

**INTERNATIONAL
SPACE STATION
ALPHA
CONTRACT**

NAS15-10000

JANUARY 13, 1995

TABLE OF CONTENTS

PART I -THE SCHEDULE

SECTION A - SOLICITATION/CONTRACT FORM	
Standard Form 26	1
Table of Contents	2
SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS	
B.1 Estimated Cost and Fee	B-1
B.2 Contract Funding	B-2
B.3 Scope of Work	B-2
B.4 Supersedure	B-2
B.5 Option(s) to Extend Completion Date (JSC 52.217-90)(OCT 1996).....	B-3
SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT	
C.1 Statement of Work	C-1
SECTION D - PACKAGING AND MARKING	
D.1 Listing of Clauses Incorporated by Reference	D-1
D.2 Packaging, Handling and Transportation (NFS 18-52.211-70) (SEP 2005)	D-1
SECTION E - INSPECTION AND ACCEPTANCE	
E.1 Listing of Clauses Incorporated by Reference	E-1
E.2 Material Inspection and Receiving Report (NFS 18-52.246-72) (JUN 1995) ..	E-1
E.3 Human Space Flight Item (NFS 18-52.246-73) (MAR 1997)	E-1
E.4 Inspection and Acceptance	E-2
E.5 Inspection of Services—Cost Reimbursement (52.246-5) (APR 1984).....	E-3
E.6 Higher Level Contract Quality Requirement (FAR 52.246-11)(FEB 1999)	E-4
E.7 Quality Assurance Surveillance Plan (JSC 52.246-93)(JUL1996).....	E-4
SECTION F - DELIVERIES OR PERFORMANCE	
F.1 Listing of Clauses Incorporated by Reference	F-1
F.2.A Completion of Work - Exhibit A	F-1
F.2.B Completion of Work - Exhibit D.....	F-1
F.3 Bills of Lading (NFS 1852.247-73)(JUN 2002)	F-2
F.4 Flight Item (JSC 52.247-95) (SEP 1989)	F-3
F.5 Deliverables	F-3
SECTION G - CONTRACT ADMINISTRATION DATA	
G.1 Listing of Clauses Incorporated by Reference	G-1
G.2 Submission of Vouchers for Payment (NFS 18-52.216-87) (DEC 1988)	G-1
G.3 Designation of New Technology Representative and Patent Representative (NFS 18-52.227-72) (JUL 1997)	G-2
G.4 Technical Direction (NFS 18-52.242-70) (SEP 1993).....	G-3
G.5 Financial Reporting of NASA Property in the Custody of Contractors (NFS 18-52.245-73) (AUG 2001)	G-4
G.6 List of Government-Furnished Property (NFS 18-52.245-76) (OCT 1988)	G-4

G.7	Use of Government Production and Research Property on a No-Charge Basis (NFS 18-52.245-80) (MAR 1989)	G-5
G.8	Use of Government Facilities by Subcontractors	G-5
G.9	Installation-Accountable Government Property (NFS 18-52.245-71) (JUN 1988)(Alternate I)(MAR 1989).....	G-6
G.10	Request for Waiver or Deviation	G-7
G.11	Change in Government-Provided Services (JSC 52.245-98) (FEB 1991)	G-7
G.12	Government-Furnished Materials	G-7
G.13	Reserved	G-8
G.14	Providing Facility Items (NFS 1852.245-97) (APR 1994).....	G-8
G.15	Providing ISS Unique Test Equipment for the Repair and Testing of NASA Orbital Replacements Units (ORUs)	G-9
G.16	Management of Post DD 250 Property	G-9
G.17	Socio-Economic Subcontracting Goals	G-10

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1	Listing of Clauses Incorporated by Reference	H-1
H.2	Special Provisions Regarding Lockheed Subcontract Assigned to Boeing ...	H-1
H.3	Representations, Certifications, and Other Statements of Offerors (JSC 52.209-90) (SEP 1988)	H-2
H.4	Technical Information Releases and Publications.....	H-2
H.5	Manned Space Flight Motivation Awareness Program	H-2
H.6	Pricing of Common Items to International Partners.....	H-3
H.7	Government Approvals/Concurrences	H-4
H.8	Indemnification.....	H-4
H.9	Special Termination Costs.....	H-5
H.10	Property/Data To Be Furnished By International Partners	H-5
H.11	Identification and Approval For Use of Restricted Computer And Software And/Or Commercial Computer Software.....	H-6
H.12	Key Product Groups	H-7
H.13	Order Of Precedence.....	H-7
H.14	Special Provision For Contract Changes.....	H-8
H.15	Space Station Freedom Hardware and Software Usage	H-8
H.16	Special Provision For Government Furnished Data	H-9
H.17	Unpressurized Logistics Carrier/Dry Cargo Carrier (ULC/DCC) Deletion	H-9
H.18	Specification Evaluation Provision.....	H-9
H.19	Reserved	H-9
H.20	Additional Excusable Delays	H-9
H.21	Special Provision Regarding Allowability of FGB Costs	H-10
H.22	Relief From Centrifuge Accommodations Module (CAM) and RS-FGB Volume Allocation Requirements	H-11
H.23	Certificates of Flight Readiness (CoFRs)	H-11
H.24	Accounting for Environmental Taxes.....	H-11
H.25	GRCI Commercialization	H-11
H.26	Node 1 Strut Strain Gauge Outfitting.....	H-12
H.27	Permission to Copyright Software	H-12
H.28	EEATCS Test Facility	H-13
H.29	ISIL Capital Equipment Maintenance and Operation Agreement	H-13
H.30	Option to Purchase the ISIL Laboratory	H-14
H.31	Delivery of Government Furnished Equipment and Government Furnished Data.....	H-15

H.32	IPS and NSTS-21000	H-15
H.33	Crew Capability to Terminate Progress Reboost at FGB NADIR Without SM Present	H-15
H.34	ESA EEE Parts	H-16
H.35	Award Fee Look Back	H-16
H.36	Special Provision Regarding International Partners/Participants' Specifications	H-16
H.37	Management of I&O Tasks	H-17
H.38	Associate Contractor Agreement for ISS Operations and Utilization Activities	H-18
H.39	JSC Hazardous Materials Use (JSC 52.223-92)(DEC 1999).....	H-19
H.40	Post-Production Support (PPS) Orbital Replacement Unit (ORU) Repair/ Scheduled Maintenance, Replenishment Parts and Transition Subcontracts Costs	H-20
H.41	System Administrator Security Certification Program	H-21
H.42	Reserved	H-21
H.43	Access to Contractor Data.....	H-22
H.44	Government Insight	H-23
H.45	ISS Contract Strategy Conflict of Interest Agreement.....	H-24
H.46	Government-Provided Russian Language and Logistics Services (RLLS) ..	H-24
H.47	Additional Export Control Requirements	H-25
H.48	Subcontracting with Russian Entities for Goods or Services	H-29
H.49	Advanced Agreement for Pension Costs.....	H-31
H.50	Hardware Transition Activities	H-31
H.51	Evidence of Completion Matrix.....	H-31
H.52	Quarterly NF 1018 and ISS Major Element Values Reporting	H-31
H.53	Spares Provisioning Procedures	H-32
H.54	Advance Settlement of Contract Changes	H-33
H.55	Reserved	H-34
H.56	IPIC Hardware and Software Acceptance Data Packages	H-34
H.57	Deliverables After Contract Period of Performance	H-36
H.58	Advance Settlement of Contract Changes	H-48
H.59	Centrifuge Accommodation Module (CAM), CAM Rotor (CR) and Life Science Glovebox (LSG Hardware Acceptance Data Packages (ADPs)	H-49
H.60	Disposition of Flood Losses Under Amphenol Subcontract	H-49
H.61	Administrative Leave (JSC 52.242-94)(SEP 2008)	H-50

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1	Listing of Clauses Incorporated by Reference	I-1
I.2	Approval of Contract (FAR 52.204-1) (DEC 1989)	I-4
I.3	Clauses Incorporated by Reference (FAR 52.252-2) (FEB 1998)	I-4
I.4	Payment for Overtime Premiums (FAR 52.222-2) (JUL 1990)	I-4
I.5	Hazardous Material Identification and Material Safety Data (FAR 52.223-3) (NOV 1991) ALTERNATE I (NOV 1991).....	I-5
I.6	Duty-Free Entry Supplies (NFS 18-52.225-73) (DEC 1988).....	I-7
I.7	Rights to Proposal Data (Technical) (FAR 52.227-23) (JUN 1987)	I-7
I.8	Changes-Cost Reimbursement (Deviation) (FAR 52.243-2) (AUG 1987) Alternate V (APR 1984)	I-7
I.9	Notification of Changes (FAR 52.243-7) (APR 1984)	I-8
I.10	Ombudsman (NFS 1852.215-84)(JUN 2000)(Alternate I)(JUN 2000)	I-10
I.11	Small Business Subcontracting Reporting (NFS 1852.219-75)(MAY 1999)....	I-10
I.12	Potentially Hazardous Items (Deviation) (NFS 1852.223-72) (Dec 1988)	I-11
I.13	Space Hardware Reporting (NFS 18-52.245-78) (MAR 1989)	I-11

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS	
J-1	Award Fee Plan for Exhibit A
J-2	Government Furnished Property.....
	Section I U.S. Source Government Furnished Equipment
	Section I U.S. Source Government Furnished Equipment, Khrunichev List
	Section II Government Furnished Material
	Section III T.T.A. Government Furnished Data.....
	Section IV U. S. Source Government Furnished Data
J-3	Installation Property & Services and On-site Provisions for NASA Centers
J-4	Data Requirements Descriptions
J-5	Deliverable Items List.....
J-6	Applicable Documents List.....
J-7	Management Information System Description
J-8	NAS15-10000 United States On-Orbit Segment (USOS) Acceptance And Vehicle sustaining Engineering Boeing's Small Business and Small Disadvantaged Business Subcontracting Plan
J-9	Provisional Items Order (PIO)
J-10	Requisition Number/Accounting and Appropriation Data (Deleted in Mod 992)...
J-11	Common Hardware
J-12	Property/Data to be Provided by International Partners
J-13	Hazardous Material (Material Code Descriptions)
J-14	SSF Equipment List.....
J-15	List of Installation-Provided Government Property Subject to Equitable
	Adjustments in Fee
J-16	Changes Applicable to the Contract Under the Swing Clause.....
J-17	Changes Applicable to the Contract Under Contract Provision H-32
J-18	Form to be Utilized for Task Orders Under Paragraph 1.10 of the Statement of Work (Section C) of this Contract
J-19	Settlement Agreement.....
J-20	Contract Labor Confirmation of Negotiations
J-21	US Rack, Truss, and UOP Level Payloads for ISS.....
J-22	Information Technology Equipment/Services.....
J-23	Extravehicular Activity Hardware
J-24	Loaned Equipment List.....
J-25	Boeing ISS Safety and Health Plan
J-26	Management of Post DD250 Property
J-27	Deliverable Items List.....
J-28	Reserved
J-29	Digital Pre-Assembly hardware Measurement List
J-30	Organizational Conflicts of Interest (OCI) Avoidance Plan
J-31	Boeing-Amphenol Flood Loss Disposition Agreement.....
J-32	Sustaining Engineering Subcontractors and Anomaly Pool Tracking.....

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B.1. ESTIMATED COST AND FEE

A) The total estimated cost of this contract is (b) (4) and consists of the following:

Estimated Cost
Exhibit D Estimated Cost
Variance at Completion Estimated Cost
Schedule 2 Estimated Cost
Schedule 3 Estimated Cost

(b) (4)

The term "estimated cost" as used elsewhere in this contract means the total estimated cost.

B) The total costs and fees agreed to by the parties for this contract are as follows:

SCHEDULE 1

1. Exhibit A Estimated Cost (Lines 2+3+4)
2. Estimated Cost
3. Estimated Cost for Letter Contract
4. Estimated Cost for PG Definitization Period
5. Maximum Award Fee
6. FY2000 Forward Technical Performance Pool
7. FY2000 Forward Cost Performance Pool
8. FY2004 Forward Performance Award Fee
9. Base Fee
10. Letter Contract Fixed Fee
11. Definitization Fixed Fee
12. FGB Fixed Fee
13. Provisioning Item Orders - Fixed Fee
14. Level of Effort Fixed Fee
15. Fixed Fee
16. Exhibit D, LOE, Estimated Cost
17. Exhibit D, LOE, Fixed Fee
18. Exhibit D, LOE, Maximum Award Fee
19. Exhibit D, LOE Maximum Special Rate Incentive Fee Earned
20. Provisional Increase to Estimated Cost
21. Variance at Completion Estimated Cost
22. Total Contract Value for Schedule 1

MOD 2062

Delta

MOD 2066

(b) (4)

(b) (4)

17,496,119,287

SCHEDULE 2 – U.S. PROP MODULE

23. Schedule 2 Estimated Cost
24. Schedule 2 Fixed Fee

(b) (4)

25. Total Contract Value for Schedule 2

(b) (4)

119,875,081

SCHEDULE 3/CLIN 3 – American Recovery and Reinvestment Act (ARRA)

26. ARRA – Common Docking Adapter Estimated Cost
27. ARRA Performance Fee

(b) (4)

28. ARRA Schedule Incentive	(b) (4)	
29. Total Contract Value for Schedule 3	(b) (4)	13,701,033
30. Total Contract Value for Schedules 1, 2, & 3	(b) (4)	17,629,695,401

C) Reserved

D) Reserved

E) Reserved

F) Base Fee. Effective October 1, 1999, a Base fee pool is added to the contract. Base fee is defined in Attachment J-1, Section III.1. Base fee will be paid in monthly installments based on percent of completion of the work as determined by the Contracting Officer.

G) Reserved

(End of Clause)

B.2 CONTRACT FUNDING (NASA 1852.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, and excluding special ARRA funding specified in (c) below, the total amount allotted by the Government to this contract is \$ (b) (4). This allotment is for all items, and covers the following estimated period of performance: From November 15, 1993, through approximately **May 13, 2014**.

(b) An additional amount of \$ (b) (4) is obligated under this contract for payment of fee.

(c) An additional amount of \$ (b) (4) of ARRA funding is obligated under this contract specifically for the payment of cost and fee for performance of the ARRA-funded effort and requirements specified in Clause B.1, Schedule 3/CLIN 3, and as otherwise described in Modification 1602. Purchase Request No. 4200314848 provides the full amount of ARRA funding associated with this modification.

(End of Clause)

B.3 SCOPE OF WORK

The Contractor shall, except as otherwise provided, furnish the personnel, facilities, materials, services, and management necessary to accomplish the requirements set forth in Section C, Statement of Work, and as specified elsewhere in the contract.

(End of clause)

B.4 SUPERSEDURE

This contract is the definitive contract contemplated by Letter Contract NAS15-10000, and supersedes in its entirety said letter contract and modifications 1-18, modifications 21-38, 40-47, modifications 49-54, modification 62, and modification 63 (DDP #222). All work performed, technical direction given, costs incurred, and payments made under said letter contract shall be deemed to have been performed, given, incurred, or made under this contract. The cost and fee(s) established in this definitive contract represent full and complete settlement of letter contract NAS15-10000 and the changes cited above and modifications thereto. They do not represent a settlement of any modifications not referenced above, nor Boeing's claim submitted under 2-1150-94-0434 dated January 3, 1995.

(End of Clause)

B.5 OPTION(S) TO EXTEND COMPLETION DATE (JSC 52.217-90) (OCT 1996)

The Government may require the Contractor to continue performing services under this contract. The Contracting Officer may exercise options by issuance of a unilateral contract modification 30 days or more before the completion date set forth in Section F. Should the option(s) be exercised, the resultant contract will include all terms and conditions of the basic contract as it exists at the time the option is exercised, except for increases in estimated cost and fee and other changes indicated below.

	OPTION 1*	OPTION 2*	OPTION 3**	OPTION 4**
Clause B.1--Cost and Fee increased as follows:				
Exhibit A Estimated Cost (Line 1)	(b) (4)			
Estimated Cost (Line 2)				
FY2004 Forward Performance Award Fee (Line 8)				
Total Contract Value (Line 22)	\$ 157,606,885	\$ 159,388,434	\$ 158,177,766	\$ 160,033,786
	March 31, 2007	Sep 30, 2007	March 31, 2008	Sep 30, 2008

*These Options were exercised under contract modification 1308.

**These Options were exercised under contract modification 1365.

(End of Clause)

[END OF SECTION]

Updated thru S/A 2073

Vehicle Sustaining Engineering Contract Statement of Work

Table of Contents

SECTION	TITLE	PAGE #
I	INTRODUCTION	
II	RESERVED	
III	SCOPE OF WORK	
1.0	MANAGEMENT INTEGRATION AND CONTROL	
1.1	PROGRAM MANAGEMENT	
1.2	BUSINESS MANAGEMENT	
1.3	CONFIGURATION MANAGEMENT/DATA INTEGRATION	
1.4	PROGRAM INFORMATION TECHNOLOGY (IT)	
1.5	INTERNATIONAL INTEGRATION	
1.6	NASA REIMBURSABLE SPACE ACT AGREEMENTS	
2.0	USOS ACCEPTANCE – COMPLETE	
3.0	VEHICLE SUSTAINING ENGINEERING	
3.1	RESERVED	
3.2	COMMON REQUIREMENTS	
3.3	VEHICLE SEGMENT SUSTAINING	
3.4	ISS SUBSYSTEM MANAGEMENT	
3.5	EXTRA-VEHICULAR ROBOTICS (EVR) INTEGRATION	
3.6	EXTRA-VEHICULAR ACTIVITY (EVA) INTEGRATION	
3.7	PROPULSION SYSTEM INTEGRATION	
3.8	SAFETY AND MISSION ASSURANCE (S&MA)	
3.9	UNPRESSURIZED CARGO INTEGRATION	
3.10	FE 1410 TESTING	
3.11	FPMU GROUND STATION	
4.0	OTHER PRODUCT DEVELOPMENT	
4.1	S-BAND UPGRADE	
4.2	NODE 2 RECONFIGURATION	
4.3	COMPLETE	
4.4	RESERVED	
4.5	COMPLETE	

4.6	NODE 3	
4.7	FABRICATION AND ASSEMBLY OF FLIGHT RELEASE ATTACH MECHANISM (FRAMS) AND ADAPTER PLATES	
4.8	COMPLETE	
4.9	COMPLETE	
4.10	COMPLETE	
4.11	SSQ CONNECTORS FOR COLUMBUS EXTERNAL PAYLOADS ADAPTER (CEPA)	
4.12	COMPLETE	
4.13	CARGO COMPATIBILITY ANALYSIS (CCA) MANIFEST FLEXIBILITY TASK (MFT)	
4.14	FLIGHT SUPPORT EQUIPMENT	
4.15	FACTORY EQUIPMENT	
4.16	COMPLETE	
4.17	COMPLETE	
4.18	COMPLETE	
4.19	COMPLETE	
5.0	WORK NOT COMPLETED: DISCRETE TASK TRANSFERRED FROM PREVIOUS SOW	
5.1	COMPLETE	
5.2	NODE 3 SOFTWARE	
5.3	COMPLETE	
5.4	COMPLETE	
5.5	NODE 2/3 INTEGRATED RACK STRUCTURAL ANALYSIS	
5.6	NODE 3 HARDWARE PROCUREMENT	
5.7	NODE 3 ANALYSIS AND PLANNING	
5.8	AMMONIA TANK ASSEMBLY (ATA) SUPPORT OF UF-4 SPACELAB PALLET (SLP) INTEGRATION ACTIVITIES	
5.9	IMPLEMENTATION OF PRELIMINARY DESIGN AND ANALYSIS OF THE EXPRESS PALLET CONTROLLER ASSEMBLY	
5.10	COMPLETE	
5.11	CUPOLA PRESSURE PANE PROOF TESTING	

5.12	CUPOLA WINDOW PANE MARKINGS	
5.13	CENTERLINE BERTHING CAMERA SYSTEM (CBCS)	
5.14	COMPLETE	
5.15	RESERVED	
5.16	CUPOLA VERIFICATION SUPPORT	
5.17	PCBM KITS	
5.18	COMMON HARDWARE STORAGE	
5.19	COMPLETE	
5.20	COMPLETE	
5.21	CUPOLA DEBRIS PANES REDESIGN	
5.22	COMPLETE	
5.23	COMPLETE	
5.24	COMPLETE	
5.25	COMPLETE	
5.26	NODE 2 VERIFICATION SUPPORT	
5.27	SOFTWARE USER MANUALS	
5.28	SPARES WAREHOUSE (SWH) CARGO INTEGRATION	
5.29	COMPLETE	
5.30	COMPLETE	
5.31	FUNCTIONAL EQUIVALENT UNIT ENHANCED MDM SOLID STATE MASS MEMORY UPGRADE	
5.32	COMPLETE	
5.33	CUPOLA RELOCATION TO NODE 3	
6.0	I&O DISCRETE TASKS	
6.1	INTEGRATION OF REGEN ECLSS INTO LAB	
6.2	INTEGRATED STATION LAN (ISL)	
6.3	REVISED SHUTTLE LAUNCH LOADS	
6.4	MODEL ENHANCEMENT	
6.5	WASTE AND HYGIENE COMPARTMENT INTEGRATION (WHC)	

6.6	SOLAR ARRAY LONGERON SHADOWING MITIGATION	
6.7	FUNCTIONAL CARGO BLOCK (FGB) INTEGRATION	
6.8	COMMERCIAL ORBITAL TRANSPORTATION SERVICES (COTS) INTEGRATION	
6.9	PAYLOAD INTEGRATION	
6.10	COMPLETE	
6.11	NODE 3	
6.12	ZERO PROPELLANT MANEUVERS (ZPM)	
6.13	COMPLETE	
6.14	HARDWARE INTERFACE REQUIREMENTS DEVELOPMENT	
6.15	SUPPORT TO INTERNATIONAL PARTNERS	
6.16	SUPPORT FOR SHUTTLE TRANSITION AND RETIREMENT (STAR) DRIVEN ANALYSES AND REDESIGNS	
6.17	SDIL OPERATION AND MAINTENANCE	
6.18	HARDWARE SOFTWARE INTEGRATION (H S I) TEST SUPPORT FOR MISSION OPERATIONS	
6.19	BIOLOGICAL RESEARCH PROGRAM SOLID STATE POWER CONTROL MODULE (BSSPCM) MOTHER BOARD RETROFIT	
6.20	CONSTELLATION PROGRAM CREW ESCAPE VEHICLE (CEV) INTEGRATION	
6.21	ROTARY JOINT HARDWARE MODIFICATION	
6.22	IATCS COOLANT REMEDIATION	
6.23	NODE 3 ATMOSPHERE REVITALIZATION (AR) RACK LAUNCH ON MPLM	
6.24	PORTABLE COMPUTER SYSTEM (PCS) LAPTOP REHOST (CLAUSE 58 APPLIES)	
6.25	COMPLETE	
6.26	ANALYSIS OF XVV FLIGHT ATTITUDE	
6.27	MDM ENHANCED PROCESSOR AND INTEGRATED COMMUNICATIONS (EPIC)	
6.28	COMPLETE	
6.29	TREADMILL-2 (T2) PROJECT	
6.30	COMPLETE	

6.31	COMPLETE	
6.32	COMPLETE	
6.33	INTEGRATION OF NEW ELEMENTS INTO ISS	
6.34	LAUNCH OF ATA ON ULF3 AND ULF5	
6.35	STARBOARD SARJ ANOMALY RESOLUTION	
6.36	ISS MODULE LEAK DETECTION SYSTEM	
6.37	NODE 3 RELOCATION	
6.38	SPARE PARTS PROCUREMENTS/IN-LINE MODIFICATIONS DURING REPAIR/REFURB	
6.39	COMPLETE	
6.40	ALTERNATE PORT CAPABILITY FOR HTV1 BERTHING	
6.41	HARDWARE TESTING	
6.42	IMV IN-LINE FILTER DEVELOPMENT	
6.43	INTEGRATION OF A SABATIER REACTOR IN THE OGS RACK	
6.44	USOS LIFE EXTENSION	
6.45	IV TEPC INTEGRATION	
6.46	SUPPORT TO THE ADVANCED RECYCLE FILTER TANK ASSEMBLY (ARFTA) DEVELOPMENT	
6.47	NASA DOCKING SYSTEM (NDS) PROJECT	
6.48	WATER PROCESSOR ASSEMBLY (WPA) FIRMWARE MODIFICATIONS	
6.49	EMERGENCY EGRESS GUIDANCE SYSTEM (EEGS) MODIFICATIONS	
6.50	SUSTAINING TRANSITIONS	
6.51	PRECIPITATION REMEDIATION METHODS FOR UPA	
6.52	FLIGHT STS-335/135	
6.53	OGA RECIRCULATION LOOP MAINTENANCE HARDWARE	
6.54	CREW QUARTER (CQ) SPARES	
6.55	DOCKING HUB SYSTEM (DHS)	
6.56	SPACE SHUTTLE CAMERAS	
6.57	MULTIPLE VISITING VEHICLES ON NODE 2	

6.58	WATER PROCESSOR AND OXYGEN GENERATION SYSTEM TESTING	
6.59	GROUND HARDWARE AND TRAINING UNITS	
6.60	HARDWARE STUDIES	
6.61	HIGH RATE DATA WIRELESS COMMUNICATIONS	
6.62	ISS-BASED RELATIVE NAVIGATION SYSTEM (RNS)	
6.63	LITHIUM-ION BATTERY PROJECT	
6.64	RPCM FIRMWARE AID	
6.65	EXPRESS RACK MODIFICATIONS	
6.66	CONTINGENCY EVA FAILURE SCENARIOS	
6.67	UPDATE OF FLOATING POTENTIAL MEASUREMENT UNIT (FPMU) GROUND STATION HARDWARE AND DATA REDUCTION SOFTWARE	
6.68	MODIFICATION OF LIGHTWEIGHT ADAPTOR PLATE ASSEMBLY (LwAPA)	
6.69	RUSSIAN SEGMENT (RS) COMPONENT WITHIN THE SOFTWARE DEVELOPMENT AND INTEGRATION LABORATORY (SDIL)	
6.70	DEVELOPMENT OF GFE PORTABLE VELOCITY AIR METERS	
6.71	INTEGRATION OF CABIN AIR SEPARATOR FOR EVA OXYGEN (CASEO)	
6.72	ATCS AMMONIA LEAK DETECTION SENSOR	
6.73	SUPPORT TO GFE FINE WATER MIST (FWM) PORTABLE FIRE EXTINGUISHER (PFE)	
6.74	ROBOTIC OPERATION OF ORUS ON FSE	
6.75	COMMON COMMUNICATION FOR VISITING VEHICLES (C2V2) INTEGRATION	
6.76	SOFTWARE INTEGRATION OF RADIATION ASSESSMENT DETECTOR (RAD)	
6.77	ANALYSIS OF ISS ASSETS FOR ALTERNATE MISSIONS	
6.78	MAIN BUS SWITCHING UNIT MAINTENANCE	
6.79	MAJOR CONSTITUENT ANALYZER (MCA) DEVELOPMENT	
6.80	REPAIR TOOLS FOR IN-FLIGHT MAINTENANCE CAPABILITY FOR CARBON DIOXIDE REMOVAL ASSEMBLY (CDRA) AIR SELECTOR VALVE (ASV)	
6.81	RUSSIAN INTEGRATION INTERFACE	

6.82	Flight Support Equipment and Camers	
6.83	EXTERNAL HIGH DEFINITION VIDEO	
6.84	Russian Science Power Module	
6.85	CCAA HX ORU FSE ENCLOSURE	
6.86	DISPOSITION OF ELC AND EXPCA RESIDUAL ASSETS	
6.87	INTEGRATION OF COMMERCIAL CREW INTEGRATED CAPABILITY (CCiCap) VEHICLES	
6.88	HIERARCHICAL MODELS FOR PAYLOADS	
6.89	FUNCTIONAL AVAILABILITY ANALYSIS FOR FGB	
6.90	DIRECT CURRENT TO DIRECT CURRENT CONVERTER UNIT (DDCU) FIRMWARE UPDATE	
6.91	ETHERNET IMPLEMENTATION ON EXTERNAL MDMS	
6.92	DELAY TOLERANT NETWORKING (DTN) IMPLEMENTATION ON JSL	
6.93	DEVELOPMENT OF GFE PANEL FOR AIRLOCK 1F1 LOCATION	
6.94	EXTERNAL MDM	
7.0	REQUIREMENTS FOR HARDWARE BUILDS	
7.1	REQUIREMENTS AND PROCESSES	
7.2	DATA	
7.3	ELECTRICAL POWER (EP)	
7.4	ACCEPTANCE DATA PACKAGES	
7.5	SOFTWARE	
8.0	PAYLOAD INTEGRATION	
8.1	CONFIGURATION MANAGEMENT	
8.2	UTILIZATION LAUNCH PACKAGE READINESS	
8.3	SUPPORT TO DESIGN REVIEWS	
8.4	BOARD AND PANEL SUPPORT	
8.5	MISSION INTEGRATION	
8.6	PAYLOAD ENGINEERING INTEGRATION	
8.7	PAYLOAD SOFTWARE INTEGRATION & FLIGHT PRODUCTION	

8.8	HARDWARE AND SOFTWARE SUSTAINING ENGINEERING	
8.9	STRATEGIC PAYLOAD INTEGRATION	
8.10	ISS NATIONAL LAB PAYLOAD INTEGRATION	
8.11	EXTERNAL FRAM BASED PAYLOAD REQUIREMENTS	
APPENDIX A	HARDWARE TO BE SUSTAINED UNDER CONTRACT	
APPENDIX B	SOFTWARE TO BE SUSTAINED UNDER CONTRACT	
APPENDIX C	NASA FACILITIES TO BE MAINTAINED AND OPERATED	
APPENDIX D	RESERVED	
APPENDIX E	ISS PROGRAM DOCUMENTS TO BE BOOK COORDINATED	
APPENDIX F	ANALYTICAL MODELS & TOOLS TO BE MAINTAINED	
APPENDIX G	RESERVED	
APPENDIX H	LIST OF ACRONYMS	
APPENDIX I	RESERVED	
APPENDIX J	KEY TERMS AND DEFINITIONS	
APPENDIX K	DEPTH OF PENETRATION FOR Ips/Ps, GFE, AND PAYLOADS	

I.INTRODUCTION

This Statement of Work (SOW) has two objectives:

1. Provides the ISS Vehicle Segment Sustaining Engineering, End-to-End subsystem management, and Post Production Support. Vehicle Segment Sustaining Engineering will be performed under Section 1.0, 3.0, and 8.0 of this SOW and consists of the following:
 - Sustaining of the USOS.
 - Sustaining of common hardware and software provided by NASA as Government Furnished Equipment (GFE) to the International Partner/Participants (IP/Ps), including Node 3, and payloads.
 - Integration of the IP/Ps elements, including Node 3 and PMM, with the USOS.
 - Integration of the commercial resupply vehicles (SpaceX and Orbital)
 - Payload integration.
 - Sustaining Engineering of unpressurized flight support equipment (FSE) and analytical integration of unpressurized cargo.
2. Defines the discrete tasks to be performed by the contractor that are not included in the sustaining engineering statement of work. This work is defined in sections 5.0 and 6.0. General requirements for new hardware are defined in section 7.0.

The ISS Vehicle Segment Sustaining Engineering contractor shall accomplish the objectives and outcomes described within this contract. The contractor shall perform the services and deliver the products described in this SOW, contract terms and conditions, applicable documents, Data Requirements Descriptions (DRDs), and other plans and sections contained within this contract.

These activities shall facilitate the ISS Program mission to “safely build, operate and utilize a continuously inhabited orbital research facility through an international partnership of government, industry and academia.”

II.RESERVED

III.SCOPE OF WORK

1.0 MANAGEMENT INTEGRATION AND CONTROL

1.1 PROGRAM MANAGEMENT

1.1.1 PROGRAM MANAGEMENT AND ADMINISTRATION

The contractor shall conduct program management, including risk management, in order to develop and deliver the required ISS Program products and services as defined for this contract. Provide and maintain program management systems, as outlined below, for the planning, organization, control and reporting of all activities required by this contract. The program management systems shall assure accomplishment of all outcomes and deliverable products required by this contract.

1.1.1.1 The contractor shall develop, maintain and implement a Management Plan in accordance with DRD F-PM-01. The plan shall describe the contractor's management structure that fully and optimally integrates all related plans and systems, including those of major subcontractors and vendors. The plan shall address the contractor's management of all systems, functions and data requirements described in this SOW.

1.1.1.2 The contractor shall conduct Performance Management Reviews (PMR) for NASA, and provide integrated management review products in accordance with DRD F-PM-02 for the work performed on this contract. The reviews shall provide the ISS Program insight into the contractor's, subcontractors', and vendors' overall technical, schedule and cost performance. Metrics that indicate the level of success in the execution of contract requirements and the status of the contractor's achievement against the performance standards contained within this statement of work or elsewhere in this contract shall be presented at the PMR.

1.1.1.3 Management Information System (MIS) is a web-based data repository designed to keep the ISS Program management and personnel aware of the most current ISS Program technical, financial, workforce, schedules and operational information, including issues and risks. The MIS links ISS Program core business issues and goals with the technical aspects of the Program. To accomplish this, the ISS Program managers will utilize selected contractor data from financial planning, costs, workforce data, program schedules, program metrics and other status and performance information. This selected information exists in the various DRD's, which are required by the contract. The contractor shall coordinate with NASA to make DRD deliverables compatible for MIS use and linkage.

1.1.2 INTERNAL/EXTERNAL PROGRAM REVIEWS

The contractor shall develop briefing materials and analyses for the ISS Program presentations and meetings with internal and external review groups. These groups may include, but are not limited to, the Aerospace Safety Advisory Panel (ASAP), Space Station Utilization Advisory Subcommittee (SSUAS), Stafford/Anfimov, Inspector General (IG), General Accounting Office (GAO), Space Flight Advisory Committee (SFAC), ISS Management and Cost Evaluation/NASA Advisory Council

(IMCE/NAC), Independent Implementation Review (IIR) and Cost Assessment Teams. The contractor shall prepare and present various topics such as ISS Program cost, schedule and technical status, specific safety or risk issues and responses to external inquiries.

1.1.3 SPACE FLIGHT AWARENESS

The contractor shall participate in the NASA Space Flight Awareness Program to ensure proper emphasis is placed on safety of flight contributions by employees and to recognize these individuals with Space Flight Awareness awards.

1.2 BUSINESS MANAGEMENT

1.2.1 MANAGEMENT AND BUSINESS ADMINISTRATION

The contractor shall provide overall contract management and administration for this contract.

1.2.1.1 The contractor shall perform all business and administrative functions and integrate these functions across all areas of performance. The contractor's on-going business analysis shall support the ISS Program business process.

1.2.2 RESERVED

1.2.3 RESOURCES MANAGEMENT

As part of the overall program management for this contract, including risk management, the contractor shall perform the following resources management tasks.

1.2.3.1 The contractor shall develop and maintain a contract financial system which discretely tracks resources by fund source and contract Work Breakdown Structure (WBS) and elements of cost including labor, overhead, other direct costs, (e.g. travel and subcontracts) and indirect costs. The contractor's financial planning system shall support the Government budget process (e.g., Program Planning, Budgeting, and Execution (PPBE) budget calls), and to support special requests for budget impacts. The ISS Program will, in accordance with the budget or special request guidelines and reporting format, specify the format and content of the contractor's inputs and supporting rationale. The contractor shall provide financial reporting in accordance with DRD PC27.

1.2.3.2 RESERVED

1.2.3.3 Develop and provide workforce reports in accordance with DRD F-PC-03 to show organization, geographical breakdown and off-site vs. on-site workforce data.

1.2.3.4 Develop and provide a contract WBS, a WBS dictionary, and a program WBS map in accordance with DRD F-PC-04. The contract WBS shall serve as the framework for contract planning, budgeting, cost reporting, Flight Planning Review reporting, schedule resource loading, and schedule status reporting to the ISS Program. The WBS map shall show mapping of the Contractor WBS to the ISS Program WBS, at the lowest level of the ISS Program WBS. Elements of work provided by major subcontractors, as defined in PC27, shall also be identified in the contract WBS.

1.2.4 RESERVED

1.2.5 SCHEDULING

1.2.5.1 The contractor shall develop and maintain schedules in accordance with DRD PC06. Resource-loaded schedules that provide performance tracking to the Tier III team-level using industry accepted scheduling software shall be provided for major projects (\$5M or greater) in accordance with DRD PC06. These Tier III schedules shall identify activities to manage changes to Level I and Level II program milestones with interdependencies to ISSP participants, other contractors or NASA organizations.

1.2.5.2 The contractor shall integrate this contract's schedule milestone requirements with affected ISS Program providers, and resolve issues with data providers.

1.2.5.3 The contractor shall identify potential schedule impacts and notify affected interfacing organizations to ensure timely Program awareness and resolution.

1.3 CONFIGURATION MANAGEMENT/DATA INTEGRATION

1.3.1 CONFIGURATION MANAGEMENT (CM) (S/A 1433)

The contractor shall implement and administer CM operations as specified in this contract and in accordance with the ISS Program CM Requirements (SSP 41170), Documentation Standards & Guidelines (SSP 50010), the CM Handbook (SSP 50123), and the Data Management Handbook (SSP 50172). Additionally, the contractor shall be responsible for contract specific CM functions as described in each of the functional CM areas described below.

1.3.1.1 MANAGEMENT AND ADMINISTRATION

The contractor shall develop and manage the ISS Program CM/Documentation Management (DM) requirements on the contract in accordance with the

contractor's CM Plan (DRD F-CM-01). The contractor shall develop status and maintain CM metrics that effectively indicate the quantity, type, and status of the work.

1.3.1.2 CONFIGURATION AND STATUS ACCOUNTING AND VERIFICATION

The contractor shall assure that the application of Configuration Status Accounting requirements and systems result in and maintain required Vehicle Segment Sustaining Engineering hardware and software product baselines in accordance with SSP 41170, CM Requirements.

1.3.1.2.1 CONFIGURATION HARDWARE/SOFTWARE STATUS ACCOUNTING

The contractor shall implement, input, and up-date the Configuration Hardware and Software Status Accounting system pursuant to SSP 41170. This includes processes and provisions for reports and access to Configuration Status Accounting data. The contractor shall ensure that historical configuration data is retained per SSP 41170. The contractor shall reconcile the Configuration Status Accounting data with operational procedures, drawings, modifications and manifests.

1.3.1.2.2 The contractor shall provide mission support for configuration analyses of hardware and software, installations and anomaly resolution.

1.3.1.2.3 The contractor shall participate in audits of compliance with CM requirements and processes by providing access to personnel, facilities and data.

1.3.1.3 CONFIGURATION CONTROL/CHANGE MANAGEMENT

1.3.1.3.1 The contractor shall process changes specific to the Vehicle Segment Sustaining Engineering contract in accordance with SSP 50123. The contract shall review and evaluate Program changes originating from outside this contract to determine if those changes have potential impacts to this contract, in accordance with SSP 50123.

1.3.1.3.2 Input, maintain and validate the Configuration Status Management Operations System (COSMOS) database to assign Change Request (CR) numbers, track/status changes, provide accurate information, reports and monthly metrics.

1.3.1.4 DATA MANAGEMENT (S/A 1433)

The contractor shall perform the following Data Management activities specific to this contract, in accordance with SSP 50010, SSP 41170, and SSP 50172. The contractor shall:

1.3.1.4.1 Provide an Engineering Release Unit.

1.3.1.4.2 Operate a Configuration Management Receipt Desk.

1.3.1.4.3 Provide DQA for all NASA controlled Program documentation identified under this contract.

1.3.1.5 SOFTWARE CONFIGURATION MANAGEMENT

1.3.1.5.1 The contractor shall implement the Software CM Handbook, D684-10293-01 for Software configuration management and maintain this document to ensure it reflects current Program approved processes.

1.3.1.5.2 The contractor shall provide configuration control of Integrated Flight Load builds and the Software Development and Integration Lab to ensure configuration fidelity is maintained.

1.3.1.5.3 The contractor shall provide configuration status accounting of flight software uploads to ensure On-Orbit software configuration is maintained.

1.4 PROGRAM INFORMATION TECHNOLOGY (IT)

The ISS contract strategy decentralizes the implementation of IT except where program integration and control is necessary for appropriate program management and communication. The Mission and Program Integration (MAPI) contractor will provide common IT infrastructure architecture for use by the ISS participants to support the mission of the ISS Program. The other contracts within the ISS contract strategy are encouraged to provide the IT necessary to perform the requirements as defined in their respective contracts, since their contract intent is to not specifically contract for generalized IT products and services. The contractor may choose to utilize the ISS Program IT infrastructure provided by the MAPI contractor when common products and services provide for increased supportability, promotes commonality, or cost efficiencies.

Any of the existing ISS Program IT tools provided as Government Furnished Data are available for utilization by the contractor to fulfill the requirements of this contract. Any modifications to GFD tools shall be sustained employing a methodology which demonstrates consistency with the Software Engineering Institute, Level 3 Capability Maturity Model, or other comparable industry standards. The Capability Maturity Model certification is not required. The contractor shall provide the IT necessary to meet the contract requirements in accordance with SSP 50013, ISS Information System Plan.

The contractor shall develop and maintain unique ISS IT software tools and applications to support the continued development and operation of the ISS and to support existing Research & Development (R&D) and sustaining engineering activities.

All IT delivered or directly costed to this contract is subject to IT capital planning processes (including strategic and tactical planning) in accordance with the IT Planning Requirements Document and the IT Security Plan.

1.4.1 IT MANAGEMENT

1.4.1.1 The contractor shall develop and implement an IT Capital Investment Process in accordance with the ISS IT Capital Investment Process, SSP-50222.

1.4.1.2 The contractor shall develop and implement an IT Security Plan in accordance with NFS 1852.204-76.

1.4.1.3 The contractor shall implement an architecture that enables bi-directional digital data sharing with government representatives.

1.5 INTERNATIONAL INTEGRATION

1.5.1 RESERVED

1.5.2 EXPORT CONTROL

The contractor shall provide export control functions for all hardware, software and data requiring export in the execution of contract responsibilities. The contractor shall establish export control procedures that are compliant with applicable Department of Commerce and Department of State regulations and perform self-audits of their established export control procedures per DRD F-EC-01.

1.6 NASA REIMBURSABLE SPACE ACT AGREEMENTS

The contractor shall accomplish all work necessary to accommodate commercial customers to the ISS. The work will be the same or similar scope already required elsewhere in this contract SOW but will be performed in support of a NASA Reimbursable Space Act Agreement.

2.0 USOS ACCEPTANCE - COMPLETED MARCH 2010

3.0 VEHICLE SUSTAINING ENGINEERING

3.1 RESERVED

3.2 COMMON REQUIREMENTS

This section contains requirements that are applicable to Vehicle Sustaining, Subsystem Management, EVA Integration, Propulsion Integration, S&MA, and IVA Integration.

3.2.1 The following requirements are applicable to sections 3.3, 3.4, 3.6, 3.7, and 3.8 of this Statement of Work.

3.2.1.1 ISS BOARDS, PANELS AND WORKING GROUPS

The contractor shall provide data, analyses and input to status and decision making at the ISS Program Boards, Panels and Working Groups as identified in SSP50200-01 and Annex L of the same document to accomplish the sustaining engineering, post production support, subsystem management and integration responsibilities defined herein.

3.2.1.2 HARDWARE/SOFTWARE PERFORMANCE ANALYSIS

The contractor shall monitor, analyze and document the Vehicle Segment hardware reliability and performance and software performance as well as end-to-end Subsystem operational performance across the full ISS system to determine actual vs. expected performance, anomalous behavior, and required updates to repair and maintenance plans, check out plans and operational procedures. The contractor shall coordinate identified issues which may impact IP/P, Commercial Visiting Vehicles (SpaceX and Orbital), payload, or GFE hardware, software, or operations with the appropriate providers. (S/A 1614)

3.2.1.3 ANOMALY RESOLUTION

The contractor shall identify, investigate, resolve and document flight and ground hardware and software anomalies for all hardware and software sustained by this contract. The contractor shall also provide tests, analyses, and engineering data to support anomaly resolution of IP/P, Commercial Visiting Vehicles (SpaceX and Orbital), payload, or GFE hardware as necessary to implement the requirements of this contract. Applicable anomalies shall be documented per the Problem Reporting And Corrective Action (hardware) SSP 30223 and Process Version and Control System software, including utilization of the NASA approved Station Program Notes (SPNs) process for software problem report disposition. (S/A 1614)

3.2.1.4 RESERVED

3.2.1.5 STUDIES, TESTS AND ANALYSES

The contractor shall perform studies, tests and analyses to resolve issues, to develop flight and stage assessments, to integrate IP/P, Commercial Visiting Vehicles (SpaceX and Orbital), GFE and payload hardware/software and to develop planning requirements. (S/A 1614)

3.2.1.6 CERTIFICATE OF FLIGHT READINESS (CoFR)

The contractor shall provide a statement of flight readiness of all hardware and software sustained under this contract, also, all analyses and modeling performed under this contract for each flight, and each software uplink as part of the Certificate of Flight Readiness (CoFR) process in accordance with SSP 50108. The contractor shall develop and implement to a CoFR endorsement plan in accordance with DRD F-MI-01. The payload integration section of the CoFR will be implemented as documented in SSP 52054 and DRD F-MA-12.

3.2.1.7 FLIGHT OPERATIONS

3.2.1.7.1 MISSION EVALUATION (S/A 1614)(S/A 1660)(S/A 1812, SSCN 12842)(S/A 1869)

The contractor shall monitor the on-orbit vehicle and payload facilities (as listed in Appendix A) performance during ISS operations to ensure safe and efficient vehicle and payload facilities operation and mission success, resolve anomalies, monitor and document the actual vs. expected performance of the vehicle and payload facilities and performance trends. The contractor shall provide data and analyses as necessary to perform this task for all hardware/software sustained for integration of IP/P, Commercial Visiting Vehicles (SpaceX and Orbital), payload facilities or GFE hardware performed under this contract. The contractor shall provide on-call 24 hour support for all subsystems and payload facilities and provide dedicated Mission Evaluation Room (MER) support to major on-orbit activities (EVAs, major repair activities, major anomaly situations, etc.) and the following activities:

- Robotic operations: MT translation or operations involving SSRMS or SPDM and other vehicle hardware
- ISS Debris Avoidance Maneuver (DAM) via Russian Segment (RS) thrusters
- “Red” Conjunction without DAM
- Unmanned VV, Russian Segment (Progress, ATV) docking and undocking
- Unmanned VV, US robotic berthing and unberthing
- Manned VV docking and undocking
- Russian Segment EVA

3.2.1.7.2 MISSION EVALUATION MANAGEMENT

The contractor shall provide technical leadership to manage the evaluation of the on-orbit vehicle and related activities. These activities include assessing anomaly time criticality, reporting to the

ISS Mission Management Team, assignment of priorities for resources to resolve anomalies, responding to requests for data from the Flight Control Team, and the ISS Program Management Center and anomaly documentation and resolution. The contractor shall provide on-call 24 hour MER Manager support and provide dedicated Mission Evaluation Room (MER) Manager support to major on-orbit activities (EVAs, major repair activities, major anomaly situations, etc.) and the following activities:

- Robotic operations: MT translation or operations involving SSRMS or SPDM and other vehicle hardware
- ISS Debris Avoidance Maneuver (DAM) via Russian Segment (RS) thrusters
- Red” Conjunction without DAM
- Unmanned VV, Russian Segment (Progress, ATV) docking and undocking
- Unmanned VV, US robotic berthing and unberthing
- Manned VV docking and undocking
- Russian Segment EVA
- Mission Evaluation Support to payloads
- ISS Contingency MER Support for a Big 12 Failure

3.2.1.7.3 HARDWARE HISTORY RETRIEVAL SYSTEM

The contractor shall maintain the ISS Program Hardware History Retrieval System to provide a repository of data required by the ISS for anomaly resolution.

3.2.1.7.4 MISSION EVALUATION SUPPORT to PAYLOADS (S/A 1812, SSCN 12842) (S/A 1869)

The contractor shall provide engineering input to anomaly resolution activities for non-vehicle system hardware and/or software anomaly resolution including multi-use payload hardware owned by the ISS Program (EXPRESS Racks, Microgravity Sciences Glovebox, MELFI, etc) and complex hardware (such as Alpha Magnetic Spectrometer (AMS)). This support shall help the payload developer/owner resolve their anomaly.

3.2.1.7.5 ISS CONTINGENCY MER SUPPORT (S/A 1812, SSCN 12842) (S/A 1869)

The contractor shall provide certified MER console support surge capability for real-time support following an ISS Contingency (“Big 12 Failure”).

3.2.1.7.6 RUSSIAN SEGMENT SUPPORT TEAM (RSST) LOGISTICS SERVICES

The contractor shall provide logistics services, travel and transportation support for the RSST technical representatives supporting the conduct of real-time and simulated U.S. – Russian space station operations. (Effective October 1, 2012.)

3.2.1.8 OPERATIONS DOCUMENTATION

3.2.1.8.1 The contractor shall provide source data for the development or modification of malfunction procedures, flight rules and system drawings.

3.2.1.8.2 The contractor shall review, evaluate and provide concurrence on operations documentation, including Station Operations Data File (SODF), Flight Data File (FDF), Flight Rules, Assembly Operations Handbook, systems drawings and briefs. This includes review, evaluation and concurrence of products for the Flight Operations Reviews (FOR).

3.2.1.9 ANALYTICAL TOOLS/MODELS

The contractor shall maintain analytical models and tools required to execute the requirements of this contract to reflect the current state of the hardware/software and On-Orbit vehicle. GFE tools and models required to be maintained are listed in Appendix F, Analytical Models & Tools.

3.2.1.10 INTEGRATION OF USOS WITH IP/PS, PAYLOADS, COMMERCIAL VEHICLES AND GFE

The Contractor shall integrate GFE, Commercial Visiting Vehicles (SpaceX and Orbital), Payload, and IP/P, including Node 3 and PMM, hardware and software with the USOS to ensure the Vehicle meets requirements per SSP 41000 and SSP 41162 per Depth of Penetration definition in Appendix K. (S/A 1614) (S/A 1677)

3.2.1.11 ENGINEERING ANALYSIS

3.2.1.11.1 The contractor shall provide analytical integration of the USOS and evaluation of the ISS System and its interfaces, including model development and integrated analyses with IP/P and VV math models, for mission planning and anomaly resolution. Such analytical integration includes participation in strategic phase A/B studies of the impacts to the existing hardware, which would result

from architectural changes, enhancements or contingency scenarios of the ISS under evaluation by NASA.

3.2.1.11.2 The contractor shall provide as-flown flight performance telemetry data to support the development and maintenance of specific models, especially plume heating and effects, channelized power generation, and channelized heat rejection, which are maintained under the direction of NASA through institutional resources or through the MAPI Contract.

3.2.1.11.3 VERIFICATION AND CLOSURE OF REQUIREMENTS

3.2.1.11.3.1 The Contractor shall verify and close all open requirements in the ISS System Specification, SSP 41000 and ISS Segment Specification, SSP 41162, through assembly complete in accordance with DRDs VE20 and VE24 to complete verification closure of all ISS requirements. The Contractor shall provide final assessment of requirements remaining open at the end of Stage 15A. (This paragraph is only applicable to flights ULF-5, ULF-6 and 3R post 9/2010).

3.2.1.11.3.2 After assembly complete, the Contractor shall provide verification data to the MAPI contractor for all open requirements in SSP 41000 and SSP 41162 traceable to hardware/software sustained herein. The data shall be consistent with the requirements of DRDs VE-20, VE23 and VE-24. (This paragraph is only applicable to flights ULF-5, ULF-6 and 3R post 9/2010).

3.2.1.11.3.3 After assembly complete the contractor shall verify and close all stage requirements per F-VE-15 (this paragraph is effective 10/1/2010). (S/A 1660)

3.2.1.12 BILATERAL HARDWARE AND SOFTWARE EXCHANGE AGREEMENTS AND BILATERAL DATA EXCHANGE AGREEMENTS

3.2.1.12.1 The contractor shall implement the hardware and software exchange agreements with the IP/P per the baseline Bilateral Data Exchange Agreements and the baseline Bilateral Hardware Software Exchange Agreements List and Schedules (BDEALs and BHSEALS) to ensure integration of IP/P elements with Vehicle Segment.

3.2.1.12.2 The contractor shall provide inputs and review BDEALs and BHSEALS that have not been baselined to ensure data and hardware/software exchange requirements of this contract are met.

3.2.2 The following requirements are applicable to sections 3.3, 3.4, 3.5, 3.6, and 3.7 of this Statement of Work.

3.2.2.1 ENGINEERING FLIGHT PLANNING REQUIREMENTS

The contractor shall provide inputs to the Planning Period Increment Definition Requirement Documents (IDRDs) in order to submit flight and stage requirements/tasks necessary to maintain and assemble all hardware/software sustained by this contract to provide integration of IP/P, payload or GFE hardware performed under this contract.

3.2.2.2 HARDWARE AND SOFTWARE ENHANCEMENTS

The contractor shall propose to NASA, via the Program's change process, hardware and software enhancements or modifications identified during the nominal performance of this contract to maintain, and expand the performance of, or reduce operational costs for the vehicle. The contractor shall provide requirements definition of any approved enhancements identified.

3.2.2.3 VEHICLE CERTIFICATION AND OPERATIONAL DATA

3.2.2.3.1 RESERVED

3.2.2.3.2 The contractor shall maintain the Space Station Operational Data Book (SSODB) and Vehicle Certification Baseline for all USOS Subsystems, Specialty Engineering areas, and EVA to ensure the data is current with the state of the vehicle hardware and software for the ISS Program.

3.2.2.3.3 The contractor shall assess changes to the SSODB data and submit associated updates to maintenance and flight products (e.g., flight rules and crew procedures) to ensure the Vehicle is operated within acceptable limits.

3.2.2.3.4 The contractor shall develop and deliver ORU Certification Baseline documents per DRD F-PM-10. (S/A 1265)

3.2.2.3.5 The contractor shall develop and deliver ISS Certification Baseline for Lifetime Extension document per DRD F-PM-10. (S/A 1737 – SSCN 12745)

3.3 VEHICLE SEGMENT SUSTAINING

The contractor shall provide sustaining engineering for the ISS, Vehicle Segment to:

- Ensure a safe and operational vehicle for execution of ISS research and development activities (Utilization Plan).
- Prevent loss of life or vehicle.
- Manage the engineering baseline.
- Assess and document the detailed performance of the Vehicle segment hardware and software per the following requirements.

Sustaining engineering is applicable to hardware and software installed or destined for installation on the orbiting vehicle or in ground facilities, including support equipment (see appendix A, B, C).

3.3.1 VEHICLE SEGMENT SUSTAINING ENGINEERING MANAGEMENT AND INTEGRATION

3.3.1.1 A SUSTAINING INTEGRATION (S/A 1259)

The contractor shall integrate sustaining activities with the ISS Program, Space Shuttle Program, International Partners and participants, including Node 3, PMM, Commercial Visiting Vehicles (SpaceX and Orbital), Payloads (including research) and other NASA organization as required to execute the contract. (S/A 1614) (1677)

3.3.1.1 B COMPLETE

3.3.1.2 The contractor shall provide sustaining engineering to all sites and organizations (including the IP/P) that have designated hardware/software listed in Appendices A, B, and in the Government On-Line Data (GOLD) database. The contractor shall sustain the flight hardware, software and NASA facilities and GSE as listed in Appendix A, B, C.

3.3.2 TECHNICAL REQUIREMENTS

3.3.2.1 PROGRAM DOCUMENTATION

The contractor shall maintain and provide the book coordination function for the ISS Program documentation listed in Appendix E to ensure applicable requirements and processes are current.”

3.3.2.2 ENGINEERING FOR POST PRODUCTION SUPPORT

The contractor shall provide engineering for ORU repair and maintenance, material review, production of design engineering for minor modifications, ORU repair transition from Original Equipment Manufacturer (OEM) to depots or new facilities and On-Orbit maintenance planning and procedural development to ensure ORUs meet system functionality requirements.

3.3.2.3 ON-ORBIT CONFIGURATION DEFINITION

The contractor shall identify the On-Orbit subsystem configuration required for vehicle hardware sustained under this contract to execute the On-Orbit tasks and resolve anomalies. The contractor shall resolve vehicle configuration discrepancies.

3.3.2.4 LAUNCH AND PROCESSING SITE INTEGRATION/DE-INTEGRATION

The contractor shall provide data (to include procedures and constraints), analyses, special test/servicing or factory equipment, and decision making inputs to the launch and processing sites' integration/de-integration activities to perform modification kit installation, element closeout, preflight and postflight processing and servicing, pad and launch operations, hardware assembly, test, issue resolution and software loading and test.

3.3.2.5 FLIGHT TRAINERS, CREW TRAINING AND OPERATIONS PROCEDURES VERIFICATION

3.3.2.5.1 ANOMALY RESOLUTION

The contractor shall investigate and resolve Vehicle Segment hardware and software anomalies found during trainer development integration and updates, crew training, or procedure verification with the Space Station Training Facility (SSTF), Part Task Trainer (PTT), Russian Segment Trainer (RST) and other ISS simulators and mockups to isolate and correct issues attributed to hardware and software sustained by the contractor.

3.3.2.5.2 COMPLETE

3.3.2.5.3 COMPLETE

3.3.2.6 RESERVED

3.3.2.7 3D CAD MODELS

3.3.2.7.1 The contractor shall take delivery of all validated 3-D solid CAD models from the hardware developers and hardware integrators and

maintain a library of models on a NASA server for access by all Program users, including the IP/Ps and the research community. It is the responsibility of the hardware provider to provide validated models. The contractor shall check the models against released 2-dimensional drawings to ensure accuracy. The contractor shall incorporate as built measurement data into the CAD model and provide a final CAD model prior to launch. This central repository shall be the reliable sole source for CAD models for the analysis teams, so there will be a consistent set of data. The contractor shall use the CAD formats for delivery and delivery schedule per DRD F-VE-02.

3.3.2.7.2 The contractor shall translate models into formats as defined in DRD F-VE-02 in the format that the CAD users require for their workstations.

3.3.2.7.3 The contractor shall provide integrated models of the exterior of USOS cargo elements for hardware that is integrated onto the element at KSC and provide integrated stage models of the exterior of hardware that is installed/de-installed/moved on-orbit (e.g. antennas, handrails, slide wires, targets, etc.). These integrated models will be used for clearance assessments, robotic analyses, etc.

3.3.2.7.4 The contractor shall maintain the capability to develop 3-D CAD models of hardware other than USOS. When hardware providers do not have 3-D CAD capability, the contractor shall transform 2-D released engineering drawings and produce 3-D CAD models for ORUs and Assemblies.

3.3.2.7.5 The contractor shall maintain the Stage Model Interface Location Spreadsheet on the NASA CAD web page. This spread sheet documents the major sub-element interface points located in the ISS On-Orbit assembly model with respect to the Space Station Coordinate System. This data is required for assembly analyses. Other reference points are also requested by users (e.g. keel pins, trunnions, etc.).

3.3.2.7.6 The contractor shall maintain ISS hardware and coordinate data as required by the ISS Program. This link, <http://iss-www.jsc.nasa.gov/ss/issapt/cadweb/>, on the NASA CAD web page contains coordinate locations for hardware items (e.g. vents, grapple fixtures, camera ports, etc.) taken from the validated CAD models.

3.3.2.7.7 The contractor shall extract physical configuration data from CAD models as required by the ISS Program users.

3.3.2.8 STAGE/ON-ORBIT INSTALLATION DRAWINGS

3.3.2.8.1 The contractor shall obtain top assembly parts lists for each Vehicle element, GFE hardware, commercial resupply vehicles (SpaceX and Orbital) hardware and IP/P hardware from the hardware developers. For the current stage, the contractor shall produce the integrated On-orbit Stage Configuration Drawing Parts List (which is a released parts list for each stage) and submit to the VMDB per DRD PC25. The stage drawing will be used by CM as released documentation of the build up of the product structure and by the Mission Operations Directorate (MOD) for procedure development and verification. (S/A 1614)

3.3.2.8.2 The contractor shall provide On-Orbit Stage Configuration Drawings, showing stage complete configuration of Contractor provided USOS end items with On-Orbit installed and removed items accounted for within the drawing in accordance with American Society of Mechanical Engineers Y14.100, Y14.35, and Y14.24 and submit to the VMDB per DRD PC25. These drawings provide engineering design definition to assembly launch configuration hardware into the on-orbit vehicle, which eventually meet SSP 41000.

3.3.2.9 VEHICLE INTEGRATION DATA

3.3.2.9.1 The contractor shall prepare, maintain and submit engineering drawings in accordance with DRD F-VE-09.

3.3.2.9.2 The contractor shall prepare, maintain, and submit the Vehicle safety and engineering data needed for the ISS Vehicle integration and operation. Scope, content and functionality shall be in accordance with DRD VE32.

3.3.2.9.3 The contractor shall prepare, maintain, and submit launch configuration drawings for manifested flight hardware in accordance with DRD F-VE-14.

3.3.2.10 MASS PROPERTY DATA

The contractor shall develop pre-flight and post-flight On-Orbit ISS Program mass properties prior to every ISS flight docking, undocking and re-docking. The contractor shall coordinate and provide mass properties to the Russians as per protocol agreement.

3.3.2.11 LAUNCH VEHICLE HARDWARE ASSESSMENTS (SSCN 13011- SA 1796)

The contractor shall perform loads and dynamics reviews and analyses in accordance with SSP 50835, Rev. B, “ISS Pressurized Volume Hardware Common Interface Requirements Documents,” for manifested hardware items.

3.3.3 COORDINATE SYSTEM

The contractor shall transmit data that requires coordinate system definition (e.g., mass properties, 3D CAD models, etc.) in accordance with SSP 30219, Space Station Reference Coordinate Systems Document.

3.3.4 ENGINEERING DATA MANAGEMENT (EDM)/VMDB

3.3.4.1 VMDB DATA INTEGRATION MANAGEMENT

3.3.4.1.1 The contractor shall receive and accept delivery from the ISS Program Data Owners, the Vehicle engineering and safety data and GFD defined in DRD VE32, “VMDB Vehicle Engineering Data”.

3.3.4.1.2 The contractor shall capture, populate, integrate, and manage configuration of the data (Vehicle engineering and safety data and the GFD needed for Vehicle integration and operations) in the VMDB.

3.3.4.1.2.1 Data capturing includes resolving data discrepancies among data sources and pre-processing to convert hard copy to electronic files, and to configure electronic files for direct loading into the VMDB.

3.3.4.1.2.2 Data population includes formatting, loading, analyzing and resolving data discrepancies. The contractor shall populate the VMDB with nominal change traffic and documents, which includes:

- Engineering drawings, which meet DRD F-VE-09, Engineering Drawings and Associated Lists.
- Tabular data-Integrated, top to bottom vehicle, manifest configurations, attributes, and PDF documents.
- Data integration includes receiving, migrating and releasing Indentured Parts List (IPL) data.
- Configuration Management includes validating and assessing data integrity; implementing the processes and procedures as defined in the VMDB Data Integration Plan, D684-10090-01.

3.3.4.1.3 The Contractor shall provide an electronic data conversion facility to format drawing data in accordance with DRD F-VE-13, Data Conversion and Interface Facility for GFE/IP/commercial resupply vehicles (SpaceX and Orbital) drawings to the VMDB, SSP 50177/GFD Description Document, and VMDB requirements for Engineering drawings for NASA GFE and IP/P hardware. (S/A 1614)

3.3.4.1.4 The contractor shall deliver all GFE, commercial resupply vehicles (SpaceX and Orbital) hardware and IP/P released engineering drawings to the VMDB, which includes integrating with the Space Station Library to coordinate deliveries of the data packages that contain hardcopy drawings and IP electronic deliveries to the VMDB. (S/A 1614)

3.3.4.1.5 RESERVED

3.3.4.1.6 RESERVED

3.3.4.1.7 The contractor shall implement and maintain the process for VMDB manifest data as described in the VMDB Work Instruction for VMDB Manifest Data Processing, MGT-OL-012.

3.3.4.1.8 The contractor shall provide help desk function VMDB user community for help calls, data issues, missing data and ad-hoc queries.

3.3.4.1.9 The contractor shall provide functional data training to VMDB users. This includes:

- a. Develop and implement training to educate users on how to navigate the VMDB and retrieve data. This training focuses on data needs, problem solving and navigating the VMDB using the reporting and browser tools.
- b. Coordinate (set-up, notify and distribute information).
- c. Create and maintain training documents.

3.3.5 RESERVED

3.3.6 RESERVED

3.3.7 SOFTWARE SUSTAINING ENGINEERING

3.3.7.1 SOFTWARE MANAGEMENT

The contractor shall develop and implement a software sustaining strategy to manage, update, and maintain the ISS Program software. The ISS Program's software shall consist of flight, ground, and test software/simulation and data developed for the USOS and common software provided to the IP/P and Payloads. The software sustaining strategy shall specify the contractor's integrated maintenance and software systems engineering of all CSCIs (see SOW, appendix B), simulation software, commercial off-the-shelf (COTS), and the resolution of related software problem reports.

3.3.7.2 SOFTWARE MODIFICATION

- 3.3.7.2.1** The contractor shall develop, test, verify and deliver software modifications (recompiles, application software releases, patches, pre-positioned loads and simulations) in accordance with D684-10017-01 Software Development Plan and SSP 50482 Software Management Plan to ensure verification of software modifications prior to operational use.
- 3.3.7.2.2** The contractor shall develop and execute Formal Qualification Test for each flight software CSCI release, patch, and PPL in accordance with D684-10017-01 Software Development Plan to ensure certified software releases are delivered.
- 3.3.7.2.3** The contractor shall develop, test, verify, and deliver, per DRD SE02, software patches as required for On-Orbit software fixes that are deemed critical by the ISS Program and cannot wait for the next flight software CSCI release of the software. When directed by the ISS Program for catastrophic and time critical software patches, the contractor shall deliver a certified patch within 24 hours.
- 3.3.7.2.4** The contractor shall develop, test, verify, and deliver, per DRD SE02, PPL to meet vehicle performance requirements for the flight software CSCIs and Firmware Controllers listed in Appendix B. When directed by the ISS Program for catastrophic and time critical PPLs, the contractor shall deliver a certified PPL within 24 hours.
- 3.3.7.2.5** The contractor shall integrate all signal data and inputs including: Ips to develop and deliver a Standard Out file per NASA approved Software CR process. The Standard Out file (DRD VE28) shall conform to the format described in Standard Out Definition Document (SODD) D684-10177-01 and the Data Integration Standards. The Data Integration Standards shall be documented per DRD F-SW-01.

3.3.7.2.6 TIMELINER BUNDLE DEVELOPMENT AND VALIDATION SUPPORT (S/A 1374)

The contractor shall provide support to the NASA/Mission Operations Directorate (MOD) timeliner bundle development activity by:

- a. Participating in the Timeliner Operations Review Panel as a member.
- b. Assisting in the development of timeliner bundle function requirements and verification tests.
- c. Performing detailed analyses and tests which assess the performance of the CCS flight software in the presence of the executing bundle.
- d. Performing formal qualification (defined as formal Hardware/Software horizontal testing and assessment) of the timeliner bundles.
- e. Confirming that commands and telemetry used on the timeliner bundle are certified.
- f. Providing software quality assurance witness to verification test activities performed in the Software Verification Facility (SVF) and configuration management of the test procedure used in the SVF.
- g. Developing timeliner flight software in accordance with existing software development processes and standards.

3.3.7.3 INTEGRATED FLIGHT LOADS (IFL)

3.3.7.3.1 The contractor shall produce and deliver software in the form of IFLs DRD SE02, to the user community.

3.3.7.3.2 The Contractor shall provide the documentation associated with an IFL defining the On-Orbit software configuration requirements that include all of the software products that must be up-linked, the constraints associated with the software products, and the On-Orbit operational impacts if the product is not up-linked.

3.3.7.4 STAGE TEST (S/A 1976, SSCN 13629)

The contractor shall define and execute Stage tests that verify the software-to-software interfaces for all CSCI releases utilizing the SDIL in accordance with the Software Development Plan D684-10017-01 and the Software Management

Plan SSP50482. Additionally, Boeing shall provide Hardware Software Integration Testing for SpaceX missions in support of JSL visiting Vehicle Operations.

3.3.7.5 RESERVED

3.3.7.6 CREW DISPLAYS

3.3.7.6.1 The contractor shall develop and maintain requirements and architecture associated with Crew Displays. The requirements and architecture shall comply with SSP 50313, ISS displays and graphics commonality standards.

3.3.7.6.2 The contractor shall develop displays in accordance with requirements from the Integrated Display and Graphic Standards (IDAGS) charter, ISSP-PPD 503.

3.3.7.6.3 The contractor shall provide data, analyses and input to status and decision making at the IDAGS Panel to ensure display implementation.

3.3.7.7 CAUTION AND WARNING

The contractor shall develop and maintain Caution and Warning files for the ISS Vehicle per NASA approved Software CR process. The C&W files shall conform to the format described in SODD D684-10177-01 section 30.7.1.3.2.

3.3.7.8 RESERVED

3.3.7.9 FACILITIES (SSCN 12638 – S/A 1817)

3.3.7.9.1 SDIL SUSTAINING

3.3.7.9.1.1 The contractor shall maintain and operate the SDIL (see Appendix C) including all hardware, support equipment, software and software tools to perform hardware/software integration, flight software verification, anomaly investigation/resolution flight following and other Program integration and test functions. This includes maintaining USOS, GFE, Commercial Visiting Vehicles (SpaceX and Orbital) and IP hardware and software interfaces for the ISS. (S/A 1614)

3.3.7.9.1.2 ESA SIMULATORS (Moved from SOW 6.15.4)

The contractor shall sustain the following SVF simulators

with the SDIL, including procurement and housing of simulator spare parts and repair/replacement:

- ATV (S/A 1485)
- Columbus (COL-SVF) (S/A 1554)

3.3.7.9.1.3 RUSSIAN SIMULATORS

The contractor shall provide the following sustaining functions for the SM and MLM simulation platform hardware and software components in the SDIL: system configuration management, software license maintenance, system and component level design/analysis, and simulation platform hardware and software upgrades.

3.3.7.9.2 The contractor shall utilize the SVF, to complete integration and verification of the ISS Vehicle per applicable open requirements in SSP 41000 per Appendix Z for flight software and data loads.

3.3.7.9.3 The contractor shall utilize the MBF as the official ISS Program repository for storage and distribution of the ISS signal data, flight software, and simulation software, C&W etc.

3.3.7.9.4 The contractor shall utilize the ISS Software Integration Laboratory (ISIL) for anomaly investigation/resolution, flight following and other software integration and testing.

3.3.7.9.5 The contractor shall create the schedule for the labs and facilities to implement formal qualification testing, stage testing, hardware/software integration testing, flight following activities, IP/P software testing, Ground Segment end-to-end testing, operational readiness test, mission configuration testing, procedure validation and other testing as approved by NASA.

3.3.7.9.6 The contractor shall develop, manage and maintain interface requirements/ICDs for USOS test facilities to support interface testing/verification with IP/P provided hardware and software integrated into NASA facilities.

3.3.7.9.7 COMPLETE

3.3.7.9.7.8 MIOP SPARES AND REPAIR (S/A 1422)

3.3.7.9.7.8.1 COMPLETE

3.3.7.9.7.8.2 The contractor shall purchase the necessary parts to support MIOP card maintenance and repair through 2016.

3.3.7.9.7.9 ISIL COMPLETION PHASE 4 IMPROVEMENTS (S/A 1457)

The contractor shall implement the following improvements into the ISIL:

- a. Local data interface emulator (as implemented in the pump flow control subassembly of the photo voltaic thermal control system).
- b. Thermal control system pump and control valve package emulator.
- c. Additional fault injection capability in the major constituent analyzer.

3.3.7.10 COMMAND AND TELEMETRY

The contractor shall conduct an analysis of the Command and Telemetry and to provide a certification report for each CSCI release per the Command and Telemetry Certification for the USOS System, D684-10436 or equivalent ASCB approved process.

3.3.7.11 SOFTWARE SCHEDULING

3.3.7.11.1 The contractor shall provide data, analyses and decision making input to the ISS Program panel chartered to control integrated software schedules, oversee development status, control configuration of formally released software, integrated software loads, and data files developed to satisfy verification, training and mission objectives.

3.3.7.11.2 The contractor shall deliver an integrated software schedule per DRD F-SW-03 to ensure software deliveries meet the ISS Program milestones.

3.3.7.12 SOFTWARE NON-CONFORMANCES

3.3.7.12.1 The contractor shall provide data, analyses and decision-making input to the team chartered per the SOW paragraph 3.2.1 to disposition non-conformances documented in Software Change Requests (SCRs).

3.3.7.12.2 The contractor shall manage the Station Program Note (SPN) process, track open SPNs and ensure resolution of problems or issues with drafted SPNs that document flight software workarounds in accordance with the NASA Approved SPN Process.

3.3.7.13 FLIGHT SOFTWARE OPERATIONS HANDBOOK

The contractor shall maintain the Flight Software Operations Handbook (FSOH) per DRD F-SW-05.

3.3.7.14 DELAY TOLERANT NETWORKING (DTN) (S/A 2051 – SSCN 13799)

The Contractor shall provide the text file changes required to update the DTN configuration files and updates to support new protocols or versions of the DTN protocol stack (ION). The contractor shall also provide integrated DTN testing with payload users in support of payload development and verification (DTN operational April 2015).

3.3.8 USOS POST PRODUCTION SUPPORT (PPS)

The Post Production Support (PPS) effort provides logistics for flight hardware listed in Appendix A and includes the maintenance and repair of failed hardware and replenishment/procurement of spares, and repair parts. The contractor shall plan the performance of PPS tasks on an annual basis and provide NASA with an annual plan which delineates the logistics responsibilities and products required to successfully support the operational phase of the ISS Program. The contractor shall perform technical integration which supports ISS Program planning and prioritization of flight manifests for all USOS hardware candidates for flight to the On-Orbit vehicle.

The contractor shall provide acquisition logistics and PPS functions for Government furnished equipment (GFE) as follows: (S/A 1696)

- Logistics support analysis record (LSAR) development and maintenance (SOW 3.3.8.1)
- Technical data and documentation (TD&D) development and maintenance per SSP50520. (SOW 3.3.8.1)
- Spares tracking (SOW 3.3.8.5.2)
- On-orbit anomaly support (SOW 3.2.1)
- Manifest planning (SOW 3.3.8.2.4)
- SODF review (SOW 3.2.1.8.2)

3.3.8.1 LOGISTICS SUPPORT ANALYSIS

The contractor shall develop and maintain technical data including LSARs and technical data and documentation located in the NASA Enhanced Automated Graphical Logistics Environment (EAGLE) database to ensure the ISS Program

has accurate data readily available to maintain and logistically support ISS hardware to the on-orbit maintenance concept level. The contractor shall integrate technical data developed for the USOS and the ISS Vehicle to provide a comprehensive body of data (i.e., in EAGLE) for the vehicle. The contractor shall convert MIL-STD 1388-2A data delivered from International Partners/Participants into MIL-STD 1388-2B data compatible with EAGLE. Updates of Logistics Support Analysis and Technical Data & Documentation shall be performed in accordance with the standards and processes in SSP 50520, International Space Station Logistics & Maintenance Operational Support Concepts and Requirements.

3.3.8.2 MAINTENANCE PLANS

3.3.8.2.1 The contractor shall develop and submit to the MAPI contractor, on-orbit maintenance plans that are used as inputs to the IDRPs and Planning Period for the IDRDs annexes to determine logistics allocations for crew time and up mass/down mass for the USOS and the ISS Vehicle.

3.3.8.2.2 The contractor shall assess the supportability of the USOS, the ISS Vehicle, and non-Boeing Sustained Payload Facilities, in terms of crew time, up mass/down mass and functional availability to support management decisions concerning supportability of the ISS. (DRDS F-LM-01, F-LM-02).

3.3.8.2.3 The contractor shall develop, update and maintain IDRD Annex 2 (DRD F-LM-03) for each ISS stage for the USOS, and the ISS Vehicle to integrate the maintenance requirements and planning across the ISS Vehicle.

3.3.8.2.4 The contractor shall develop and submit the MAPI contract Manifest Requests, for USOS hardware required to be delivered to/returned from the On-Orbit vehicle to perform this contract's function per the Mission Integration Dataset Blankbook, SSP 50622 and SSP 50200-02, SPIP Volume 2. The contractor shall ensure on time delivery of hardware and supporting documentation for flight of hardware in Appendix A with an "SE" or SE-Pri" in the designation. The contractor shall implement pre-flight imagery requirements for new ORU installations per SSP 50502 and the ISS Hardware Pre-flight Imagery Requirements, including On-Orbit imagery requirements. The contractor shall validate mass and dimensional data and other part attributes prior to submission of Manifest Requests for hardware in Appendix A with an "SE" or "SE-Pri" in the designation Task to ensure the spares, repair parts, tools and maintenance.

3.3.8.2.5 The contractor shall provide logistics up-mass, crew time and On-Orbit stowage requirements for the operations summary for the USOS and the ISS Vehicle. This information defines the resources required long term to maintain the ISS Vehicle. (Ref: DRD F-LM-01)

3.3.8.3 ON-ORBIT MAINTENANCE OPERATIONS

3.3.8.3.1 The contractor shall provide logistics and maintenance data generated from maintenance operations to the MAPI contractor, analyses and decision-making input to ISS vehicle operations issues and anomalies to support On-Orbit USOS maintenance operations.

3.3.8.3.2 The contractor shall maintain logistics data products and databases consistent with On-Orbit hardware status. This task includes up-dating the Maintenance Data Collection for the USOS and ISS Vehicle as maintenance occurs and the tracking of limited life items per Joint Program Directive (JPD)-315, Limited Life Item (L&I) Tracking and Control. This task ensures that historical data is readily available to support future maintenance planning, spares management and repair decisions.

3.3.8.4 ON-ORBIT GOVERNMENT PROPERTY

The contractor shall perform On-Orbit government property accounting of the USOS using GOLD to ensure accountability of government hardware.

3.3.8.5 MATERIAL MANAGEMENT

3.3.8.5.1 The contractor shall track spare hardware On-Orbit in the GOLD database to include USOS and IP/P core systems hardware and payload support hardware.

3.3.8.5.2 The contractor shall perform asset tracking inventory management and maintenance data collection of hardware required to execute the logistics function.

3.3.8.5.3 The contractor shall perform vendor and parts obsolescence monitoring and identify issues for hardware to ensure that NASA has opportunities to address obsolescence through procurements or redesign in time to avoid supportability issues. (DRD F-LM-04)

3.3.8.5.4 The contractor shall package and ship hardware per approved engineering and the version of NPR 6000.1 cited in SSP 50257 to ensure safe, timely delivery of ISS hardware. Domestic shipments via commercial bills of lading (CBLs) shall be pursuant to Clause F.3,

BILLS OF LADING (NFS 1852.247-73)(JUNE 2002), for all property accountable to or hardware/software delivered under this contract.

3.3.8.5.5 The contractor shall manage the residual asset process including the review, disposition, preparation and archival of all hardware from the USOS vehicle development contract in order to retain hardware potentially useful to the ISS, and to excess hardware causing unnecessary expense. This includes ensuring hardware credentials are maintained or created and hardware is packaged and shipped for long term storage or use at the depots.

3.3.8.5.6 The contractor shall procure or manufacture hardware to execute hardware repair as directed by a Maintenance Action Request (MAR) from the System Problem Resolution Teams (SPRTs) and to meet hardware delivery requirements. The contractor shall provide SPRT support including MAR processing for USOS hardware.

3.3.8.6 MAINTENANCE AND REPAIR

3.3.8.6.1 The contractor shall maintain and repair flight hardware per program requirements at facilities certified per SSP 50276. The hardware shall be delivered to the next level integrator with all acceptance test requirements satisfied. This task is performed to ensure hardware is repaired-to-print in time to meet on-going support requirements.

3.3.8.6.2 The contractor shall resolve issues in the SPRTs and manage the MAR process per ISS JPD 327. This task is performed to coordinate hardware disposition per the SPRTs and to ensure SPRT direction is supported by the repair facilities.

3.3.8.6.3 The contractor shall perform modifications and minor up-grades that have been approved by the ISS Program so that flight worthy hardware is available when needed. This may include the production or procurement of modification kits per ISS Program approved engineering.

3.3.8.6.4 The contractor shall up-date technical documentation (ADPs, TCTIs, INCs) and databases, as required, to document up-grades, modifications, maintenance and repair actions. This includes the delivery of as built parts lists for kitted items. This task is to ensure that the USOS technical baseline is consistently up-to-date. Up-dates to technical documentation as a result of modification kits and up-grades shall be performed in accordance with D684-10749-01.

3.3.8.6.5 The contractor shall fabricate or procure piece parts or low dollar (less than \$200K per item) ORU replenishments to support corrective

(repair) and preventative maintenance. If the total estimated cost to repair an ORU exceeds the cost of a replacement, the ORU will be replaced.

3.3.8.6.6 The contractor shall maintain, repair, and/or replace ISS program accountable components, contingency kits/items, flight support equipment (FSE), ground support equipment (GSE), operational items, orbital replacement units (ORU), orbital support equipment (OSE), and parts; regardless of source. The contractor shall use Boeing form, Maintenance Action Request (MAR), to document and obtain authorization for the following maintenance activities for ORU/SRU, which include as required, the development of procedures and the touch-labor required to accomplish the defined maintenance:

- **TEST, TEARDOWN & EVALUATION (TT&E)** – Fault isolation to identify the cause of failure, includes fault location inspection and testing, disassembly, condition determination, and failure analysis required to complete the maintenance action. Does not include detailed failure analysis (i.e. root cause).
- **CORRECTIVE MAINTENANCE (CM)** - Servicing, post repair test, inspection, adjustment/alignment, access, assembly/disassembly, lubrication, operation, decontamination, removal, replacement, installation, calibration, repair, rework, refurbishment, overhaul, rebuilding and reclamation based upon a TT&E disposition.
- **PREVENTIVE MAINTENANCE (PM)** – Servicing, test, inspection, adjustment/alignment, access, assembly/disassembly, lubrication, operation, removal, replacement, installation, calibration, overhaul, rebuilding and reclamation based upon a preventive maintenance schedule.
- **MODIFICATION (MOD)** – Installation of Modification Kit (less than \$200K per item) and completion of all related documentation in support of an approved Class I engineering change.
- **OTHER** – NASA COTR approved activities other than TT&E, CM, PM, or MOD such as, but not limited to cannibalization; unscheduled test; disassembly in support of failure analysis.

3.3.8.6.7 DEPOT TRANSITIONS

The contractor shall transition subcontracts for ORU repair, refurbishment and scheduled maintenance, including subcontracts with

Original Equipment Manufacturers (OEMs) and repair depots to transition repair support from a specific vendor to a NASA depot. The contractor shall provide training and technical support, transfer and installation of maintenance support equipment (MSE), repair manuals, and depot certification activities for transitions.

3.3.8.7 DATA SYSTEMS

The contractor shall provide sustaining support for the GOLD, EAGLE, CITRIX and TACTRAC data systems hardware and software operations, administration, maintenance, patches and upgrades as needed to meet the requirements of this contract.

3.3.9 ON-ORBIT CONSTRAINTS TESTING (OOCT) – NOT IN 2011 – 2015 CONTRACT EXTENSION

The contractor shall perform, and document results of element cable and fluid mate, demate, and fit checks (e.g., On-Orbit Constraints Test) for all flight elements available through the contract period.

3.3.10 USOS STRUCTURAL HARDWARE LIFE EXTENSION (PHASE 2 AND PHASE 3) (S/A 1660)

3.3.10.1 The contractor shall perform an analytical assessment of the feasibility of extending the structural life of USOS primary structural hardware installed on-orbit through December 31, 2028.

3.4 ISS SUBSYSTEM MANAGEMENT

The contractor shall manage the integrated performance of the end-to-end subsystem, across all ISS segments for the following subsystems and specialty engineering areas:

- Electrical Power Subsystem (EPS)
- Structures and Mechanical Subsystem (S&M)
- Passive Thermal Control Subsystem (PTCS)
- Active Thermal Control Subsystem (ATCS)
- Environmental Control and Life Support Subsystem (ECLS)
- Command and Data Handling Subsystem (C&DH)
- Communication and Tracking Subsystem (C&T)

- Guidance, Navigation and Control Subsystem (GNC)
- Caution and Warning Subsystem (C&W)
- Materials and Processes
- EEE Parts
- Electromagnetic Effects (EME)
- Natural and Induced Environments

The contractor shall ensure physical, functional, safety and operational compatibility at the USOS element to IP/P element interface within constraints of the MOUs, IGAs and JMPs to protect the crew and vehicle and facilitate the ISS research activities. NASA will provide these documents. The IP/P element providers are responsible for sustaining their contribution (e.g., hardware, software, data products, schematics, unless specifically called out in an IP/P MOU, IGAs or JMPS).

3.4.1 SUBSYSTEM ANALYSIS AND INTEGRATION

3.4.1.1 The contractor shall perform GFE, Commercial Visiting Vehicles (SpaceX and Orbital), and IP integration per DOP definition in Appendix K to assess Subsystems hardware and software interface compatibility, validate verification requirements and plans, analyze and document subsystem integrated performance, and define integrated Subsystem test configuration, test procedure and test requirements. (S/A 1614)

3.4.1.2 The contractor shall perform ISS time-phased power resource analyses and integration in support of the ISS assembly and utilization operations. This work shall include the development of operational concepts, procedures and vehicle power configurations that are compatible with the limitations of the ISS power system.

3.4.1.2.1 The contractor shall obtain time-phased power generation elements to perform this effort from the ISS repository or directly from NASA.

3.4.1.2.2 The contractor shall develop and maintain power and thermal resource data and submit it to the VMDB.

3.4.1.3 The contractor shall provide assessments of Vehicle hardware, software, consumable and logistics impacts to flight attitude and altitude profiles under evaluation by the MAPI contractor.

3.4.1.4 The contractor shall provide assessments of Vehicle hardware thermal performance to resolve issues identified by the ISS MAPI contractor launch to

activation evaluation, ensuring certified thermal limits of Vehicle hardware are not exceeded.

3.4.1.5 The contractor shall generate the design and verification requirement definition for Vehicle Subsystem hardware being integrated into the ISS and for Subsystems across element interfaces, including allocated requirements across element-to-element interfaces to ensure complete requirements verification closure.

3.4.1.6 The contractor shall perform the following to integrate the vehicle hardware requirements with the associated FSE, External Stowage Platform, and External Carrier development, integration, and operations performed by the NASA, International Partners, Commercial re-supply vehicles (SPACEX and Orbital (pressurized only)), and the MAPI contractor.

3.4.1.6.1 Deliver to the appropriate Program repository the following information pertaining to ORU's sustained in Appendix A for use in the development, configuration, certification and integration of FSE, External Stowage Platforms and External Carriers:

3.4.1.6.1.1 Structural, thermal, CAD and mass properties models.

3.4.1.6.1.2 Non-operating hardware constraints.

3.4.1.6.1.3 Interface definition.

3.4.1.6.2 The contractor shall participate in design and integration reviews to identify and resolve issues associated with specific carrier configuration and carrier or FSE design as it impacts ORU's sustained by this contract.

3.4.1.6.3 The contractor shall provide technical requirements for Carrier or stowage platform configuration and integration to ensure vehicle certification limits are protected, and to identify issues with carrier configuration by performing the following:

3.4.1.6.3.1 The contractor shall participate in design and integration reviews to identify and resolve issues associated with carrier configuration and design as it impacts the On-Orbit Vehicle.

3.4.1.6.3.2 In support of operations planning, the contractor shall perform EVA assessments of carrier configurations under

evaluation by the carrier integrator and identify and resolve issues with the carrier integrator.

3.4.1.6.4 The contractor shall provide analytical integration of integrated carrier or stowage platform configuration with the ISS Vehicle by performing the following:

3.4.1.6.4.1 The contractor shall perform integrated ISS structural, thermal, power, MMOD, microgravity, EMI/EMC and EVA analyses to identify issues with carrier configuration or operations.

3.4.1.6.4.2 The contractor shall provide up-dated thermal, structural, dynamic, EMI, and MMOD environments and results of assessments to the International Partners and commercial re-supply vehicles for issue resolution with ORU providers.

3.4.1.6.4.3 The contractor shall resolve issues between carrier configuration and the On-Orbit vehicle with the International Partners and commercial re-supply vehicles.

3.4.1.6.4.4 The contractor shall resolve structural issues associated with structural launch environments exceeding manifested ORU capabilities for internal and external ORUs sustained by this contract. (S/A 1660)

3.4.1.7 The contractor shall perform as-built measurement of flight hardware (not in 2011 – 2015 contract extension).

3.4.1.7.1 (not in 2011 – 2015 contract extension)

The contractor shall provide as-built measurement data of flight hardware that will attach to the Vehicle to support clearance analyses and integration tasks (e.g., static fit analysis for ISS element mating interfaces). The items to be measured on the elements are defined at the Measurement Technical Interchange Meetings (TIMs) for the elements of USOS, GFE, commercial resupply vehicles (SpaceX and Orbital) hardware, and IP/P hardware. The contractor shall incorporate the as-built measurements into the final CAD model. Elements to be measured through September 30, 2008 are:

1. DPA measurement and analysis of ESA Columbus Module, JAXA JEM PS, JAXA JEM PM, JAXA JEM ES, JAXA JEM EF, SPDM, HTV1 CBCS, and Node 3 element-to-element interfaces. (S/A 1355)

2. Redo DPA measurement and analysis of MPLM FM1 and MPLM FM2 element-to-element interfaces due to hatch replacement (PRACA 3251). (S/A 1297)
3. Perform DPA of ESP3. (S/A 1300)
4. Perform DPA of Node 3. (S/A 1315)
5. Perform DPA of UMAs removed from the outboard MT/CETA Rails. (S/A 1456)

Elements to be measured from October 1, 2008 through September 30, 2010 will be determined on a case-by-case basis. The contractor shall provide the capability to perform DPA measurement and analysis of 6 elements/year. (S/A 1614)

3.4.1.7.2 (not in 2011 – 2015 contract extension)

The contractor shall conduct Measurement TIMs to gather requirements from the ISS/SSP Program users on the following element flight hardware requiring as-built dimensions: HTV1 CBCS, and Node 3. The Measurement TIMs will be held at L-12 months and the users shall submit their request on the Measurement Form via the CAD Team website on the ISS homepage. (S/A 1355)

3.4.1.7.3 The contractor shall conduct as-designed audits for Node 3 fluid and cable interfaces and develop a report on the audit findings. (S/A 1315)

3.4.1.7.4 The contractor shall conduct on-orbit constraints tests (OOCT) for Node 3. (S/A 1315)

3.4.1.8 The contractor shall define Station Detailed Test Objectives (SDTOs) according to SSP50448, SDTO Catalog, as needed to evaluate system capability expansion necessary to sustain the vehicle.

3.4.2 PERFORM MISSION EVALUATION

3.4.2.1 The contractor shall monitor and maintain status of overall subsystem architecture and topology changes, including the addition of IP/P, Commercial Visiting Vehicles (SpaceX and Orbital), GFE, or Payload hardware to the subsystem to ensure thorough understanding of the Subsystem configuration for supporting Subsystem performance assessment or anomaly resolution. (S/A 1614)

3.4.2.2 The contractor shall track and document the consumed life of all life-limited hardware sustained by this contract to support assessment of impacts on maintenance planning and On-Orbit operations.

3.4.3 FLIGHT PLANNING

Assess ISS launches, stages and increments to assure the planned activities fall within the certified capability of the vehicle and the end-to-end subsystem.

3.4.4 IP TEST AND VERIFICATION

3.4.4.1 TEST

The contractor shall conduct functional interface testing for IP provided modules and components as specified in bilateral integration and verification plans. The task includes system and subsystem coordination, and preparation of test reports with Ips. This task is required to ensure thorough interface compatibility verification with the USOS prior to launch, On-Orbit assembly, and On-Orbit activation operations with Vehicle Subsystems.

3.4.4.2 COMPLETE

3.4.5 IP ELEMENT TECHNICAL INTEGRATION

The contractor shall perform the following tasks to technically integrate IP elements (JEM/HTV, Columbus, Cupola, ATV, SPDM) into ISS subsystems:

3.4.5.1 Define data requirements for and participate in NASA-supported, IP element/segment-level reviews, including requirements reviews, design reviews, qualification and verification reviews, acceptance reviews, and pre-shipment reviews to validate that the IP element meets requirements defined in SSP41000 by performing the following. Identify and resolve issues.

3.4.5.2 RESERVED

3.4.6 SPECIALTY ENGINEERING

In addition, to the generic tasks required for subsystem management above, the following tasks are also required for the specialty engineering areas (Materials & Processes, EEE Parts, Electromagnetic Effects, and Natural & Induced Environments).

3.4.6.1 The contractor shall maintain and implement specialty engineering control programs for the ISS Program to ensure compliance with Program requirements and engineering practices as defined in:

- SSP 41000, System Specification for the ISS (Natural and Induced

Environments section).

- SSP 30312, EEE and Mechanical Parts Management and Implementation Plan.
- SSP 30233, Space Station Requirements for Materials & Processes (M&P). The materials used for the ISS Program hardware shall be reported and reviewed through the processes identified in DRD's VE09, MIUL and VE10 MUA.
- SSP 30243, Space Station Requirements for Electromagnetic Compatibility.

3.4.6.2 The contractor shall review waivers and exceptions to ISS specialty engineering requirements for hardware provided or modified by all ISS Program contracts, GFE providers, Commercial Visiting Vehicles providers (SpaceX and Orbital), payload providers, and IP/Ps to ensure consistency in implementation. The contractor shall audit submitted MUA's, MIUL's for hardware provided or modified by all ISS Program contracts (except those managed by NASA JSC and NASA MSFC) and by IP/Ps to ensure consistency in implementation. This responsibility shall be consistent with the Depth of Penetration scope definition in Appendix K. (S/A 1614)

3.4.6.3 The contractor shall develop and maintain an integrated ISS Vehicle acoustics model excluding payload hardware.

3.5 EXTRA-VEHICULAR ROBOTICS (EVR) INTEGRATION (not in 2011 – 2015 extension)

3.5.1 The Contractor shall ensure physical, functional, safety, and operational EVR compatibility at the USOS element-to-IP/P element interface within constraints of the BIVP, BHSEALS, and BDEALS. IP/P element providers are responsible for sustaining their contribution (e.g., hardware, software, data products, schematics), unless specifically called out in an IP/P BIVP, BHSEALS, and BDEALS.

3.5.2 The contractor shall develop and implement requirements and procedures for end-to-end EVR operations across the ISS Vehicle to ensure ORU/element Robotics compatibility and to ensure Robotics operability.

3.5.3 The contractor shall integrate the system design of the elements involved in the ISS robotic assembly/maintenance operations and validate assembly/maintenance operational concepts to ensure ISS hardware robotics compatibility.

3.5.4 The contractor shall conduct EVR functional interface testing for IP/P provided modules and components as specified in bilateral integration and verification plans. The tasks include system and subsystem coordination and preparation of test reports

with IP/Ps. These tasks are required to ensure thorough interface compatibility verification with the USOS prior to launch On-Orbit assembly and On-Orbit activation operations with Vehicle Subsystems.

3.5.5 The contractor shall perform end-to-end berthing integration to achieve safe and effective ISS robotic assembly operations on each berthing attempt. These analyses shall be performed via a program approved schedule.

3.5.6 The contractor shall integrate all (including GFE, commercial resupply vehicles (SpaceX and Orbital) hardware and IP/P) dexterous ISS robotic hardware with the Special Dexterous Manipulator (SPDM) to ensure compatibility. The contractor shall identify all hardware ORU deficiencies as related to EVR operations and recommend corrective action to ensure successful SPDM operations. (S/A 1614)

3.5.7 The contractor shall integrate USOS hardware with IP/P's, including JEM RMS systems, to ensure compatibility and successful IP/P's, including JEM and RMS, operations.

3.5.8 The contractor shall document the as-designed location and orientation for the SRMS and the Space Station Remote Manipulator System (SSRMS) grapple fixtures manifested for USOS, commercial resupply vehicles (SpaceX and Orbital) hardware GFE, and IP/P hardware and provide to the VMDB at L-1 year to track the configuration of grapple fixtures on the ISS. Update the document prior to flight with as-built data from the DPA. (S/A 1614)

3.5.9 The contractor shall provide SSRMS, and SPDM kinematics/graphical analysis associated with robotic manipulation of the ISS element for the ISS Program to ensure compatibility and successful ISS robotic maintenance and sustaining operations. The contractor shall deliver a kinematics analysis report documenting the assessment performed.

3.6 EXTRA-VECHICULAR ACTIVITY (EVA) INTEGRATION

3.6.1 The contractor shall perform EVA integration with all IP/Ps to ensure the ISS Program EVA requirements are met (includes defining verification requirements and requirements closure). This includes providing technical input to IP/P requirements and design reviews.

3.6.2 The contractor shall evaluate requirements and procedures for end-to-end EVA operations across the ISS Vehicle to ensure existence of sufficient translation corridors, to ensure existence of proper worksites/conditions, and to ensure proper tool compatibility with required ORU fastener operations. The applicable document is SSP41000. (Russian EVA hardware and operations are excluded).

3.6.3 The contractor shall integrate EVA issues with affected ISS Vehicle Subsystems to ensure impacts to their operations are evaluated and properly resolved.

- 3.6.4** The contractor shall provide data, analyses and input to EVA training activities associated with hardware sustained by this contract.
- 3.6.5** The contractor shall perform mission evaluation for all planned Vehicle Segment EVA operations to ensure operations are successfully executed and to aid in resolving issues.
- 3.6.6** The contractor shall sustain the EVA subsystem data products associated with certification and verification of EVA requirements for NASA GFE elements Node 2, Node 3, Cupola, and PMM.

3.7 PROPULSION SYSTEM INTEGRATION

- 3.7.1** The contractor shall perform Propulsion system integration with all IP/Ps to ensure propulsion system performance meets the ISS Program requirements. This includes providing technical input to IP/P requirements and design reviews.
- 3.7.2** The contractor shall integrate Propulsion system issues with the GN&C Subsystem and the Vehicle Integrated Performance team to ensure impacts to the ISS Program mission operations or flight/mission planning are evaluated.
- 3.7.3** The contractor shall provide real time mission data, analyses and inputs for Propulsion System status monitoring (propellant quantity tracking, keeping Mission Evaluation management informed of Propulsion System health, data retrieval and evaluation, daily activity reports, summary reports of significant system operations, etc.), critical operations and problem investigation.
- 3.7.4** The contractor shall maintain the Russian Propulsion and Propellant Resupply Systems for the ISS, JSC27979, to ensure an accurate status of the Russian propulsion and propellant transfer systems is maintained. The contractor shall develop and maintain future IP propulsion element smart books (e.g., ATV, HTV) to document their architectures and capabilities for vehicle sustaining operational assessments.

3.8 SAFETY AND MISSION ASSURANCE (S&MA)

For hardware sustained within the scope of this SOW, the S&MA analyses (e.g., FMEAs, hazards, etc.) previously developed for this hardware shall be maintained per the requirements within this section of the SOW.

3.8.1 S&MA MANAGEMENT

3.8.1.1 S&MA/RISK MANAGEMENT PLAN

The contractor shall maintain and implement a Safety & Mission Assurance/Risk Management (S&MA/RM) Plan consistent across all contractor

sites in accordance with DRD F-SA-01. Upon approval, the S&MA/RM Plan shall be incorporated into the contract.

3.8.1.2 AS 9100

The contractor shall establish and maintain a Quality Management System (QMS) that complies with the International Organization for Standardization document SAE, AS 9100 Rev A Quality Systems – Aerospace –Model for Quality Assurance in Design/Development, Production, Installation and Servicing. Third party certification/registration is not required at contract award, however, the contractor must be certified by third party audit within 18 months of contract award. If the contractor is AS 9100 registered and subsequently changes registrars, loses registration status, or is put on notice of losing registration status, the contractor shall notify the NASA Contracting Officer within three (3) days of receiving such notice from the registrar.

3.8.1.3 AUDIT/SURVEILLANCE

The contractor shall provide access to data, personnel, and facilities for government audit/surveillance of contractor plans, procedures, and processes when deemed necessary by the government. The contractor shall provide written responses to audit/surveillance findings that are delivered to and accepted by the government.

3.8.1.4 MISHAP INVESTIGATING AND REPORTING

The contractor shall investigate and report mishaps (DRD SM03), in accordance with NPR 8621.1, NASA Procedures and Guidelines for Mishap Reporting, Investigating and Record keeping and NPR 8715.3, NASA Safety Manual (Sections 1.3.7, 1.5.11, 1.15.1, and 1.15.2.4). All investigation reports shall include a human factors assessment, root cause analysis and any remedial/corrective actions performed. These reports shall encompass mishaps occurring during the contracted period as follows:

- All mission failures and type A and B mishaps resulting in injury to contractor personnel or equipment damage occurring on-site at NASA facilities and offsite at contractor facilities.
- Type C mishaps resulting in equipment damage on-site at NASA facilities and offsite at contractor facilities.
- Type C mishaps resulting in injury to contractor personnel located onsite at NASA facilities.
- Incidents and close calls occurring on-site at NASA facilities.

The contractor shall develop and implement a call tree with government contacts for the reporting of a mishap, near-miss incident, equipment problem or a system going out of specification. The contractor shall report incidents and problems within four hours of the occurrence. Type C injury mishaps occurring offsite at contractor facilities shall be reported in a monthly summary of such injuries. The contractor shall enter mishap reporting and provide summary data into the Incident Reporting Information System (IRIS) per NPR 8621.1.

3.8.1.5 SAFETY AND HEALTH

The contractor shall develop and implement a process to identify how personnel and property will be protected from injury or harm. The process shall provide for hazardous operation surveillance, hazardous procedure review and risk assessments associated with deviations from procedures or safety and health requirements.

The contractor shall comply with NASA installation safety and health requirements and related processes when performing contract work onsite at NASA installations. The contractor shall document the assessments in monthly safety and health metrics (DRD F-SA-02).

3.8.1.6 LESSONS LEARNED

The contractor shall develop, implement and maintain a lessons learned process to capture, disseminate and implement lessons learned, both positive and negative.

3.8.2 RESERVED

3.8.3 PROGRAM RISK

3.8.3.1 RISK MANAGEMENT

The contractor shall identify risks and provide inputs to the ISS risk process, the ISS Risk Management Application (IRMA) and in accordance with SSP 50175 Risk Management Plan and JPD 306 Establishment of the Program Risk Management System, and coordinate risks with NASA counterparts.

3.8.4 ISS SAFETY PROGRAM

3.8.4.1 ISS SYSTEM SAFETY ASSESSMENT

The contractor shall perform and deliver flight and/or Stage Specific Integrated Safety Assessments, such as Integrated Hazard Analysis (IHA), Integrated Experiment Hazard Analysis (IEHA), IVA and EVA crewmember injury or ISS

damage, and IVA crewmember exposure to excessive noise and touch temperatures for the ISS Vehicle in accordance with SSP 30599, SSP 30309, NSTS 1700.7, KHB1700.7, and SSP 50021 as specified between SSP 41000 and SSP 41162 (DRD F-SA-04).

3.8.4.2 USOS SYSTEM SAFETY ASSESSMENT

The contractor shall perform and deliver assessments for all USOS sustained hardware/software and supporting ground test equipment (H/W, S/W, etc.) in accordance with SSP 30599, 30309, NSTS 1700.7, SSP 13830, KHB1700.7, and SSP50021 as specified between SSP41000 and SSP41162 (DRD F-SA-04).

3.8.4.3 SAFETY REQUIREMENT VERIFICATION

The contractor shall perform safety requirement verification planning and deliver associated documentation. The contractor shall perform verification analyses, test and inspection to certify compliance to the Safety requirements as defined in paragraph 3.8.4.2 for all USOS sustained hardware/software and supporting ground test equipment.

3.8.4.4 SOFTWARE SAFETY

The contractor shall conduct software safety analyses in accordance with SSP 30309 and ensure compliance with SSP 50038. The analyses shall include review of software products such as requirement documents, non-conformance reports, change proposals and SPNs for safety impact and compliance.

3.8.5 RELIABILITY AND MAINTAINABILITY (R&M)

3.8.5.1 FAILURE MODES AND EFFECTS ANALYSIS AND CRITICAL ITEMS LIST (FMEA/CIL)

The contractor shall develop, maintain and deliver the FMEA/CIL Report and FMEA/CIL worksheets in accordance with DRD F-SA-05.

3.8.5.1.1 USOS FMEA/CIL WORKSHEETS

The contractor shall maintain FMEA/CIL worksheets for USOS hardware based on needed changes to establish accurate and complete FMEA/CIL worksheets in accordance with SSP 30234. (S/A 1626)

3.8.5.1.2 INTEGRATED FMEA/CIL WORKSHEETS

The contractor shall receive IP/GFE commercial resupply vehicles (SpaceX and Orbital) hardware FMEA worksheets and update them in accordance with SS P 30234, paragraph 4.5 to reflect the integrated

ISS configuration and functionality. The contractor shall notify NASA R&M when critical items are identified as a result of the FMEA/CIL integration process. (S/A 1614, S/A 1626)

3.8.5.1.3 REVIEW AND APPROVAL OF FMEA/CIL

All USOS and integrated FMEA/CIL worksheets shall be submitted to NASA R&M for review and approval. When required by SSP 30234, the contractor shall present USOS critical items to the Space Station Program Control Board for approval. This requires identification of retention rationale with concurrence from other teams identified in SSP 30234.

3.8.5.1.4 CRITICAL ITEMS LIST

The contractor shall maintain the Critical Items List in accordance with SSP 30234.

3.8.5.2 R&M DATA AND ANALYSIS

The contractor shall develop, maintain and deliver a R&M Allocation, Assessment and Analysis (AAA) Report in accordance with DRD F-SA-06.

3.8.5.2.1 USOS R&M DATA AND ANALYSIS

3.8.5.2.2 The contractor shall develop, maintain, and deliver R&M AAA Report in accordance with DRD F-SA-06 for USOS sustained hardware. The contractor shall maintain USOS R&M source data to reflect hardware operational performance. The contractor shall utilize baselined reliability block diagrams and data to perform quantitative R&M analyses. The contractor shall submit newly generated or updated source data and analyses to NASA R&M for approval.

3.8.5.2.3 INTEGRATED R&M DATA AND ANALYSIS

3.8.5.2.4 The contractor shall receive IP/P, commercial resupply vehicles (SpaceX and Orbital) hardware and GFE R&M data to perform and deliver integrated R&M analyses in accordance with DRD F-SA-06. (S/A 1614)

3.8.6 QUALITY ASSURANCE (QA)

3.8.6.1 QUALITY ASSURANCE REQUIREMENTS

The contractor shall implement and update the quality assurance plan, as documented in the S&MA/RM Plan DRD F-SA-01, which ensures that the

performance of this contract is in accordance with SSP 41173, Space Station Quality Assurance Requirements.

3.8.6.1.1 FLIGHT QA STATUS

The contractor shall track open QA actions and issues impacting each flight in accordance with SSP 41173. The contractor shall provide reports to NASA QA and launch teams.

3.8.6.1.2 GOVERNMENT INDUSTRY DATA EXCHANGE PROGRAM (GIDEP) AND NASA ADVISORY PROBLEM DATA SHARING, UTILIZATION PROGRAM DOCUMENTATION AND REPORTING

The contractor shall participate in the GIDEP in accordance with the requirements of the GIDEP S0300-BT-PRO-010 and S0300-BU-GYD-010, available from the GIDEP Operations Center, PO Box 8000, Corona, California 91718-8000.

The contractor shall review all GIDEP ALERTS, GIDEP SAFE-ALERTS, GIDEP Problem Advisories, GIDEP Agency Action Notices and NASA Advisories to determine if they affect the contractors products/services provided to NASA.

For those that affect the program, the contractor shall take action to eliminate or mitigate any negative effect to an acceptable level.

The contractor shall generate the appropriate failure experience data report(s) (GIDEP ALERT, GIDEP SAFE-ALERT, GIDEP Problem Advisory) whenever failed or non-conforming items, available to other buyers, are discovered during the course of the contract.

The contractor shall provide intervention recurrence control for all hardware in Appendix A impacted by alerts and SCANs.

3.8.6.1.3 PROBLEM REPORTING SYSTEM

The contractor shall develop and implement a closed-loop problem reporting system in compliance with the requirements of SSP 41173. The contractor shall report, promote, and participate in the investigation and resolution of applicable problems in accordance with SSP 41173, SSP 30524, and SSP 30223.

3.8.6.2 HARDWARE ACCEPTANCE

3.8.6.2.1 The contractor shall maintain and provide the ADP for existing hardware, as a result of implementing NASA approved changes, such as hardware processing refurbishment, repair, rework and design upgrades, including all associated software and firmware. The contractor shall complete work, document open actions and closure, and maintain ADPs in accordance with SSP 41173, SSP 41170, SSP 50287, and SSP 30695.

3.8.6.3 SOFTWARE ACCEPTANCE

3.8.6.3.1 The contractor shall maintain and provide the acceptance data package (ADP) for existing software, as a result of implementing NASA approved change requests, such as software processing, patches and design upgrades. The contractor shall complete work, document open actions and closure and maintain ADPs in accordance with SSP 41173, SSP 41170, SSP 50287, and SSP 30695. Software shall be accepted by the government per SSP 50287.

3.9 UNPRESSURIZED CARGO INTEGRATION (S/A 1660)

3.9.1 UNPRESSURIZED CARGO ANALYTICAL INTEGRATION (S/A 1700 – SSCN 11967)

The contractor shall perform unpressurized cargo analytical integration for ORUs and payloads launching on visiting vehicles and for ORUs and payloads stowed on stowage platforms on-orbit, including the EXPRESS Logistic Carrier (ELC). ELC work shall begin for all flight configurations post ULF6 flight.

3.9.1.1 The contractor shall act as the primary point of contact with the Visiting Vehicle providers for unpressurized cargo analytical integration and shall attend reviews/meetings/TIMs, identify and document required interface control documents/agreements during integration, and provide mission support for on-orbit activities.

3.9.1.2 The contractor shall provide all data listed in SOW 3.4.1.6 and subparagraphs for Boeing provided integrated ORU/ FSE/carrier configurations launching on a visiting vehicle.

3.9.1.3 The contractor shall review interface (ICA/ICD) documents (and other applicable cargo integration documentation) and verification data developed by the visiting vehicle provider for the external ORUs to determine if ORU requirements are met.

3.9.1.4 The contractor shall provide analytical integration products required for physical integration of unpressurized cargo for Boeing provided ORU/FSE/carrier configurations. Cargo analytical products shall be delivered to the physical integrator.

3.9.1.5 The contractor shall perform EVA assessments of FSE/carrier translations to / from the Visiting Vehicle, external carrier, or end use locations on ISS to ensure the feasibility of the configuration for a mission. Analysis shall be performed for each change to the cargo arrangement on the ISS external carrier.

3.9.1.6 The contractor shall perform thermal analysis of the transfer of ORU/FSE/carrier to/from the Visiting Vehicle, external carrier, or end use locations on ISS to ensure the feasibility of the configuration for a mission.

3.9.1.7 The contractor shall perform on-orbit structural analysis of integrated assemblies (Boeing ORUs with Visiting Vehicle FSE/carrier).

3.9.1.8 The contractor shall determine bolt torque data (1819 data) and perform failure tolerant analyses for all FSE listed in Appendix A manifested on a flight.

3.9.1.9 The contractor shall review visiting vehicle coupled loads assessments, including potential FSE negative structural margins that may have been identified as a result of the analyses, and identify issues.

3.9.1.10 SAFETY DATA PACKAGES (S/A 1660)

3.9.1.10.1 The contractor shall develop and deliver integrated flight safety data packages for Boeing provided ORU/ FSE/carrier configurations and participate in safety reviews as required to ensure flight safety.

3.9.1.10.2 The contractor shall develop and deliver integrated ground safety data packages for Boeing provided ORU/ FSE/carrier configurations. The contractor shall provide a Safety Re-flight Assessment data package to the Safety Review Panel for each mission for flight and ground support equipment (GSE),.

3.9.2 UNPRESSURIZED CARGO PLANNING

The contractor shall provide assessments of unpressurized cargo manifest and manifest options to support the overall ISSP planning process.

3.10 FE 1410 TESTING

The contractor shall perform Passive Common Berthing Mechanism (PCBM) FE 1410 acceptance testing of every Commercial Resupply Service (CRS) SpaceX and Orbital vehicle, at the CRS contractor location, in order to verify that all PCBM components are within design limits.

3.11 FPMU GROUND STATION

The contractor shall sustain and operate the Floating Potential Measurement Unit (FPMU) Ground Station (G/S).

4.0 OTHER PRODUCT DEVELOPMENT

4.1 S-BAND UPGRADE

4.1.1 IMPLEMENT TRIPLE DATA ENCRYPTION STANDARDS (3DES)

The Contractor shall design, develop, test and deliver modified Assembly/Contingency Baseband Signal Processor (ACBSP) ORUs in accordance with the Triple Data Encryption Standards 3DES defined by American National Standards Institute (ANSI) X9.52.

4.1.2 LOW RATE VOICE

The Contractor shall modify the ACBSP and transponder to add low rate voice capability.

4.1.3 CONNECTOR ALIGNMENT

The Contractor shall design, develop and build an alignment tool in the alignment of the module edge connector.

4.2 NODE 2 RECONFIGURATION

4.2.1 COMMON HARDWARE/SOFTWARE RELATED TO NODE 2

The Contractor shall develop Hardware and Software for installation in Node 2 for delivery in accordance with Section J, Attachment J-5 Deliverable Items List. This hardware and software shall be considered Common Hardware and Software and controlled in accordance with SSP 41170, paragraphs 3.3.2.2, 3.3.2.3, and 3.3.2.4. Prior to establishment of the NASA baseline, the Contractor shall provide notification of changes to the Common Hardware to the Marshall Space Flight Center, and Alenia by sending a copy of all proposed and authorized changes as well as revisions and change notices to the Common Hardware Specifications to each of the locations identified. Traceability from the common component Hardware and Software shall be completed to the Node 2 PIDS (SSP50290) by NASA as GFD.

4.3 COMPLETE

4.4 RESERVED

4.5 COMPLETE

4.6 NODE 3

4.6.1 PROCURE HARDWARE FOR NODE 3, AND NODE 3 ENVIRONMENTAL CONTROL AND LIFE SUPPORT SYSTEM (ECLSS) RACKS (S/A 1171, SSCN 6647, REV A)

The Contractor shall procure and deliver hardware in accordance with the Section J, Attachment J-5 Deliverable Items List. All hardware to be delivered is already under subcontracts.

4.6.2 NODE 3 FIBER OPTIC INSPECTION

The Contractor shall travel to Alenia and inspect each Node 3 fiber optic termination in all connectors using OHB post-polishing termini end-face inspection criteria (N2-PR-OHB-005, Para 4.6). The Contractor shall clean fiber end-face and caps as determined by the inspection. (S/A 1299)

4.7 FABRICATION AND ASSEMBLY OF FLIGHT RELEASE ATTACH MECHANISM (FRAMS) AND ADAPTER PLATES (S/A 1171, SSCN 6179, Rev. D)

The contractor shall procure and deliver hardware in accordance with SSCN 6179. All hardware to be delivered is already under subcontracts.

4.8 COMPLETE

4.8.1 COMPLETE

4.8.2 COMPLETE

4.8.3 COMPLETE

4.8.4 COMPLETE

4.8.5 COMPLETE

4.9 COMPLETE

4.10 COMPLETE

4.10.1 COMPLETE

4.10.2 COMPLETE

4.11 SSQ CONNECTORS FOR COLUMBUS EXTERNAL PAYLOADS ADAPTER (CEPA) (S/A 1239)

a) COMPLETE

- b) Accelerate acceptance testing of the Medium Adapter Plate Assembly (MAPA) and the Large Adapter Plate Assembly (LAPA) to be complete by early March 2004 and to be performed in MSFC facilities.

4.12 COMPLETE

4.13 CARGO COMPATIBILITY ANALYSIS (CCA) MANIFEST FLEXIBILITY TASK (MSF) (S/A 1245)

Complete and document the Cargo Compatibility Analysis Manifest Feasibility Task for the Resupply Stowage Racks (RSR), Resupply Stowage Platforms (RSP), and the integrated MPLM. This task was previously done by United Space Alliance (USA) under the Space Flight Operations Contract (SFOC).

4.14 FLIGHT SUPPORT EQUIPMENT (S/A 1247)

4.14.1.1 COMPLETE

4.14.2 ANALYTICAL SLOSH MODEL FOR THE AMMONIA TANK ASSEMBLY (ATA) ORU (S/A 1247)

Develop an analytical model for the ATA ORU to account for internal structural loading as a function of varying fluid levels and conduct an analysis at a design level (DCLA) to determine internal ORU structural loading and ATA/FSE structural interface loading. Document results per DRD F-VE-3.

4.14.3 COMPLETE

4.14.4 COMPLETE

4.14.5 AMMONIA TANK ASSEMBLY FSE REDESIGN

- 4.14.5.1** The Contractor shall redesign the Ammonia Tank Assembly (ATA) Flight Support Equipment (FSE) to meet the design for minimum risk (DFMR) requirements. The design shall include the capacity to release the ATA from an empty carrier in case of a jammed ATA EVA bolt. (S/A 1307)

4.14.5.2 The Contractor shall not meet requirements to launch and return on the Integrated Cargo Carrier (ICC) with an ATA installed. (S/A 1632)

4.14.6 AMMONIA TANK ASSEMBLY (ATA) MODAL TESTING

The contractor shall incorporate the following test requirements into the modal survey test being performed for the LMC ATA Flight Support Equipment (FSE) (DIL item 31944).

- Perform x-y cg test on the ATA.
- Perform removal/re-installation of the tank debris shield.
- Perform water fill/drain/dry of one tank.
- Perform one test configuration with water and with outside enclosure/debris shields removed.
- Perform ATA model correlation update based on results from FSE test.
- Perform additional pre-test analysis and updates to test documentation (Plan, Procedure, and Report).

4.15 FACTORY EQUIPMENT (S/A 1247)

4.15.1 BATTERY CYCLING UNITS (S/A 1247)

Design, develop, manufacture, test and provide battery cycling units (BCU) factory equipment (FE). This equipment shall:

- 1) Monitor the health, including the level of precharge, of battery Orbital Replacement Units (ORU)
- 2) Charge and discharge batteries
- 3) Operate with batteries mounted on the Integrated Equipment Assembly (IEA) as well as with individual uninstalled Battery ORUs.

4.15.2 COMPLETE

4.16 COMPLETE

4.17 COMPLETE

4.18 COMPLETE

4.19 COMPLETE

5.0 WORK NOT COMPLETED; DISCRETE TASKS TRANSFERRED FROM PREVIOUS SOW

5.1 COMPLETE

5.2 NODE 3 SOFTWARE

5.2.1 The contractor shall define, develop code, verify, and deliver the software for the Node 3 CSCIs.

5.3 COMPLETE

5.4 COMPLETE

5.5 NODE 2/3 INTEGRATED RACK STRUCTURAL ANALYSIS

The Contractor shall provide the following Node 2/3 Avionics Integrated Rack structural analysis:

5.5.1 COMPLETE

5.5.2 COMPLETE

5.5.3 COMPLETE

5.5.4 COMPLETE

5.5.5 COMPLETE

5.5.6 COMPLETE

5.5.7 COMPLETE

5.6 NODE 3 HARDWARE PROCUREMENT

5.6.1 The contractor shall develop, manufacture, and verify the hardware required to support the Node 3 development by NASA and deliver the hardware as identified on the Section J, Attachment J-5 Deliverable Items List in accordance with the contractor developed and controlled specifications for those items.

5.6.2 COMPLETE

5.6.3 COMPLETE

5.7 NODE 3 ANALYSIS AND PLANNING

The Contractor shall provide Node 3 internal ATCS analysis, GFE environmental and fracture analysis, integrated test and verification planning, and end-to-end schedule development and maintenance.

5.8 AMMONIA TANK ASSEMBLY (ATA) SUPPORT OF UF-4 SPACELAB PALLET (SLP) INTEGRATION ACTIVITIES

The Contractor shall:

- a. Perform a structural assessment of the Ammonia Tank Assembly (ATA) using the Design Coupled Loads Analysis (DCLA) #2 interface force information and provide it to the Government in contractor format via contract letter.
- b. COMPLETE
- c. Using Government provided thermal data perform a revised structural assessment of the Ammonia Tank Assembly (ATA) to support cargo item integration activities and provide it to the Government in contractor format via contract letter.

5.9 IMPLEMENTATION OF PRELIMINARY DESIGN AND ANALYSIS OF THE EXPRESS PALLET CONTROLLER ASSEMBLY

- a. The Contractor shall develop a preliminary design of the EXPRESS Pallet Controller Assembly (ExPCA).
- b. The Contractor shall develop the following program plans associated with the development of the ExPCA: Quality Assurance Plan; SW Quality Assurance Plan; CM Plan; EMC Control Plan; Parts Control Plan; ESD Control Plan; Maintainability Plan; Safety Plan; Reliability Plan; HW Test Plan; Test Verification/Requirements Plan; SW Development Plan (Flight); SW Development Plan (Testing); Corrosion Control Plan; M&P Plan; Structural Control Plan; Manufacturing Plan; Radiator Development Plan; Radiator Safety Plan; STE Test Plan and Methodology; SW STE Test Plan and Methodology; and DPA Plans and Procedures.

5.10 COMPLETE

5.11 CUPOLA PRESSURE PANE PROOF TESTING

- a. The Contractor shall perform an evaluation to determine if the Cupola window pane stresses match the proof fixture pane stresses.
- b. The Contractor shall plan and conduct pressure testing of Cupola side pressure pane

5.12 CUPOLA WINDOW PANE MARKINGS

The Contractor shall provide markings on Cupola Window Panes to identify location and orientation of specific panes within the cupola.

5.13 CENTERLINE BERTHING CAMERA SYSTEM (CBCS)

- a. COMPLETE
- b. COMPLETE
- c. COMPLETE
- d. COMPLETE
- e. COMPLETE.
- f. COMPLETE
- g. COMPLETE
- h. COMPLETE
- i. The Contractor shall perform DPA of the JAXA JEM PS for verification of the CBCS.
(S/A 1355)

5.14 COMPLETE

5.15 RESERVED

5.16 CUPOLA VERIFICATION SUPPORT

- a. The Contractor shall perform Fluid and Cable fit-checks of the Cupola side of the interface with Node 1 vestibule jumpers.
- b. The Contractor shall perform the digital Pre-assembly tasks for Cupola at KSC.
- c. The Contractor shall perform the Fluid and Cable Fit Checks for Cupola at KCS after Cupola delivery.

5.17 PCBM KITS

- a. The Contractor shall deliver the Passive Common Berthing Mechanism (PCBM) kit (including the equipment, installation instructions, checkout procedures, and kit proofing) in accordance with the Section J, Attachment J-5 Deliverable Items List. The Contractor shall provide the personnel for ESA technicians to consult, during the ESA installation of the PCBM rings and mechanisms as well as the ATP, on-site at the ESA contractor.

- b. COMPLETE
- c. COMPLETE
- d. COMPLETE
- e. The Contractor shall perform end-to-end berthing analysis in order to assure that the Cupola can be mated to Node 1.
- f. The Contractor shall modify the PCBM rings to include the interface holes for the Cupola Restraints and Mobility capability. This new interface shall be documented in SSP 41004, part II.

5.18 COMMON HARDWARE STORAGE

The Contractor shall provide the storage space to accommodate all of the U. S. contractor provided Cupola Component Hardware from the time of delivery to NASA per the Section J, Attachment J-5 Deliverable Items List until NASA delivery to ESA per the NASA to NASA GFEL.

5.19 COMPLETE

5.20 COMPLETE

5.21 CUPOLA DEBRIS PANES REDESIGN

- a. The Contractor shall develop and implement an approach to modify the exiting Debris Panes and also produce new debris panes for the ESA Cupola to accommodate debris panes assembly replacement both EVA and IVA.
- b. The Contractor shall develop this approach using Cupola test and flight frames provided to the Contractor by Alenia.

5.22 COMPLETE

5.23 COMPLETE

5.24 COMPLETE

5.25 COMPLETE

5.26 NODE 2 VERIFICATION SUPPORT

- a. The Contractor shall provide the technical support and expertise necessary to support the NASA verification activities for the Node 2. The activities that the Contractor shall support are as specified in the Program Master Integration and Verification Plan (D684-10020-1).
- b. The Contractor shall perform fit-checks of the CAM, JEM, MPLM, and APM side of the interface with Node 2 vestibule jumpers at KSC after Node 2 delivery.
- c. The Contractor shall perform the Digital Pre-assembly tasks for Node 2.
- d. The Contractor shall perform the Fluid and Cable Fit Checks for Node 2 at KSC after Node 2 delivery.
- e. The Contractor shall re-do measurement and analysis of Node 2 element-to-element interfaces due to hatch replacement. (PRACA 3251) (S/A 1297)

5.27 SOFTWARE USER MANUALS

The Contractor shall document the Software User Manuals in accordance with D684-10017-1 for the N2-1 and N2-2, CSCI's.

5.28 SPARES WAREHOUSE (SWH) CARGO INTEGRATION

- a. COMPLETE
- b. COMPLETE
- c. COMPLETE
- d. The Contractor shall develop, fabricate, and deliver a high fidelity NBL compatible mock-up for the Trunnion Pin Attachment Mechanism.
- e. COMPLETE
- f. COMPLETE

g. COMPLETE

h. COMPLETE

i. The Contractor shall perform modifications to ITS Z1 to add a power outlet and to verify that the added power outlet can provide up to 1000 watts of secondary electrical power at a voltage of 115 to 126 volts.

5.29 COMPLETE

5.30 COMPLETE

5.31 FUNCTIONAL EQUIVALENT UNIT ENHANCED MDM SOLID STATE MASS MEMORY UPGRADE

The contractor shall upgrade 25 Functional Equivalent Unit (FEU) Enhanced MDMs that are used for ground testing, with solid state Mass Memory Units (MMU) in place of the existing rotational drive Mass Storage Device (MSD) units and provide an additional 12 solid state memory cards.

5.32 COMPLETE

5.33 CUPOLA RELOCATION TO NODE 3

The Contractor shall perform the required hardware and software analysis and the testing of existing hardware and software to accommodate the relocation of the GFE provided Cupola to the GFE provided Node 3 Forward and Aft Ports (S/A 1362).

6.0 I&O DISCRETE TASKS

6.1 INTEGRATION OF REGEN ECLSS INTO LAB

The contractor shall integrate the Oxygen Generation System (OGS) and Water Recovery Systems (WRS-1 and WRS-2) Regenerative Environmental Control and Life Support (REGEN ECLSS) racks into the U.S. Lab to support the ULF-2 flight. The changes made for integration shall not preclude the ability to move the racks to Node 3 on-orbit and maintain in the U.S. Lab in an operational condition.

6.1.1 HARDWARE AND SOFTWARE MODIFICATIONS

The contractor shall deliver all of the required hardware and software modifications to the U.S. Lab to allow for integrating with the REGEN ECLSS.

6.1.2 SYSTEMS INTEGRATION AND OPERATIONS

- a. The contractor shall perform the systems integration, operational analysis and procedure development, verification and product assurance required to integrate the REGEN ECLSS racks into the U.S. Lab for full activation on ULF2.
- b. The contractor shall develop and verify requirements for early activation of the OGS prior to ULF2. (S/A 1386)
- c. The contractor shall update hazard analyses required for early activation of the OGS prior to ULF2. (S/A 1386)

6.1.3 NASA/MSFC TEST ACTIVITIES

The contractor shall participate in the Regenerative ECLS rack test activities being conducted by NASA/MSFC by:

- a. Maintaining calibration on the following equipment:
 - T1001-6 Power Breakout Box
 - T1001-19 Power Breakout Box
 - FE1053 Support Equipment Controller
 - T1226 Trielectron Power Source
 - SQ2-20066 Rack Manifold Fixture
 - P305D TCS Differential Pressure Sensors
 - Calibrate required items in three Moderate Temperature Loops of the Rack Manifold Fixture

- b. Reviewing and providing comments via memorandum on the rack test procedures listed below:
 - OGS Rack Tests 14 Procedures
 - WRS Rack Tests 12 Procedures
- c. Providing engineering participation in the first three days of testing the WRS Rack 2 and the OGS Rack.
- d. Providing “on-call” support as requested by NASA on an “as available basis” during periods when a technician is not scheduled to be supporting the ECLS activity.
- e. Performing weight and CG measurements for the OGS, WRS-1 and WRS-2 Racks (Total of 5 tests). NASA MSFC shall be responsible for shipping, handling, and transportation of the rack hardware to and from the Boeing facilities for the activity.

6.1.4 OXYGEN GENERATOR SYSTEM (OGS) EARLY ACTIVATION

- 6.1.4.1** The contractor shall develop and release an Appendix C to the Stage Requirements Document (D684-12172-01), which documents the OGS feedwater assembly interfaces and top level functional requirements required for early activation of the OGS in the U.S. Lab.
- 6.1.4.2** The contractor shall modify software as required to accommodate early activation of the OGS with power from the U.S. Lab overhead rack 5 locations.

6.2 INTEGRATED STATION LAN (ISL)

6.2.1 EDGE ROUTERS

The contractor shall procure 10 edge router flight equivalent units (FEU) as designed for the Integrated Station LAN and compatible with both 220V and 120V power.

6.2.2 TRANSITION FROM OPSLAN TO INTEGRATED STATION LAB (ISL)

- 6.2.2.1** The contractor shall recommend a commercial off-the-shelf (COTS) Ethernet wireless access point (WAP) for use on-board the ISS in the Russian segment and shall develop a specification for procurement of this hardware. (S/A 1389)
- 6.2.2.2** The contractor shall conduct joint US-Russian worst case Ethernet characterization for the ISL link, including all cabling. (S/A 1389)

6.2.2.3 The contractor shall provide data products required for NASA to qualify the WAPs for use on the USOC. (S/A 1389)

6.2.3 LOCAL AREA NETWORKS (LANS)

6.2.3.1 SHUTTLE TO STATION (S/A 1512)

The contractor shall modify the ISS Wireless Access capabilities to enable:

- Initial wireless file transfer between the Orbiter and the ISS.
- Network connectivity between the Orbiter/Payload General Support Computer (PGSC) network and the Mission Control Center (MCC)/Orbiter Communications Adapter (OCA) via ISS beginning with flight ULF2.
- Expansion of the wireless capabilities onboard for ISS/STS crew operation.
- Payload and General Support Computer (PGSC) connection to have the same network connectivity capabilities as would be delivered via the Shuttle Orbiter Communications Adapter 2 (OCA2)
- Deployment of all wireless capabilities to operate as one integrated system.

6.2.3.2 CREW LAN AND INTERNET SERVICES (S/A 1554)

The contractor shall design and implement on-orbit Crew dedicated LAN capability and internet services consistent with the requirements in NPR 2810.1A, "Limited Personal Use of Information Technology (IT) Resources including Internet Access," applicable IT security assessments and update the ISS Security Plan to incorporate these new requirements and applicable IT security assessments and provide updates to the ISS Security Plan.

6.2.4 ESA LAN INTEGRATION

6.2.4.1 The contractor shall integrate the ESA Columbus Ethernet LAN into the Joint Russian-US Station LAN, while maintaining Node 2 portable workstation (PWS) connectivity of the ESA LAN by April 1, 2011. (S/A 1610)

6.2.4.2 The contractor shall identify NASA ground and training facility updates required to reflect the on-orbit architecture change (due to ESA LAN integration) by March 1, 2010. (S/A 1610)

6.2.4.3 The contractor shall provide USOS hardware and software configuration information necessary to upgrade the ESA ground and training facilities to reflect the on-orbit architecture (due to ESA LAN integration) change by March 1, 2010. (S/A 1610)

6.2.5 ISL SUPPORT TO SMCC TELEMETRY (S/A 1645)

The contractor shall update (by October 2011) the Integrated Station LAN (ISL) routers to support two unique 256 Kbps streams of Service Module Central Computer (SMCC) telemetry data from Russian provided equipment connected to the Joint Station LAN (JSL) in the SM.

6.2.6 JOINT STATION LAN (JSL) EXTENSION

6.2.6.1 EXTENSION INTO NODE 3 (S/A 1658)

6.2.6.1.1 The contractor shall identify and document all the Joint Station LAN (JSL) user requirements for wired Ethernet connectivity from Node 3 to the Cupola module and deliver via mod kits, the required JSL data cabling with associated interface panels/attach hardware to support connectivity to the JSL in the Cupola as documented on the DIL. This hardware will be designed for stowed launch/delivery to the International Space Station (ISS) via any of the current launch vehicles and to be installed on-orbit.

6.2.6.1.2 The contractor shall provide (via 1149) two Node 3 Ethernet Network devices (part numbers 684-015068-0501 and 943 912-001) by April 6, 2011.

6.2.6.2 EXTENSION INTO RUSSIAN MULTIPURPOSE LABORATORYMODULE (MLM) SSCN 12816 – S/A 1808)

The contractor shall perform the following tasks in support of extending the JSL to the MLM:

6.2.6.2.1 Provide MLM Ethernet manufacture test cable assembly via DD1149 by 05/15/12.

6.2.6.2.2 Provide one test cable that interfaces between the Fluke cable analyzer and the MLM Ethernet via DD1149 by 05/15/12.

6.2.6.2.3 Provide input to end-to-end validation testing of edge router and Russian router functionality over the MLM cable including:

- Development of end-to-end functional test procedures for the US router by 06/15/12.
- Integration of US and Rocket Space Corporation – Energia (RSC-E) procedures into a common volume by 07/30/12.
- Execution of the end-to-end validation test procedures that pertain to USOS devices. Test shall be performed as RSC-E by 09/26/12.
- Ethernet cable testing using the Fluke cable analyzer by 09/26/12.
- Generate final test report for the complete (USOS and Russian tests) end-to-end validation testing by 10/15/12.
- Deliver edge router configuration file upgrades to support redundant link to the Russian Segment MLM router by 10/30/12.

6.2.6.3 Media Conversion for Payloads (S/A 1993; SSCN 13672)

The contractor shall procure an Off-the-Shelf (OTS) media converter to provide conversion from wired Ethernet to IEEE 802.11 wireless communication, implement required modifications to support flight operations, and deliver (via 1149) sixty five Class I Modified OTS (MOTS) circuit cards to NASA by August 27, 2014.

6.2.7 JAXA LAN

The Contractor shall update (by June 2013) the Integrated Station LAN (ISL) routers to support connectivity between the JAXA/JEM payload network and the OCA Ku band network.

6.2.8 COMMERCIAL VISITING VEHICLES

6.2.8.1 ETHERNET INFRASTRUCTURE

The contractor shall develop, test, and deliver an Edge Router configuration file which supports the transfer of SpaceX Dragon Trunk video Ethernet packets. The configuration file shall be delivered to the Mission Build Facility (MBF) no later than 60 days prior to the SpaceX 3 (by May 2013) and SpaceX 4 (by August 2013) missions SPACE X CONNECTIVITY.

6.2.8.2 ADDITIONAL SPACE X CAPABILITIES (S/A 1976, SSCN 13629)

The contractor shall update (by September 2013) the onboard ISS Integrated Station LAN (ISL) routers to support connectivity between the Space-X visiting Vehicle network and the ICU Ku bank network and provide the following capabilities during berthed operations only

- Downlink of recorded data from SpaceX data recorder,
- Downlink of real-time telemetry,
- Downlink of payload data on the Payload LAN from Powered Cargo Payloads (externally in the Dragon Trunk or internally in the Pressurized Cargo Rack)
- Uplink of files for contingency purposes.

6.2.9 Network Monitoring System for the International Space Station (ISS) Joint Station LAN (JSL) (S/A 1951, CD 13614)

The contractor shall deliver a network monitoring capability for the ISS Joint Station LAN which provides real-time network (ground and on-orbit) performance monitoring, diagnostics, reporting capability and data collection (by December 2013).

6.3 REVISED SHUTTLE LAUNCH LOADS

The contractor shall assess the impact of NSTS 37329, revision B, change 3, “Structural Integration Analyses Responsibility Definition for Space Shuttle Vehicle and Cargo Element Developers,” for all Boeing sustained elements launched on the Shuttle. This includes the determination and recommended resolution of issues and concerns.

6.4 MODEL ENHANCEMENT

The contractor shall develop and incorporate model enhancements to the passive thermal models (ISS simplified model and detailed element level models of S0, P6, S1 and P1) resulting in an overall improvement of 50% (combination of both accuracy and efficiency improvement) to the detailed element level-models. (S/A 1346)

6.5 WASTE AND HYGIENE COMPARTMENT INTEGRATION (WHC) (S/A 1376 – 6.5.1) (S/A 1488 – 6.5.2 through 6.5.8) (S/A 1548 – 6.5.9)

6.5.1 The contractor shall perform the following tasks in support of the early RSC-Energia efforts for ACYK (Russian toilet + “Kabin”) conceptual layouts and analysis:

- Develop a low fidelity volumetric computer aided design (CAD) model of the refrigerator freezer rack in IGES format and provide to NASA by September 14, 2006.
- Develop the not-to-exceed internal rack limit loads and provide to NASA by September 14, 2006.
- Develop the list of data required from RSC-Energia for the development of an internal interface control document (IICD) and provide to NASA by August 29, 2006.
- Support the review and draft development of the IICD and the JSC WHC requirements documents.
- Support weekly NASA/RSC-Energia telecons related to the ACYK through October 24, 2006.

6.5.2 The contractor shall provide an Internal Interface Control Document (IICD) defining interfaces between the Refrigerator Freezer Rack and the RSC-E ACY-K.

6.5.3 The contractor shall provide a Unique Interface Control Document (UICD) defining requirements for the WHC using SSP 57000 “Pressurized Payloads Interface Requirements” document as a template.

6.5.4 The contractor shall support the following activities to be conducted in Russia:

- ACYK Critical Design Review (CDR)
- ACYK System Acceptance Review (SAR)

6.5.5 The contractor shall perform structural analysis of the local attachment structure of the following ACY components to determine the ability of the components to meet MPLM launch requirements:

- EDV
- Wringing collector
- Water pump
- Solid waste tank
- Air Filter
- Fan
- Pre-treat assembly
- Sensor assembly
- Pump-sep control
- Fan Control panel
- Air and electrical pre-treat unit

6.5.6 The contractor shall develop one prototype and two protoflight power supplies for the WHC rack power distribution by March 2007.

6.5.7 The contractor shall provide a non-functioning rack ACY fit check unit by September 30, 2008.

6.5.8 The contract shall track on-orbit performance of the WHC rack system, including ACYK components, and recommend quality of spares and consumables to be purchased by NASA on a yearly basis.

6.5.9 The contractor shall provide the following items to support the launch of the WHC on flight ULF-2 in November 2008:

- Delivery of hardware items via DD1149, tagged with part numbers and bagged for delivery:
 - A clear flexible silicone rubber cover fitting the outside dimensions of the following components in the WHC rack. The surrounds of the material will be fitted with strip magnets for attachment:

ACY-SPK-U and Hydraulic Interface Control Panels (one piece) ACY fan control panel, rack power switch, and the Urine Monitoring System (UMS) power and fluid interface Connections (one piece)
 - A clear flexible silicone rubber cover fitting the outside dimensions of the Avionics 3 Rack power. The surrounds of the material will be fitted with strip magnets for attachment.
 - A clear flexible silicone rubber cover fitting the outside dimensions of the Utility outlet Panel between the WHC and AV-3 racks. The surrounds of the long sides of the material will be fitted with strip magnets for attachment.
 - An aluminum foam filter fitting the outside dimensions of the WHC fan inlet. The filter frame will contain a full shield on the front and partial deflector on the bottom and sides. The filter will be replaceable on orbit. The contractor shall provide 6 replacement filters.
 - A 316 stainless steel mesh cover fitting the top opening dimensions of the WHC Kabin. The attachment methodology will include eyelets that can be used with existing on-orbit bungee cords to attach to the Kabin walls
- Materials certification for the above items.
- A hazard assessment of the above items as stand-alone covers (not the integrated function).

- A Computational Fluid Dynamics analysis with all the covers in place to calculate air flow paths and ventilation within the WHC and Kabin.

6.5.10 ADDITIONAL WHC COVERS

6.5.10.1 The contractor shall provide via 1149 the following Waste Hygiene Compartment (WHC) cover by October 20, 2010:

- 316-Stainless steel mesh cove fitting the top opening dimensions of the WHC Kabin – Part Number SK683-99217-5- Quantity = 1

6.5.10.2 The contractor shall provide via 1149 the following Waste Hygiene Compartment (WHC) covers by October 31, 2011:

- Quantity of five (5): ACY-SPK-U and Hydraulic Interface control Panels Covers – Part number SK683-99217-10
- Quantity of six (2 modified): Covers for ACY fan control panel, rack power switch, and the Urine Monitoring System (UMS) power and fluid interface connections – Part number SK683-99217-11. Two of the six covers shall be delivered modified for UMS utility cable interface according to the on-orbit procedure for modification of the cover. “WHC Hygiene Cover Mod Procedure,” December 2010.
- Quantity of three (3): 316-Stainless steel mesh covers fitting the top opening dimensions of the WHC Kabin – Part number SK683-99217-5

6.6 SOLAR ARRAY LONGERON SHADOWING MITIGATION (S/A 1384)

6.6.1 SOFTWARE MODIFICATIONS

The Contractor shall develop software requirements and generate the standard out product necessary to detect shadow zone infringement on the solar arrays, reconfigure the SAFJ to mitigate the structural hazard, and autonomously operate the solar arrays to provide additional power generation.

6.6.2 DEVELOPMENT OF NOMINAL AND CONTINGENCY OPERATIONS RESPONSE PLAN (S/A 1398)

The contractor shall provide technical input to the NASA Mission Operations Directorate (MOD) for development of a nominal and contingency response plan for solar array operations by:

- a) Providing loads and dynamics and environmental analysis of the beta gimbal assembly (BGA) and solar alpha rotary joint (SARJ) as a function of SAFJ and BGA angle for ISS vehicle attitude maneuvers and operations (including shuttle docked).
- b) Providing input on the development of Mission Control Center (MCC) tools and validation of the tool.
- c) Providing an assessment of the risk posture for exceeding load limits to support resolution of a long duration loss of attitude control recovery.

6.6.3 SOLUTION TO MITIGATE SOLAR ARRAY LONGERON SHADOWING CRITICAL HAZARD AND SUPPORT POWER GENERATION CAPABILITIES (S/A 1451)

6.6.4 ACCELERATION OF ADJACENT ARRAY STUDY (S/A 1717 – SSCN 12632)

The contractor shall accelerate the longeron shadowing adjacent array shadowing special study, to assess the adjacent array longeron shadowing phenomenon and quantify the likelihood of sustaining a shadowed condition sufficient to cause an ISS hazard (approved by the Space Station Program Control Board on 10/19/10), from June 14, 2011 to May 17, 2011.

6.6.3.1 The contractor shall deliver flight software to manage electrical power imbalance at high solar beta angles due to solar array shadowing and that provides automated detection and mitigation of longeron shadowing hazard.

6.6.3.2 The contractor shall deliver validated solar array pre-positioned loads for high solar beta energy balance management that supports all flights.

6.6.3.3 COMPLETE

6.6.3.4 Develop and verify ground based tools to define array positioning.

6.7 FUNCTIONAL CARGO BLOCK (FGB) INTEGRATION

6.7.1 COMPLETE

6.7.2 COMPLETE

6.7.3 EXTENSION OF THE FUNCTIONAL CARGO BLOCK (FGB) STRUCTURAL LIFE CERTIFICATION (Clause H.58 Applies) (S/A 1499)

6.7.3.1 The Contractor shall conduct testing of the FGB dynamic test article to determine the FGB structural life capability.

6.7.3.2 The Contractor shall assess the subsystems within the FGB to identify requirements and impacts for delta life certification:

- a) Hardware requiring delta life certification;
- b) Analysis or testing required to accomplish delta life certification;
- c) Suppliers impacted;
- d) Schedule for when analysis or re-testing is required.

6.7.4 EXTENSION OF FGB DOCKING MECHANISM STRUCTURAL LIFE CERTIFICATION(S/A 1563)

The Contractor shall perform testing and analysis to support the extension of the life certification of the FGB module docking units by as much as 15 years past the current certification date of 2013.

6.7.5 SERVICE LIFE EXTENSION OF FGB NON-REPLACEABLE HARDWARE (S/A 1669) (SSCN 12283 – S/A 1794)

6.7.5.1 SERVICE LIFE EXTENSION THROUGH 2020 (S/A 1669)

The contractor shall perform test and analysis to determine the viability of the FGB propulsion system (including propellant transfer and storage), thermal system, pressurized hull passthroughs, and Gas Composition Support System (GCSS) for extended service life through 2020.

6.7.5.2 SERVICE LIFE EXTENSION THROUGH 2028 (SSCN 12283 - S/A 1794, SSCN 12283 – S/A 1820)

6.7.5.2.1 NON-REPLACEABLE HARDWARE (SSCN 12283 – S/A 1794)

The contractor shall perform tests and analyses by August 2014 to assess the viability of Functional Cargo Block (FGB) Non-Replaceable Hardware through 2028 for components of the propulsion system,

structures system, thermal control system, electrical power system, gas composition system and soft goods.

6.7.5.2.2 THERMAL ANALYSIS (SSCN 12283 – S/A 1820)

The contractor shall perform thermal analysis for the Functional Cargo Block (FGB) Power Loss scenario, evaluate the transient effects, including time to effect for freezing of the cooling loops, and develop a mitigation plan for the risk of freezing the FGB module by August 31, 2013.

6.7.5.2.3 PRE-EMPTIVE R&R PROCEDURE (SSCN 12283 – S/A 1820)

The contractor shall accelerate the development of the pre-emptive R&R procedure for the set of spare EPS units (Main power assembly bus, Filter unit, Power supply unit (11M156M) from August 2014 to December 13, 2012. The R&R procedure delivered at this time will be based on preliminary thermal analysis and preliminary shut down command procedure. The final pre-emptive R&R procedure shall be delivered with the newly built EPS spares (DIL items 51494, 51495, 51496).

6.7.5.2.4 SUSTAINING AND MAINTENANCE PLANS FOR EPS ORUS (SSCN 13209-S/A1878)

The contractor shall develop diagnostics procedure(s) for FGB non-replaceable Electrical Power System (EPS) units (Main Bus Unit, Filter Unit, and Power Distribution Unit) and a diagnostics data analysis plan, including frequency of conducting procedures and data analysis procedures to determine hardware health (by November 2013).

6.7.6 FGB Module Maintenance and ORU Replacement (S/A 2060 – SSCN 13079)

The contractor shall provide an FGB Maintenance and ORU Replacement Plan, including required repair and replacement procedures, for the FGB Phase IV DIL (DIL ID numbers 51750 – 51794) items by June 2018 (H. 57 Clause).

6.8 COMMERCIAL ORBITAL TRANSPORTATION SERVICES (COTS) INTEGRATION

6.8.1 SUPPORT TO COTS SYSTEM REQUIREMENTS REVIEW (SRR) (S/A 1401)

The contractor shall provide multidiscipline technical review of SSP 50808, ISS to COTS IRD, and SSP 50809, ISS to COTS ICD (both dated 10 October 2006), and perform the following tasks pertaining to these documents:

- a) Identify areas of incompatibility or risk.
- b) Propose revisions to the documents to ensure compatibility with ISS standards.
- c) Attend customer coordination meetings.
- d) Prepare for and support COTS formal reviews pertaining to these documents (for both Rocketplane Kistler and Space X).

6.8.2 SYSTEM REQUIREMENT REVIEW (SRR) ACTION CLOSURE (S/A 1487)

The contractor shall close all assigned SpaceX SRR actions and issues.

6.8.3 INTERFACE REQUIREMENTS DOCUMENT (IRD) DEVELOPMENT

6.8.3.1 The contractor shall revise the SpaceX COTS to ISS Interface Requirements Document (IRD) to include coordinated verification requirements (Section 4). (S/A 1487)

6.8.3.2 The contractor shall provide inputs to SSP 50808 “ISS to COTS IRD” necessary for the SpaceX and Orbital vehicles to interface with the ISS vehicle during proximity operations, including automated rendezvous and docking/berthing (AR&DB) and departure and integrated on-orbit operations. (S/A 1571)

6.8.3.3 The contractor shall provide training and training materials to Orbital Sciences for interface requirements familiarization. (S/A 1571)

6.8.4 SOFTWARE ICD DEVELOPMENT

6.8.4.1 The contractor shall develop, coordinate and Program baseline the SpaceX COTS to ISS software Interface Control Document (ICD) and update as required. (S/A 1487)

6.8.4.2 The contractor shall develop and release a Common Visiting Vehicle Software ICD which contains software interface requirements for a generic vehicle that include the definition of the command and data interface to the ISS command and data handling architecture and update as required. (S/A 1571)

6.8.4.3 The contractor shall provide training and training materials to Orbital Sciences for software requirements familiarization. (S/A 1571)

6.8.5 VERIFICATION PLANNING, DEVELOPMENT AND CLOSURE

6.8.5.1 The contractor shall develop and coordinate a verification strategy for SpaceX COTS (S/A 1487)

6.8.5.2 The contractor shall develop and coordinate a verification strategy for the Orbital Sciences Demo flight. (S/A 1571)

6.8.5.3 The contractor shall review closeout verification data products for compliance to The SpaceX to ISS IRD in preparation for the SpaceX Demo 2 Flight (rendezvous) and Demo 3 (berthed) flight. (S/A 1571)

6.8.5.4 The contractor shall review closeout verification data products for compliance to the ISS to COTS IRD (SSP 50808) and the Orbital hardware ICD (SSP 50885) in preparation for the Orbital Sciences Demo berthed flight in March 2011 (FY 10/11). (S/A 1605)

6.8.6 DATA SUBMITTAL AND EXCHANGE

6.8.6.1 The contractor shall develop coordinated data submittal agreements for SpaceX COTS, including all required data to be transferred and associated delivery dates. (S/A 1487)

6.8.6.2 The contractor shall develop coordinated data submittal agreements for the Orbital Science vehicle to support requirements development, verification planning, assessment of requirements compliance and subsystem analysis including all required data for transfer and associated delivery dates. (S/A 1571)

6.8.7 DESIGN AND SAFETY REVIEW PARTICIPATION

6.8.7.1 The contractor shall review design and safety review data for COTS (SpaceX and Rpk) to determine ISS interface requirement compliance, identify areas of incompatibility and risk, and obtain necessary data for authorized technical integration activities. The contractor shall participate in review for this data. (S/A 1571)

6.8.7.2 The contractor shall review design and safety review data for Orbital Science COTS to determine ISS interface requirement compliance, identify areas of incompatibility and risk, and obtain necessary data for authorized technical integration activities. The contractor shall participate in reviews for this data. (S/A 1571, 1605)

6.8.8 ACTION AND ISSUE CLOSURE FROM DESIGN AND SAFETY REVIEWS

The contractor shall close all assigned actions and issues from COTS vehicle, SpaceX and Orbital Science vehicle design and safety reviews. (S/A 1487, 1571, 1605)

6.8.9 INTERFACE DEVELOPMENT

6.8.9.1 The contractor shall provide inputs to and identify issues/risks related to the SpaceX COTS ICD and review and provide inputs to support revisions. (S/A 1487)

6.8.9.2 The contractor shall provide inputs for hardware interface control requirements definition for the Orbital vehicle and review and provide inputs to support revisions. (S/A 1571, 1605)

6.8.10 HARDWARE/SOFTWARE CHANGE DEFINITION (S/A 1487/1571)

The contractor shall develop draft requirements for ISS H/W and/or S/W development or modification required to accommodate the SpaceX and Orbital Sciences vehicles at the ISS.

6.8.11 TEST STRATEGY DEFINITION

6.8.11.1 The contractor shall support development of and identify issues related to the draft test strategy/approach for the SpaceX COTS Program to ensure required tests exist to allow the vehicle to be integrated with the ISS and to satisfy ISS Program CoFR requirements. (S/A 1487)

6.8.11.2 The contractor shall develop draft test strategy/approach for recommended or required tests to allow SpaceX and Orbital Science COTS vehicles to integrate with the ISS and successfully complete CoFR. (S/A 1571)

6.8.12 OPERATIONAL CONSTRAINT DEFINITION (S/A 1487)

The contractor shall define operational constraints as part of performing the SpaceX COTS SOW tasks.

6.8.13 DESIGN AND VERIFICATION ANALYSIS

6.8.13.1 The contractor shall define and perform applicable analyses to support planned verification of the initial demonstration flight of SpaceX COTS to determine design drivers for the following areas: (S/A 1487)

- Loads and Dynamics
- Robotics/End-to-End Berthing and Integration
- Guidance, Navigation and Control
- Environmental Control and Life Support
- Environments
- Material and Processes;
- Propulsion System Integration
- Vehicle Integrated Performance
- Resources

6.8.13.2 The contractor shall perform verification analysis cycle (VAC) analyses for the SpaceX Demo flight2 (rendezvous) and Demo flight 3 (berthed) to support execution/closeout of pre-flight verification tasks. (S/A 1571)

6.8.13.3 The contractor shall perform required analysis for demo flights of the Orbital Sciences COTS vehicle to determine design drivers for the Orbital Science vehicle and support pre-flight verification planning. The analyses shall be in the following areas: (S/A 1571)

- Loads and Dynamics
- Robotics/End-to-End Berthing and Integration

- Guidance, Navigation and Control
- Environmental Control and Life Support
- Environments
- Material and Processes;
- Propulsion System Integration;
- Vehicle Integrated Performance
- Resources
- Thermal
- Power

6.8.13.4 The contractor shall perform verification analysis cycle (VAC) analyses for the Orbital Sciences Demo flight to support execution/closeout of pre-flight verification tasks. The VAC will include GN&C (FY10/11). (S/A 1605)

6.8.14 PASSIVE COMMON BERTHING MECHANISM (CBM) ENGINEERING PACKAGE (S/A 1487)

6.8.14.1 The contractor shall deliver a complete engineering package to NASA to enable manufacture and verification of a passive common berthing mechanism (CBM) by June 2008. This package shall include the latest up-to-date drawings of the Node 2 Nadir Passive CBM configuration, identification of equivalent processes for Boeing proprietary specifications, and identification of open items, waivers and/or nonconformances for the configuration

6.8.14.2 The contractor shall provide interpretation of data for 90 days after the last data delivery.

6.8.15 JOINT TESTING WITH SPACEX AND ORBITAL SCIENCESs

6.8.15.1 PCBM ACCEPTANCE TESTING

6.8.15.1.1 The contractor shall perform passive CBM acceptance testing for the SpaceX Dragon Flight vehicle 3 at the SpaceX facility. (S/A 1556)

6.8.15.1.2 The contractor shall perform passive CBM acceptance testing for the Orbital Sciences Cygnus Flight vehicle at the Orbital Sciences facility (FY11). (S/A 1605)

6.8.15.2 POWER QUALITY TESTING

6.8.15.2.1 The contractor shall develop and perform power quality testing per SSP 50808 (source and load electrical requirements) for the ISS to SpaceX Dragon electrical interface and document in a final test report. (S/A 1556)

6.8.15.2.2 The contractor shall develop and perform power quality testing per SSP 50808 (source and load electrical requirements for the ISS to Orbital Sciences Cygnus electrical interface and document in a final test report (FY10). (S/A 1605)

6.8.16 INTEGRATION OF SPACEX AND ISS AVIONICS AND SOFTWARE SYSTEMS (S/A 1563)

6.8.16.1 INTEGRATION ACTIVITIES (S/A 1563)

The contractor shall perform the activities required to integrate the SpaceX and ISS avionics and software systems to support test and flight operations (proximity and berthed operations) through SpaceX Demo Flight 3. This includes system hardware and software integration of the COTS Ultra High Frequency Communications Unit (CUCU) with the ISS vehicle.

6.8.16.2 CHANNELIZATION ASSESSMENTS (S/A 1563)

The contractor shall perform channelization assessments between the following:

- ISS vehicle and the SpaceX CUCU
- SpaceX vehicle interface with the ISS vehicle

The SpaceX vehicle to ISS vehicle assessment shall be performed to the first level of interface between the two vehicles and include ISS GNC and ISS flight critical interfaces.

6.8.16.3 SIMULATOR DEVELOPMENT AND INTEGRATION (S/A 1563)

6.8.16.3.1 SDIL SIMULATION CAPABILITIES (S/A 1563)

The contractor shall update SDIL with the hardware and software capabilities necessary to support integration, test and verification activities for the SpaceX vehicle, including functional and physical interface between the SDIL and the SpaceX simulator.

6.8.16.3.2 ISS SIMULATOR DEVELOPMENT AND INTEGRATION (S/A 1563)

The contractor shall perform the following simulator and integration activities:

- Develop and provide an ISS simulator to SpaceX for use in integrated testing at the SpaceX facility.
- Deliver all associated software and hardware tools, documents, and user guides necessary for the installation and operation of the ISS simulator.
- Develop and provide an ISS simulator to SpaceX for use in integrated testing at the SpaceX.
- Provide the hardware interface between the ISS simulator and the SpaceX facility.
- Provide training to SpaceX personnel on the use of the ISS simulator.

6.8.17 COFR PLANNING

6.8.17.1 The contractor shall submit inputs for the development of updates to the ISS CoFR plan (SSP 50108) for the SpaceX demo 2 flight (rendezvous) and Demo 3 flight (berthed). (S/A 1571)

6.8.17.2 The contractor shall submit inputs for the development of updates to the ISS CoFR plan (SSP 50108) for the Orbital Sciences Demo flight (FY10/11). (S/A 1605)

6.8.18 INTEGRATION OF ORBITAL SCIENCES COTS CYGNUS VEHICLE AND ISS AVIONICS AND SOFTWARE SYSTEMS (S/A 1599)

6.8.18.1 INTEGRATION ACTIVITIES

The contractor shall perform the activities required to integrate the COTS Cygnus vehicle and ISS avionics and software systems to support test and flight operations (proximity and berthed operations) through the Cygnus demo flight.

6.8.18.2 CHANNELIZATION ASSESSMENTS

The contractor shall perform a channelization assessment between the ISS and Cygnus vehicles using data provided by NASA/Orbital. The assessment shall be performed to the first level of interface between the two vehicles and include ISS GNC and ISS flight critical interfaces.

6.8.18.3 SIMULATOR DEVELOPMENT AND INTEGRATION

6.8.18.3.1 SDIL SIMULATION CAPABILITIES

The contractor shall update SDIL with the hardware and software capabilities necessary to support integration, test and verification activities for the Cygnus vehicle, including functional and physical interface between the SDIL and the Orbital Sciences simulator.

6.8.18.3.2 ISS SIMULATOR DEVELOPMENT AND INTEGRATION

The contractor shall perform the following simulator and integration activities:

- Develop and provide an ISS simulator to Orbital Sciences for use in integrated testing at the Orbital facility
- Deliver all associated software and hardware tools, documents, and user guides necessary for the installation and operation of the ISS simulator.
- Provide the hardware interface between the ISS simulator and the Orbital Sciences facility.

- Provide training to Orbital Sciences personnel on the use of the ISS simulator.
- Provide integration support for checkout at the Orbital Sciences facility.

6.8.19 ACBM TO PCBM PRESSURE SEAL ANALYSIS FOR ORBITAL DEMO FLIGHT BERTHING TO ISS

The contractor shall perform an analysis using Orbital provided models to verify the ACBM of the ISS will support the capability to attach to and from a pressurized seal with the PCBM of the Cygnus for the Orbital Demo flight (FY10 & FY11). (S/A 1605)

6.8.20 DIGITAL PRE-ASSEMBLY (DPA) AND CABLE/FLUID ASSESSMENT

6.8.20.1 The contractor shall perform DPA measurements and static fit analysis for ISS element mating interfaces with Orbital visiting Vehicle (FY11). (S/A 1605)

6.8.20.2 The contractor shall perform Cable and fluid Assessments (C&FA), including an as-designed audit, as-built audit, and mate/fit-check of IVA cable and fluid interfaces between the ISS and Orbital visiting vehicle (FY11). (S/A 1605)

6.8.21 OUTGAS TESTING (S/A 1629)

The contractor shall perform outgas rate testing on SpaceX and Orbital vehicle materials to support analysis and verification that these vehicles are compliant with induced contamination limits defined in the COTS IRD. Testing shall be performed according to the ASTM E 1559 standard (Standard Test Method for Contamination Outgas Characteristics of Spacecraft Materials) and the results of the testing shall be provided NLT Launch -4 months for the specific vehicle.

6.8.22 INTEGRATION OF HRSGFS ON SPACEX FSE (FLIGHT SPACEX-2) (S/A 1647)

The contractor shall perform the following functions to launch and integrate two Heat Rejection System Grapple Fixtures (HRSFSS) on SpX-2 in the Dragon Trunk by 9/30/10:

- Assess SpaceX provided launch loads of the Grapple Bars to determine if the grapple bars can support those loads at the cup cone interface and resolve analytical issues

- Revise the grapple bar interfaces for SpaceX FSE top assembly drawing.
- Participate in “Grapple Bar FSE Preliminary Design Review (PDR)” and “Interim Design/Ops Review #3 (CDR)” to identify issues and concerns with the designs and interfaces, write Review Item Discrepancies (RIDs), and work actions assigned to close.
- Perform thermal evaluation of on orbit operations of the grapple bar attached to the SpaceX FSE.

6.8.23 ASSESS SPACEX UNPRESSURIZED CARGO PROCESSES (S/A 1660)

The contractor shall assess SPACEX processes for unpressurized analytical and physical integration for two early non-demonstration flights with external cargo, and provide issues, concerns, and recommendations for improvement.

6.8.24 SPACEX 4 FRAM DEVELOPMENT TESTING (S/A 1706-SSCN 12546)

The contractor shall perform the following testing to support SpaceX in the first manufacture and test of FRAMs:

- Thermal-Vacuum and random vibration acceptance testing and bake out of one SpaceX provided (EXPRESS) Pallet Adapter (ExPA) per acceptance test report CMC-FRAM-00001-ATR by April 29, 2011.

6.8.25 PARTIALLY INSTALLED FRAM ON SPACEX 3 FLIGHT (S/A 1745 – SSCN 12820)

The contractor shall perform the following tasks to determine issues associated with a partially installed FRAM on SpX-3 by December 2011:

- 1) A capability study to determine FRAM allowable loads in a worst-case partially installed state in the SpaceX 3 trunk for STP-H3 payload insertion for disposal. This shall include validation of assumptions on turn count and load path configurations.
- 2) Integrate passive and active non-linear FRAM model to SpaceX – provided Craig-Bampton (CB) model of Dragon capsule and trunk
- 3) Develop loads, including non-linear effects, of a partially installed FRAM during on-orbit loading unberth, and SSRMS maneuver to separation point

- 4) Provide non-linear FRAM model for coupled loads assessment of SpX-3 separation maneuver
- 5) Develop FRAM loads for separation maneuvers within the ISS Keep-Out-Zone (KOZ).

6.8.26 CONTAMINATION ASSESSMENT OF DRAGON TRUNK (SSCN 13366 – S/A 1899)

The contractor shall perform analyses of contamination induced by the SpaceX Dragon trunk and integrated Dragon payloads/cargo/FSE complement while in transit and mated to ISS prior to deployment on ISS, and identify induced contamination issues and violations to payloads/cargo. Analyses shall be completed by Launch-5 months for SpX-3 (July 2013 launch) and Launch-6 months for all subsequent SpaceX flights. Analyses include the following:

- Analysis of Dragon trunk with integrated payloads/cargo and FSE material outgassing induced contamination onto payloads/cargo surfaces (trunk to payloads/cargo and payload/cargo/FSE-to-payload/cargo contamination).
- Analysis of Dragon trunk plume/pyro induced contamination onto payloads/cargo (Dragon separation from Falcon 9 upper stage) for SpaceX 3 only.

6.9 PAYLOAD INTEGRATION

6.9.1 PASSIVE RACK ISOLATION SYSTEM (PaRIS)

6.9.1.1 PASSIVE RACK ISOLATION SYSTEM (PaRIS) ISOLATION PLATE RECONFIGURATION AND ENGINEERING SUPPORT OF A NASA PaRIS TRAINER BUILD

- A. The contractor shall perform the following physical integration functions to assist NASA in the modification of the PaRIS isolation base plate assembly:
 - 1) Remove the isolation plate from the Combustion Integrated Rack (CIR) located at the NASA Glenn Research Center (GRC) and prepare it for shipment to the HPSC.
 - 2) Reconfigure the isolation base assembly into a stowed assembly, integrate captive fasteners, re-identify /identify hardware as necessary,

install GFE identify labels and perform verification and requirement reviews.

- 3) Re-install the modified isolation plate less the crossbeam into the CIR at GRC. Provide the crossbeam as part of the PaRIS stowed items kit.

B. The contractor shall perform the following tasks to assist NASA in the development of a PaRIS trainer:

- 1) Modify a residual asset international standard payload rack (ISPR) by drilling holes necessary for installation of the PaRIS equipment per PaRIS to ISPR ICD, SSP 57058.
- 2) Modify a residual asset PaRIS front isolator base bracket assembly per NASA specified drawing and assemble the same captive fasteners specified in SOW 6.9.1.1.A.
- 3) Provide engineering input to the development of the NASA PaRIS trainer.

6.9.2 INTEGRATION OF THE EXPEDITE THE PROCESSING EXPERIMENTS TO SPACE STATION (EXPRESS) SUBPALLET PAYLOADS IN THE EXPRESS LOGISTICS CARRIER (ELC) (S/A 1430) (S/A 1547)

6.9.2.1 PROGRAM DOCUMENTATION

The contractor shall develop and Program baseline the following documents:

- ELC to P/L and Cargo Interface Requirements documents [DR F-SE-44]
- Develop ELC to P/L and Cargo Interface Control Document Template [DR F-SE-44]
- ELC to International Space Station Interface control Documents [DR F-PA-16]
- ELC to Payload Interface Control Documents [DR F-PA-16]

6.9.2.2 STAGE ANALYSIS

The contractor shall perform stage analyses for the ELC and the payloads for the ULF3 stage.

6.9.2.3 PAYLOAD EXCEPTIONS

The contractor shall process ELC and ELC subpallet payload exceptions as required.

6.9.2.4 UPGRADE THE PAYLOAD SOFTWARE INTEGRATION AND VERIFICATION FACILITY (PSIV)

The contractor shall upgrade the payload software integration and verification facility hardware and software to support ELC, flight equivalent units (FEUs), and ELC payload simulations to perform payload software interface verification with the payload command and data handling system.

6.9.2.5 SUSTAINING ENGINEERING AND POST PRODUCTION SUPPORT OF THE ELC ELECTRICAL GSE (EGSE)

6.9.2.5.1 The contractor shall convert the GSFC provided ELC EGSE drawings to a format maintainable by Boeing.

6.9.2.5.2 The contractor shall provide design support to the GSFC ELC Project.

6.9.2.5.3 The contractor shall provide sustaining engineering and post production support for the GSFC provided ELC electrical GSE (payload interface test equipment). (S/A 1547)

6.9.2.5.4 The contractor shall provide Help Desk support to users of the EGSE devices. (S/A 1547)

6.9.2.6 MODIFICATION TO STEP SOFTWARE FOR ELC INTERFACES TO PAYLOADS (S/A 1658)

The contractor shall develop and incorporate a patch to the Suitcase Test Environment for Payload (STEP) software that will emulate the EXPRESS Logistics Carrier (ELC) MIL-B-1553B and Ethernet interfaces to Payloads by October 2010.

6.9.3 SUPPORT TO THE OPERATIONAL CONCEPT FOR 6 PERSON CREW FOOD PREPARATION SYSTEM (S/A 1451) (S/A 1547)

6.9.3.1 The contractor shall develop/update, baseline, and maintain the following ICDs:

- EXPRESS Rack 6 ICD, SSP 57206
- Food Warmer ICD, SSP 53110
- Potable Water Dispenser (PWD) ICD, SSP 53109
- Food Preparation Rack (EXPRESS Rack 6) Unique Software ICD, SSP 57306.

6.9.3.2 The contractor shall participate in one preliminary design review and one critical design review for the PWD by reviewing the data packages, identifying issues and concerns, and participating in the resolution of issues and concerns.

6.9.3.3 The contractor shall process exceptions for the potable water dispenser (PWD).

6.9.3.4 The contractor shall support PWD testing and food warmer functional checkout with a flight EXPRESS Rack at KSC by providing engineering discipline support in order to resolve and close interface issues, as required.

6.9.3.5 The contractor shall provide engineering evaluation of verification data for the PWD and food warmer and track and status verification closure of PWD and food warmer requirements.

6.9.3.6 The contractor shall lead the certification of flight readiness for the EXPRESS Rack 6 payload.

6.9.3.7 The contractor shall perform mission integration for the PWD, food warmer and the microgravity experiment research locker incubator (MERLIN).

6.9.3.8 The contractor shall perform an integrated safety assessment of the EXPRESS Rack 6.

6.9.4 HTV PRESSURIZED LOGISTICS CARRIER (PLC) VIBRO ACOUSTIC TEST

6.9.4.1 RACK HARDWARE (S/A 1516)

The contractor shall provide an EXPRESS Transportation Rack (ETR) and rack handling ground support equipment (GSE) to support the ETR incorporation in the HTV Pressurized Logistics Carrier (PLC) acceptance acoustic vibration test on location in Japan.

6.9.4.2 TEST DEVELOPMENT, PLANNING AND IMPLEMENTATION (S/A1516)

The contractor shall provide the engineering necessary to plan, develop, implement and document the incorporation of the ETR into the HTV PLC acceptance acoustic vibration test on location in Japan.

The contractor shall provide on-site support to the HTV PLC acceptance acoustic test and document the results of the testing.

6.9.5 PRCU TO ACASS (S/A 1539)

6.9.5.1 The Contractor shall design and deliver a new cable harness set to connect the KSC payload rack checkout unit (PRCU) remote interface panel (RIP) and a local 120 VDC power supply to the active common attachment system simulator (ACASS) to allow processing or attached payloads in the express logistics carrier rotation stand (ELCRS) in the KSC SSPF.

6.9.5.2 The Contractor shall perform analysis of the cable to verify the resulting PRCU, cable, power supply and ACASS system will result in a configuration capable of supporting the required ISS verification testing of attached payloads per SSP 57003, the Attached Payloads Interface Requirements Document, paragraph 3.2.2.3.1 "WIRE DERATING" applies to the cable design.

6.9.6 EXPRESS RACK 8 INTEGRATION ON ULF 5 (S/A 1629)

The contractor shall provide payload integration functions for EXPRESS Rack 8 for launch on ULF-5 (September 2010).

6.9.7 SOFTWARE AUTOMATION TOOLS (S/A 1696 – SSCN 12539)

The contractor shall define, develop and provide the following data recording and tracking tools for use in NASA management of ISS Payloads:

6.9.7.1 Automation software tool to track the initiation, review and approval process for the NASA ISS Payloads Office change evaluation (CEF) form traffic (due May 31, 2011).

6.9.7.2 ISS increment research plan spreadsheet with payload attributes, including mass, volume, and crew time, to upload research plan data directly into the Boeing developed “Payload Tactical Plan Automation Tool” (PAT) database (due April 20, 2011).

6.9.8 INTEGRATION OF BIGELOW EXPANDABLE ACTIVITY MODULE (BEAM) ON ISS (S/A 1697 – SSCN 12616) (S/A 1760 – SSCN 12845)

The contractor shall perform the following tasks to support integration of the BEAM on ISS:

6.9.8.1 Review the NASA provided draft BEAM to ISS Vehicle ICD and provide concurrence on the requirements or identify issues/concerns (due January 2011). (S/A 1697 – SSCN 12616)

6.9.8.2 Provide an engineering cost estimate for integration of the BEAM to the ISS based on updated ICD requirements (due January 2011). (S/A 1697 – SSCN 12616)

6.9.8.3 Develop and baseline the “Bigelow Expandable Activity Module (BEAM) to ISS Interface Control Document” (SSP 57239) for review at the BEAM SRR and release a post-SRR ICD baseline version by February 17, 2012.

6.9.8.4 Participate in the BEAM Systems Requirements (SRR) to ensure the BEAM requirements properly invoke the interface requirements and to determine if there are any specific issues/concerns with the passive thermal and structure and mechanical systems requirements. (S/A 1760 – SSCN 12845)

6.9.8.5 Review the draft BEAM Concept of Operations to ensure compatibility with ISS interfaces (due 3 weeks after GFD received). (S/A 1760 – SSCN 12845)

6.9.8.6 The contractor shall integrate the BEAM (berthed to Node 3 aft location) with the ISS System for on-orbit operation by May 2015. (S/A 1959 – SSCN 13121).

6.9.8.7 The contractor shall perform the following testing, analysis and audits on the BEAM hardware (S/A 1959 – SSCN 13121; S/A 1991 – SSCN 13121 Rev 2):

- CBM FE1410 acceptance testing on BEAM PCBM in order to verify that all PCBM components are within design limits by October 2014 (Payload Readiness Review (PRR) – 4 months).
- Digital Pre-assembly (DPA) of the as-built measurement for the pre-inflated configuration at the BEAM contractor location and update of the CAD models for these measurements by October 2014 (PRR – 4 months).
- Assembly Analysis of the BEAM as-designed configuration by February 2014 (CDR + 3 months) to validate the approach corridor to Node 3 aft interface. Assembly Analysis of the as-built models for input to the End-to-End Berthing Integration Team (EBIT) by March 2015 (launch – 2 months).
- Cable & Fluid Assessments (C&FA) audits of the as-designed and as-built configurations, and a mate-fit check/On-Orbit Constraints Test to validate Node 3 interfaces by September 2014 (PRR – 4 months). Test reports shall be submitted by January 2015 (prior to PRR).

6.9.9 NITROUS OXIDE FUEL BLEND (NOFBX™) ENGINE INTEGRATION (S/A 1722 – SSCN 12634)

6.9.9.1 FEASIBILITY ANALYSIS

The contractor shall perform a study limited to evaluation of the plume effects (contamination, erosion, loads and GN&C) from firings of a Nitrous Oxide Fuel Blend (NOFBX™) engine located on-orbit on a Columbus Starboard Deck X –direction (SDX) attached payload site and identify issues and concerns by July 2011.

6.9.10 PAYLOAD VERIFICATION SOFTWARE TOOL (S/A 1731 – SSCN 12649)

The contractor shall deliver, implement, beta test (within the ISS Payload Community), and provide training materials for a software tool which provides the following functions (by January 2012):

- Allows electronic (web-based) submittal of verification data by Payload Developers,
- Provides web-based interface for Payload Developers to view applicable requirements and submittal status,
- Allows electronic processing and review of verification data,

- Interfaces with the Interface Control Document (ICD) Development Tool for direct input of applicability matrices from ICDs and Preliminary Interface Revision Notices(PIRNs),
- Provides real-time verification status.

6.9.11 WAKE-ALIGNED REPEATING PULSE (WARP) PROPULSION SYSTEM (S/A 1776 – SSCN 12948)

6.9.11.1 CHARACTERIZATION (SSCN 12948 – S/A 1776)

The contractor shall characterize the key ISS technical parameters of the Wake-Aligned Repeating Pulse (WARP) propulsion system located at P5/S5 locations as defined below (by January 20, 2012).

- a. The contractor shall assess the assembly-complete (including the proposed future Russian Science Power Modules and mini connecting node) response of the ISS Momentum management system and the existing GN&C filtering process to the pitch disturbance torque expected from the WARP concept.
- b. The contractor shall define preliminary induced environments constraints for plume pointing and distance with respect to ISS hardware. The contractor shall define bounding limits determined by erosion, contamination, molecular column density, net ion density and vehicle charging requirements on ISS.
- c. The contractor shall calculate the expected electrical power that will be available to the WARP system and determine the best option to provide uninterrupted and two fault tolerant power to the WARP system.
- d. The contractor shall review existing ISS integrated Hazard Reports to determine if the installation of the WARP system on the ISS will require new hazard causes, controls, or non-compliances.

6.9.12 PAYLOAD LAPTOPS (SSCN 12836 – S/A 1786)

The contractor shall provide the capability to perform virus scans on the EXPRESS and WOP Payload Laptops by March 2013.

6.9.13 KU-BAND FORWARD ACCESS FOR PAYLOAD OPERATIONS (SSCN 13351 – S/A 1919)

The contractor shall perform the following activities to enable KU-Band forward access for Payload Operations:

- Update (by February 2014) the Integrated Station LAN (ISL) routers and the Ipehg to support LAN connectivity between the HOSC Control Center and the ISS Payloads network via Ku band network.
- Provide releases of EXPRESS Common Laptop Software (CLS), PRCU, STEP, Rack Software Test Bed (RSTB) tools, and PSIV/ Payload Test Environment (PTE) software which integrate the Government provided Consultative Committee for Space Data Systems (CCSDS) File Data Protocol (CFDP) software to support Ku band uplink connectivity (by March 2014).

6.9.14 PAYLOADS OFFICE WORKFLOW SOLUTION (S/A1944 – SSCN 12837)

6.9.14.1 The contractor shall provide a web-based, integrated payload–centric data entry interface, Payload Workflow Tool with a common database [all functionality to be complete by February 2015] for payload data which meets the following requirements (S/A1944 – SSCN 12837; S/A 1992 – SSCN 12837 Rev 2):

1. Integrates the following current set of stand-alone software tools and processes listed below:

A. The following functionality shall be available by September 2013 (Spiral 1):

- Infrastructure.
- OZCoFR [NASA Department OZ Certificate of Flight Operations software].
- Payload Manifest Assessment Tool (PMAT).
- Change Evaluation Form (CEF) Tracking and Integration (CETI) software, Version 2.0.
- Verification of Engineering Requirements Interface for Tracking, Approval, and Submission (VERITAS).

- Payload Engineering and Integration (PEI) Internal Tasks & Assignments (PITA).
- Payload Developer (PD) Contact List.
- Payload Unique Documents Website.

B. The following functionality shall be available by March 2014 (Spiral 2):

- Payload Tactical Plan (PTP) Automation Tool (PAT).
- Program Scientist Toolbox.
- Research Plan Spreadsheet.
- CETI Version 3.0.

C. The following functionality shall be available by September 2014 (Spiral 3):

- Payload Integration Manager (PIM), Lead Stage Engineer, and Flight Payload Manager (FPM) schedules within an interactive, integrated visual timeline architecture.
- Cold Stowage Forms.
- Payload Interface Revision Notices (PIRN) Database.
- Payload Guidelines and Constraints (GLC) Database.

D. The following functionality shall be available by February 2015 (Spiral 4):

- Payload Data Library (PDL).
- User Operations Panel (UOP) Resource Requirements.

- Flex Chart [tracking payload objectives].
 - Payload Engineering Configuration List/As-Built Configuration List (ECL/ABCL).
 - Integrated Payload List (IPL).
2. Includes a capability to display payload end-to-end integration milestones, schedules, and status [September 2014].
 3. Includes a capability to exchange data with the ISS Electronic Document Management System (EDMS), Mission Integration Database Application System (MIDAS), Export Control Relational Database Management System (RDBMS), and the Payload/Ground Safety Data Management System (DMS) databases [February 2015].
 4. Is housed on NASA Johnson Space Center (JSC) servers under the NASA Data Center (NDC) domain.

6.9.14.2 The contractor shall provide the following documentation for the Payload Workflow Tool (by February 2015):

1. Systems Requirements Document (SRD) [October 2012]
2. Detailed Design Specification (DDS) [Draft October 2012] [Final release February 2015]
3. Concept of Operations (CONOPS) Document [October 2012]
4. Interface Definition Document (IDD) [Draft October 2012] [Final release February 2015]
5. Acceptance Review Plan (ARP) [November 2012]
6. User test procedures and acceptance review package for each spiral phase.

6.10 COMPLETE

6.11 NODE 3

6.11.1 GROUND PROCESSING ACTIVITIES (S/A 1406) (S/A 1547)

A. The contractor shall support/perform the following tasks at Alcatel Alenia Space (AAS):

- Flight wate (ITCS) load
- Software load and post final software load initialization testing
- Active and passive common berthing mechanisms (CBM) final installation, regression testing and acceptance.
- On-orbit constraints test (OOCT) – see SOW section 3.4.1.7.4
- Digital Pre-Assembly (DPA) – see SOW 3.4.1.7.1
- Radial hatch installation (S/A 1451)
- Final installation of CBM meteoroid/debris (M/D) cover (petals) (S/A 1451)

B. The contractor shall refurbish the rack loading kit installation assembly and ship to KSC.

C. The contractor shall coordinate and provide input to resolve government furnished equipment (GFE) nonconformances and issues. (S/A 1451)

H. The contractor shall routinely analyze Node 3 water samples to determine the basic chemical structure. (S/A 1451)

6.11.2 LAUNCH AND ASSEMBLY OF INTEGRATED NODE 3 AND CUPOLA (S/A 1460) (S/A 1547)

6.11.2.1 INTEGRATED ELEMENT VERIFICATION

The contractor shall provide input to the verification of the launch configuration of the Integrated Node 3/Cupola element to requirements in SSP 50793 and that the required operations can be executed on-orbit by:

- Performing a Cupola Windows stress analysis

- Performing a CBM to CBM stress analysis for launch
- Performing a thermal environment assessment for the flight element
- Performing a PNP on-orbit analysis of CBM to CBM
- Providing updates to the A&OSP and to operations data for on-orbit operations.
- Assessing on-orbit EVA and Robotics impacts
- Performing an over-pressure analysis of the cupola and IMV for the new launch configuration.
- Closing out verification work.
- Providing input on thermal blanket analysis and design.

6.11.2.2 CBM INSTALLATION

The Contractor shall provide assistance for the CBM-to-CBM ground installation at KSC.

6.12 ZERO PROPELLANT MANEUVERS (ZPM)

6.12.1 The contractor shall perform analyses and develop attitude and attitude rate commands for 4 zero propellant maneuvers.

6.12.2 The contractor shall develop a plan for long term implementation of ZPMs, to streamline the development and execution process.

6.13 COMPLETE

6.14 HARDWARE INTERFACE REQUIREMENTS DEVELOPMENT

6.14.1 The contractor shall develop a draft interface requirements document (IRD) for government and contractor furnished hardware that will operate within the USOS pressurized elements.

6.14.2 The contractor shall lead an ISS Program review of the draft document and present all issues, concerns, and recommendations to the NASA Vehicle Control Board.

6.14.3 The Contractor shall baseline and release SSP 50835, "Pressurized Volume Hardware Interface Requirements Document."

6.14.4 FOAM PACKED ORUs (S/A 1648)

6.14.4.1 ENVELOPING LAUNCH ENVIRONMENT FOR FOAM PACKED ORUs (S/A 1497) (S/A 1648)

The contractor shall determine the enveloping launch environment for foam packed ORUs based on existing ISS Program packing material and packing techniques.

6.14.4.2 PLASTAZOTE FOAM TESTING (S/A 1648)

The contractor shall perform the following tasks in support of Compression and Random Vibration Testing of Plastazote MP15FR Foam (L200 Minicell Foam Replacement):

(Note: The following tasks shall be completed by 9/30/10).

- Develop Test Plan to characterize the static and dynamic stiffness properties of Plastazote MP15FR and to determine if this foam is similar to previously tested foam materials by June 20, 2010.
- Review NASA developed test procedures for compliance with the Boeing developed test plan.
- Participate in the test as an observer to witness test proceeding and resolve testing issues and actions.
- Perform analyses correlation of Plastazote test data with L200 Minicell data and analytical predictions.

(Note: the following tasks shall be completed after 9/30/10).

- Update analytical static deflection and vibration isolation models with Plastazote MP15FR foam test results.
- Document the test results and release Test Report(s).
- Provide inputs to document test results for CIRD update by 2011.

6.14.4.3 LAUNCH VEHICLE HARDWARE ASSESSMENTS (S/A 1701 – SSCN 12560)

The contractor shall perform loads and dynamics reviews and analyses in accordance with SSP 50835, Rev. B, “ISS Pressurized Volume Hardware Common Interface Requirements Document,” for manifested hardware items through flight HTV3 (January 2012 per SSP 54100, Rev. D, “Increment Definition and Requirements Document Flight Program”).

6.14.4.4 COMPOSITE OVERWRAPPED PRESSURE VESSELS (COPVs) (S/A 2041 – SSCN 13684)

The contractor shall provide three COPVs via DD1149 by December 15, 2013 as spares.

6.14.5 The Contractor shall perform the following tasks in support of the development and implementation of SSP 50835, “ISS pressurized volume Hardware Common IRD” (CIRD) (S/A 1567):

- Provide input to the NASA concept of operations regarding application of the common IDR (SSP 50835) and development of associated certification processes.
- Provide input to and support NASA negotiations with the International Partners (Ips) on approval of the document, development of IP specific appendices, and development of certification processes.
- Document in the appendices the data set required from the hardware provided to satisfy the needs of Ips, cargo integration activities, and mission integration activities.
- Provide input to NASA for approval of unique applicability matrix of CIRD requirements for each hardware item.

- Provide loads and dynamics analysis of GFE and IP hardware items relative to the launch environment and determine hardware compatibility to the launch environment.

6.15 SUPPORT TO INTERNATIONAL PARTNERS (S/A 1425)

6.15.1 HARDWARE/SOFTWARE INTEGRATION (HSI) TESTING

6.15.1.1 COMPLETE

6.15.1.2 COMPLETE

6.15.1.3 COMPLETE

6.15.1.4 JAPAN AEROSPACE EXPLORATION AGENCY (JAXA) H-II TRANSFER VEHICLE (HTV) TESTING (S/A 1465)

The Contractor shall support and conduct an end-to-end test of the H-II Transfer Vehicle (HTV) flight software and HTV Joint Test #20 (additional objectives related to the robotics workstation and HTV rendezvous) utilizing the HTV Control Center (HTVCC) in Japan, the Mission Control Center – Houston (MCC-H), the ground network and the Houston Software Development and Integration Laboratory (SDIL).

6.15.2 COLUMBUS AND JEM MODULE FLUID SAMPLE ANALYSIS

The contractor shall perform analysis on 19 Columbus and 1 JAXA fluid samples to verify the concentration of OPA.

6.15.3 ZERO GRAVITY STORAGE RACKS (ZSRs) CERTIFICATION FOR COLUMBUS LAUNCH CONFIGURATION

The Contractor shall:

- Certify the ZSR for launch in the ESA Columbus module.
- Provide support to ESA's installation and fit check of the ZSRs.
- Assess operational impacts of NASA rack relocations.

6.15.4 MOVED TO SOW 3.3.7.9.1.2

6.15.5 H-II TRANSFER VEHICLE (HTV) EXPOSED PALLET – MULTI PURPOSE (EP-MP) DESIGN AND DEVELOPMENT SUPPORT (S/A 1494)(S/A 1568)

The contractor shall support the HTV EP-MP Design Review Process by performing the following tasks:

- a. Define a “physical shock” capability for the TUS, BCDU, PM, NTA, ATA, CMG, FHRC, and PCU.
- b. Perform an integrated on orbit ISS loads assessment with the EP-MP attached to ISS for up to three years. Boeing will assess loads in the ISS structure. Boeing will provide a fatigue spectrum for the EP-MP to NASA.
- c. Boeing shall support EP-MP design reviews and Technical Interchange Meetings through FY08. Data packages will be reviewed and Review Item Discrepancies (RIDs) will be written.
- d. Technical review of data packages and products for the HTV EP-MP Critical Design Review Package (CDR) and Safety Review Panels (SRP) Phase 0, 1, 2, and 3 to identify areas of incompatibility or risk and submit RIDs.
- e. Participate in technical meetings to support development of hardware, issue resolution and formal reviews.
- f. Technical review of JAXA provided EP-MP layouts and EVA analyses to determine issues or concerns.
- g. Provide an integrated EVA Analysis Report (EAR) of one EP-MP layout (layout to be determined by NASA).
- h. Review the ORU max-max loads from 4 of AXA’s DCLAs to determine where Environments are not enveloped by previous analysis.
- i. Compare JAXA’s EP-MP shock environment with the qualification of acceptance tests of the ORUs to thenet any exceedances.

- j. Compare JAXA's EP-MP shock environment with the shock rating of the ORUs to identify any exceedances.

6.15.6 ANALYSIS OF ATTITUDES FOR RUSSIAN VEHICLE MANEUVERS (S/A 1500) (S/A 1547)

The contractor shall analyze new attitudes required by Russian vehicle maneuvers to ensure the ISS hardware and software operate within ISS vehicle capabilities. The specific attitudes to be analyzed will be transmitted via a MER CHIT. Analysis will be performed for:

- 2 Russian Vehicle (RV) dockings/yr
- 3RV undockings/yr
- 2RV relocations/yr
- 4 contingency RV dockings/yr
- 2Debris Avoidance Maneuvers (DAMs)/yr

6.15.7 HTV TESTING (S/A 1548)

The contractor shall perform the following tests on the HTV-1 at the Tsukuba Space Center in Japan in accordance with SSP 50420 "NASA/JAXA Bilateral Integration and Verification Plan for HTV":

- Assembly level interface test of the PCBM installed on the HTV-1 Pressurized Logistics Carrier to verify that all PCBM components are within design limits and to satisfy the acceptance test requirements for the PCBM (Test sheet 14).
- As designed and as-built assembly analyses to develop flight and stage assessments for the following:
 - HTV-1 to Node 2
 - HTV express pallet (EP) to HTV unpressurized logistics carrier (UPLC)

6.15.8 INTEGRATED MINI RESEARCH MODULE (MRM)-1 POWER TESTING (S/A 1583)

The contractor shall incorporate integrated tests into the verification activities to certify the Russian provided MRM-1 power system and associated CHT-50's (USOS to Russian Segment power converter units) by performing the following tests:

- Primary/secondary power quality testing on a flight or flight equivalent CHT-50.
- Integrated testing on the flight MRM1 module to verify electrical requirements per SSP 50227, "Russian Segment (SSP, SM, and FGB) to PDGF/SSRMS Interface Control Document," Table H4-1, "PVGF to MRM1 Interface Verification Table."

6.15.9 ADDITIONAL NODE 3 LAUNCH CAPABILITY (S/A 1590)

The contractor shall perform the following tasks to support integration of the Integrated Stowage Platform (ISP) into the MPLM and integration of the PVGF to Node 3 for flights.

- Update impacted software ICDs.
- Perform a standard MIL-STD-1553 analysis to calculate the end to end electrical signal integration of the PVGF to Node 3.
- Update Boeing drawings affected by integration of the ISP into the MPLM and/or integration of the PVGF to Node 3.
- Provide robotics analysis for clearance and SPDM operations.
- Update loads for CBM areas.
- Perform stress review of Alenia work.

6.15.10 INTEGRATION OF CSA MT RELAY BOX ASSEMBLY (S/A 1717 – SSCN 12608)

The contractor shall integrate the CSA provided MT relay box assembly (MTRA) with the ISS system in support of a launch no earlier than HTV-3 (January 2012).

**6.15.11 RUSSIAN MULTIPURPOSE LABORATORY MODULE (MLM)
(S/A 1752 – SSCN 12852) (S/A 1769 – SSCN 10395)**

6.15.11.1 RUSSIAN MLM TESTING (S/A 1752 – SSCN 12852)

The contractor shall perform outgassing rate testing on the Multipurpose Laboratory Module (MLM) vehicle materials to support analysis and verification that this module is compliance with induced contamination limits defined in SSP 50094, “NASA/RSA Joint Specifications Standards Document for the ISS Russian Segment.” Testing shall be performed according to the ASTM E 1559 standard (Standard Tests Method for Contamination Outgassing Characteristics of Spacecraft Materials) and the results of the testing shall be provided by December 16, 2011.

6.15.11.2 MLM ELECTRICAL POWER SYSTEM INTERFACE (S/A 1769 – SSCN 10395)

The contractor shall perform the following tasks to support implementation and verification of the Electrical Power System (EPS) interface and power transfer cables for the Russian Multipurpose Laboratory Module (MLM):

6.15.11.2.1 Deliver six test cables, representative of DIL items 51467 and 51468, “Cable Assy, Power – MLM” with one end terminated, for MLM flight unit ground checkout by 3/22/2012.

6.15.11.2.2 Provide EPS input, review, and concurrence of USOS to MLM/SM Interface Control Document (ICD) by 6/14/2011.

6.15.11.2.3 Provide EPS input, review, and concurrence of USOS to MLM/SM Interface Control Document (ICD) verification by 8/31/2012.

6.15.11.2.4 Perform power quality and EME testing of DDCU-R by 8/31/2011.

6.15.11.2.5 Perform EPS analysis for post-MLM installed configuration, including analysis for the interim configuration (SM CHT-50 powering the MLM) and the final configuration (MLM receiving power from USOS via external cables) to

determine to MLM/SM compatibility with the USOS EPS (by 9/14/2012).

6.15.12 JEM ORU TRANSFER INTERFACE (JOTI) (SA 1780 – SSCN 12931)

The contractor shall perform the following activities to support the design, manufacture, and certification of the Government Furnished Equipment (GFE) Japanese Experiment Module (JEM) ORU Transfer Interface (JOTI):

- Evaluate the JOTI design and operational environment to determine compatibility with the certification limits /capabilities of the following ORUs (by April 2012):
 - ACBSP, DDCU-E, ECU, EVSU, MDMs, and RJMCs
- Assess the expected compression load the Boeing sustained ORUs will be subjected to by the JOTI hardware. (February 2012)
- Assess the JOTI foam off-gassing against the Boeing sustained ORU capabilities (January 2012)

6.16 SUPPORT FOR SHUTTLE TRANSITION AND RETIREMENT (StaR) DRIVEN ANALYSES AND REDESIGNS (S/A 1460)

6.16.1 SPARES TRADE STUDIES/ANALYSES

6.16.1.1 The Contractor shall create a list of candidate ORUs for redesign. Candidates should have one or more of the following characteristics:

- On the Spares pre-positioned list.
- Planned for procurement on Shuttle Retirement related Provisional Item Orders (PIOs).
- Have a predicted annual upmass demand of greater than 100 lbm.
- Have a predicted annual crew time expenditure of greater than 2 hours for a Remove and Replace (R&R).
- Have parts or process obsolescence issues that make new builds of the current design impossible.

- Have potential incompatibility with expendable launch vehicles (ELVs).

6.16.1.2 The Contractor shall technically evaluate candidate ORUs for potential redesign to minimize upmass, minimize crew time for R&R, resolve obsolescence issues and/or resolve incompatibility issues with ELVs, present the results to the responsible NASA Board, and develop change requests/directives to implement feasible candidates.

6.16.1.3 The Contractor shall screen the 2008 NASA planned spares procurements for build-to-print producibility issues and identify items that require redesign prior to procurement.

6.16.2 SYSTEMS TRADE STUDIES/ANALYSES

6.16.2.1 The Contractor shall conduct detailed trade studies and develop options for supplying nitrogen (ECLSS and TCS), ammonia, and oxygen to the ISS through end-of-life.

6.16.2.2 The Contractor shall conduct a study of all ORUs in the high data rate path, including data sources and recorders, and

- Provide assembly complete architectural descriptions to identify constraints to the system including bottlenecks, single point failures, and signal inputs/outputs.
- Develop architectural redesign options to pursue.
- Perform technology readiness assessments for NASA preferred options.
- Define impacts and schedules associated with recommended options(s).

6.16.3 AVIONICS REDESIGN ACTIVITIES DUE TO OBSOLESCENCE

6.16.3.1 OBSOLESCENCE DRIVEN AVIONICS REDESIGN (ODAR) PHASE II – OPERATIONS CONCEPT DEFINITION AND REQUIREMENTS DEVELOPMENT (S/A 1485)

The contractor shall perform the following activities to support the avionics redesign for the SGANT Boom with adapter (new), Automated Payload

Switch (APS) upgrade, Payload Ethernet Hub/Gateway (PEHG) upgrade, and an HDTV communications interface box.

- A. Develop a functional requirements matrix which maps the existing capabilities by the orbital replacement unit (ORU) to the proposed new architecture documented on the NASA Avionics webpage.
- B. Develop a draft functional requirements document for each proposed new or modified ORU
- C. Develop a Concept of Operations for the new system to be coordinated with supporting organizations.
- D. Develop pin-to-pin preliminary drawings for the cabling required.
- E. Develop single replaceable unit level drawings for the new or upgraded ORUs.
- F. Develop a preliminary drawing for Space-to-Ground Antenna (SGANT) boom assembly.
- G. Develop a draft Software Description Document for the new ORUs.
- H. Develop sequenced configuration sketches for the upgrades and replacements proposed by phase.
- I. Develop a program plan for the design, development, test and evaluation of the upgrades and replacements proposed.
- J. Recommend a high definition television (HDTV) compression algorithm.
- K. Develop high fidelity rough order of magnitude cost estimate for the upgrades and replacements proposed.

6.16.3.2 IMPROVED AUTOMATED PAYLOAD SWITCH (IAPS) PROTOTYPE ACTIVITIES (S/A 1485)

The contractor shall develop and perform prototype activities for the Improved Automated Payload Switch (IAPS) to define hardware and firmware that will perform:

- A. All of the legacy functions of the existing APS per SP-M-501B “configuration Item Specification for Automated Payload Switch.”
- B. New functionality to multiplex Transport Asynchronous Transceiver/Receiver Interface (TAXI) fiber inputs into a single output channel.

6.16.3.3 IMPROVED AUTOMATED PAYLOAD SWITCH (IAPS) IMPLEMENTATION (S/A 1557)

6.16.3.3.1 The contractor shall deliver (DIL items):

- Four modification kits which improve the flight Automated Payload Switch (APS) units to eliminate the 8 channel bottleneck in the KU-band downlink.
- A mod kit for installation of 2 Improved APS (IAPS) units into the US LAB on-orbit.
- One spare switch matrix Circuit Card Assembly (CCA)
- One spare controller CCA

The modification kits to improve the APS shall:

- Retain existing switching function without impacting the fiber optic inputs and outputs or the existing users of these inputs and outputs.
- Provide new input data aggregation function.
- Provide aggregated data output over the existing high rate data link or new high speed digital interfaces to ODAR components.

- Provide a minimum of 95 Mbps aggregated data transfer out the existing high rate data link.
- Provide a minimum of 260 Mbps aggregated data transfer out the new high speed digital interfaces.
- Provide the capability to upload new software/firmware versions.
- Detect, manage and report errors in the commanded input/output channel configuration.

6.16.3.3.2 The contractor shall modify one APS qualification unit and one engineering development unit to the improved APS (IAPS) configuration.

6.16.3.3.3 The contractor shall update the flight software to support implementation of the IAPS units in July 2010 (Flight ULF5).

6.16.3.4 ODAR DEVELOPMENT TASKS THRU PDR (S/A 1564)

6.16.3.4.1 The contractor shall perform all activities required to prepare for and conduct System Requirements Reviews (SSRs) and Preliminary Design Reviews (PDRs) for the ODAR Project, the Integrated Communications Unit (ICU), and associated interfacing flight software Computer software Configuration Items (CSCI).

6.16.3.4.2 The contractor shall procure all parts required to build ground and flight cables for the ODAR project and to provide ODAR lab equipment.

6.16.3.4.3 The contractor shall provide a preliminary assessment of ISS Systems Integration Laboratory (ISIL) upgrades required due to ODAR related upgrades.

6.16.3.5 IMPROVED PAYLOAD ETHERNET HUB GATEWAY (Ipehg) (S/A 1593)

The contractor shall provide the following non-flight IPEHG units to support the implementation of the Ipehg:

- One engineering development unit by June 30, 2010 for use in the ISIL.
- One qualification unit by December 31, 2010 for use in the ISIL.
- An Ethernet Test Suite (ETS) for the Joint Station LAN (Houston) to augment existing payload ground facility hardware and enable operation with payloads with 100 base T Ethernet by March 31, 2011.
- Four ground units to support the ETS in Houston (2 units) and the PSIVF in Huntsville (2 units) by March 31, 2011.

6.16.3.6 INTEGRATED COMMUNICATIONS UNIT (ICU) DEVELOPMENT (S/A 1595)

6.16.3.6.1 The contractor shall perform all activities required to deliver and integrate the ODAR High Rate Communication System (HRCS) components with the on-orbit Vehicle and the ISS ground system. This includes all required hardware, software, integration and documentation products.

6.16.3.6.2 The contractor shall provide two ICU engineering development units (EDU) as follows:

- One EDU for use in the ESTL and the SDIL in October 2010 to support systems level integration, verification and validation.
- One EDU shall be provided upon completion of hardware and software development (September 2011).

6.16.4 NITROGEN/OXYGEN RECHARGE SYSTEM (S/A 1567) (S/A 1644) (SSCN 13383 – S/A 1905)

6.16.4.1 The contractor shall perform all activities necessary to develop the requirements for a nitrogen/oxygen recharge system (NORS) that enables delivery and recharge of the ISS airlock, including the nitrogen tank

assemblies located externally on the trusses. The contractor shall conduct a Systems Requirements Review on these requirements.

6.16.4.2 PRELIMINARY DESIGN

The contractor shall perform all the following activities for the preliminary design phase of the NORS project by September 30, 2010:

- Develop a design of the NORS to recharge the ISS airlock nitrogen and oxygen tanks, the Portable Breathing Apparatus (PBA), and the Nitrogen Tank Assembly (NTA) through System Preliminary Design Review (PDR). The NORS design shall accommodate the presence of the Cabin Air Separator for EVA Oxygen (CASEO), as defined by the Boeing developed ICD.
- Fabricate 2 COPV development liners to the point of being ready to weld cylinder sections to forged domes and 6 engineering test unit liners to the point of completing cylinder fabrication.
- Complete a trade study by the Systems PDR to identify concepts for delivery of nitrogen to the ISS cabin prior to a fully functional NORS systems delivery.
- Complete component PDRs for the composite overwrapped pressure vessel (COPV), regulators, quick disconnects (QDs), manual valve , gamah fittings, couplings and hoses.
- Procure long lead material procurement for COPV tasks, valves, regulators, QDs, hoses and the heater black.
- Perform an independent safety and risk assessment of the integrated NORS hardware design.
- Complete Phase 0 and Phase 1 Safety Review.

6.16.4.3 GROUND SUPPORT, SHIPPING, AND TRAINING HARDWARE

The contractor shall complete the following Nitrogen/Oxygen Recharge System (NORS) tasks:

- Provide the following hardware via 1149:
 1. One ground fill assembly (GFA) and spare parts (component parts required to maintain the 1 GFA for life of NORS usage through 2020), designated as ground support equipment (GSE), to allow for filling the recharge tank assemblies (RTAs) by March 2013.
 2. One training set of mock up hardware for a Recharge Tank Assembly (RTA) with valve and QDs by February 2012.
 3. One set of mock up regular training hardware by February 2012.
 4. One set of mock up External Fill Assembly (EFA) training hardware by February 2012.
 5. Thirty five (35) shipping containers (concurrent with RTA DIL deliveries).
 6. Ground support hardware needed to complete oxygen testing at White Sands Test Facility (WSTF) by June 2012.

6.16.4.4 DEVELOPMENT OF NORS CONTINGENCY DEPRESSURIZATION TOOL (NCDT)

The contractor shall deliver:

- Two flight fidelity NORS Contingency Depressurization Tool (NCDT) (DIL item 32405) for direct venting of a NORS Recharge Tank Assembly (RTA) into the cabin atmosphere without use of the NORS regulator or manifold assemblies. The NCDT shall be certified using a proto-flight approach and shall not be certified to ISS intermittent and continuous acoustics requirements.
- One high fidelity mockup (via DD1149) of the NCDT (DIL item 32405) for crew training by October 31, 2013.

6.17 SDIL OPERATION AND MAINTENANCE (S/A 1465) (S/A 1904)

6.17.1 HORIZONTAL TEST RIG OPERATIONS

The contractor shall maintain and provide operational support to the second horizontal Software Verification Facility (SVF) test rig in the Software Development

and Integration Laboratory (SDIL) during FY08 to support increased International Space Station (ISS) test requirements. This is in addition to the SDIL requirements called out in SOW 3.3.7.9.1.

6.17.2 REMOTE ACCESS CAPABILITY

The contractor shall implement a Configurable Remote access Capability within the SDIL to provide remote users' access to vertical and horizontal test assets to support ISS test capability, define all user/system capability requirements for remote users (international Partners (Ips). Visiting Vehicles (VV), and subsystem teams) to perform testing within SDIL requiring remote access, and provide all engineering documentation to maintain the SDIL lab configuration baseline, including requirements and design documentation, SDIL System Architecture Notebook (SAN), hardware design/drawings, Concept of Operations, Prime Item Development Specification (PIDS), Interface Control Documents (ICDs), SDIL SOP, Security Assessment Report (SAR), Contingency Plan/Disaster Recovery Plan (CP/DRP) by November 2013.

6.18 HARDWARE SOFTWARE INTEGRATION (H S I) TEST SUPPORT FOR MISSION OPERATIONS (S/A 1475)

6.18.1 COMPLETE

6.18.2 The Contractor shall support ten additional 8 hour shifts to meet specific Robotics Special Purpose Dextrous Manipulator (SPDM) training objectives defined by the NASA MOD.

6.19 BIOLOGICAL RESEARCH PROGRAM SOLID STATE POWERCONTROL MODULE (BSSPCM) MOTHER BOARD RETROFIT (S/A1464) (S/A 1547)

The Contractor shall deliver 12 modification kits to correct the BSSPCM motherboard fill and drill design issue and install and test the 12 modification kits.

The Contractor shall repair the BSSPCM 1553B RAM discrete anomaly for BSSPCM S/N 13.

6.20 CONSTELLATION PROGRAM CREW ESCAPE VEHICLE (CEV) I INTEGRATION

6.20.1 INTERFACE REQUIREMENT DEFINITION

- The contractor shall review the ISS to CEV Interface Requirements Document (IRD) to audit coordinated verification requirements (Section 4) and identify areas of incompatibility and risk. (S/A 1487).

- The contractor shall provide and coordinate inputs to SSP 70031 “CEV ORION to ISS IRD” necessary for the CEV vehicle to interface with the ISS vehicle during proximity operations, including automated rendezvous and docking/berthing (AR&DB) and departure and integrated on-orbit operations. (S/A 1571).

6.20.2 INTERFACE DEVELOPMENT

The contractor shall provide inputs to and identify issues/risks related to the CEV Interface Control Document (ICD) and review and provide inputs to support revisions. (S/A 1487, 1571)

6.20.3 CEV SOFTWARE ICD DEVELOPMENT

6.20.3.1 The contractor shall develop, document and Program baseline the ISS to CEV Software ICD and update as required. (S/A 1487)

6.20.3.2 The contractor shall develop, document and Program baseline ICDs SSP 50858 – ISS PCS to Orion Ethernet and SSP 50859 – ISS to Orion ICCA Ethernet, reflecting the command and data interfaces to ISS C&DH architecture and update as required. (S/A 1571)

6.20.4 DESIGN REVIEW PARTICIPATION

6.20.4.1 The contractor shall review design and safety review data for CEV to determine ISS interface requirement compliance and to identify areas of incompatibility and risk. The contractor shall participate in reviews for this data. (S/A 1571)

6.20.4.2 The contractor shall review design and safety review data for the ATLAS PDR, CxP PDR, LIDS CDR and ICCA SDR to determine ISS interface requirement compliance, identify areas of incompatibility and risk, and obtain necessary data for authorized technical integration activities. The contractor shall participate in reviews for this data. (S/A 1487, 1571)

6.20.5 ACTION AND ISSUE CLOSURES FROM DESIGN REVIEWS

6.20.5.1 The contractor shall close all assigned actions and issues from the CEV SDR and PDR Design reviews. (S/A 1487)

6.20.5.2 The contractor shall close all assigned actions and issues from ATLAS PRD, CxP PDR, LIDS CDR, and ICCA SDR. (S/A 1571)

6.20.6 VERIFICATION PLANNING

6.20.5.1 The contractor shall develop and coordinate generic stage verification and Certification of Flight Readiness (C0FR) planning for CEV. (S/A 1487)

6.20.5.1 The contractor shall develop and coordinate a verification strategy for the Orion flights (Orion 1 no dock, Orion 2 docked). (S/A 1571)

6.20.7 DATA SUBMITTAL AND EXCHANGE (S/A 1487) (S/A 1571)

The contractor shall develop coordinated data submittal agreements for CEV to support requirements development, verification planning, assessment of requirements compliance and subsystem analysis, including all required data for transfer and associated delivery dates.

6.20.8 HARDWARE/SOFTWARE CHANGE DEFINITION (S/A 1487) (S/A 1571)

The contractor shall develop change requests for ISS hardware and/or software development or modification required to accommodate the CEV vehicle on the ISS.

6.20.9 TEST STRATEGY DEFINITION (S/A 1487)

The contractor shall develop draft test strategy/approach for recommended or required tests needed to allow CEV to be integrated with the ISS and to satisfy ISS Program CoFR requirements.

6.20.10 OPERATIONAL CONSTRAINT DEFINITION (S/A 1487)

The contractor shall define operational constraints as part of performing the CEV SOW tasks.

6.20.11 DESIGN AND VERIFICATION ANALYSIS

The contractor shall define and perform applicable analyses to support planned verification of the initial CEV demonstration flight to determine design drivers and support pre-flight verification planning for the following areas: (S/A 1487) (s/a 1571)

- Loads and Dynamics
- Robotics/End-to-End Berthing and Integration
- Guidance, Navigation and Control

- Environmental Control and Life Support
- Environments
- Material and Processes
- Propulsion System Integration
- Vehicle Integrated Performance
- Resources
- Thermal
- Power

6.20.12 CEV IMV FLOW ASSESSMENTS AND TESTING (S/A 1583)

6.20.12.1 The contractor shall determine the feasibility of providing increased IMV flow to the CEV at the Node 1 nadir/PMA-3 and the Node 2 forward/PMA-2 locations. (S/A 1571)

6.20.12.1 The contractor shall perform analysis to determine required hardware modifications and associated integrated impacts to ISS subsystems necessary to provide air ventilation to the CEV using the Node 2 IMV fan. An analysis report on flow pressure findings and recommendations for hardware modifications shall be delivered. (S/A 1583/1610)

6.20.13 ISS TO CEV DOCKING ADAPTER (S/A 1590)

The contractor shall perform the following tasks in support of the requirements definition stage of the CEV to USOS docking adapters:

- A. Perform a requirements analysis for the CEV to ISS docking adapter by September 24, 2009, which will identify:
 - The docking mechanism that will be used to interface to the ISS.

- The launch configuration of the adapter, including attach hardware concepts assuming launch on the HTV.
 - The on-orbit configuration to be supported between launch and activation of the docking adapter.
 - The recommended hardware providers for the docking adapter components and their specific areas of responsibility.
- B. Develop a concept of operations by September 24, 2009 for delivery, for integration and sustaining engineering of docking adapters to be installed on the USOS in support of CEV.
- C. Define draft system requirements for docking adapter and establish preliminary design allocations for key system components by September 24, 2009, assuming the following:
- Adapters (one/flight) will be delivered via HTV flights on exposed platform.
 - Adapters may be stowed on the ISS without active thermal conditioning up to one year.
 - Adapters will be operational from 2015 through 2025, supporting 2 crew rotation flights/year and additional visiting vehicle flights per Program baseline.
 - Adapter will provide umbilicals for automated mating to supported ISS heritage and Orion baselined interfaces.
- D. Define preliminary interface agreements between docking adapter sub-assembly hardware by September 24, 2009.
- E. Develop conceptual design for hardware elements in support of the analysis.
- F. Perform long-lead material evaluation and assessment of existing GFE assets for use in the development of the docking adapter by September 24, 2009.

6.21 ROTARY JOINT HARDWARE MODIFICATION (S/A 1489)

The contractor shall develop a design for a new A3 motor driver circuit card assembly (CCA) configuration to replace the existing CCA as installed in the rotary joint motor controller (RJMC) used in configuration item (C1) number 222032A, solar alpha rotary joint (SARJ) system, and C1 222033A, thermal radiator rotary joint (TRRJ) system. The design shall incorporate the following features:

- Continuous operation of the common motor select circuit after RJMC power-on.
- Limited potential cross-conduction or shoot through of Q31/Q32 and Q24/Q35 transistor pairs.

6.22 IATCS COOLANT REMEDIATION

6.22.1 SYSTEM LEVEL TEST (S/A 1497)

The contractor shall extend the system level test at the MSFC ITCS System Simulator to validate treatment effects through September 30, 2008 and perform the following tasks:

- 1) Sample coolant monthly and perform chemical and microbiological analysis of the coolant.
- 2) Perform OPA shock effectiveness testing on planktonic microorganisms isolated after re-growth in the IATCS system test coolant to determine if resistance to OPA has increased.
- 3) Perform ONE application of an effective ORA shock concentration the systems test for the recommended duration and lower OPA shock concentration to 75-105 ppm OPA with OPA removal resin.

6.22.2 MAINTENANCE (S/A 1621)

The contractor shall perform the following tasks in support of ITCS coolant maintenance in all USOS pressurized modules (including Node 2 and Node 3) and the Columbus and JEM elements:

- 1) Determine if the effective shelf life of ortho-phthalaldehyde (OPA) loaded resin and OPA test strips can be extended and what the effective shelf life is (to be complete by December 20, 2010.)

- 2) Identify and qualify a new antimicrobial removal resin that removes 99.9% of OPA in any USOS IATCS loop from initial levels of up to 325 ppm OPA (to be complete by November 30, 2010).
- 3) Increase the measurement accuracy of OPA test strips (to be complete by September 30, 2010).

6.23 NODE 3 ATMOSPHERE REVITALIZATION (AR) RACK LAUNCH ON MPLM (S/A 1496)

The contractor shall perform MPLM loads analysis to verify the AR Rack is acceptable to launch on the MPLM.

6.24 PORTABLE COMPUTER SYSTEM (PCS) LAPTOP RE-HOST (CLAUSE 58 APPLIES) (S/A 1498)

The contractor shall re-host the Portable Computer System (PCS) software to run on a GFE portable laptop, replacing the IBM A31p laptop.

6.25 COMPLETE

6.26 ANALYSIS OF XVV FLIGHT ATTITUDE (S/A 1500)

The contractor shall provide updates to SSP 50699 Volume III, "ISS Certification Baseline Volume 3: Flight Attitudes" to include –XVV Z nadir for all flight/stages including assembly complete.

6.27 MDM ENHANCED PROCESSOR AND INTEGRATED COMMUNICATIONS (EPIC)

6.27.1 The contractor shall deliver and install updated MDM circuit card assemblies and associated software to recover CPU and memory margins and provide growth for future C&DH functionality. (S/A 1504)

6.27.2 The contractor shall deliver and integrate the ground and onboard hardware and software required to utilize the command and control and payload MDM EPIC ethernet port for the downlink of the current value table (CVT) data and payload data, respectively. The ethernet capability for the C&C MDM shall be ready for uplink by October 2012. The ethernet capability for the Payload MDM shall be ready for uplink by October 2012. (S/A 1557/1595)

6.27.3 The contractor shall perform all tasks required to implement the EPIC processor in the on-orbit payload MDMs by December 2011. (S/A 1557)

6.27.4 The contractor shall deliver and incorporate the EPIC capability, similar to the on-orbit vehicle, into the Software Verification Facility (SVF) prior to activation of the capability on-orbit. The SVF upgrade shall allow for parallel EPIC software development and testing of software releases that have been migrated to the new platform. (S/A 1557)

6.27.5 The contractor shall modify the Payload rack checkout unit to incorporate the EPIC capability prior to activation of the capability on-orbit. (S/A 1557)

6.27.6 The contractor shall modify the payload software integration/verification facility to incorporate the EPIC capability into the FEU MDM prior to activation of the on-orbit capability. (S/A 1557)

6.27.7 The contractor shall provide the following non-flight hardware: (S/A 1557)

- 15 EFEU CCAs (includes 4 spares and 2 with in circuit emulator (ICE))
- 3 proto CCAs
- 2 Engineering development units with ICE

6.27.8 CONTAINER DELIVERY (S/A 1722 – SSCN 12770)

The contractor shall deliver via 1149 the following hardware by 5/16/2011:

- 6 standard MDM card containers (part number ST8274480-801)
- 2 MDM power supply card containers (part number ST8274485-801)
- 6 Edge router card containers (ST8275060-801).

The hardware shall include material certifications, verification of hardware cleanliness, structural analysis, engineering drawings and launch configuration drawings necessary for NASA to certify the hardware for flight.

6.27.9 EPIC FOR EXTERNAL MDMs (S/A 1738 – SSCN 12648)

The contractor shall deliver (via 1149) 11 Enhanced processor and Integrated Communications (EPIC) EFEUs (9 P/N 8272510-803 and 2 P/N 8272510-804) and 3 Proto-C circuit cards (P/N 275155-801) by June 15, 2012 to support implementation of the EPIC processor upgrade to the EXT MDMs.

6.28 COMPLETE

6.29 TREADMILL-2 (T2) PROJECT

In support of the second treadmill for the ISS, the contractor shall perform the following:

6.29.1.1 Deliver a Vibration Isolation System (VIS) to be temporarily installed in the Node 2 Deck 5 bay and permanently installed in the Node 3 Port 5 bay. One flight VIS (DIL) and one ground VIS are required.

6.29.1.2 Deliver an International Standard Payload Rack (ISPR) outfitted to accommodate Vibration Isolation System (VIS) hardware. One flight rack (DIL) and one ground rack are required for delivery.

6.29.1.3 De-integrate components from the Habitat Holding Rack (HHR) to be used as Government Furnished Equipment (GFE) and supplied to Bioastronautics. No updates to existing HHR drawings are required; however, Acceptance Data Packages (ADPs) shall be generated for de-integrated components to document the residual configuration of the de-integrated components and the HHRs. De-integrated components shall be delivered in the as-is condition. No cleaning of parts shall be required.

6.29.1.4 Provide detailed design input into development of Mission Operations Directorate (MOD) procedures.

6.29.1.5 Prepare and deliver operations data and Assembly and Operations System Procurement date.

6.29.1.6 Develop and release the interface control document between Treadmill 2 and Nodes 2 and 3.

6.29.1.7 Provide technical support to the Bioastronautics contractor for questions that may arise from the re-integration of GFE hardware.

6.29.1.8 Integrate Treadmill 2 with the ISS Vehicle.

6.29.1.9 Incorporate the entire T2 system LSAR and illustrated parts breakdown (IPB) data into the Enhanced Automated Graphical Logistics Environment (EAGLE).

6.29.1.10 Develop and perform Electro-Magnetic Interference (EMI) susceptibility testing in the NASA Johnson Space Center (JSC) EMI test facility, review the test results, develop solutions to mitigate failures, and prepare and deliver the test report.

6.29.2 Treadmill 2 (T2) Spare Vibration Isolation and Stabilization (S/A 1742 – SSCN 12446)

6.29.2.1 The contractor shall perform disassembly, inspection, and analysis of the following subassemblies to determine usability/replacement parts required to support upgrade to flight hardware for incorporation into DIL ID #51375, “Kit, On-Orbit Maintenance, T -2 Spares”:

- 1F16172-2, Standoff Arm Assy, Upper (Left Side).
- 1F16183-1, Snubber Assy, Lower (Right Side).
- 1F16183-2, Snubber Assy, Lower (Left Side).
- 1F16190-2, Snubber Assy, Upper (Left).
- 1F16199-1, Standoff Arm Assy, Lower (Right).
- 1F16199-2, Standoff Arm Assy, Lower (Left).
- 1F16223-2, Standoff Arm Attach Assy, Upper (Left).

6.29.2.2 The contractor shall develop a sparing plan for the T2 VIS that identifies all spares needed to support T2 operations through 2028, by 07/29/11.

6.30 COMPLETE

6.30 COMPLETE

6.31 COMPLETE

6.32 COMPLETE

6.33 INTEGRATION OF NEW ELEMENTS INTO ISS

6.33.1 MINI RESEARCH MODULE 1 (MRM1) INTO INTERNATIONAL SPACE STATION (ISS) (S/A 1534)

The Contractor shall integrate the MRM1 into the ISS.

6.33.2 PERMANENT MULTI-PURPOSE MODULE (PMM) (S/A 1677)

The contractor shall integrate the Permanent Multi-Purpose Module (PMM) with the USOS and ISS system to support launch of the PMM on Flight ULF-5. The PMM shall be located at Node 1 Nadir port.

6.34 LAUNCH OF ATA ON ULF3 AND ULF5 (S/A 1550)

The contractor shall provide additional structural, thermal, and electrical analysis and additional thermal models in ISS Program format, for the following configurations of the ATA/FSE launching on ULF3 and ULF5:

- On-orbit configurations (4): ELCs on P3/S3 CAS sites, with ATA/FSE in both inboard and outboard facing configurations.
- Launch configurations (4): ATA/FSE both on top and bottom of ELCs, and with ELCs in both forward and back positions in the PLB.

6.35 STARBOARD SARJ ANOMALY RESOLUTION (S/A 1548)

6.35.1 COMPLETE

6.35.2 QUALIFICATION DLA UPGRADE (S/A 1570)

The contractor shall perform the following tasks on the SARJ qualification drive/lock assembly (DLA) hardware to support the manifest and operation on flight 19A (Feb 2010):

- Refurbish the DLA to full functionality (including motor assembly mechanical components and locking mechanism) to support on-orbit operations.
- Perform inspection, analysis, refurbishment and acceptance testing of the DLA to determine the risk of on-orbit usage of this qual DLA. Develop a risk summary verification document which identifies capabilities and constraints of DLA flight critical item specification applicable requirements.
- Conduct a Risk Assessment Review prior to DD 1149 back to NASA.
- Provide Certification of Flight Readiness (CoFR) endorsement that hardware is suitable for intended use on-orbit.

6.35.3 SARJ “XL” (S/A 1616) (S/A 1626)

The contractor shall perform the following tasks in support of the development of a Solar Alpha Rotary Joint (SARJ) Race Ring for installation onto the Integrated Truss Segment (ITS) Starboard 3 SARJ race ring:

- Perform all activities required to get through IDR-1 in support of SARJ race ring installation into the USOS.
- Perform design engineering preparation for Incremental Design Review (IDR)-2.
- Initiate procurement of long lead parts, raw materials, and purchase items (including required assembly and test).

Develop manufacturing, assembly, test, and production planning documentation and manufacture of piece parts

6.35.4 FULL REDUNDANCY FOR SARJ OUTBOARD OPERATIONS

The contractor shall provide hardware and software to add full redundancy capabilities to the starboard and port SARJ outboard operations mode functionality by December 2011. This shall include software FDIR, auto recovery, tooth crash

recovery and capabilities consistent with the SARJ inboard operations mode RJMC/DLA drive functions. (S/A 1625)

6.35.5 SARJ LUBRICATION INTERVAL TEST & EVALUATION (LITE) (S/A 1660) (SSCN 13041 – S/A 1786)

The contractor shall run the SARJ LITE test until lubricant failure occurs or a 36 year lubricant life is demonstrated.

6.36 ISS MODULE LEAK DETECTION SYSTEM (S/A 1548)

6.36.1 The contractor shall perform all activities necessary to develop the requirements for an ISS module atmospheric leak location system and conduct a Systems Requirements Review on these requirements.

6.36.2 The contractor shall develop a concept for and an overall project plan for implementation of a leak location system, including a rough order of magnitude (ROM) cost estimate to support post-SRR planning and project implementation planning.

6.36.3 The contractor shall provide geometric models for Lab and Airlock for use in ultrasonic environment characterization.

6.37 NODE 3 RELOCATION (S/A 1552)

The contractor shall perform the following tasks for the Node 3 relocation from the Node 1 Nadir to the Node 1 Port location (and clocked ninety degrees):

- Development and delivery of software products to support Node 3 relocation.
- Subsystem integrated analysis products.
- Verification of hardware and analytical products.

6.38 SPARE PARTS PROCUREMENTS/IN-LINE MODIFICATIONS DURING REPAIR/REFURB (S/A 1552) (S/A 1557) (S/A 1626) (S/A 1690)

6.38.1 The contractor shall procure the following Regen Environmental Control & Life Support System parts and produce, assembly, test, and store all parts such that the following ORUs can be delivered subsequent to further contract direction within one year from Authorization to Proceed (ATP).

<u>Nomenclature</u>	<u>Part Number</u>	<u>Quantity</u>	<u>Date</u>
Catalytic Reactor	PLSV28733	4	01/01/2012
Oxygen Outlet	PLSV28736	2	02/01/2011
Nitrogen Purge	PLSV28735	2	02/01/2011
Gas Separator	PLSV28734	1	04/01/2013
Hydrogen ORU	PLSV28783	2	11/01/2012
OGA Process Controller	SV826025-1	1	01/02/2012
OGA Pump ORU	PLSV28738	2	09/01/2011
Start-up Filter	PLSV28739	4	09/01/2010
Water ORU	PLSV28740	1	12/01/2011
Waste Water ORU	PLSV28741	2	09/01/2011
Pump Separator ORU	PLSV28742	2	06/01/2012
Water Storage ORU	PLSV28743	2	12/01/2011
Water Delivery ORU	PLSV28744	2	09/01/2011
Multi Filtration BED ORU	SV28744	3	03/31/2010
Multi Filtration BED ORU	PLSV28786	8	06/30/2010

6.38.2 The contractor shall procure all necessary parts and produce, assemble, test, and store all parts by January 29, 2010, such that three (3) Multifiltration Bed ORUs (part number SV28787), including packed cylinders, can be delivered subsequent to further contract direction within five (5) months from ATP. (S/A 1626)

6.38.3 The contractor shall procure all necessary parts and produce, assemble, test, and store all parts by December, 2010 (2 sets of parts for Multifiltration Bed ORU kits every 2 months starting in June 2010), such that eight (8) Multifiltration Bed ORUs (part number PLSV28786), excluding packed cylinders, can be delivered subsequent to further contract direction within twelve (12) months from ATP. (S/A 1626)

6.38.4 IPEHB PARTS

The contractor shall (by June 2010) procure, receive, inspect, and store the parts listed below to support follow-on IPEHB builds:

<u>Nomenclature</u>	<u>Part Number</u>	<u>Quantity</u>
IC, HYBRID, 8-SIP	IF95102-1	26
XILINX RADHARD SERIAL PROM	XQR17V16CC44V	63
CONNECTOR, ELECTRICAL	NATC00T13N35PA	30
CONNECTOR, ELECTRICAL	NATC00T13N4PB	30
CONNECTOR, ELECTRICAL	NATC00T13N4PN	30
CONNECTOR, ELECTRICAL	NATC0023N35PN	30
24 PORT GBE SWITCH NO HIGIG	BCM56300B1KEBG	48
BGA 5488 ETH-NET XCEIVER OCTAL	BCM5488SA5KPBG	90
32-BIT RISC PROCESSOR 266 MHz	PPC405EP-3GB266C	32
NAND FLASH 64Mx8	K9F1208U0B-YIB0	32
7SZ08 UHS 21P AND GATE SOT-23	NC7SZ08M5X	117
7WZ07 DUAL BUFFER 2.3-5 5V	NC7WZ07P6X	273

9F 1208 64Mx8 FLH MEMORY 512 MB	K9F1208U0B-YIB0	32
1501 REAL TIME CLOCK WATCHDOG	DS1501WEN+	32
IC 10/100MBS ETH 3.3V	DP838481VV/NOPB	47
LM75 DIGITAL TEMP SENSOR 3.3V	TCN75-3 3MUA	32
7SZ32 UHS 2-IP OR GATE SOT-23	NC7SZ32M5X	32
7WZ241 DUAL UHS BUFFER W/3-ST	NC7WZ241K8X	32
POWER MODULE 75V-3 3V OUT 16A	ATH016A0X3-SRZ	117
3965 ULDO LINEAR ADJ VREG	LP3965EMP-ADJ-NOPB	117
7S08 2IP AND GATE	NC7S08P-5X	32
XFMR GBIT ETH 2PORT SMD50	TG111-S212NW	358
83905 LOW SKEW/JTR BUFFER 3.3V	ICS83905AGLFT	90
CLK OSC 25.000 MHz 50PPM 3.3V	MI3050H48H-25.000	33
CRY OSC 33.333 MHz 3.3V	ASV-30-33.333-L-C-T5	33
CRY OSC 66 MHz 3.3V	MI3050H48H-66.0000MHZ	33
CRY 32.768KHZ50PPM 12.5PF	MC-405-32.768K-A3ROHS	33

6.38.5 WPA CATALYTIC REACTOR PARTS (S/A 1651)

The contractor shall procure all hardware (by January 31, 2011) necessary to upgrade the PIO 92 Catalytic reactor (DIL item 20069) and four additional WPA catalytic reactor kits with the high Temperature seal and pin plug configuration modification (authorized in change 12398).

6.38.6 CDRA MODIFICATIONS (S/A 1690)

The contractor shall upgrade three CDRA desiccant adsorbent beds to the “-3” configuration, in-line during repair or refurbishment (due March 30, 2010, November 2010, and February 2011). The contractor shall upgrade two CDRA desiccant adsorbent beds to the “-4” configuration, in-line during repair or refurbishment (due September 2012 and November 2010).

6.38.7 WATER PROCESSOR ASSEMBLY HOSES

The contractor shall procure the flowing water processor assembly (WPA) hose kits and fill with dry nitrogen purge for long-term storage such that the kits can be delivered ready for launch, subsequent to further contract direction within one month from Authorization to Proceed.

<u>Nomenclature</u>	<u>Part Number</u>	<u>Quantity</u>	<u>Due Date</u>
WPA System Hose	SV827939	1	6/30/2011
WPA System Hose	SV827940	1	6/30/2011
WPA System Hose	SV827940	1	6/30/2011
WPA System Hose	SV827940	1	6/30/2011
WPA System Hose	SV827941	1	6/30/2011
WPA System Hose	SV827941	1	6/30/2011
WPA System Hose	SV827941	1	6/30/2011

WPA System Hose	SV827941	1	6/30/2011
WPA System Hose	SV828011	1	6/30/2011
WPA System Hose	SV828011	1	6/30/2011
WPA System Hose	SV828012	1	6/30/2011
WPA System Hose	SV828012	1	6/30/2011
WPA System Hose	SV828012	1	6/30/2011
WPA System Hose	SV828019	1	6/30/2011
WPA System Hose	SV828019	1	6/30/2011
WPA System Hose	SV828019	1	6/30/2011
WPA System Hose	SV828019	1	6/30/2011
WPA System Hose	SV828019	1	6/30/2011
WPA System Hose	SV828021	1	6/30/2011

6.38.8 WASTE WATER KITS (SSCN 13096 – S/A 1839)

The contractor shall deliver two waste water kits for PIO-95 (by March 20, 2013) which contain:

- One pass-through plug (P/N SV1018162-1)
- One connector cap (from GOLD)
- Screws & washers

6.38.9 PIO 92 REGEN ECLSS KITS (S/A 2024; SSCN 10622)

The contractor shall procure the following PIO 92 Regenerative ECLSS hardware and store without resin packing for launch. The hardware shall be delivered subsequent to further contract direction to perform resin packing within 6 months from Authorization to Proceed (ATP).

<u>Nomenclature</u>	<u>Part Number</u>	<u>Quantity</u>	<u>Date</u>
Inlet Deionizing Bed	SV825569-1	1	9/29/2012
Microbial Valve Check	SV825499-1	1	9/29/2012

6.39 COMPLETE

6.40 ALTERNATE PORT CAPABILITY FOR HTV1 BERTHING (S/A 1583)

The contractor shall perform the following tasks to support the use of Node 2 Zenith as an alternate port for HTV1 berthing in a contingency situation:

- Delta technical analyses required to ensure Node 2 Zenith can be utilized as an alternate port.

- 1553 bus signal margin analysis for the HTV1 located at the Node 2 Zenith interface, with and without a MPLM attached to Node 2 Nadir.
- Develop and release an on-orbit (Node 2 to HTV1) configuration drawing for the interim configuration.

6.41 HARDWARE TESTING

6.41.1 SGANT FSE TESTING (S/A 1589)

The contractor shall perform the following tasks associated with thermal vacuum testing of SGANT FSE Mechanism:

- Configure, calibrate, and check-out test equipment with Data Acquisition System (DAS) per SK683-80500 prior to FSE flight hardware testing to support test start of August 5, 2009
- Provide engineering and technical personnel to assist the Cargo Mission Contract (CMC) with installation of thermocouples per SK683-80501 drawing, routing of heater wires from the bulkhead through the connector to the DAS, and removal of the test article from the test chamber.
- Perform thermal vacuum testing as test conductor of the SK683-97268-002 Thermal Vacuum Acceptance Assembly using Sections 7.1 through 7.7 of the Acceptance Test Procedure D683-80468-1 by August 25, 2009.
- Provide the motors, torque cells, and cold plate defined in the the SK683-97268-02 assembly to support test start of August 5, 2009 for CMC to install with Boeing test conductor direction once the assembly is delivered to MSFC Bldg. 4619.
- Attend and present relevant technical content to weekly status meetings to report progress of activities leading up to the start of testing on August 5, 2009.

6.41.2 SASA ORU TESTING (1594)

The contractor shall develop and deliver a test correlated structural loads model of the SASU ORU in support of ULF5 and ULF6 VLAs by November 24, 2009.

6.41.3 TUS Cable (S/A 1651)

The contractor shall perform a bench test (by 9/30/10) on the TUS Cable to determine thermal effects of increased current from an MT relay box (up to 8A continuous and higher amperage for shorter durations) and shall update the TUS Thermal model with the test results.

6.41.4 OGA Cell Stack Cathode Feed (S/A 1741 – SSCN 12809)

The contractor shall perform a functional test of the Non-Flight Oxygen General Assembly (OGA) Development Cell Stack Cathode Feed Unit (by July 29, 2011) to determine if the unit can be used to perform ground testing to project response and the on-orbit OGA to operation or system design changes.

6.41.5 HEPA Filter Life Testing (S/A 1761 – SSCN 12784)

The contractor shall perform life testing (by June 2012) on seven (7) spare-category expired HEPA filters (PN SV810010-1) to determine if the filter “useful life” can be extended 5 years beyond the current 10 year life and provide a test report containing:

- Test results for all applicable lots.
- Recommendation on whether to extend the filter life.
- Determination on whether lots not tested and stored in an identical manner, are acceptable for life extension.

If testing is successful, the contractor shall provide supporting rationale and recommendation to change lifetime to the number of years supported by the testing.

6.42 IMV IN-LINE FILTER DEVELOPMENT (S/A 1590)

The contractor shall perform the following tasks to support the GFE IMV in-line filter development:

- Provide the IMV bulkhead interface data for filter development.
- Update stage configuration drawings to reflect addition of mod kits.
- Provide four non-flight, high-fidelity quality flanges for the IMV duct interface by December 2009. Two flanges shall be for the duct flanges and two for the bulkhead flanges.

- Update temperature and humidity control FMEAs to include GFE filters by March 2010.
- Perform an integrated assessment of IMV system performance with the addition of GFE in line filters by March 2010.

6.43 INTEGRATION OF A SABATIER REACTOR IN THE OGS RACK (S/A 1495)

The Contractor shall complete the following activities to support integration of a Sabatier Reactor in the OGS Rack:

- Develop integrated safety products based on NASA Safety Review Panel approved Sabatier safety data package(s).
- Integrate Sabatier in the ISS software.
- Modify the CDRA model to operate according to the ISS Program approved operational concept.
- Evaluate the impact of the ISS Program approved operational concept on the:
 - Major Constituent Analyzer (MCA) and rack isolation valve life in the Lab Case.
 - Rack isolation valve and standoff CO2 valve life in the Node 3 case.
- Perform integrated analysis of the CDRA and OGS operations up to the Sabatier interfaces to ensure CDRA and OGS continue to operate as previously operating prior to Sabatier integration.
- Develop a unique work breakdown structure (WBS) to track costs for Boeing Sabatier work.

6.44 USOS LIFE EXTENSION

6.44.1 STRUCTURAL LIFE EXTENSION

The contractor shall initiate an analytical assessment of the capability to extend the structural life of the following USOS structural hardware for the purposes of

extending ISS usage beyond the current 15 year design life through the end of CY 2028. Critical tracking locations shall be identified:

- Node 1, PMA-1, 2 and 3, US Lab, Airlock, and Z1 truss, including all CBMs and hatches.
- P6 truss and IEA including BGAs, SAWs and PVRs

6.44.2 S&MA CRITICAL HARDWARE LIFE EXTENSION (S/A 1704 – SSCN 12599)

6.44.2.1 The contractor shall provide the following data to support on-orbit vehicle life extension from 2015 to 2028 (by September 2011) (S/A 1704 – SSCN 12599):

1. A Safety Risk Item List which will identify the following:
 - a) Critical operating hardware items which have the potential to cause catastrophic hazard if the hardware is operated between 2015 and 2028 and is not replaceable and has no identified operational workaround.
 - b) NCRs that are not viable post 2015 through 2028.
 - c) “Must work/must not work” functions at risk of failure post 2015 through 2028.
 - d) Critical Items Lists (CILs) supporting functions at risk of failure post 2015 through 2028.
2. Assessment criteria used to screen data for Safety Risk Items List.
3. Recommendation of future engineering analysis needed based on Safety Risk Item List.

6.44.2.2 The contractor shall review the Safety Risk Item List [delivered via Change Directive (CD) 012599] and provide the following by September 2014:

1. Document the following in the Safety & Mission Assurance (S&MA) Life Extension Hazard Control Hardware Matrix (located in the Electronic Document Management System (EDMS):
 - a) Any potential candidates for future operational philosophy of “run to failure.”

- b) Current life expectancy of all non limited life hardware.
 - c) Engineering recommendation for future risk mitigation augmentation measures needed to maintain current control [workaround, hardware modification (mod), system mod, sparing, and operational (ops) controls] for hardware.
- 2. Update USOS Integrated Hazard Reports (IHR) and Non-Compliance Reports (NCRs) to reflect life extension assessment as follows:
 - a) Retire, re-baseline, or create United States On-Orbit Segment (USOS) Integrated Hazard Reports (IHRs) to document S&MA Life Extension assessment and include any updated risk measures resulting from assessment.
 - b) Retire or re-baseline all applicable USOS NCRs to document S&MA Life Extension assessment.
 - c) Develop USOS NCRs for any hardware items where current risk mitigation measures are insufficient to meet existing requirements resulting from S&MA Life Extension assessment.
- 3. Develop and deliver S&MA Life Extension Hazard Control Hardware Risk Identification Management Tool to quickly identify any expiring hazard controls.
- 4. Update Modeling & Analysis Data Set (MADS) database to capture all applicable changes to currently documented hardware life expectancy.
- 5. Deliver a Phase II summary report documenting process and results of S&MA Life Extension Project.

6.44.3 Integrated Equipment Assembly (IEA) Advanced Thermal Model

The contractor shall develop an advanced fidelity thermal model of the Integrated Equipment Assembly (IEA) primary structure that will reduce temperature gradients at interfaces and the effects of the current step-function-like gradients on the computed thermal loads, develop a companion thermal-to-structural map of the IEA to convert temperatures into thermal loads, and perform a telemetry comparison to determine if the new, advanced fidelity thermal model is generating temperature data consistent with temperatures measured on-orbit. The P6 IEA thermal data shall be re-generated with the

updated model, and the P6 IEA thermal load cycles re-generated. The P6 IEA Life Extension analysis shall be re-run using the updated thermal loads and spectra by April 30, 2014.

6.45 IV-TEPC INTEGRATION

The contractor shall integrate the GFE active radiation monitoring hardware, composed of the Intra-Vehicular Tissue Equivalent Proportional Counter (IV-TEPC) with the ISS Vehicle by December of 2011.

6.46 SUPPORT TO THE ADVANCED RECYCLE FILTER TANK ASSEMBLY (ARFTA) DEVELOPMENT

6.46.1 The contractor shall perform the following tasks to support development ARFTA:

- Analyze samples from three returned-from-orbit RFTA filter sets for inorganic, organic and Polymer composition (by July 31, 2010) to provide data to support the filter selection and design of the ARFTA.
- Provide on pre-production tank assembly, one pre-production Brine filter, one pre-production 100 micron Produce Water filter and one 20 micron Produce Water filter by January 15, 2011 for the MSFC integrated test to evaluate the new Boeing hardware in an integrated UPA to identify any issues that may impact the ISS. This hardware will be transferred to NASA via DD1149.

6.46.2 The contractor shall perform a trade study of options for on-orbit fill and drain servicing of the ARFTA in the rack, provide associated risk & cost of each option, and provide recommendation(s) on implementation. The study shall be complete by July 2011. (S/A 1720 – SSCN 12753)

6.47 NASA DOCKING SYSTEM (NDS) PROJECT

6.47.2 COMMON DOCKING ADAPTER (CDA) REQUIREMENTS DEVELOPMENT (S/A 1637)

The contractor shall perform the following activities to develop and baseline CDA requirements:

6.47.1.1 COMPLETE

6.47.1.2 COMPLETE

6.47.1.3 COMPLETE

6.47.1.4 Develop (by September 2010) a draft of the end-to-end (active and passive) docking system design requirements based on the NASA provided definition of the International Docking System Standard (IDSS), including system specifications, ICDs, and IRDs, for both the passive Common Docking Adapter (CDA), and the active low impact docking system.

6.47.1.5 Draft an integrated software specification document by September 30, 2010 which encompasses the end-to-end (active to passive) docking system.

6.47.1.6 Add the following features, at the concept level of definition, into the end-to-end docking system drawings and ICDs, and applicable requirements for these features in the System Specification and IRDs by September 30, 2010:

- Moding Lights
- Visiting Vehicle Docking Target
- Retractable Pushers

6.47.2 CDA SYSTEM AND PROJECT INTEGRATION (S/A 1637)

The contractor shall perform the following activities to support integration of the CDA project with visiting vehicles:

6.47.2.1 COMPLETE

6.47.2.2 Develop a Visiting Vehicle User's Guide by September 30, 2010 for use by potential visiting vehicle developers, on the CDA design, operational features, and available services.

6.47.3 CDA VERIFICATION (S/A 1637)

The contractor shall perform the following activities to develop and implement verification requirements and plans:

6.47.3.1 COMPLETE

6.47.3.2 Develop a conceptual design of a Common Passive Docking Interface Master Verification Tool by September 30, 2010.

6.47.4 CDA TRADE STUDIES/ANALYSIS/CONCEPT DEFINITION (S/A 1637)

The contractor shall perform the following studies by September 30, 2010:

6.47.4.1 Evaluate alternative approaches for packaging and locating the outside umbilical cables required by the end-to-end docking system.

6.47.4.2 Evaluate potential capability enhancements to the CDA and develop a low fidelity conceptual design to reflect these proposed enhancements.

6.47.4.3 Evaluate the manufacturability of the GFE active docking system design, including avionics and propose design recommendations to increase manufacturing efficiency.

6.47.5 CDA GROUND HARDWARE AND MOCKUPS (S/A 1637)

6.47.5.1 COMPLETE

6.47.5.2 COMPLETE

6.47.5.3 LABORATORY OUTFITTING

The contractor shall deliver (via 1149) by September 30, 2010), the initial hardware necessary to outfit a new docking mechanism prototyping laboratory capable of supporting the development of an active docking system firmware controller.

6.47.6 CDA PROGRAM REVIEWS (S/A 1637)

6.47.6.1 The contractor shall conduct a CDA Project interim review to review project status and forward plans and to assess schedule, technical feasibility and maturity level of the CDA project by September 15, 2010.

6.47.7 CDA PRODUCTION AND MANUFACTURING (S/A 1637)

6.47.7.1 LONG LEAD PARTS

The contractor shall develop a long lead procurement list to support production and manufacturing of the CDA by September 15, 2010.

6.47.8 HYBRID DOCKING SYSTEM DEVELOPMENT (S/A 1648)

The contractor shall perform the following tasks in support of the development of a new hybrid docking system:

6.47.8.1 INTEGRATION

The contractor shall perform the following tasks to integrate the NASA defined low impact ring assembly into the APAS hard mate system (by September 20, 2010):

- a. Conceptual design of a structural mounting for LIDS like platform to the APAS body.
- b. Conceptual design of a structural mounting for LIDS like passive ring to the APAS body.
- c. Analysis of kinematic clearance between LIDS like platform and APAS body.
- d. Conceptual design for reconfigurable petals and for a separation system.
- e. Study of options for a dual (magnetic and mechanical) latching system for LIDS like ring.

6.47.8.2 ASSESSMENTS

The contractor shall assess the following:

6.47.8.2.1 Modification of passive load attenuation system for “low impact” docking characteristics (lower docking forces and moments consistent with latest IDSS IDD docking load limits) and provide results by September 30, 2010.

6.47.8.2.2 Modification of High Energy Dampers (HEDs) to eliminate the “stuck damper” issue currently encountered during Shuttle docking and provide results by February 28, 2011.

6.47.8.2.3 Development of EVA drives option for actuating structural hooks in a contingency and provide results by February 28, 2011.

6.47.8.2.4 Options for APAS mass reduction to accommodate 5-25 MT capsule type vehicles (initial contact conditions consistent with latest IDSS IDD (Rev A dated May 27, 2010) and provide recommendations by February 28, 2011.

6.47.9 CLOSED (S/A 1721)

6.47.9.1 CLOSED (S/A 1721)

6.47.9.2 CLOSED (S/A 1721)

6.47.9.3 CLOSED (S/A 1721)

6.47.10 TRANSITION TO PRODUCTION FOR THE NASA DOCKING SYSTEM (SSCN 12358 – SA 1797, S/A 1871)

The contractor shall perform the following tasks to enable the transition to full scale flight production of the NASA Docking System (NDS):

6.47.10.1 Develop requirements and design concepts for an International Docking Adapter (IDA), that shall attach to a PMA APAS and include an NDS docking interface for Visiting Vehicles, to support a System Requirements Review (SRR) in December 2011.

6.47.10.2 Purchase long-lead items to support assembly of IDA and associated test and qualification unit hardware.

6.47.10.3 Develop concepts for a short tunnel version of the NDS to support a SRR in December 2011.

6.47.10.4 Provide an Informational ROM/engineering estimate and schedule for delivery in 2013 of 10 HMA units, by 9/30/11.

6.47.10.5 RESERVED

6.47.10.6 Upgrade to current NDS design interfaces and deliver (via DD1149) the NDS mock up (Experimental Engineering Mockup Subassemblies (EEMS) for use in 6-Degree of Freedom (6DOF) development testing of the NASA NDS engineering development unit (EDU) by 6/29/12.

6.47.10.7 RESERVED

6.47.10.8 Deliver a qualified NDS Hook Assembly (HA) design which can be incorporated into the NASA NDS design and deliver (via DD1149) HA units as follows:

- Quantity twelve (12) Development Unit HA's for NASA EDU due by 6/29/12.
- Quantity one hundred twenty-four (124) Flight Fidelity HA's for long-lead NDS flight production by 12/22/14.

6.47.10.9 Deliver a qualified NDS Pyro System design which can be incorporated into the NASA NDS design and deliver (via DD1149) one Pyro System development unit for the NASA EDU by 4/9/12.

6.47.10.10 Provide a Hook Assembly Reliability Assessment by 3/30/12.

6.47.10.11 Prepare, inspect, downgrade and disassemble orbiter APAS hardware and provide all shipping and export logistics required for use in IDA testing. Downgrade APAS units from Flight to Non-flight Class 2. Uninstall APAS assemblies from Orbiter Docking Systems, and remove non-required hardware (hardware not used for IDA testing) and ship to Russia. Package and maintain removed APAS hardware and the ODS Docking Base Assembly as Non-Flight Class 3 hardware. Ship two disassembled APAS units to Russia by 3/30/12. Ship a non-disassembled APAS and the Passive Docking Simulator to Russia by 8/31/12.

6.47.10.12 Provide systems engineering and integration functions for the NDS project.

6.47.10.13 RESERVED

6.47.10.14 RESERVED

6.47.10.15 Deliver (via DD1149) the following hardware:

- Quantity one (1) certified Circuit Card Test Console (CCTC) to support NDSC production testing by 8/10/12.
- Quantity two (2) Static Seals per Boeing design (for NASA) by 7/9/12.
- Quantity five (5) NDS Drill Templates per Boeing design. One unit due on 11/28/11 and two units due on 8/30/12, and two units due on 10/30/12.
- Quantity five (5) flight dynamic seals per NASA design (5 spares) by 8/16/12.
- Quantity six (6) flight fidelity Dynamic Seal Retainers per NASA design (6 spares) by 6/5/12.
- Quantity nine (9) each flight fidelity RTAX1000S-CQ-352-EV, and RTAX2000S-CQ-352-EV Field Programmable Gate Arrays (FPGA) risk mitigation spares by 5/25/12.
- Quantity eight (8) part number 63127142-1RES Linear EMA, EDU. Four by 4/24/12, three by 5/15/12 and 1 by 5/3/12.
- Quantity seven (7) part number 63127142-2RES Linear EMA, EDU. Three by 4/24/12, one by 5/3/12 and three by 5/15/12.
- Quantity nine (9) part number 63240431-1RES Striker Assembly, EDU. Seven units by 3/20/12 and two by 3/27/12.
- Quantity nine (9) part number 63240432-1RES Magnet Assembly, EDU. Seven by 3/20/12 and two by 3/27/12.

- Quantity one (1) part number SLZ29101641-301 Magnet Assembly (flight fidelity to be used by NASA for its component qualification testing activities) by 7/13/12.
- Quantity one (1) part number SLZ29101641-302 Striker Assembly (flight fidelity to be used by NASA for its component qualification testing activities) by 7/13/12.
- Quantity one (1) part number SLZ29101643-301 Lockdown EMA (flight fidelity to be used by NASA for its component qualification testing activities) by 7/19/12.
- Quantity three (3) part number 63127144-1RES Hook EMA, EDU. Two by 5/15/2012 and one by 5/24/12.
- Quantity fourteen (14) part number 63127146-1RES Gearhead, EDU. Twelve by 5/15/12 and two by 5/24/12.
- Quantity four (4) part number 63127150-1RES Separator EMA, EDU by 6/1/12.
- Quantity six (6) part number 63127152-1RES Lockdown EMAs, EDU. Five by 5/31/12 and one by 6/8/12.
- Quantity two (2) part number 63127156-1RES Umbilical EMA, EDU. One by 5/16/12 and one by 5/31/12.
- Quantity two (2) part number 63127156-2RES Umbilical EMA, EDU. One by 5/16/12 and one by 5/31/12.

6.47.10.16 Provide all HA and Pyro System assembly procedures in non-proprietary electronic export format to NASA by 12/22/14.

6.47.11 CONCEPTUAL DESIGN FOR SIMPLIFIED ACTIVE DOCKING SYSTEM (SSCN 13575 – S/A 1926)

The contractor shall perform conceptual design and analysis tasks to determine feasibility of implementing a simplified Soft Capture System (SCS) for the NASA Docking System by January 2013.

**6.47.12 DEVELOPMENT & DELIVERY OF INTEGRATION OF
INTERNATIONAL SPACE STATION DOCKING ADAPTERS (IDAs)
/(SSCN 13047-S/A 1943) (S/A 2016 – SSCN 13231)**

The contractor shall perform the following activities in support of development, installation, activation and operation of two (2) International Docking Adapters (IDAs) located on PMA2 and PMA3 on-orbit (March 2015 operation for first IDA; September 2015 for 2nd).

6.47.12.1 Develop and deliver required documentation for, perform, and closeout the following reviews:

- A. Node 2 IDA Preparation ISS Modkit (IPIM) elements Interim Design Review (IDR) in May 2012.
- B. IDA primary structure PDR in May 2012 and CDR in July 2012.
- C. IDA/IPIM PDR in July 2012.
- D. IDA/IPIM Interim Design Review (IDR) to provide the input necessary to conclude DAC#3 in October 2012.

6.47.12.2 Provide the following input to a SpaceX IDA Flight Support Equipment (FSE) PDR in April 2012 and a CDR in December 2012:

- A. IDA thermal condition model (Feb 2012 for PDR, October 2012 for CDR)
- B. Integrated IDA/FSE thermal analysis (March 2012 for PDR, November 2012 for CDR),
- C. Reduced IDA loads model (Feb 2012 for PDR, October 2012 for CDR)
- D. Review products and provide issues, concerns, and RIDs. Work actions.

6.47.12.3 Procure the following IDA long lead parts by December 2012:

A. SLZ29101649 EMA Passive Umbilical Plug, quantity 6

B. SLZ29101649 EMA Passive Umbilical Receptacle, quantity 6

C. SLZ29101648 Separation EMA, quantity 17

D. SLZ2910XXXX Heaters, quantity 60 (final heater design complete in Feb 2012)

E. SLZ29101630 Resistive Thermal Devices, quantity 20

6.47.12.4 Procure long lead IDIS cable harness connectors by November 2012.

6.47.12.5 Deliver (via 1149) a Modified Androgynous Peripheral Attach System (MAPAS) simulator for early EVA feasibility testing of IDA installation concepts by June 2012.

6.47.12.6 Draft the structure and scope of content for the Docking Systems Program Management Plan, which shall include planning, execution and integration processes for the total Docking Systems project. The plan shall address domestic and international implementations with draft plan delivered in September 2012.

6.47.12.7 Complete an IDSS Visiting Vehicle (VV) Test and Verification (T&V) plan to assure that VV and IDA are fully compliant with the Interface Definition Document (IDD) International Docking System Standard, Interface Control Document (IDSS IDD, May 13, 2011) (Note: IDSS IDD is the document number). The Plan shall also include an approach for IDSS verification for non-NDS implementations (by September 2012).

6.47.12.8 Develop and analyze Software Change Requests (SCRs) to define software requirements and implementation approach for core CSCIs (CCS, GNC, INT SYS) and associated IPCL to support IDA 1 (on Node 2 forward). Deliver software code for IMV Fan / IDA1 heater

management and required command and telemetry functions in INT SYS R8, to be delivered to the MBF in October 2012.

- 6.47.12.9** Perform an integrated therm analysis of IDA in the SpaceX trunk for free flyer configuration and ISS berthed configurations using Space X Simplified Dragon model by June 2012.
- 6.47.12.10** Provide ISS APAS hardware assessments, analysis and problem resolution through 2015.
- 6.47.12.11** Perform logistics required to return all NASA hardware provided to Energia in support of IDA, including integration with the NASA Moscow Technical Liaison Office (MTLO) procedures, processes and requirements [by Sept. 2015].
- 6.47.12.12** Store, maintain and repair IDA flight hardware and associate Ground Support Equipment (GSE) & Special Test Equipment (STE) beginning with IDA hardware DD250 through launch [IDA#1 launch by March 30, 2015 and IDA#2 by September 30, 2015].
- 6.47.12.13** Develop and implement a program to demonstrate and retire risk on the NDS Block 1 concept and integration of the concept with the active and passive docking system, including IDA – [by Aug 31, 2013].
- 6.47.12.14** Conduct a delta System Requirements Review (SRR) for the NDS Block 1 NASA Docking System concept, encompassing full mission requirements for docking system (both low earth orbit and deep space mission scenarios) [by Sept. 30, 2013].
- 6.47.12.15** Conduct trades and develop a conceptual design for consolidated IPIMs at Node 2 – [by September 30, 2013].
- 6.47.12.16** Revise the flight software CSCIs listed below, including PPL updates and associated IPCL data deliveries, required for IDA#1/PMA-2 and IDA#2/PMA-3 implementation:
 - Internal Systems (INTSYS) – R8 [Software Acceptance Review (SAR) complete by May 8, 2013].
 - Guidance, Navigation and Control (GNC) – R11 [MBF delivery by Sept. 30, 2013.]
 - Command and Control System (CCS) – R13 modified for both IDA and VV related changes – MBF delivery by Sept. 12, 2013]

6.47.12.17 Provide the following IDA software products for ISS reconfigurations (reference CD 13565, “Permanent Multipurpose Module (PMM) Relocation and Second Docking Port at Node 2 Zenith”):

- IDA configurations Software Change Request (by Feb. 15, 2013)
- Standard-In files for the following, to support IDA at Node 2 Zenith and Node 1 Nadir outfitted as a 2nd berthing port (by April 3, 2013):
 - CCS R13 IPCL
 - INTSYS R9 IPCL
 - PMCA R5 IPCL
 - NCS R4 IPCL

6.47.12.18 Procure and store the following NDS parts such that an IDA can be delivered subsequent to future contract action:

- Quantity one (1) Energia Adapter Ring (EAR), flight quality [by June 30, 2014].
- Quantity one (1) Modified Androgynous Peripheral Attachment System (MAPAS) flight version/pedigree delivery [by 5/30/15].

6.47.12.19 Deliver the following hardware via 1149 to NASA for integration with vehicles using the NDS:

- Quantity three (3) non-flight ISS Docking Interface System (IDIS), part number 684-022310-001, by the following dates:
 - One (1) by 8/30/2014
 - One (1) by 2/22/15
 - One (1) by 8/12/16.
- Quantity four (4) IDA/IPIM Test Control Units (ITCUs) and associated cabling, part number ITCU-100000-1, by the following dates:
 - Two (2) by 8/30/14
 - One (1) by 2/22/15
 - One (1) by 8/12/16

6.47.13 PRODUCTION OF NASA DOCKING SYSTEMS FOR VISITING VEHICLES (S/A 1950 – SSCN 13049) (S/A 1967 – SSCN 13049 Rev 2)

The contractor shall perform the following tasks to enable production of NASA Docking Systems for Visiting Vehicles:

6.47.13.1 Develop and deliver required documentation and conduct a NDS-305 System Requirements Review (SRR) (May 2012) and a NDS-305 Preliminary Design Review (PDR) (September 2012) for the Boeing designed NDS -305 configuration combined with an -305 Tunnel Interim Design Review (IDR). These reviews shall include content for the Smart Mass Simulators (-301 and -305).

6.47.13.2 Procure the NDS pyrotechnic system long lead materials for three NDS flight units and provide five tunnel forgings by December 2012.

6.47.13.3 Procure parts for Ground Support Equipment (GSE) required to assist installation of NDS Flight units by Visiting Vehicle providers by December 2013.

6.47.13.4 Develop a preliminary plan for transition of Technical Authority for the NDS from NASA Engineering (EA) to Boeing (by 3/30/12). Focus shall be placed on areas of commonality between the -301 and -305 designs and areas that will enable an expedited fabrication and delivery of qualification and flight hardware procured under Change Directives (CDs) 12358, "Transition to Production for the NASA Docking System" and 13047, "Development, Delivery, and Integration of International Docking Adaptors (IDAs) for ISS" Transition shall be planned to begin during FY12.

6.47.13.5 Disposition all hardware/material procured or built under CD 13049 Undefined Contract Action prior to 11/28/12 the Stop Work Order per Program processes.

6.47.14 NDS BLOCK 1 FLIGHT UNIT DESIGN AND DELIVERY (S/A 2062 – SSCN 13642)

The contractor shall perform the following tasks in support of the design, delivery and integration of the NASA Docking System Block 1:

6.47.14.1 Perform technical and design trade studies to resolve integration issues with NDS Block 1 users.

6.47.14.2 Deliver an engineering package to NASA to enable manufacture of the NDS mass simulator [by May 15, 2014]. The engineering package shall not include any proprietary specifications or processes and shall include only US sourced components.

6.47.14.3 Deliver PDR, CDR and Qualification Complete maturity CAD, structural, thermal, and dynamic math models of the NDS Block 1 docking system for ISS or Vehicle integrated analysis. PDR models [by 10/30/13], CDR models [by 8/29/14] and Qualification Complete models [by 12/15/15]. PDR models shall be delivered in the following formats: CAD (STEP), structural launch (NASTRAN), structural mated (ABAQUS), thermal (Thermal Desktop), dynamic (Adams). CDR and Qualification Complete models shall be delivered in the following formats: CAD (STEP),

structural launch (NASTRAN), structural mated (NASTRAN), thermal (Thermal Desktop), dynamic (Adams and Trick-compatible subsystem model).

6.47.14.4 Assist Visiting Vehicle providers in using NDS Block 1 models and emulators for vehicle functional testing during vehicle development and qualification phases.

6.47.14.5 Provide recommendations for long lead procurements and sustaining engineering for NDS Block 1 hardware and TSE following initial production of 4 flight units [by 7/31/14].

6.47.14.6 Deliver an engineering package to NASA to enable manufacture and verification of a NDS Block 1 docking system. This package shall include the released drawings of the NDS Block 1 docking system configuration, contain no proprietary specifications or processes, contain only US sourced components, and identify waivers and/or non-conformances for the configuration [by 12/22/15].

6.47.14.7 Provide the following hardware via DD1149:

- Early integration hardware, that provide docking system command and telemetry emulation only, for NDS-to-user interfaces checkout by 1/15/15.
- TSE Set #1 for NDS-to-vehicle integration and testing by 12/22/15.
- TSE Set #2 for NDS-to-vehicle integration and testing by 5/16/16.

6.47.14.8 Provide guidelines for NDS Block 1 hardware refurbishment to accommodate 5 uses (launch and entry) [by 8/29/14].

6.47.14.9 Deliver the NDS Block 1 indentured parts list, drawing status and release schedule to NASA monthly.

6.47.14.10 Develop and baseline the following documents:

- SSP 50978 System Specification for NASA Docking System (NDS) Rev Basic by 2/27/14.
- JSC 65795, NASA Docking System Interface Definition Document Rev H by 12/20/13.
- JSC 64600, Executive Summary NASA Docking System (NDS) Concept of Operations Rev Basic by 2/27/14.

6.47.15 PMM RELOCATION AND SECOND DOCKING PORT AT NODE 2 ZENITH (S/A 2066 – SSCN 13565)

6.47.15.1 The contractor shall develop and deliver required hardware, software and subsystem integrated analysis products to implement and sustain the

following major USOS configuration changes, associated with the Permanent Multipurpose Module (PMM) Relocation and Second Docking Port at Node 2 Zenith. (Configuration changes shall be implemented by September 2015).

1. Relocation of PMM from Node 1 Nadir to Node 3 Forward.
2. Outfitting of Node 1 Nadir as the USOS berthing port including different berthed vehicle clocking orientations and scarring for 2 additional 25 Amp feeds for a future Node 1 Galley.
3. Relocation of Pressurized Mating Adapter (PMA)3 from Node 3 Port to Node 2 Zenith (with PMA3 oriented tail forward).
4. Installation of International Docking Adapter (IDA) Preparation ISS Mod kit (IPIM) mod kits and IDA1 enabling docking port at Node 2 Forward.
5. Installation of IPIM mod kits and IDA2 enabling docking port at Node 2 Zenith.
6. Relocation of the P1 Lower Inboard (P1LOIB) camera at Camera Port (CP)7 to CP8.
7. Relocation of Advanced Resistive Exercise Device (ARED) within Node 3 module to allow unobstructed access to PMM.

6.47.15.2 The contractor shall update Phase I and Phase II of the ISS Life Extension analyses to account for the new ISS configuration by June 2017 (Clause H. 57).

6.47.15.3 The contractor shall develop IPIM and ISS Reconfiguration Outfitting Kits (IROK) mock-up hardware, perform an Engineering Fit Check and Crew Configuration Evaluation of the hardware installation procedures, and provide hardware to NASA via DD1149. [DD1149 of the equipment used in support of the IPIM Node 2 hardware evaluation by November 1, 2013 (complete) and remaining hardware evaluation equipment in support of IROK/IPIM evaluation by June 1, 2014].

6.47.15.4 The contractor shall evaluate thermal and structural compatibility of the proposed ISS configuration in the attitude envelopes as defined in SSP 50699-03 (by May 29, 2015).

6.47.15.5 The contractor shall develop and install Peripheral Docking Targets (PDTs) to be delivered as part of the IDA Delivery Items (DILs 51722 and 51723).

6.48 WATER PROCESSOR ASSEMBLY (WPA) FIRMWARE MODIFICATIONS (S/A 1641)

The contractor shall provide the following updates to the WPA firmware by February 2011:

- Resolve the over pressurization potential within the “mostly liquid separator (MLS)” during warm shutdown.

- Change result of specific faults to “SHUTDOWN” instead of “WARM SHUTDOWN.
- Update default values to reflect actual on-orbit performance.
- Correct algorithms resulting in “P_7116_TOL_FAULT” and “P_7117_LEAK_WARNING” fault messages.
- Modify firmware to allow water in the accumulator to be available for crew use when storage tank is empty.
- Correct Algorithm to eliminate unnecessary “Flow_Test sequence” messages.
- Implement a modification that will flush the Pump/Sep ORU inlet with iodinated water at the completion of each process cycle.

6.49 EMERGENCY EGRESS GUIDANCE SYSTEM (EEGS) IMPLEMENTATION S/A 1641)

The contractor shall provide the logistics engineering, drawing updates, and procedure updates required to implement the deactivation of the existing ISS Emergency Egress Lighting Systems (EELS) and removal of the Lighting Power Supplies (ELPS) from the United States Laboratory (USL), Airlock, and Node 1 by September 2010.

6.50 SUSTAINING TRANSITION S/A 1660)

6.50.1 UNPRESSURIZED FLIGHT SUPPORT EQUIPMENT

The contractor shall provide planning and implementation activities to transition authority and control of sustaining engineering activities from the Cargo Mission Contract (CMC) to Boeing for unpressurized flight support equipment and on-orbit stowage platforms by January 1, 2011. The contractor shall identify hardware that can be excessed as part of the transition.

6.50.2 URINE PROCESSING ASSEMBLY/POWER SUPPLY MODULE HARDWARE (S/A 1704 – SSCN 12423)

The contractor shall perform the following tasks for the Regenerative Environmental Control and Life Support Systems (ECLSS) Urine Processing Assembly (UPA) Power Supply Module PSM) by September 30, 2011:

- 6.50.2.1** Develop a UPA/PSM transition strategy for sustaining engineering of this hardware from Marshall Space Flight Center (MSFC) to Boeing and perform a baseline supportability assessment for original equipment manufacturer (OEM) to depot transition.
- 6.50.2.2** Assess all existing reliability and maintainability products on four ORUs from the UPA system to determine if they support the ISS assembly complete configuration.
- 6.50.2.3** Observe assembly and test activities for the distillation assembly (DA) and fluid control and pump assembly (FCPA) to understand and document any delta processes and techniques that may exist between MSFC and Boeing operations and to determine if any of the processes and techniques observed may affect/have implications to on-orbit troubleshooting of the Regen ECLSS.
- 6.50.2.4** Assess UPA software version description document (VDD), software architecture and design documentation, software user's manual and UPA software formal verification and acceptance processes to determine similarities/differences between MSFC and Boeing products/processes.
- 6.50.2.5** Assess UPA/PSM electrical hardware drawing and unique specifications to determine power quality similarities/differences between MSFC and Boeing products ISS/specifications.

6.50.3 EXPRESS LOGISTICS CARRIER (ELC) S/A 1700 – SSCN 11967)

The contractor shall perform the following tasks to support the transition of sustaining engineering of the ExPRESS Logistics Carrier hardware and the ExPRESS Carrier Avionics (ExPCA) software from NASA Goddard Space Flight Center (GSFC) to Boeing by 30 days post activation of the ELC on Flight ULF6 (launch in February 2011):

- 6.50.3.1** Process sampling of major GSFC data items (models drawings, software source code, major analysis reports, etc.) to determine if products can be opened and manipulated with Boeing tools and provide a summary of major findings (missing data, errors in models, etc) and recommendations for resolution by July 31, 2010.
- 6.50.3.2** Review the list of residual assets and provide recommendations for disposition by June 30, 2010.

6.50.3.3 Observe the integration and testing of ExPCA at GSFC and the integration and testing of ExPCA 5 at KSC, including comprehensive performance tests.

6.50.3.4 Develop and implement transition plans (agreed to by GSFC, ISS Program, and Boeing) for the following by September 30, 2010.

6.50.3.4.1 Transition of ELC ExPCA software sustaining from GSFC to Boeing.

6.50.3.4.2 Transition of ELC payload test and processing hardware sustaining from GSFC to Boeing.

6.50.3.4.3 Transition of the Advanced Spacecraft Integration and System Test (ASIST) workstations from GSFC to Boeing.

6.50.3.5 Evaluate GSFC hardware and software integration processes and develop an ELC Payload Integration Plan to define the templates and data products required to integrate future Payloads to the ELCs on-orbit by September 30, 2010.

6.50.3.6 Evaluate the ExPRA design engineering for compatibility with Boeing design tools and status of the ExPCA 6 to determine the feasibility for Boeing to complete assembly by December 2010.

6.50.3.7 Perform Space Communication and Navigation (SCAN) payload software integration with the ELC ExPCA software and input the interim ELC3 command and data handling (C&DH) data set into the payload data library, in support of the installation of SCAN on the ELC3 and HTV3 stage by September 2010.

6.50.4 JSC GFE HARDWARE (S/A 1701 – SSCN 12205)

The contractor shall develop sustaining engineering transfer plans, jointly with NASA, to document the GFE provided product baseline (drawings, models, safety data packages, etc.), packaging, handling, and storage requirements, pre-flight processes and non-conformance reports (NCRs). Any issues related to the data shall be documented. The plan shall also identify any multi-use ground support equipment (GSE) and facility dependencies, and provide options for alternative solutions. Plans shall be developed for the following GFE systems and their associated GSE and facilities (in 21 weeks after GFE data is delivered):

- Crew Health Care System (CheCS)
- Flight Crew Systems
- Environmental Control and Life Support/Active Thermal Control System (ECLS/ATCS)

6.50.5 OXYGEN GENERATIONS SYSTEM AND WATER RECOVERY SYSTEM RACKS (S/A 1712 – SSCN 12204)

The contractor shall perform the following tasks for the transition of sustaining engineering responsibilities for the oxygen generation system (OGS) rack and support equipment (including ground), the water recovery system (WRS) racks 1 and 2 and support equipment (including ground), and regenerative ECLSS contingency hardware and support equipment from NASA MSFC to Boeing by no earlier than April 2011:

- a. Development and disposition of a Design Transfer Package (DTP).
- b. Documentation capture for all hardware.
- c. Product structure baseline development and transition for hardware to be transitioned.
- d. Logistics supportability assessment to facilitate product support transition.
- e. Participate in and provide engineering input for three on-orbit contingency operations that require the use of the microbial shock kit, water delivery system, or hydrogen ORU calibration kit.

6.50.6 CREW QUARTERS (SSCN 12860 – S/A 1827)

The contractor shall perform the following tasks to transition sustaining engineering and post production support of crew quarters from NASA to Boeing:

6.50.6.1 Provide planning and implementation activities, including documentation capture, to transition authority and control of sustaining engineering activities from NASA to Boeing for all Crew Quarters (CQ) hardware (SEG32109500-301, -302), by September 30, 2012.

6.50.6.2 Develop the following LSARs to support the transition and to determine the need for additional spares by May 11, 2012:

- Audio Annunciation Device – P/N: SEG32110362
- ATU Loudspeaker – P/N: SEG32110407
- Test Panel – P/N: SEG32110349
- Electrical Panel – P/N: SEG32110307
- Fan Power / Data / Switch Cable Assembly – P/N: SEG32110117

6.50.6.3 Complete obsolescence assessments for the following spares by April 2012:

- Power Supply Assembly – P/N: SEG32110334-301
- Fan Orbital Replaceable Unit (ORU), Ventilation Assy – P/N: SEG32109721-301
- Intake Airflow Sensor – P/N: SEG32110394-301
- Intake Airflow Sensor – P/N: SEG32110394-302
- Exhaust Airflow Sensor – P/N: SEG1100401-301
- Audio Annunciation Device – P/N: SEG32110362

- ATU Loudspeaker – P/N: SEG32110407
- Test Panel – P/N: SEG32110349
- Fan Power / data / Switch Cable Assembly – P/N: SEG32110117
- Electrical Panel – P/N: SEG32110307

6.50.7 FLIGHT CREW EQUIPMENT (FCE) (SSCN 12870 - S/A 1829)

The contractor shall transition authority and control of sustaining engineering from NASA Engineering to Boeing (by 06/14/12) and Maintenance and Operations (M&O) from the Space Operations Contract (SPOC) to Boeing [by 04/01/12] for the following equipment, including Ground Support Equipment (GSE):

- Portable Breathing Apparatus (PBA)
- Water Transfer Equipment
- Hand Held Microphone (HHM)
- Color Television Camera (CTVC)

6.50.8 Oxygen Generation Assembly Power Supply Module (S/A 1865 – SSCN 13097)

The contractor shall provide planning and implementation activities, including documentation capture, to transition authority and control of sustaining engineering for the Oxygen Generation Assembly Power Supply Module (OGA PSM) from NASA Marshall Space Flight Center (MSFC) to the Boeing NAS15-10000 Contract by December 01, 2012.

6.50.9 ACTIVE THERMAL CONTRAOL SYSTEMS & ENVIORNMENTAL CONTROL AND LIFE SUPPORT HARDWARE (SSCN 13267 Rev 2 – S/A 1925)

The contractor shall transition authority and control of Sustaining Engineering (SE) and Maintenance and Operations (M&O) from NASA JSC to Boeing for Active Thermal Control System (ATCS) Environmental Control and Life Support (ECLS) hardware listed in Appendix A by 04/19/13.

6.51 PRECIPITATION REMEDIATION METHODS FOR UPA (S/A 1674)

The contractor shall support the test and analysis of precipitation remediation methods for the urine processing assembly (UPA) by performing the following tasks in the areas of organic chemistry, microbiology, and materials and processing (to be completed by 9/30/2011):

- Evaluate and recommend potential technologies and remediation techniques.
- Evaluate/determine potential impacts to the environmental control life support system and ISS impacts for remediation methods.
- Provide input to test method selection and test performance criteria definition.
- Provide input to the evaluation of test results of remediation technologies and techniques including: effectiveness of precipitation control; relationship between remediation solution, system Ph, and oxidizer; and consumable rates that would be required to support the remediation.

6.52 FLIGHT STS-335/135 (S/A 1679) (S/A 1713)

6.52.1 PUMP MODULE INTEGRATED ASSEMBLY RETURN STUDY

6.52.1.1 The contractor shall perform a trade study (by 09/09/10) of Lightweight MPRESS Carrier configurations to safely return a pump module integrated assembly from on-orbit, on flight STS-335. The following shall be provided:

- Recommendation on the LMC configuration with design concepts and required new or existing hardware.
- Recommendation on using current EVA tools and requirements and design for any new tools required.
- An overall LMC flight integration schedule that includes LMC Flight Support Equipment (FSE) design work, FSE modifications, analytical and physical integration milestones, Shuttle deliverables, KSC deliverables, and long lead procurement parts.

6.52.1.2 The contractor shall initiate procurement of long lead components for required hardware (based on recommendations).

6.52.2 MISSION PLANNING AND OPERATIONS (S/A 1685)

The contractor shall provide integration and operations tasks (SOW 1.0 and 3 .0) to support mission planning and operations for Flight 335 (in June 2011).

6.52.3 LMC ANALYTICAL INTEGRATION (S/A 1685)

The contractor shall perform the analytical integration of the LMC to launch the R2D2 payload and return the failed pump module on Flight 335 and shall provide the necessary products and engineering for physical integration by NASA KSC.

6.52.4 CONTINGENCY LOADS ANALYSIS (S/A 1715 – SSCN 12689)

The contractor shall perform the analysis to determine if the STS-135 LMC Integrated Assembly (IA) can be certified for a landing case with either contingency operations LAPA tool (COLT) not installed for return. The contractor shall certify the LMC IA for this configuration if feasible.

6.53 OGA RECIRCULATION LOOP MAINTENANCE HARDWARE (S/A 1679)

The contractor shall develop, design, test and provide via DD 1149 (by 10/15/10) two flexhose assemblies utilizing commercial grade components for use as a temporary near-term corrective maintenance action to periodically restore the OGA recirculation loop Ph to near neutral and to preclude corrosion of the cell stack assembly's zirconium support screens and cell separator sheets and resultant colloidal zirconium oxide particulates from occluding loop filters and flow passages. Data packages shall be delivered with the hardware and shall include material/cleanliness certifications, testing results and parts traceability data.

The contractor shall review and provide inputs to the Marshall Space Flight Center (MSFC) provided Maintenance Hazard Assessment (MHS) for the Safety Review Panel (SRP) for this hardware, and the Mission Operations Directorate (MOD) development of the crew and ground procedures needed to install and operate maintenance hardware within the OGA subsystem.

6.54 CREW QUARTER (CQ) SPARES (S/A 1657 – SSCN 12569)

The contractor shall perform a reliability and maintainability assessment and a sparing analysis on CQ components/ORUs and provide a recommendation on CQ spares/spares quantities required to support operations through 2020 (due April 2011).

6.55 DOCKING HUB SYSTEM (DHS) (S/A 1707 – SSCN 12371)

The contractor shall perform the following tasks in support of development of the Docking Hub System (DHS):

6.55.1 Preliminary Design, Integration and Delivery Concept

6.55.1.1 Perform preliminary analysis for the DHS mission concept of operations to determine the DHS required functionality, system architecture, and system requirements and develop configuration layouts and a test and verification approach (due January 2011).

6.55.1.2 Perform preliminary integrated analysis for all mission phases through docking hub delivery and ISS attached operations to establish natural and induced environments and to define Atlas V launch vehicle and ISS imposed environments constraints (due October 2010).

6.55.1.3 Develop a preliminary system architecture and constraints for the DHS, including constraints imposed by an Atlas V launch vehicle, delivery to the ISS and mated flight operations (due January 2011).

6.55.1.4 Produce a plan for upgrading the Node structural test article (STA) to flight status, including preliminary design of the docking hub (DH) primary structure based on the Node STA. The plan shall describe the repair and upgrade approaches (due January 2011).

6.55.1.5 Provide a technical evaluation of the enhanced payload attach fitting concept of the orbital transfer unit implementation and provide a ROM cost and schedule to implement the concept (due January 2011).

6.55.1.6 Develop a preliminary conceptual design for the interface ring between the DH and the orbital transfer unit (due January 2011), including the following:

- Structural interface concept based on the assessment of preliminary life cycle loads.

- Concept for a separation system and safety evaluation for separation operation.
- Concept for electrical interfaces with the DH and orbital transfer unit, including element and heater power, data, pyrotechnics and discrete signal wiring.

6.55.1.7 Develop risks and associated mitigation plans for the development of the Docking Hub System through ISS operations (due January 2011).

6.55.1.8 Provide a plan for long lead procurement of DHS components (due January 2011).

6.55.1.9 Generate data packages and resolve formal action items and comments for the following:

A. A preliminary requirements review (PRR) in October 2010 for the DH primary structure (PRR-1).

B. A PRR in January 2011 for the DHS.

C. An Incremental Design Review (IDR) in January 2011 for the DH primary structure preliminary design.

6.55.1.10 Generate a systems requirements review (SRR) data package for the DHS (due in April 2011), limited to the following items:

- System level concept of operations
- DH specification
- Launch mission kit (LMK) specification
- Centaur modification requirements
- Phase zero safety analysis

- Draft systems integration plan (including test and verification approach and technology readiness level (TRL) assessments)
- Conceptual design layouts of the DH
- Subsystem schematics
- Program schedule for development of the DHS
- Design reference mission description for DHS launch, assembly and on-orbit operations
- System level design for manufacturing, assembly, integration and test approaches.

6.56 SPACE SHUTTLE CAMERAS (S/A 1713 – SSCN 12556)

The contractor shall perform the following tasks to allow use of the Space Shuttle Program (SSP) color TV cameras (CTVC) in the ISS external camera group (ETVCG):

- Revise the ETVCG drawings to allow use of the SSP CTVC part numbers (SSP CTVC P/N 3278890-508, 3278890-507) as an alternative to the International Space Station (ISS) CTVC within the ETVCG configuration.
- Revise the ETVCG Launch Configuration Drawing (LCD) to account for the SSP CTVC as an alternate part and establish two launch configurations: one with the ISS MLI blanket, lens hood & protective caps and one with just the CTVC with protective caps.

6.57 MULTIPLE VISITING VEHICLES ON NODE 2 (S/A 1736 – SSCN 12644 and SSCN 12693)

The contractor shall perform the following tasks to support the addition of a berthing port capability at Node 2 Zenith to support simultaneously berthed VVs at Node 2 Zenith and Nadir ports:

6.57.1 Hardware and Software Capabilities (S/A 1736 – SSCN 12693)

Provide the hardware and software capabilities required to support two different type visiting vehicles simultaneously on Node 2 Zenith and Nadir ports by December 2011.

6.57.2 ECLSS Capability Analyses, Testing & Implementation (S/A 1736 – SSCN 12693)

6.57.2.1 Perform analysis of ECLSS airflow using the following configurations to assess the airflow at the VV interface, identify issues and determine necessary work-arounds (by August 3, 2011)

- Existing Node 2 ECLSS configuration
- Use of Node 2 Forward fan with ducting to reroute IMV air to Zenith

6.57.2.2 Perform a test using available on-orbit hardware (Elephant trunk) to determine resultant cabin airflow to Node 2 Zenith. Develop procedures to implement this configuration on-orbit (by September 28, 2011).

6.57.2.3 Manifest 72 CBM controller panel assembly protective caps for use on-orbit crew to install a temporary vestibule outfitting kit (VOK) (by August 26, 2011).

6.57.3 Capability Envelope (S/A 1736 – SSCN 12693)

Perform subsystem analyses to define capability envelope for VVs at Node 2 Zenith and for dual VVs simultaneously berthed at Node 2 Nadir and Node 2 Zenith (by December 20, 2011).

6.57.4 Zenith Release and Departure Capability for Berthed Visiting Vehicles (SSCN 12961 – S/A 1810) (S/A 1886)

The contractor shall perform analyses required to implement the capability to support SSRMS release of visiting vehicles from the Node 2 Zenith port while Node 2 Nadir is occupied by another berthed vehicle and material outgassing/plume contamination analyses to support dual berth visiting vehicle capability for the HTV and Standard Cygnus on Node 2 Zenith.

- The analysis shall support implementation of this capability for HTV by February 2013.
- The analysis shall support implementation of this capability for Standard Cygnus by April 2013.

- The analysis shall support implementation of this capability for Orbital Enhanced Cygnus by August 2013.

6.58 WATER PROCESSER AND OXYGEN GENERATION SYSTEM TESTING (S/A 1734 – SSCN 12313)

The contractor shall perform the following tasks to complete testing and cycle life analysis for the Water Processor Assembly/Oxygen Generation Assembly (WPA/OGA) Pumps:

- Perform and complete life testing on the waste water pump (SV825431), water delivery pump (SV825619), and the OGA pump (SV825566).
- Provide report(s) for the waste water pump (SV825431), water delivery pump (SV825619), and the OGA pump (SV825566) containing cycle and continuous operation test data and life assessments to support sparing analysis (by December 2012).

6.59 GROUND HARDWARE AND TRAINING UNITS (S/A 1743 – SSCN 12810)

6.59.1 SPCU Heatexchanger (HX)

The contractor shall deliver (via DD 1149) a training unit of the SPCU HX Insulation Maintenance Kit deliverable item by April 2012.

6.59.2 WHC Piping Connection (S/A 1777 – SSCN 12637)

The contractor shall deliver (via DD 1149) a training unit of the Piping Unit ORU A2 Connector Plug deliverable item (ID 51597) by August 31, 2012.

6.59.3 Lab Window Shutter (S/A 1960 – SSCN 13324)

6.59.3.1 The contractor shall deliver EXPRESS Software which enables ground commanding of Lab Window Shutter System by May 2014 (S/A 1980 – SSCN 13324 Rev 1).

6.59.3.2 The contractor shall deliver (via DD 1149) 1 training unit of the Window Observational Research Facility (WORF) Window Shutter Mod Kit (DIL 32404) to JSC by August 2014.

6.59.4 AIRLOCK SHELL HEATER MODIFICATION (MOD 1989/SSCN 13501)

The contractor shall provide training hardware for the Airlock Shell Heater modification kits (DIL 32426) by June 2014.

6.59.5 ARFTA IN-PLACE FILL & DRAIN (S/A 2000 – SSCN 13197 Rev 1)

The contractor shall provide (via 1149) training hardware for the WRS-2 Rack modification kits (DIL 32397) which allow in-place filling and draining of the Advanced Recycle Filter Tank Assembly (ARFTA) by 03/02/15.

6.60 HARDWARE STUDIES (S/A 1765 – SSCN 12835)

6.60.1 Pressurized Elements On-Orbit installed Shell Heater

The contractor shall perform a study (by 03/07/12) to assess the technical feasibility of an on-orbit installed internal shell heater for USOS pressurized elements. The study shall include the following:

- Installation method.
- Operational use.
- Design and implementation approach.
- Pros, cons and risks associated with design concept(s).
- Cost of option(s)
- Recommendation.

6.60.2 EATCS DESIGN IMPROVEMENTS (SSCN 12878 – S/A 1789)

The contractor shall develop concepts and associated costs for a dual pump and control valve package (PCVP) design and modular pump module (PM) with dual PCVPs design for the External Active Thermal Control System by September 27, 2012.

6.60.3 ATCS RADIATOR LIFE EXTENSION (SSCN 12833 – S/A 1818)

The contractor shall perform an assessment of the current Heat Rejection Subsystem Radiators (HRSRs) and photovoltaic radiators (PVRs) capabilities and requirements to develop a recommended strategic plan to support ISS operations through 2028. The study shall be a complete assessment to quantify and update the risk to the current radiator designs to better understand how that risk relates to future hardware needs for ISS life through 2028 (by September 2012).

6.60.4 AIRLOCK OXYGEN HIGH PRESSURE GAS TANK ASSESSMENT(S/A 1862 SSCN 13257)

The contractor shall provide a feasibility assessment of Airlock oxygen High Pressure Gas Tank (HPGT) recharge by compressing output gas from the Oxygen Generation Assembly (by July 1, 2012). Study results shall be defined to the feasibility and conceptual design level needed to support a decision on whether to pursue this option as a method of providing HPGT recharge on orbit and shall include:

1. OGA gas purity and composition of the non-oxygen components when operated at capacities needed to support ISS atmospheric regeneration as well as added capacity for HPGT recharge. As a minimum, water vapor and hydrogen concentrations in the output gas shall be defined; however, levels of any other trace gases that might be a limitation to ISS operations, safety or crew health shall be addressed if identified as present.
2. Definition of the interface parameters at the OGA outlet, including any unique requirements for isolating back pressure or accumulating gas to interface with a pump/compressor that will deliver compressed oxygen to the HPGT at approximately 2740 psia.
3. Impacts to OGA operations, reliability or maintenance requirements that result from additional run time or interface modifications.
4. Prediction of ISS resources required for operation.
5. Any unique conditioning required of OGA output gas such as removal of water vapor or thermal conditioning of recharge lines between the OGA and the Airlock.
6. Recommendation of where best in the ISS to locate any added equipment including gas conditioning systems and compressor equipment, including proposed hose/line routing.
7. A notional control method to coordinate OGA and recharge equipment operation and any anticipated need for computer-based (software) control.
8. Definition of any impacts to the OGA and its health as a result of high pressure O₂ compression.

6.60.5 FEASIBILITY AND CONCEPTUAL DESIGN FOR SIMPLIFIED ACTIVE DOCKING SYSTEM (S/A 1864 – SSCN 13275)

The contractor assess the feasibility of implementing a simplified Soft Capture System (SCS) for the NASA Docking System and shall develop a concept to a level of maturity to allow NASA to determine technical and schedule risks associated with the alternate approach (by August 31, 2012). Requirements for the system include the following:

- The SCS shall be comparable with a passive or active APAS style SCS.
- Hard mate assembly/hard capture system shall be per the International Docking System Standard (IDSS)
- Must use Technology Readiness Level 6 or higher.
- Design, development, qualification and certification of a final design is required to be completed no later than June 2015.
- The design shall contain no proprietary features.
- Loads are as documented in IDSS Interface Definition Document, Rev A.
- The design shall be as simple and robust as possible (based on requirements).
- The design shall allow build-to-print capability by third parties (must use publically available processes and data).

6.60.6 INTEGRATION OF GALLE INTO NODE 1 (SSCN 13391 – S/A 1902)

The contractor shall perform a trade study to identify and assess options for relocating and consolidating galley hardware components into Node 1 (by May 2013). The study shall include:

- A list of subsystem impacts (including additional hardware and resources required).

- An assessment of options based on difficulty of implementation and crew time vs. benefits.
- Impacts to Node 1.
- Recommendation for implementation.

6.60.7 ADDITIONAL PRESSURIZED PAYLOAD ACCOMODATIONS (SSCN 13407 – S/A 1903)

The contractor shall perform a trade study to identify options to provide additional pressurized payload accommodations onboard the ISS for Expedite the Processing of Experiments to the Space Station (EXPRESS) Rack type payloads. The study shall define a set of architecture options, pros/cons associated with each option, and the relative complexity of implementing each option. The study shall assess the use of existing resources available onboard and on the ground to implement each option (by March 2013).

6.60.8 Identify Technology to Remove Organic Compounds Via the Water Processor Assembly (S/A 1907)

The contractor shall define and recommend options to remove organic compounds that are present in the ISS water recovery system and are not efficiently removed by the current design of the Water Process Assembly (WPA) Multifiltration Beds (by 9/2013). Compounds targeted for removal shall include dimethylsilanediol (DMSD), polydimethylsiloxanes (PDMS) and trimethylsilanol (TMS). The contractor shall also perform initial capacity assessment of up to 3 candidate media (2 for removal of DMSD/PDMS/TMS/Dimethylsulfone, 1 for replacement of 580-26 adsorbent) and provide for storage of the candidate sample media for future shelf life study

6.61 HIGH RATE DATA WIRELESS COMMUNICATIONS (S/A 1771 – SSCN 12443)

The contractor shall perform the following tasks:

6.61.1 Provide the capability for two way wireless high data rate communications between the EXPRESS Logistics Carrier (ELC) payload sites and the United States Laboratory using commercial-off-the-shelf (COTS) antenna(s) and wireless access point(s).

6.61.2 Provide the following non-flight components via 1149:

<u>Component</u>	<u>Qty</u>	<u>Due Date</u>
Lab Coax Cable Assembly – Lab Unit	2	4/06/11

FEU Antenna Assemblies – Lab Unit	2	4/06/11
WAP to Brick Power Cable – Qualification Units	2	5/25/12
Payload Antenna Assembly Coax Cable – Quantity Lab Units	14	5/25/12
COTS Linear Antennas – Lab Units	22	9/16/11
COTS Linear Antennas – Qualification Units	2	9/16/11
USL Linear Antennas – Lab Units	2	3/26/12
USL Linear Antennas – Qualification Units	2	3/26/12
USL Linear Antennas – Unmodified COTS Units	4	3/26/12
USL Payload Patch Antennas – Lab Units Due	10	5/25/12
Wireless Access Points (WAPs) – Lab Units	14	5/25/12
WAP – Qualification Units	2	5/25/12
WAP – Unmodified Units	18	5/25/12
Network Device – USB – Lab	16	5/25/12
Network Device – USE- Qualification Units	2	5/25/12
Network Device – USE – Unmodified COTS Units	20	5/25/12
WAP – Lab Units (for Huntsville PSIVF lab)	4	9/16/11
Network Device – USB – Lab Units (for Huntsville PSIFV lab)	4	9/16/11

6.62 ISS-BASED RELATIVE NAVIGATION SYSTEM (RNS) (SSCN 12957 – S/A 1784)

6.62.1 The contractor shall define and develop system design specifications and requirements Relative Navigation System (RNS) sensor package and conduct the System Requirements Review (SRR) by April 12, 2012.

6.63 LITHIUM-ION BATTERY PROJECT (SSCN 12202 – S/A 1792)

The contractor shall complete the following tasks to support the development and implementation of Lithium-Ion (Li-Ion) Battery Orbital Replacement Units on the ISS Vehicle:

- Provide software updates to support a new charge algorithm and account for instrumentation differences between the existing Ni-H2 battery and the new Li-Ion battery ORUs (by April 30, 2014 for PVCA R5 and by May 31, 2014 for PMCA R5).
- Provide one Li-Ion qualification unit to the Integrated Power Lab by September 15, 2014.
- Provide (via DD 1149) 55 GS Yuasa Cells and 65 Quallion Cells to NASA (by February 29, 2012).

6.64 RPCM FIRMWARE AID (SSCN 12984 – S/A 1800)

The contractor shall provide a Remote Power Controller Module (RPCM) standard maintenance firmware aid (by June 3, 2012) for use with existing on-orbit RPCM firmware and available

RPCM ground spares. The standard maintenance firmware aid shall:

1. Increase the time considered necessary after power connection during an RPCM hot mate installation to allow proper RT address acquisition;
2. Increase the size of the 1 kilohertz (kHz) current and voltage hindsight buffers to allow more data capture to improve troubleshooting when a circuit breaker trip occurs;
3. Have the capability to copy the Electrically Erasable Programmable Read Only Memory (EEPROM) to Static Random Access Memory (SRAM) on power-up, regardless of any EEPROM Cyclic Redundancy Check (CRC) errors detected;
4. Have the Input Undervoltage Trip Recovery function to default Inhibited rather than Enabled.

6.65 EXPRESS RACK MODIFICATIONS

6.65.1 Hardware Modifications

The contractor shall modify the following flight racks to replace the 10 baseT payload Ethernet hub bridges (PEHBs) with 100baseT improved Ipehg via on-orbit IVA modification kits:

- Four EXPRESS with ARIS racks by 6/19/14.
- One WOLF rack by 4/4/14.
- Three EXPRESS without ARIS Racks (EXPRESS Rack 6, Galley Rack will not be modified) by 10/16/14.
- Two Human Research Facility (HRF) Racks by 11/27/14.

6.65.2 Software Modifications

The contractor shall modify the EXPRESS flight software to allow utilization of the iPEHBs, while retaining the capability to utilize the heritage PEHB by 03/06/2015.

6.65.3 Ground Facility Modifications

The contractor shall modify the Avionics Test Bed (ATB), the Rack Software Test Bed (RSTB) and the Payload Software and Integration Facility (PSIVF), to install ground iPEHGs, while maintaining the capability to utilize the heritage PEHBs by 03/07/2014.

6.65.4 Ground Hardware

The contractor shall provide the following ground hardware via 1149:

Hardware Description	Part No.	Due Date	Use
Wire Harness Assy – PWR/FO	683-98949-1	6/6/2013	Functional Checkout Unit (FCU)
Wire Harness Assy – PWR/FO	683-98949-2	06/06/2013	FCU
Wire Harness Assy – Ethernet/RS232	683-98968-1	07/10/2013	FCU
Ipehg Ground Unit	EAN64562-001-01	07/17/2013	Ground Facilities
Ipehg Ground Unit	EAN64562-001-01	07/22/2013	Ground Facilities
Ipehg Ground Unit	EAN64562-001-01	08/20/2013	Ground Facilities
Ipehg Ground Unit	EAN64562-001-01	08/27/2013	Ground Facilities
Ipehg Ground Unit	EAN64562-001-01	09/30/2013	Ground Facilities
Ipehg Ground Unit	EAN64562-001-01	10/07/2013	Ground Facilities
Ipehg Ground Unit	EAN64562-001-01	10/23/2013	HRF FPR ground rack
Wire Harness Assy – PWR/FO	683-98949-5	08/28/2013	HRF FPR ground rack
Wire Harness Assy – PWR/FO	683-98949-6	08/28/2013	HRF FPR ground rack
Wire Harness Ethernet/RS232	683-98968-1	08/28/2013	HRF FPR ground rack

6.66 CONTINGENCY EVA FAILURE SCENARIOS (BIG 12)

The contractor shall perform the following tasks to complete identification of required pre-failure and post-failure analysis and best “Next Worst Failure” configuration for the currently identified ISS Contingency Extra Vehicular Activity (EVA) Failure scenarios (Big 12):

6.66.1 EATCS pump module (PM) R&R

The contractor shall review the current EATCS PM Integrated Operations Product Template (IOPT), identify the following, and update the IOPT (by 2/2/12):

- Analyses and tasks required to support recovery of a PM failure.
- Analyses required to be performed in advance of the failure to minimize the time between occurrence of the failure and execution of recovery EVAs.
- The ISS system configuration which best mitigates impacts, in the event of the next worst failure and also protects EVA capability.

6.66.2 IOPT Completion

The contractor shall complete identification of all analysis and products required, identify analyses required to be performed in advance of the failure to minimize the time between occurrence of the failure and execution of recovery EVAs, identify the ISS system configuration which best mitigates impacts in the event of the next worst failure and also protects EVA capability, and document analysis required in a dedicated IOPT matrix for the following contingencies by 11/2013:

- R&R of FHRC,
- R&R of IFHX,
- R&R of SAW ECU,
- R&R of SAW BMRRM,
- R&R of ATA,
- R&R of NTA,
- R&R of MBSU,
- R&R of EXT MDM,
- R&R of DDCU S01A and DDCU S02B,

- R&R of external RPCMs SO1A_C, SO2B_C, S01A_A, S11A_D, S02B_A, P12B_D

6.66.3 NH3 Leak and MMOD Penetration

The contractor shall perform the following tasks for the NH3 leak isolation and recovery (by 11 /19 /12) contingency and the loss of module due to MMOD penetration contingency (by 2/13/13):

- Identify current capabilities to locate leak site and perform repairs.
- Identify tools and systems necessary to restore pressure and structural integrity for a repair to be performed EVA.
- Identify assumptions bounding the tool designs and usagae techniques.

6.66.4 Generic EVA Baseline

The contractor shall finalize Failure Response Assessment Team (FRAT) ISS generic contingency EVA baseline assumptions (by 10/06/11).

6.66.5 SEQUENTIAL SHUNT UNIT (SSU) R&R (SSCN 12769, REV 3; S/A 2010)

The contractor shall perform the following tasks in preparation for an SSU contingency:

- Prepare an SSU IOPT matrix identifying required analyses and products required to prepare for an SSU contingency and identify which analyses are needed prior to the contingency (by 01/2014).
- Perform an SSU power generation analysis (by 11/2013) for the SSU contingency. The analysis shall be performed at BGA angles of 270, 240, 30 and 65, to determine the electrical current at the SSU shunt plugs to determine if it violates the shunt plug maximum current limit.

6.67 UPDATE OF FLOATING POTENTIAL MEASUREMENT UNIT (FPMU) GROUND STATION HARDWARE AND DATA REDUCTION SOFTWARE (SSCN 13073 – S/A 1811)

The contractor shall establish a Ground Station (G/S) for the Floating Potential Measurement Unit (FPMU) in the contractor's facility (by May 2012). The FPMU G/S will

consist of a contractor furnished computer and contractor developed software tool that will convert the government-furnished FPMU video stream into raw (“Level 0”) FPMU data required to perform ISS plasma hazard assessments.

6.68 MODIFICATION OF LIGHTWEIGHT ADAPTOR PLATE ASSEMBLY (LwAPA) (SSCN 13123 – S/A 1809)

The contractor shall modify the Lightweight Adaptor Plate (LwAPA) S/N 683-96104-013 to 683-96104-001 (by April 18, 2012).

6.69 RUSSIAN SEGMENT (RS) COMPONENT WITH THE SDIL (SSCN 12638 – S/A 1817)

6.69.1 SDIL UPGRADE

The contractor shall upgrade the SDIL RS simulator to contain the same hardware and software configuration as planned to be utilized in the RSC-E Ground Debugging and Development Complex (GDC), including the Multipurpose Logistics Module (MLM) rig (as documented in SDIL ICD SSP 50142, Part 1 and Part 2 (September ‘98’ release)) by September 2013. An Acceptance Data Package on the simulator upgrade shall be delivered to NASA.

6.69.2 SDIL SUSTAINING DOCUMENTATION

The contractor shall provide documentation required to sustain the upgraded Service Module (SM) and MLM components by no later than September 30, 2015. The documentation includes training manuals, user’s guides, and maintenance and operations procedures required to perform system operations, troubleshooting, and maintenance of the upgraded SM and MLM systems.

6.70 DEVELOPMENT OF GFE PORTABLE VELOCITY AIR METERS (SSCN 13057 – S/A 1822)

The contractor shall perform the following tasks in support of the development of GFE portable air velocity meters:

- Provide input into the development of requirements.
- Review, provide Review Item Dispositions (RIDs), and participate in design reviews to identify issues, concerns, and risks.
- Perform testing to establish flow characteristics through flow devices to aid in the on-orbit use of hardware (report due January 2013).

- Define the vehicle configuration around air diffusers and inlets to aid in the design of the hardware, by May 2012.

6.71 INTEGRATION OF CABIN AIR SEPARATOR FOR EVA OXYGEN (CASEO) (SSCN 12209 – S/A 1825 & 1932)

6.71.1 RESERVED

6.71.2 The contractor shall deliver the following parts for the GFE CASEO project:

NAME	NUMBER	FIDELITY	QTY	DUE DATE
Oxygen Coupling, Male, 3-point flange	N/A	Mock-up	1	12/16/2011* 1/6/12 (A)
Connector, Receptacle, Flanged, Power	N/A	Mock-up	1	12/16/2011* 1/6/12 (A)
Connector, Receptacle, Flanged, Power	NATC00T15N4 PN	GSE	1	1/16/2012* 1/12/12 (A)
Pins for Connector J	NZGC-C-12PB	GSE	30	1/16/2012* 12/22/11 (A)
Sealing Plugs for Connector J	NZGSP-12	GSE	3	1/16/2012* 12/22/11 (A)
Connector, Plug, Power	NATC06G15N4 SN	GSE	4	1/16/2012* 3/15/12 (A)
Backshell, 90 deg for Connector K	NZGA-JG-15-N-12	GSE	4	1/16/2012* 12/22/11 (A)
Backshell, 90 deg for Connector K	NZGA-LG-15-N-12	GSE	4	1/16/2012* 12/22/11 (A)

Sockets for Connector K	NZGC-C-12SB	GSE	100	1/16/2012 * 12/22/11 (A)
Sealing Plugs for Connector K	NZGSP-12	GSE	12	1/16/2012 * 12/22/11 (A)
Protective Cover for Connector K	NATC-PPC-N-15-0	GSE	4	1/16/2012 * 12/22/11 (A)
Backshell for Connector L	NZGA-SG-15-N-12	GSE	1	1/16/2012 * 12/22/11 (A)
*NOTE: Parts Delivered (1/16/11 should have been 1/16/12) **Parts on Order will be delivered into GOLD (Reference Debit/Credit Proposal).				
Pins for Connector L	NZGC-C-12PB	GSE	100	1/16/2012 * 12/22/11 (A)
Sealing Plugs for Connector L	NZGSP-12	GSE	12	1/16/2012 * 12/22/11 (A)
Protective Cover for Connector L	NATC-RPC-N-15-0	GSE	4	1/16/2012 * 12/22/11(A)
Connector, Plug, Power	NATC06G15N4 SN	GSE	3	1/16/2011 * 12/22/11 (A)
Backshell for Connector M	NZGA-SG-15-N-12	GSE	3	1/16/2011 * 1/13/12 (A)
Sockets for Connector M	NZGC-C-12SB	GSE	80	1/16/2011 * 1/20/12 (A)

Sealing Plugs for Connector M	NZGSP-12	GSE	9	1/16/2011 * 12/22/11 (A)
Protective Cover for Connector M	NATC-PPC-N-15-0	GSE	3	1/16/2011 * 12/22/11 (A)
Oxygen Coupling Assy, Female, 3000 PSIA	683-15179-34	GSE	3	3/8/2012* * 06/15/12 (A)
Pressure Plug	683-15179-61	GSE	3	3/8/2012* 12/22/11 (A)
Connector, Receptacle, Flanged, Power	NATC00T15N4 PN	Spare (with build documentation)	1	1/16/2011 * 12/22/11 (A)
Pins for Connector J	NZGC-C-12PB	Spare (with build documentation)	20	1/16/2011 * 12/22/11 (A)
Sealing Plugs for Connector J	NZGSP-12	Spare (with build documentation)	3	1/16/2011 * 12/22/11 (A)
Connector, Plug, Power	NATC06G15N4 SN	Spare (with build documentation)	1	1/16/2011 * 12/22/11 (A)
Backshell, 90 deg for Connector K	NZGA-JG-15-N-12	Spare (with build documentation)	1	1/16/2012 * 12/22/11 (A)
Backshell, 90 deg for Connector K	NZGA-LG-15-N-12	Spare (with build documentation)	1	1/16/2012 * 12/22/11 (A)
Sockets for Connector K	NZGC-C-12SB	Spare (with build documentation)	20	1/16/2012 * 12/22/11 (A)

Sealing Plugs for Connector K	NZGSP-12	Spare (with build documentation)	3	1/16/2012 * 12/22/11 (A)
Protective Cover for Connector K	NATC-PPC-N-15-0	Spare (with build documentation)	1	1/16/2012 * 12/22/11 (A)
Backshell for Connector L	NZGA-SG-15-N-12	Spare (with build documentation)	1	1/16/2012 * 12/22/11 (A)
Pins for Connector L	NZGC-C-12PB	Spare (with build documentation)	20	1/16/2012 * 12/22/11 (A)
Sealing Plugs for Connector L	NZGSP-12	Spare (with build documentation)	3	1/16/2012 * 12/22/11 (A)
Protective Cover for Connector L	NATC-RPC-N-15-0	Spare (with build documentation)	1	1/16/2012 * 12/22/11 (A)
Connector, Plug, Power	NATC06G15N4 SN	Spare (with build documentation)	1	1/16/2012 * 1/13/12
Backshell for Connector M	NZGA-SG-15-N-12	Spare (with build documentation)	1	1/16/2012 * 1/20/12
Sockets for Connector M	NZGC-C-12SB	Spare (with build documentation)	20	1/16/2012 * 12/22/11 (A)
*NOTE: Parts Delivered (1/16/11 should have been 1/16/12) **Parts on Order will be delivered into GOLD (Reference Debit/Credit Proposal).				
Sealing Plugs for Connector M	NZGSP-12	Spare (with build documentation)	3	1/16/2012 * 12/22/11 (A)
Protective Cover for Connector M	NATC-PPC-N-15-0	Spare (with build documentation)	1	1/16/2012 * 12/22/11 (A)

Oxygen Coupling Assy, Female, 3000 PSIA	683-15179-34	Spare	1	3/8/2012* 12/22/11 (A)
Pressure Plug	683-15179-61	Spare	1	3/8/2012* * 06/15/12 (A)
Connector, Receptacle, Flanged, Power	NATC00T15N4 PN	Qualification (with build documentation)	1	1/16/2011 * 1/13/12 (A)
Pins for Connector J	NZGC-C-12PB	Qualification (with build documentation)	30	1/16/2011 * 12/22/11 (A)
Sealing Plugs for Connector J	NZGSP-12	Qualification (with build documentation)	3	1/16/2011 * 12/22/11 (A)
Connector, Receptacle, Flanged, Power	NATC00T15N4 PN	Flight	2	5/18/2012 * 2/28/12
Pins for Connector J	NZGC-C-12PB	Flight	60	5/18/2012 * 12/22/11 (A)
Sealing Plugs for Connector J	NZGSP-12	Flight	6	5/18/2012 * 12/22/11 (A)
Protective Cover w/Tether for Connector J	NATC-RPC-N- 15-6	Flight	2	5/18/2012 * 12/22/11 (A)
Oxygen Coupling Assy, Male, 3000 PSIA	683-15179-33	Flight	1	5/18/2012 ** 06/15/12 (A)
Protective Cover for Connector L	NATC-RPC-N- 15-0	Spare (with build documentation)	1	1/16/2012 12/22/11 (A)
Connector, Plug, Power	NATC06G15N4 SN	Spare (with build documentation)	1	1/16/2012 1/13/12 (A)

Backshell for Connector M	NZGA-SG-15-N-12	Spare (with build documentation)	1	1/16/2012 1/20/12 (A)
Sockets for Connector M	NZGC-C-12SB	Spare (with build documentation)	20	1/16/2012 12/22/11 (A)
*NOTE: Parts Delivered (1/16/11 should have been 1/16/12) **Parts on Order will be delivered into GOLD (Reference Debit/Credit Proposal).				

6.71.3 The contractor shall provide training hardware of each component contained in the Boeing Airlock Mod Kit (DIL number 32242) by October 2012.

6.71.4 The contractor shall perform a sparing assessment to determine required spares to support operations through both 2020 and 2028 for all Boeing-provided hardware contained in the Airlock Modification Kit for CASEO by August 2011.

6.72 ATCS AMMONIA LEAK DETECTION SENSOR

6.72.1 Systems Requirement Review

The contractor shall provide the following data for the Ammonia Leak Locator SRR by November, 2012:

- Requirements for the hardware, including ISS interface definition, contamination/materials compatibility requirements, and SPDM/OTCM and IVA power/data checkout power allocations.
- Scan procedures (grid spacing, orientation angles, general and homing routines, etc.) to define the required operations to find an ammonia leak.
- Definition and recommendation of an experimental procedure to verify the operation of the leak locator package using ISS vent locations.

6.72.2 Ammonia Leak Locator Development (S/A 1998; SSCN 13504)

The contractor shall provide the following input to the GFE Ammonia Leak Locator (ALL) development:

- Update the draft On-Orbit Test Plan, including the following sections by October 2013.
 - Proximity detection curves of predicted vent pressure
 - On-orbit vent characterization, including pressure and mass flow rate, for selected vent or vents
 - Test grid prediction tables
 - Demonstration scan constraints

- Interpret and correlate ground characterization test data as it compares/contrasts to on-orbit leak scenarios and integrate the interpretation into the On-Orbit Test Plan by October 2013.
- Develop detailed scan procedures (grid spacing, orientation angles, general and homing routines, etc.) to define the required operations to find an ammonia leak by October 2013.
- Participate in Delta System Requirements Review (June 2013) to discuss initial results of the ground characterization test and updates to the On-Orbit Test Plan.

6.72.3 AMMONIA LEAK LOCATOR ACCEPTANCE, INTEGRATION AND ON-ORBIT ACTIVATION (S/A 2069 – SSCN 13504R1)

The contractor shall perform the following tasks in support of the acceptance, integration and on-orbit activation and testing of the Ammonia Leak Locator (ALL) payload (launch in February 2015):

- Provide contamination/materials compatibility requirements verification (by January 2014).
- Perform Remote Terminal Validation testing on the ALL payload to demonstrate compliance with MIL-STD-1553B, Notice 2, by February 2014.
- Perform ISS controllability assessment with mass properties timelines (GFD) for ALL robotics activities associated with the on-orbit Tech Demo by June 2014.
- Perform ASTM E1559 outgassing rate testing of 5 ALL materials in support of outgassing induced contamination assessment by February 2014.
- Complete development of the On-Orbit Test Plan, including final updates of the following sections (by January 2014).
 - Proximity detection curves of predicted vent pressure
 - On-orbit vent characterization, including pressure and mass flow rate, for selected vent or vents
 - Test grid prediction tables
 - Demonstration scan constraints
- Finalize detailed scan procedures (grid spacing, orientation angles, general and homing routines, etc.) to define the required operations to find an ammonia leak. Procedures and techniques to be recorded in On-Orbit Test Plan (by January 2014).
- Provide status of all tasks at the ALL (PDR/CDR) combined Design Review TIM.

- Present contamination and material controls to the PSRP for approval.

6.73 SUPPORT TO GFE FINE WATER MIST PORTABLE FIRE EXTINGUISHER (PFE) (S/A 1856 – SSCN 13190; S/A 2019 – SSCN 13639)

The contractor shall perform the following tasks for the GFE FWM PFE development:

6.73.1 DEVELOPMENT THROUGH CRITICAL DESIGN REVIEW (CDR) (S/A 1856 – SSCN 13190; S/A 2019 – SSCN 13639)

The contractor shall perform the following tasks for the GFE Fine Water Mist (FWM) Portable Fire Extinguisher (PFE) development through CDR:

- Review design data and participate in design and safety reviews through CDR, to identify issues and concerns with physical interface and stowage of the FWM PFE into the ISS system (CDR planned for February/March 2013).
- Execute 10 tests (identical to tests being run on the FWM PFE) of the Developmental (DEV) CO2 PFE unit to determine how the CO2 PFE performs compared to the FWM PFE (by December 2012). Tests shall also evaluate and reactivate the CO2 PFE fill and discharge carts to determine the current operating condition of the carts.

6.73.2 COMPLETION OF DEVELOPMENT AND CERTIFICATION (S/A 2019 – SSCN 13639)

The Contractor shall perform the following tasks in support of the GFE Water Mist (WM) Portable Fire Extinguisher (PFE) final development and certification:

- Perform a risk assessment of the feasibility of using a WM PFE for a laptop lithium ion battery fire in the Lab open cabin, including integrated hazard identification by 6/20/14.
- Update SSP 30262:10, “Space Station Program Portable Fire Extinguisher Standard Interface Control Document,” to include the WM PFE. Deliver updated ICD no later than 6/20/14.
- Perform an integrated hazard assessment on stowage of the WM PFE on-orbit by 6/20/14.
- Review design data and participate in Phase 3 Safety Review and System Acceptance Review (SAR) to identify issues and concerns with physical interface and stowage of the WM PFE into the ISS system by 6/20/14.

6.74 ROBOTIC OPERATION OF ORUS ON FSE (S/A 1857 – SSCN 13232)

6.74.1 The contractor shall conduct analysis of the following FSE to determine modifications required to prepare the FSE for Special Purpose Dexterous Manipulator (SPDM) operations (by December 2012):

1. Main Bus Switching Unit (MBSU) FSE.
2. Direct Current Switching Unit (DCSU) FSE.
3. Battery Charge Discharge Unit (BCDU) FSE (both FRAM based and S6 truss based).
4. Pump and Flow Control Subassembly (PFCS) FSE (P6 truss based).

6.75 COMMON COMMUNICATION FOR VISITING VEHICLES (C2V2) INTEGRATION (SSCN 12639 – S/A 1860) (SSCN 13928 – S/A 2071)

The contractor shall perform all activities required to integrate the Common Communication Visiting Vehicle (C2V2) Government Furnished Equipment (GFE) (including the laser retro reflectors on the antenna assemblies) with the ISS systems to support on-orbit operation by March 2015, including the following:

6.75.1 INTERFACE CONTROL DOCUMENTS

Prepare and release the following Interface Control Documents (ICDs) and Preliminary Interface Revision Notice (PIRNs):

- ISS to C2V2 ICD,
- SSP 41175-39, “Software Interface Control Document Station Management and Control to International Space Station (ISS), Commercial Orbital Transportation Services (COTS) Free Flyer Common Interface”, PIRNs
- ISS C2V2 Ethernet ICD.

6.75.2 SDIL SIMULATION CAPABILITIES

Update the Software Development Integration Laboratory (SDIL) with the hardware and software capabilities necessary to support test and verification activities for the C2V2 system.

6.75.3 TEST SUPPORT

Provide SDIL Hardware Software Integration (HSI), Remote Terminal (RT), Ethernet, and ISS Power Laboratory (IPL) testing to support C2V2 system development and verification.

6.75.4 OPERATIONS SUPPORT

Provide real-time performance evaluation and response to off-nominal conditions during on-orbit installation, activation and check-out of the C2V2 system.

6.75.5 SUSTAINING ENGINEERING TRANSITION

Transition sustaining engineering (SE) from the C2V2 Transceiver Processor Assembly (CTPA) contractor within 30 days after delivery of Mod Kit (Ref. DIL ID 32379).

6.75.6 FITCHECK ACTIVITIES (S/A 2003; SSCN 13789)

The contractor shall perform the following fit checks prior to launch to mitigate the risk of issues during on-orbit installation (by 4/15/14):

- Mechanical fit check between the C2V2 communications unit (GFE) and the MSS-2 rack shelf assembly to confirm proper mating of the mechanical interfaces between the Communication Unit boxes and the MSS-2 rack C2V2 mod kit cold plate.
- Interface to interface fit check of the EVA Radio Frequency (RF) cables between the C2V2 antenna assemblies (GFE) and the C2V2 external RF cable assemblies to confirm component fit/form and mitigate risk of problems during EVA installation on-orbit.

6.75.7 COMMUNICATION UNIT 1553 INTERFACE TESTING (S/A 2003; SSCN 13789)

The contractor shall provide the following in support of the C2V2 Communication Unit (GFE) 1553 interface testing:

- One (1) GFE provided MADE (MDM Application Development Environment) loaded with CCS simulation software to the C2V2 Communication Unit provider via 1149 by 8/15/13.
- A MADE User's Guide by 8/15/13 and MADE product training to the C2V2 Communication Unit provider by 9/15/13.
- MADE help desk support until the last C2V2 Comm Unit Flight Equivalent Unit (FEU) is delivered (contract delivery date of 8/25/14).

6.75.9 ETHERNET CAPABILITY (S/A 2049 – SSCN 13854)

- The contractor shall validate the capability to perform data dumps/data loads solely through Ethernet without impacting the 1553 path (by October 2014).
- The contractor shall develop and baseline an International Space Station (ISS) to Visiting Vehicle (VV) Ethernet Interface Control Document (ICD) by April 2014.

6.75.10 GSE FOR VV RADIO DEVELOPMENT (S/A 2068 – SSCN 13975)

The contractor shall deliver (via 1149) three (3) MDM Application Development Environments (MADEs) to simulate the ISS Command and Control hardware/software interface, for use by Visiting Vehicle providers in the development and testing of radios and communications systems required to be compatible with the ISS and C2V2 system:

- One (1) MADE to be delivered by June 17, 2014 .
- One (1) MADE to be delivered by August 15, 2014.
- One (1) MADE to be delivered by September 30, 2014 .

6.76 SOFTWARE INTEGRATION OF RADIATION ASSESSMENT DETECTOR (RAD) (SSCN 13235– S/A 1866)

The Contractor shall perform software integration of the Radiation Assessment Detector (RAD) with the ISS Core Systems for on-orbit operation by September 2015.

6.77 ANALYSIS OF ISS ASSETS FOR ALTERNATE MISSIONS (S/A 1895)

The contractor shall perform the following tasks to determine the feasibility of using specific ISS assets and design for alternate ISS missions:

1. Evaluate the Node module with a single rack bay configuration and structure to determine the feasibility for launch on the Space Launch Systems (SLS) atop a Russian provided ISS module. Complete this evaluation by February 2013.
2. Evaluate the Node with NASA Docking System (NDS) to determine what standoffs are required to dock a Cygnus type vehicle to the Starboard / Port interfaces. Complete this evaluation by March 2013.
3. Perform an assessment of the Multi-Purpose logistics module (MPLM) to determine its compatibility with SLS launch loads as well as the feasibility of installing another hatch on the Aft End Cone. Complete this assessment by March 2013.
4. Evaluate module outfitting design concepts which result in the ability to install / replace equipment at the sub rack level. Complete this evaluation by February 2013. Include conceptual designs for power and thermal utilities, Environmental Control and Life Support Systems (ECLSS), command and control, communications systems, and options for electrical power and attitude control.

5. Develop radiation design concepts for improving radiation protection for crew members given the existing structural and system designs. (December 2012).

6.78 MAIN BUS SWITCHING UNIT MAINTENANCE (S/A 1900)

The contractor shall develop and deliver [by 07/17/13] the capability to perform intermediate level (I-Level) maintenance repair on the Main Bus Switching Unit (MBSU) for failures that require Circuit Card Assembly (CCA) replacement. The contractor shall provide:

- Interconnect Test Cable to the MBSU.
- Development & certification of Flight Software Command Test Scripts to interface with existing Flight Test Software for the MBSU.
- Post maintenance test procedures for crew execution.
- Logistics source data (text and illustration) for crew procedures.

6.79 MAJOR CONSTITUENT ANALYZER (MCA)

6.79.1 Development (S/A 1896)

The contractor shall define requirements and develop a specification for a replacement Major Constituent Analyzer (MCA) for use on the ISS and the NASA Orion Multi-purpose Crew Vehicle and conduct a System Requirements Review (SSR) (by March 2013). The replacement MCA shall result in reduced upmass and crew time required to monitor the MCA.

6.79.2 Non-Flight Unit Conversion (S/A 1963, CD 13528)

6.79.2.1 The contractor shall determine issues and concerns associated with installing and operating non-flight Circuit Card Assembly (CCA) P/N 184A641-1 in the flight MCA ORU 01 and make a recommendation regarding the use of this hardware in flight hardware by October 2013.

6.79.2.2 The contractor shall refresh CCA P/N 184A641 UVPROM, verify functionality and workmanship, install the CCA in MCA ORU 01, and perform protoflight Acceptance Testing of the ORU by October 2013. The delivered MCA ORU 01 shall contain firmware version 4.25.

6.79.2.3 The contractor shall determine issues and concerns associated with operating non-flight IBM EDP CCA part number 155A420-1, S/N 00010 in a flight environment and make a recommendation regarding the suitability of this CCA for use in a flight environment by November 2013.

6.79.2.4 The contractor shall refresh CCA P/N 155A420-1 and verify functionality and workmanship by November 2013.

6.80 REPAIR TOOLS FOR IN-FLIGHT MAINTENANCE CAPABILITY FOR CARBON DIOXIDE REMOVAL ASSEMBLY (CDRA) AIR SELECTOR VALVE (ASV) (SSCN 13326 S/A 1915)

The contractor shall deliver (via DD 1149) four tools: (1) PSMC63900868, Bearing Compression Tool, (2) PMSC63900869, Cartridge Removal Tool, (3) PMSC63900870, Torque Adapter, and (4) ST7422122, Spline Socket, by November 2012.

6.81 RUSSIAN INTEGRATION INTERFACE (SSCN 13473 – S/A 1923)

The contractor shall provide an interface between NASA and the Russian International Partner (IP) in Russia to better understand the Russian ISS systems, elements, and vehicles (Soyuz, Progress) and communicate issues, concerns, risks and status to NASA from January 1, 2013 – December 31, 2014. Functions include the following:

- Acts on behalf of IP Russia in the Mission Action Report (“Chit”) system, coordinating chit input and responses in a timely manner to support Station operations.
- Functions as the ISS Management Center (IMC) agent in MCC-M, and negotiates with the Russian side on their behalf regarding changes in the Increment Requirements Document for each ISS Increment.
- Communicates and collaborates with the operations team in the Houston Support Group (HSG) on issues, concerns, risks, status, etc.
- Functions as an agent in Moscow for the ISS Vehicle Office and other JSC technical organizations as required to manage and facilitate the exchange of technical information for the ISS Program between U.S. and Russian specialists.
- Participates in Technical Interchange Meetings (TIMs), General Design Reviews, and teleconferences to assure required NASA representation, and ensures closure of action items.
- Manages efforts to actively track and research the status of the ISS Russian Segment and Russian space vehicles (Soyuz and Progress), including tracking modifications, anomalies, repairs and re-work, and makes reports as required to the ISS program.

- Responsible for acceptance activities on flight hardware and software being developed in Russia by Russian entities under contract to NASA.
- Functions as an agent for the ISS Mission Integration and Operations Office in Moscow, and is responsible for all NASA flight hardware and software to be delivered to the ISS aboard Russian vehicles while it is in Moscow and Baikonur, Kazakhstan.
- Oversees the integration of U.S. cargo on Soyuz and Progress vehicles in Baikonur, Kazakhstan and acts as the USOS representative at the Russian State Commission for Progress launches.
- Responsible for shipping nominally stowed flight hardware after each Soyuz landing and other hardware as needed throughout the year.
- Supports dynamic events from TsUP (Mission Control Center—Moscow).
- Maintains MTLO internal documents and websites updated on a regular basis.

6.82 FLIGHT SUPPORT EQUIPMENT AND CARRIERS

6.82.1 SpaceX Deployable Carrier

The contractor shall define requirements and develop a specification for a Deployable Carrier for use on the SpaceX Dragon and conduct a System Requirements Review (SRR) (by November 2013).

6.82.2 FRAM FSE (S/A 2061 – SSCN 12869)

- The contractor shall modify two (2) existing PFRAM Installation Kits (P/N 1J00520-011) into one (1) P/N 1J00520-005 PFRAM Installation Kit and one (1) P/N 1J00520-001 PFRAM Installation Kit and deliver via DD11149 by 5/14/13.

6.83 EXTERNAL HIGH DEFINITION VIDEO (S/A 1984/SSCN 13149)

- 6.83.1** The contractor shall integrate the External High Definition Video (EHDV) Camera Assembly with the ETVCG and the ISS system for on-orbit operation by August 30, 2014.
- 6.83.2** The contractor shall provide (via 1149) one training external power cable (for DIL 51739) for the EHDV camera to ETVCG by December 2013.
- 6.83.3** The contractor shall provide planning and implementation activities, including documentation capture, to transition authority and control of Sustaining Engineering (SE) from NASA to Boeing for the Camera Assembly and Camera Assembly attachment mechanism within 30 days after the on-orbit installation and activation (transition complete October 1, 2014).

6.84 RUSSIAN SCIENCE POWER MODULE (SPM) (S/A 1988; SSCN 13787)

6.84.1 SPM LOCATION (S/A 1988; SSCN 13787)

The contractor shall provide all data required for NASA to determine the preferred Science Power Module (SPM) docking location, including:

- Known areas of concern and issues for docking the SPM at Russian Node starboard, Russian Node port side, Russian Node Aft, and SM Zenith (without MRM2) by 6/14/13.
- Additional issues and areas of concern as identified by subsystem team analysis and a low fidelity cost estimate of work required to clear or mitigate all identified issues and concerns (by 12/2013).

6.85 CCAA HX ORU FSE ENCLOSURE (S/A 1994; SSCN 13773)

The contractor shall perform the following activities to support integration of a FSE enclosure for launch and return of a CCAA HX ORU:

- Safety, foam and structural assessments to confirm the Common Cabin Air Assembly (CCAA) Heat Exchanger (HX) ORU FSE, modified by DIL 51845, will allow the survivable launch and return of the ORU (by September 2013).
- Modification of the FSE (Birdcage) to support the CCAA HX ORU for flight, by 10/7/13.

6.86 DISPOSITION OF ELC AND EXPCA RESIDUAL ASSETS (S/A 2022; SSCN 13704)

The contractor shall inspect and disposition 7 pallets of GFE Goddard Space Flight Center residual material (piece parts) and assets (tooling) for the ELC and ExPCA located at Huntsville, Alabama (by March 2014).

6.87 INTEGRATION OF COMMERCIAL CREW INTEGRATED CAPABILITY (CCiCap) VEHICLES (S/A 2027; SSCN 13554)

The contractor shall perform the following activities in support of integration of CCiCap Visiting Vehicles (VVs) with the ISS:

- 6.87.1** Review technical data for CCiCap VVs (SpaceX, Boeing, and Sierra Nevada) to determine ISS interface requirement compliance, identify areas of incompatibility and risk, and obtain necessary data for authorized technical integration activities. The contractor shall participate in reviews for this data and provide input to the resolution of issues and actions.

6.87.2 Perform ISS plume loads analyses for three CPC VVs (Boeing, SpaceX, and Sierra Nevada) docked at two Node 2 Ports (Zenith and Forward) locations to determine ISS interface requirement compliance and identify areas of incompatibility and risk by May 2014. The contractor shall participate in reviews for this data and provide input to the resolution of issues and actions.

6.87.3 Provide inputs for hardware interface control requirement definition for three CPC VVs (SpaceX, Boeing, and Sierra-Nevada). The contractor shall identify and document any CPC VV-unique software interface requirements required to integrate the CPC VVs to ISS. This effort includes defining Instrumentation Program and Command List (IP&CL) requirements for the CPC VVs by May 2014. The requirements shall be to the CDR level of maturity.

6.87.4 The contractor shall review the following CPC VV technical data, provide input to resolve issues and concerns, and support Technical Interchange Meetings (TIMs) to resolve comments (by May 2014):

- Human certification plans to ensure interface requirement compliance,
- Phase 1 Hazard reports to determine ISS interface requirement compliance and identify areas of incompatibility and risk,
- Verification/validation plans to determine ISS interface requirement compliance and identify areas of incompatibility,
- Alternate Standards to determine ISS interface requirement compliance and compatibility with existing ISS standards.

6.88 HIERARCHICAL MODELS FOR PAYLOADS (S/A 2030; SSCN 13759)

The contractor shall develop hierarchical models for non-Boeing sustained Payloads Facilities (PF) hardware, listed in SOW Appendix L, to identify hardware functions to be assessed for Functional Availability (FA), including up-mass and crew time estimations to support the Payload Facilities through 2028 (to support an Aug 2014 delivery of FA analysis).

6.89 FUNCTIONAL AVAILABILITY ANALYSIS FOR FGB (S/A 2030; SSCN 13759)

The contractor shall conduct Probability of Sufficiency (POS) analyses for the Functional Cargo Block (FGB) hardware, listed in SOW Appendix M, to include onetime only sparing recommendations for each identified item (by July 2014).

6.90 Direct Current to Direct Current Converter Unit (DDCU) Firmware Update (S/A 2035, CD 13822)

The contractor shall provide a DDCU firmware update to reduce the risk of a transient overload in the USOS EPS system which can result in losing power to critical avionics equipment (by April 2014).

6.91 ETHERNET IMPLEMENTATION ON EXTERNAL MDMS (S/A 2047 – SSCN 13305)

- 6.91.1 The contractor shall provide an Ethernet interface for External (EXT) Multiplexers/Demultiplexers (MDMs) to use as an alternate path for additional system and trending data requests from the Structural Dynamics Measurement System (SDMS), Active Thermal Control Systems (ATCS) and Structures and Mechanisms (Struc and Mech) subsystems. The system shall be activated on-orbit by April 2015.
- 6.91.2 The contractor shall deliver the following hardware via DD1149 in support of the Ethernet implementation:
- Quantity two (2) Ethernet cables for connectivity of the SDIL lab EFEU and prototype MDMS to JSL (by December 22, 2013).
 - Quantity three (3) modified prototype MDM covers with features necessary to implement Ethernet connectivity (by December 22, 2013).
 - Quantity one (1) spare Enhanced MDM cover for crew training at NBL by 01/30/14.

6.92 DELAY TOLERANT NETWORKING (DTN) IMPLEMENTATION ON JSL (S/A 2051 – SSCN 13799)

The contractor shall perform the following activities to support the implementation of Delay Tolerant Networking (DTN) service capability for ISS laptops and ground equipment to improve operational efficiency for ISS payloads (by April 2015):

- Integrate, test, and document DTN nodes which shall operate in virtual machines within two ISS servers (Casablanca 1 and Casablanca 2).
- Test, document, and incorporate DTN capability on ExPRESS Laptop Computer (ELC), Remote Advanced Payload Test Rig (RAPTR), Rack Software Test Bed (RSTB) and Payload Software Integration and Verification (PSIV) ground test systems software loads.
- Develop documentation to assist users on integrating to DTN on ISS.
- Provide necessary ground equipment for SDIL testing and remote payload testing.

6.93 DEVELOPMENT OF GFE PANEL FOR AIRLOCK 1F1 LOCATION (S/A 2073 – SSCN 13914)

The contractor shall update the Avionics Rack Product Structure to include a new GFE panel to replace Avionics Rack panel 683-52026-2 at the Airlock 1F1 location, allowing access without the use of tools to the hardware in the rack (April 2014).

6.94 EXTERNAL MDM (S/A 2075 – SSCN 13641)

The contractor shall install the Chootherm gasket into the External MDM (DIL 51827) at the conclusion of the Post Software Load Confidence Tests (PSLCT) for each of the 3 EPIC cards that are to be loaded and tested with the EXT R9 flight software (November 2014).

7.0 REQUIREMENTS FOR NEW HARDWARE DEVELOPMENT (S/A 1660)

The contractor shall develop new hardware, modified hardware and spares necessary to maintain or enhance operations of the International Space Station (via change request). For hardware being developed under this contract, the following requirements apply:

7.1 REQUIREMENTS AND PROCESSES (S/A 1660)

The contractor shall develop, design, manufacture and verify new or modified hardware that meet the requirements of the contract applicable documents list in contract attachment J-6, "Applicable Documents List". The contractor shall follow Program processes documented in the contract applicable documents list (J-6).

7.2 DATA (S/A 1660)

The contractor shall

- a. Prepare, maintain and submit engineering drawings in accordance with DR F-VE-09.
- b. Capture and deliver engineering and safety data needed for Vehicle integration and operations in the VMDB. Scope, content, and functionality shall be in accordance with DR VE32.
- c. Provide data on the certified performance of ORUs (DR F-PM-02).
- d. Determine and provide requirements applicable to pre-launch and post-landing processing of the new hardware.
- e. Provide safety and reliability data per DRs F-SA-04 (hazard reports) and F-SA-05 (FMEAs/CILs).
- f. Identify and document all mishaps associated with manufacturing, test, and operations of hardware/software developed (DR SM03).
- g. Identify and document material identification usage lists and material usage agreements (DRs VE09 and VE10).

7.3 ELECTRICAL POWER (EP) (S/A 1660)

For new electrical power consuming equipment designs, Common Mode Noise requirements are to be developed for incorporation into SSP-52051 User Power Quality Specification.

7.4 ACCEPTANCE DATA PACKAGES (S/A 1660)

7.4.1 The contractor shall assemble and provide acceptance data packages (ADPs) in accordance with DR PC08 for new hardware.

7.4.2 For modification kits, the contractor shall provide modification package acceptance data packages in accordance with DR PC18, time compliance technical instructions in accordance with DR PC19 and modification kit unique engineering drawings and associated list in accordance with DR F-VE-09.

7.5 SOFTWARE (S/A 1660)

The contractor shall develop, test, verify and deliver software modifications and requirements to include software configuration management for documents and software code. All post DD250 flight software modifications will be developed and delivered in accordance with SSP 41170,

CM Requirements, as data per DR SE02. Also, included is technical inputs and assessments for integration of simulations within the MBF.

8.0 PAYLOAD INTEGRATION (S/A 1547) (SSCN 12516 – S/A 1793)

The Contractor shall provide technical and programmatic functions to implement the ISS payload integration tasks into all phases of the ISS Program.

8.1 CONFIGURATION MANAGEMENT (S/A 1547)

The Contractor shall provide the configuration status accounting and verification functions consistent with the requirements in SSP 41170 except for the flight by flight as-built reconciliation of on-orbit payload hardware. This is applicable for Boeing-built payload hardware/software, payloads within Boeing-built payload hardware, all US or IP furnished facilities/payloads located in the U.S. Lab, all U.S. furnished facilities/payloads located in IP labs, unpressurized U.S. payloads, and IP payloads mounted on U.S. attached locations. Payload hardware will be tracked at the following levels:

- Facility Class – ORU level that comprises the primary interface to the Station subsystems
- Aisle Deployed – top assembly/stowage kit level
- Subrack – top assembly/stowage kit level
- Subpallet – top assembly level

8.2 UTILIZATION LAUNCH PACKAGE READINESS (S/A 1547)

The Contractor shall ensure the readiness of the Utilization launch package to support all major integration milestones, including cargo integration reviews, bench reviews, transportation carrier integration, MPLM/orbiter integration, launch, and on-orbit operation.:

8.3 SUPPORT TO DESIGN REVIEWS (S/A 1547) (SSCN 12516 – S/A 1793)

The contractor shall provide payload integration technical support to the design reviews for payloads and new transportation vehicles.

8.4 BOARD AND PANEL SUPPORT (S/A 1547) (S/A 1962)

The contractor shall Co-Chair the following NASA payload boards and panels:

- Payload Mission Integration Team (PMIT)
- Payload Engineering Control Panel (PECP)
- Payload Software Control Panel (PSCP).

8.5 MISSION INTEGRATION (S/A 1547)

8.5.1 STAGE AND INCREMENT INTEGRATION

Develop, document and implement the processes required to integrate payloads into the ISS Stages and Increments for facility (pressurized/truss attached), aisle deployed, subrack and subpallet payload classes. Processes shall address documentation of payload requirements, resource allocations, schedule, roles and responsibilities, and issue resolution.

8.5.2 PAYLOAD DEVELOPER (PD) SUPPORT (S/A 1547)

The contractor shall provide Payload Developers a primary point of contact and advocate for coordination of integration and operations activities and issue resolution.

8.5.3 RESERVED

8.5.4 PAYLOAD SAFETY (S/A 1547)

8.5.4.1 SAFETY DATA PACKAGE REVIEW (S/A 1547)

The contractor shall review and analyze the EXPRESS subrack Payload (facility/ rack/ pallet/ subrack/ subpallet) Safety Data Packages (PSDPs) to ensure adequate payload hazard identification and controls. The contractor shall update and submit the integrated EXPRESS rack PSDPs for changes required based upon the EXPRESS subrack payload PSDOs.

8.5.4.2 PAYLOAD SAFETY REVIEW PANEL (PSRP).PARTICIPATION (S/A 1547)

The contractor shall participate in the Payload Safety Review Panel (PSRP) and respond to actions from the PSRP.

8.5.5 COFR PROCESS MANAGEMENT (S/A 1547) (S/A 1962)

The contractor shall provide input to the stage and flight specific CoFR process as defined in SSP 52054, "ISS Program Payloads Certification of Flight Readiness Implementation Plan, Generic," including:

- a) Define and integrate the technical set of payload requirements to which the payloads community performs their certification.
- b) Collect, disposition and track payload requirements.

8.6 PAYLOAD ENGINEERING INTEGRATION (S/A 1547)

8.6.1 PAYLOAD DEVELOPER VERIFICATION (S/A 1547) (SSCN 12516 – S/A 1793)

The contractor shall coordinate with payload developers on the planning and execution of PD verification activities; provide status of these activities and present integrated results at ISS program reviews. The contractor shall provide technical support to the US payload test or analysis activities at KSC or at PD locations for complex payloads to resolve and close interface or verification issues.

8.6.2 HUMAN FACTOR VERIFICATION (S/A 1547) (SSCN 12615 – S/A 1793)

The contractor shall perform human factors verification for payloads (racks, subracks, UOPs).

8.6.3 PAYLOAD DEVELOPER EXCEPTIONS AND ISSUES DISPOSITION (S/A 1547)

The contractor shall evaluate, coordinate, and provide approval/disapproval recommendations for NASA closure of proposed payload interface exceptions and payload developer issues.

8.6.4 OPERATIONS AND MAINTENANCE REQUIREMENTS AND SPECIFICATIONS DOCUMENT (OMRSD) REVIEW (S/A 1547)

The contractor shall review the OMRSD for inclusion of the necessary payload requirements and identify discrepancies.

8.6.5 EXPRESS RACK VERIFICATION (S/A 1547)

The contractor shall develop and maintain models to support verification coupled loads analyses for EXPRESS Racks on Shuttle flights.

8.6.6 VACUUM SYSTEM COMPATIBILITY (S/A 1547)

The contractor shall perform analysis that payload vacuum exhaust gases are compatible with the vacuum systems of the US lab and JEM.

8.6.7 EXTERNAL WIRELESS COMMUNICATIONS (S/A 1771 – SSCN 12443)

The contractor shall provide early integration and final pre-flight wireless high rate data communication testing for payloads.

8.6 PAYLOAD SOFTWARE INTEGRATION & FLIGHT PRODUCTION (S/A 1547)

8.7.1 SOFTWARE IDENTIFICATION (S/A 1547)

The contractor shall assign and manage the payload allocation of application process identifiers (APIDs), subset IDs, and program unique identifiers (PUIs) for the program.

8.7.2 ANCILLARY DATA SETS (S/A 1547)

The contractor shall develop and maintain payload unique ancillary data sets.

8.7.3 SOFTWARE FACILITY SUSTAINING (S/A 1547)

Provide hardware and software sustaining engineering for the Payload Software Integration and Verification Facility (PSIVF), Payload Development Laboratory (PDL), and the Mission Integration Software Tool (MIST) (MIST will not be supported post P/2010).

8.7.4 PAYLOAD SOFTWARE TOOL SUSTAINING (S/A 1731 – SSCN 12649)

The contractor shall sustain the following software tools:

- Payloads Verification Tool

8.7.5 PAYLOAD LAPTOPS ANTI-VIRUS SCANNING (SSCN 12836 – S/A 1786)

The contractor shall test the virus definition files against the EXPRESS and WOLF laptop configurations on the ground prior to on-orbit update.

8.7.6 STELLA (SSCN 13175 – S/A 1848)

The contractor shall provide the Software Toolkit for Ethernet Lab-Like Architecture (STELLA) (reference FAR 52.227-14 RIGHTS IN DATA – GENERAL (JUNE 1987)

as modified by NASA FAR Supplement 1852.227-14 (OCT 1995), Alternate III), to U.S. and International Partner Payload Developers, including provision of unique payload configuration files, startup script development, verification testing, user training, real-time operations support, and Help Desk support.

8.8 HARDWARE AND SOFTWARE SUSTAINING ENGINEERING (S/A 1547) (S/A 1696 – SSCN 12539) (S/A 1944 – SSCN 12837) (S/A 1947 – SSCN 12916)

The contractor shall provide sustaining engineering for

- Delivered EXPRESS and EXPRESS derivative ground and flight software and hardware.
- Payload ground support equipment.
- Active and Passive Rack Isolation (ARIS and PaRIS) hardware as defined in Appendix A.
- Automation software tool to track the initiation, review and approval process for the NASA Payloads office CEF (change evaluation form CEF) tracking and integration software (CETI)).
- ISS increment research plan spreadsheet.
- Payload Workflow Tool (including provide training and technical support to the Payload Workflow Tool user community on the use of the tool).
- Remote Advanced Payload Test Rig (PARTR)

The contractor shall provide sustaining engineering for delivered EXPRESS and EXPRESS derivative ground and flight software and hardware, Payload ground support equipment, and Active and Passive Rack Isolation (ARIS and PaRIS) hardware as defined in Appendix A.

8.9 STRATEGIC PAYLOAD INTEGRATION (S/A 1594)

The contractor shall provide strategic payload integration management for payloads in the integration process prior to the Increment -16 months timeframe, and accelerated integration of payloads under the purview of the ISS National Lab Office.

8.10 ISS NATIONAL LAB

8.10.1 ISS NATIONAL LAB PAYLOAD INTEGRATION (S/A 1601/1706/1744 (SSCN 12840))

The contractor shall identify potential research opportunities for the ISS National Lab Program, contact potential investigators, develop plans for utilization of the payloads on the ISS, and establish and provide corresponding metrics through September 30, 2011.

8.10.2 ISS NATIONAL LAB MANAGEMENT MODEL (S/A 1669)

The contractor shall develop a management organization model for the ISS National Lab by September 24, 2010 which shall include identification of:

- Possible users of the ISS National Lab
- Capabilities required in an organization managing the National Lab mission, including
 - Resources necessary to provide the required capabilities.
 - A strategy for providing the necessary resources.
 - Identification of the capabilities which must be in place on startup and which can be added over time.
- Options for organizational structures including key roles and responsibilities of the members.

8.11 EXTERNAL FRAM BASED PAYLOAD REQUIREMENTS (S/A 1624)

The contractor shall develop (by May 7, 2010) and maintain an external Flight Releasable Attachment Mechanism (FRAM) based common Payload Interface Requirements Document (IRD), to provide for HTV or CRS transport of FRAM based payloads and to provide FRAM based payloads a common set of transport requirements to design to and, as a result, allow flexibility in manifesting. (S/A 1624)

Appendix A-1
Hardware Responsibility

APPENDIX A – HARDWARE TO BE SUSTAINED UNDER CONTRACT

Component Name	Component Number	Sustaining Role
All hardware delivered under NAS15-10000 shall be fully sustained under this contract except for more limited role as defined below and addition of GFE and NAS8-50000 items.		
Boeing manufactured common hardware provided to IP/P as GFE shall be fully sustained under this contract. Boeing manufactured common hardware procured commercially is not covered under this contract except as defined in NASA/NASDA Common Spares Pool (CSP) agreements for repair or in this Appendix.		
Racks		
ISPR	683-50243	S, SE-Pri
Systems Racks: Integrated Rack Level	(ALL except CheCS)	S, SE-Pri
CheCS: Integrated Rack Level		SE-Sec
Rack Assembly – CheCS		S, SE-Pri
Payload Racks: (Integrated Level)		
ARIS and ARIS Kits	683-61590 683-61600	S, SE-Pri
PaRIS	1J00900-1	S, SE-Sec
PRCUs	683-21419	S, SE-Sec
WORF Rack	683-83999	S, SE-Sec
HRF Rack	683-46051-2	S, SE-Sec
BRP Rack	683-46710	S, SE-Sec
EXPRESS Rack/ with ARIS (ALL EXP RACKS INCLUDED)	683-46052-001	S, SE-Sec
EXPRESS Rack/ without ARIS (ALL EXP RACKS INCLUDED)	683-46052-002	S, SE-Sec
EXPRESS Transportation Rack	683-46059-1	S, SE-Pri
ScS-EXPRESS	683-46360-3	S, SE-Pri*
ScS-EXPRESS	683-46360-4	S, SE-Pri*
HHR Rack	683-42644-1	S, SE-Sec
ISIS Drawers (Stowage Drawers)	683-43656-1	SE-Sec
ISIS Drawers (Powered Drawers)	683-43650-1, -3 683-43660-3	S, SE-Sec
EXPRESS Functional Checkout Unit (FCU)	683-46055-1	S, SE-Pri
BRP HHR Qual Rack	683-46710	S, SE-Pri
HRF FPR Rack	683-4605-1	S
EXPRESS Rack Trainer	683-46053	S (Common H/W)
WORF Ground Rack	683-83660	S

Appendix A-1 Hardware Responsibility

WOLF ScS	683-46360-4	S
BRP ScS	683-30195-1	S
BRP PHD (Payload Handling Device)	683-83573	S (Common H/W)
BRP HFSS	683-83591-1, -2	S (Common H/W)
STEPS	683-21440	S, SE-Pri*
Node 3 / Advanced ECLSS Hardware (Through Advanced ECLSS / Rack Integrated Assembly DD-250)		SE-Sec
Advanced ECLSS / Rack Integrated Assembly: Water Recovery System Top Assembly, Rack 1	96M11540	S, SE-Pri
Advanced ECLSS / Rack Integrated Assembly: Water Recovery System Top Assembly, Rack 2	96M11800	S, SE-Pri
Advanced ECLSS / Rack Integrated Assembly: Oxygen Generation Assembly Rack Top Assembly	96M11500	S, SE-Pri
Advanced ECLSS Assembly: Water Processor Assembly, Rack 1	SV827250	SE-Sec
Advanced ECLSS Assembly: Water Processor Assembly, Rack 2	SV826250	SE-Sec
Advanced ECLSS Assembly: Oxygen Generation Assembly Rack	SV825600	S, SE-Pri
Advanced ECLSS Assembly: Urine Processor Assembly Top Assembly	96M11821	SE-Sec
Advanced ECLSS Assembly: Power Supply Module Top Assembly	96M11700	SE-Sec
Crew Quarters (CQs)	P/N SEG32109500-301, -302	S, SE-Pri
Note: * S, SE-PRI ends May 2014 (after RAPTR delivered) ** S, SE-PRI ends September 2014 (5 months after RAPTR delivered)		
Integration Hardware		
APCU	tbd	S, SE-Pri
GFE		
PEEK		S, SE-Pri
Russian Source Adapter	SEG33112678-301	S, SE-Pri
Russian Chassis Ground Cable	SEZ39134181-301	S, SE-Pri
28V Power Extension Cable, 10 foot	SEG33112266-301	S, SE-Pri
28V Power Extension Cable, 20 foot	SEG33112266-303	S, SE-Pri
120V Power Extension Cable, 10 foot	SEG33112596-301	S, SE-Pri
120V Power Extension Cable, 20 foot	SEG33112596-303	S, SE-Pri
120V Power Extension Cable, 40 foot	SEG33112596-305	S, SE-Pri
28V Express Rack Adapter Cable	SEG33112598-301	S, SE-Pri
Handrail Assy 8.5 LG	SEG33117290-301	SE-PRI

Appendix A-1 Hardware Responsibility

Handrail Assy 21.5 LG	SEG33117290-303	SE-PRI
Handrail Assy 41.5 LG	SEG33117290-305	SE-PRI
Oxygen Recharge Compressor Assy (ORCA)	SEG29100906	S
Portable Breathing Apparatus Assy, Emergency	SEG33105002	S
ON-ORBIT ANDROGYNOUS PERIPHERAL ASSEMBLY SYSTEM (APAS)		
APAS on PMA-1	MC621-0087-7001	SE-PRI
APAS on PMA-2 and PMA-3	MC621-0087-8001	SE-PRI
FSE & Carriers		
All NAS15-10000 delivered FSE		S, SE-PRI
All NAS15-10000 delivered Carriers		S, SE-PRI
WATER TRANSFER HARDWARE:		
Hose Adapter	528-20870-2	S, SE-Pri
US/RSA-A Hose	528-20870-5	S, SE-Pri
US/RSA-B Hose	528-20870-6	S, SE-Pri
Microbial Check Valve	SED42100926-305/-306	S, SE-Pri
Contingency Water Dispenser	SED48101607-306	S, SE-Pri
3102 Yellow/Yellow (Y/Y) Assy.	10108-20045-04	S, SE-Pri
Yellow/Red Hose	528-20870-01	S, SE-Pri
3102 Yel/3142 Red Adapter Assy	10108-20175-01	S, SE-Pri
Iodine Removal Hose Assy	528-21022-1	S, SE-Pri
Actex (activated carbon ion exchange) Hose Assembly	528-21026-1	S, SE-Pri
Blue/Blue Hose (Shuttle Only)	10108-20043-01	S, SE-Pri
Contingency Waste Water Dump Line Filter (CWWDLF)	SED39123946-301	S, SE-Pri
CWC Contingency Hose Assy	10108-10089-02	S, SE-Pri
Flexible Wand Extender	SED39121808-302	S, SE-Pri
PBA/PHA:		
Portable Breathing Apparatus Kit (PBA)	SEG33105002	S, SE-Pri
Pre-breathe Hose Assy Kit	SJG33112241-301	S, SE-Pri
Pre-breathe Hose Spares Kit	SJG33112747-301	S, SE-Pri
Mount Assembly, Cylinder, PBA, PEP	SEG33105050-301/-303	S, SE-Pri
Quick Disconnect Assy, ECLSS, PBA, PEP	SEG33105312-301	S, SE-Pri
Quick Disconnect Assy, ECLSS, PBA, PEP	SEG33105312-303	S, SE-Pri
Mask Holder Assembly, PBA, PEP	SEG33105316-301/-303	S, SE-Pri
Extension Hose/Tee Kit (-303/-305)	SJG33104995-301/303/-305	S, SE-Pri
HAND HELD MICROPHONE:		
Hand Held Microphone (HHM)	SED16101310 -311	SE-Pri, FT
HHM Interface Cable, ISS	SED16101310-705	SE-Pri, FT
COLOR TELEVISION CAMERA:		

Appendix A-1 Hardware Responsibility

Color Television Camera (CTVC)	3278890-507 & -508	SE-Pri, FT
Lens Shield Assembly	SED39129392-302	SE-Pri, FT
EHDV CAMERA:		
EHDV Camera Assembly	TBD	SE-Pri*
EHDV Camera Assembly Attachment Mechanism	TBD	SE-Pri*
*SE PRI begins 30 days after EHDV on-orbit installation and activation (SE PRI begins Oct 1, 2014).		
Telemetry Monitoring System		
Radio Telemetry Device TA-948.04	ИЮ2.158.024-04	PAS
Transmitter IIIA 262C	ИЮ2.010.039-14	PAS
Transmitter IIIA 262И	ИЮ2.010.039-08	PAS
Local Switch TA203M	ЦХ2.148.004	PAS
Temperature Measuring System СИТ 9Л	ИЮ2.148.054 СИ	PAS
Static Memory Device СЗУ-ЦУ8	ЦВИЯ.467666.013	PAS
Distribution Unit TA044	ИЮ2.393.506	PAS
Time Transducer ЮА059 М1	ИЮ3.097.680	PAS
Sawtooth Voltage Sensor ДПН9	ИЮ3.263.001 СИ	PAS
Local Switch TA 204M	ИЮ2.148.063	PAS
Cross Connection Unit TA601	ИЮ2.148.060 СИ	PAS
Cross Connection Unit TA604	ИЮ3.027.014 СИ	PAS
EPS/OCCS		
Set of Cables	TBD	PAS
Power Distribution Unit	11М156М	PAS
Main Bus Assembly	БСИ – 2	PAS
Filter Unit	БФ -2	PAS
Power Distribution Unit	11М156М/FGB2	PAS
Main Bus Assembly	БСИ – 2/FGB2	PAS
Filter Unit	БФ -2/ FGB2	PAS

NOTE: FT – Functional Testing of the hardware will be done at the ISIL prior to delivery to next level integrator. No repair capability exists for this hardware.

Item	Component Name	Component Number	Sustaining Role
ATCS			
01	Non-Intrusive Flow Meter Kit	SJG33117585	S, SE-Pri ⁺⁺ (Note: the ground unit is yellow tagged as an incomplete kit)
02	Coolant Quality Monitoring Kit (CQMK)	SEG46118274-303, & 305	H, SE-Pri ⁺⁺
Water Transfer Hardware			
03	WPA Water Supply Hose Assembly	SEG33119485-301	H, SE-Pri ⁺⁺

Appendix A-1
Hardware Responsibility

04	Potable Water Reservoirs (PWR)	SEG46117689-301 & 302	S, SE-Pri ⁺⁺
05	Silver Biocide Syringe Kit	SED46111879-301	S, SE-Pri ⁺⁺
06	Mineral Syringe Kit	SED46109306-301	S, SE-Pri ⁺⁺
07	Sample / Purge Kit	SED46111870-303	S, SE-Pri ⁺⁺
08	CWC Water Sample Bag	SED46113541-302	H, SE-Pri ⁺⁺
09	Purge Bags	KLSJ320189-301	H, SE-Pri ⁺⁺
10	20 – Micron Filter (i.e. Condensate Filter)	SEG33117584-301	S, SE-Pri ⁺⁺
11	CWC-to-3/4” Female QD Adapter	SEG33119914-301	H, SE-Pri ⁺⁺
12	Contingency Water Container, CWC (-305)	SEG33113140-305	H, SE-Pri ⁺⁺
13	Iodine Sampling Adapter	WLSJ320219-303	H, SE-Pri ⁺⁺
REGEN ECLSS FLUID HARDWARE (REFH) Hardware			
14	WPA H2O Common Transfer Hose	SEG33119491-301, -302 (Short 6’, Long 12’)	S, SE-Pri ⁺⁺
15	Actex Adapter	SEG33119492-301	S, SE-Pri ⁺⁺
16	PTU Transfer Hose	SEG33121250-301	S, SE-Pri ⁺⁺
17	Pre-treated Urine T-Valve	SEG33121260-304	S, SE-Pri ⁺⁺
Item	Component Name	Component Number	Sustaining Role
18	Hygiene Water Dispenser	SEG33121270-301	S, SE-Pri ⁺⁺
19	Water “Y” Hose	SEG33121280-301	S, SE-Pri ⁺⁺
Other ECLS			
20	Portable Fire Extinguisher Cover Assembly	SEG33112741-301/-302	S, SE-Pri ⁺⁺
21	LiOH Cartridge Cover	V070-613593-001	S, SE-Pri ⁺⁺
25	Odor Absorber (Charcoal Filter used in conjunction with the Portable Fan Assembly)	MC623-0016-5000 and SV783970-2	SE-Pri ⁺⁺
26	Acoustic Suppression Kit, Russian Airlock Depress Pump	SEG33110959	SE-Sec ⁺⁺ (Note: NASA performs SE-Pri w/ Energia)
27	Russian Depress Pump (TCY-A)	321ГK.52Ю 5081A	SE-Sec ⁺⁺ (Note: NASA performs SE-Pri w/ Energia)
28	Electronic Commutator	ЕИДЖА 468347.044	S, SE-Sec ⁺⁺ (Note: NASA performs SE-Pri w/ Energia)
29	Cables W1, W2, W3, W4, W5	321ГK.210Ю 1812-100, -200, -310, -320, & -330	SE-Sec ⁺⁺ (Note: NASA performs

Appendix A-1
Hardware Responsibility

			SE-Pri w/ Energia)
30	Ambient Temperature Catalytic Oxidizer	SV774230-1	H, SE-Pri ⁺⁺
31	STS Hydrazine Canister	MC621-0008-0060 SV791197	H, SE-Pri ⁺⁺
32	STS ARS (LiOH) Canister	MC621-0008-0409 SV755510-4	S, SE-Pri ⁺⁺
33	CQ Hygiene Liner	SEG33120906-301	S, SE-Pri ⁺⁺
34	CQ Blanket Covers	SEG32112288-301, SEG32112289-301, SEG32112290-301/302, SEG32112291-301/302, SEG32112292-301/302, SEG32112293-301, SEG32112294- 301/302/303/304	S, SE-Pri ⁺⁺
35	OGA Conductivity Meter	SEG33122633-301, -302	S, SE-Pri ⁺⁺
37	OGA Loop Remediation Hose ASSY/Pump to ACTEX	SV825600CT014	SE-Pri ⁺⁺ (Note: Delivered to NASA on DD 1149, if future requisition is required it will be delivered on DD 1149)
Item	Component Name	Component Number	Sustaining Role
38	OGA Loop Remediation Hose Assembly	SEG33123190-301	SE-Pri ⁺⁺ (Note: Delivered to NASA on DD 1149, if future requisition is required it will be delivered on DD 1149)
39	OGA Remediation Adapter	SEG33122706-301, -302	SE-Pri ⁺⁺
40	Flared Fitting Seal Bag Assembly	SEG33123126-301	SE-Pri ⁺⁺
41	WPA Catalytic Reactor Sample Adapter	SEG33122581-301	SE-Pri ⁺⁺ (Note: Yellow tagged on orbit for incomplete certification)
42	Pre-Treat Urine Sample Kit	SEG33122501-301	S, SE-Pri ⁺⁺
43	IMV Cone Screen	SEG11101191-301	H, SE-Pri ⁺⁺
44	A/L IMV Panel Screen	SEG11101193-301	H, SE-Pri ⁺⁺
45	A/L IMV Jumper Duct Screen	SEG11101192-301	H, SE-Pri ⁺⁺
46	CO2 Removal Kit (CRK)	SEG33113733	H, SE-Pri ⁺⁺
47	LiOH Canister Adapter Assembly	SED33107619-303	SE-Pri ⁺⁺

Appendix A-1 Hardware Responsibility

++ Full Sustaining begins 4/19/2013 post transition (CD 13267).

HARDWARE TRANSFERRED FROM CARGO MISSION CONTRACT (Sustaining effective on January 1, 2011 except as noted)

<u>Pressurized Equipment</u>		
Resupply Stowage Platform Stowage System – SE-PRI begins on 7/31/11	SJG33111610-901 to 958	S, SE-PRI
Resupply Stowage Rack– SE-PRI begins on 7/31/11	683-60554	S, SE-PRI
<u>External Carriers</u>		
External Stowage Platform #1	9070407	S, SE-PRI
Universal Trunnion Attachment System	1J00330	S, SE-PRI
External Stowage Platform #2	1283222	S, SE-PRI
Active ESPAD	26900-10001	S, SE-PRI
Enhanced Universal Trunnion Attachment System	683-97051	S, SE-PRI
Passive ESPAD	26900-10002	S, SE-PRI
Modified Airlock FRGF Blanket	26900-20117	S, SE-PRI
External Stowage Platform #3	3555470	S, SE-PRI
<u>Ground Equipment</u>		
Passive FRAM Alignment Fixture	683-97110	S, SE-PRI
Active FRAM Alignment Fixture	683-97111	S, SE-PRI
Passive FRAM Drill Template	1J00517	S, SE-PRI
Active FRAM Drill Template	1J00503	S, SE-PRI
Active/Passive FRAM Alignment Pin Alignment Fixture Assembly	683-97114	S, SE-PRI
FRAM Thermal Vacuum Test Stand	SK683-80504	S, SE-PRI
FRAM Vib Standoffs	SK683-97082	S, SE-PRI
PFRAM Connector Alignment Tooling Kit	683-97340	S, SE-PRI
EUTAS Vib Test Fixture	1J00415	S, SE-PRI
TUS RA FSE Assembly Restraint Fixture	SK68396909	S, SE-PRI
“Generic” Active FRAM Qual Unit	683-97083	S, SE-PRI
Passive FRAM Qual Unit	SK1J01207	S, SE-PRI
FRAM Engineering Development Unit	SK00422	S, SE-PRI
Square Grid Simulator	SK1J01210	S, SE-PRI
ARD Test Plate	SK683-97148	S, SE-PRI
<u>Shipping Containers for FSE</u>		
SAPH ARM Assembly GSE	9008398	S, SE-PRI
SAPH Body Assembly GSE	9008399	S, SE-PRI
<u>Unpressurized Flight Support Equipment</u>		
Flight Releasable Attachment Mechanism (FRAM) Family		S, SE-PRI
Active FRAM Mechanism	1J00422	S, SE-PRI
Small Adapter Plate Assembly (SAPA) – SE-PRI begins on 3/31/2011	683-96004	S, SE-PRI
Medium Adapter Plate Assembly (MAPA)) – SE-PRI	683-96604	S, SE-PRI

Appendix A-1
Hardware Responsibility

begins on 3/31/2011		
Large Adapter Plate Assembly (LAPA)) – SE-PRI begins on 3/31/2011	683-96504	S, SE-PRI
Light-weight Adapter Plate Assembly (LwAPA)) – SE-PRI begins on 3/31/2011	683-96104	S, SE-PRI
Columbus External Payload Adapter (CEPA)) – SE-PRI begins on 3/31/2011	683-97464	S, SE-PRI
ExPA Adapter Plate Assembly) – SE-PRI begins on 3/31/2011	683-97494	S, SE-PRI
EVA FRAM (EFRAM)) – SE-PRI begins on 3/31/2011	683-97404	S, SE-PRI
Passive FRAM) – SE-PRI begins on 3/31/2011	1J00520	S, SE-PRI
6B Box Class ORU Protective Cover	1J00100	S, SE-PRI
MDM-Lower ORU Protective Cover	24700-10015	S, SE-PRI
BMRRM ORU Protective Cover	24700-90012	S, SE-PRI
Stanchion Mount Class ORU Protective Cover	24700-90011	S, SE-PRI
FLAP ORU Protective Cover	24700-10014	S, SE-PRI
Ammonia Tank Assembly FSE for ELC) – SE-PRI begins on 3/31/2011	683-99273	S, SE-PRI
Ammonia Tank Assembly FSE for ICC	683-97547	S, SE-PRI
Battery Assembly FSE Installation Kit	683-96603	S, SE-PRI
Battery FSE Installation Kit	SJG33120130	S, SE-PRI
BCDU FSE Installation Kit	683-96103	S, SE-PRI
Cargo Transportation Container (CTC)) – SE-PRI begins on 3/31/2011	T1470000000	S, SE-PRI
CMG FSE Installation Kit	683-96703	S, SE-PRI
DCSU FSE, Adapter Plate Assy	1J00539	S, SE-PRI
FHRC Assembly FSE Installation Kit	1F22060	S, SE-PRI
HRS Radiator FSE	SGG33121421	S, SE-PRI
LDU FSE Installation Kit	683-96803	S, SE-PRI
MBSU FSE Installation Kit	683-96403	S, SE-PRI
MDM FSE Installation Kit	1F15250	S, SE-PRI
MT/TUS Reel FSE Installation Kit	683-96903	S, SE-PRI
Nitrogen Tank Assembly (NTA) FSE	683-97573	S, SE-PRI
PCU FSE Installation Kit	683-96003	S, SE-PRI
Pump Flow Control Subassy (PFCS), Installation	9070417	S, SE-PRI
Pump Module FSE Installation Kit	683-96503	S, SE-PRI
SASA Blanket Kit) – SE-PRI begins on 3/31/2011	1F98549	S, SE-PRI
SASA FSE) – SE-PRI begins on 3/31/2011	SJG33120819	S, SE-PRI
SGANT FSE Installation Kit	683-97164	S, SE-PRI
Special Purpose Dexterous Manipulator (SPDM) FSE	9008243	S, SE-PRI
Stanchion Support Structure (SSS)	29300-10001	S, SE-PRI
UTA FSE Installation Kit	683-96210	S, SE-PRI
UTAS Anti-Rotation Device	28500-10001	S, SE-PRI
Express Logistics Carrier (ELC) Interface Hardware Kit	Boeing should put in a number TBD	S

Appendix A-1
Hardware Responsibility

SMDP to GAS Beam Adapter Plate Assembly	9008441	S, SE-PRI
6A Launch Deployment Platform	97M19650	S, SE-PRI
SASA FSE and side wall carrier (5A GAS Beam)	9008275	S, SE-PRI
PFCS FSE and side wall carrier (5A GAS Beam)	9008276	S, SE-PRI
DCSU FSE and side wall carrier (5A GAS Beam)	9008277	S, SE-PRI
6A Passive FRAM Adapter Plate Assembly	1J00530	S, SE-PRI
Integrated Photovoltaic Radiator FSE Assembly	9070664	S, SE-PRI
PMA FSE	9007974	S, SE-PRI
Crosstie, ribbed, short; SE-PRI to beign 10/01/10	9008369	S, SE-PRI
Crosstie, flat, long; SE-PRI to beign 10/01/10	9008368	S, SE-PRI
Crosstie, flat, long, drilled; SE-PRI to begin 10/01/10	9008371	S, SE-PRI
Adapter Plate, Passive FRAM; SE-PRI to beign 10/01/10	9008367	S, SE-PRI
Fuse Box; SE-PRI to beign 10/01/10	1J00528	S, SE-PRI
Cable Assy. ; SE-PRI to beign 10/01/10	9008373	S, SE-PRI
Bracket, Test Connector; SE-PRI to beign 10/01/10	9008386	S, SE-PRI
UF-2 Staging Assembly	5000380	S, SE-PRI
6A Staging Assembly	5000362	S, SE-PRI
LMC FSE; SE-PRI to beign 10/01/10	9008365	S, SE-PRI
HDRR Junction Box Assembly; SE-PRI to beign 10/01/10	9004345	S, SE-PRI
Adapter Plate/Crosstie Support Drill Template; SE-PRI to beign 10/01/10	9008375	S, SE-PRI
7A Staging Assembly	5000371	S, SE-PRI
UF-1 Staging Assembly	5000378	S, SE-PRI
3/8" Passive UTAS	1J00351	S, SE-PRI
5/8" Passive EUTAS	1J00674	S, SE-PRI
Ammonia Tank Assembly FSE for LMC	683-97511	S, SE-PRI
CMG FSE MLI Cinch Strap Assembly	SDG33118117	S, SE-PRI
SASA MLI Assembly	9008288	S, SE-PRI
DDCU-HP CHIA	RH000002	S, SE-PRI
MBSU FSE MLI	1F15305, 1F153112	S, SE-PRI
BCDU FSE MLI	1F15301, 1F153022	S, SE-PRI
PCU FSE MLI	1F15306, 1F153072	S, SE-PRI
Battery FSE MLI	1F15312, 1F15313	S, SE-PRI
ECOM to LMC Adapter Plate; SE-PRI to beign on 10/01/10	9070733	S, SE-PRI
45 Degree ECOM Adapter Bracket; SE-PRI to beign on 10/01/10	683-97788	S, SE-PRI
Crosstie, Flat, Frame 3; SE-PRI to beign on 10/01/10	683-97787	S, SE-PRI
Ballast Plate Assembly; SE-PRI to beign on 10/01/10	9008403	S, SE-PRI
Active ESPAD Mod Kit (Guide Vane)	26900-20149	S, SE-PRI
Passive ESPAD Mod Kit (Bolt Shield)	26900-20146	S, SE-PRI
ESPAD – Loose Items Kit (A)	26900-20135	S, SE-PRI

Appendix A-1
Hardware Responsibility

PFRAM Mod Kit (PFRAM S/Ns 0005 – 0007) (A)	683-97142	S, SE-PRI
Heat Exchanger ORU FSE Assembly	SEG33117665	S, SE-PRI
Mounting Assembly, Right	SEG33114745	S,SE_PRI
6B OAK (EVSU)	T1474110100	S,SE_PRI
DDCU OAK	T1474110500	S,SE_PRI
RPCM OAK; SE-PRI to begin on 3/31/11	T1474110900	S,SE_PRI
CRPCM OAK; SE-PRI to begin on 3/31/11	T1474111300	S,SE_PRI
ACU OAK; SE-PRI to begin on 3/31/11	T1474111900	S,SE_PRI
VDU OAK; SE-PRI to begin on 3/31/11	T1474111200	S,SE_PRI
Mounting Assembly, Left	SEG33114744	S,SE_PRI
Knee Brace Set Equipment Rack	683-50249	S,SE_PRI
ATA FSE MLI Straps	SDG33120160	SE, SE-PRI
DCU FSE Installation Kit	SJG33119821	SE, SE-PRI
HPG Adaptor Assembly Interface Plate Kit, SE-PRI begins on 3/31/11.	SJG33120793	SE, SE-PRI
SPDM Arm Integrated Assembly Kit, SE-PRI begins on 3/31/11	SJG33120778	SE, SE-PRI
SAPH Arm Beta Cover, SE-PRI begins on 3/31/11	SEG33121506	SE, SE-PRI
SAPH Beam Beta Covers, SE-PRI begins on 3/31/11	SEG33121507	SE, SE-PRI
HRS Kit	SJG33121419	SE, SE-PRI
PFCS FSE Assembly	9070418	SE, SE-PRI
TUS RA FSE Coarse Alignment Knob Assembly	SEG33119805	SE, SE-PRI
Battery FSE Reconfiguration Kit	SJG33121058	SE, SE-PRI
DCSU FSE MLI Assembly	9008290	SE, SE-PRI
Deployment Hardware	9008468	SE, SE-PRI
Cable Harness Strap, SE-PRI begins on 10/01/10	9S04731	SE, SE-PRI
Heater and Harness Installation Kit, SE-PRI begins on 3/31/11.	SJG33120872	SE, SE-PRI
Contingency Pin Kit, SE-PRI begins 10/1/10	SJG33120170	SE, SE-PRI
Kinematic Bolt Kit – Vertical Shim, SE-PRI begins 3/31/11.	SDG33120148	SE, SE-PRI
HPGT Tension Slide, SE-PRI begins 3/31/11	SDG33121038	SE, SE-PRI
Kinematic Bolt Kit – Square Ring, SE-PRI begins 3/31/11.	SDG33120871	SE, SE-PRI
Kinematic Bolt Kit – Retainer Pin, SE-PRI begins 3/31/11.	SDG33120518	SE, SE-PRI
Kinematic Bolt Kit – Block Retainer, SE-PRI begins	SDG33120146	SE, SE-PRI

Appendix A-1
Hardware Responsibility

3/31/11.		
Kinematic Bolt Kit – Shear Bushing, SE-PRI begins 3/31/11.	SDG33120888	SE, SE-PRI
Kinematic Bolt Kit – Slide Block, SE-PRI begins 3/31/11.	SDG33120141	SE, SE-PRI
Kinematic Bolt Kit – Shear Slide, SE-PRI begins 3/31/11.	SDG33120887	SE, SE-PRI
Kinematic Bolt Kit – Block Washer, SE-PRI begins 3/31/11.	SDG33120147	SE, SE-PRI
Kinematic Bolt Kit – Mount to Deck Shim, SE-PRI begins 3/31/11.	SDG33120149	SE, SE-PRI
Kinematic Bolt Kit – Slide Nut, SE-PRI begins	SDG33120143	SE, SE-PRI
Common Hardware		
CAM, CR and LSG piece parts that were brought onto the Sustaining Engineering contract via change request 010537 (Attachments B, D, E and F) will be tracked via GOLD and will not be shown in the following list of CAM, CR and LSG hardware.		
CAM, CR and LSG HW		
Area Smoke Detector Assy AKA Analog Smoke Sensor	2351510-2-1	S, SE-Pri
Audio Terminal Unit	3000001-301	S, SE-Pri
Baseplate/Ballast Assy	219011	S, SE-Pri
C&W Malfunction Panel	1F51710-1	S, SE-Pri
CCAA – Common Cabin Air Assembly	SV806610-4	S, SE-Pri
CCAA – Cabin Air Inlet ORU Assembly	SV811840-6	S, SE-Pri
CCAA – Electrical Interface Box	SV806488-3	S, SE-Pri
CCAA – Heat Exchanger	SV813900-2	S, SE-Pri
CCAA – Inlet Fan Group	SV811840-4	S, SE-Pri
CCAA – Inlet Temp Sensor Assy	SV813923-1	S, SE-Pri
CCAA – Liquid Sensor, HX	SV806609-1	S, SE-Pri
CCAA – Temp Control Check Valve	SV805626-1	S, SE-Pri
CCAA – Water Separator	SV813920-2	S, SE-Pri
Electrical Interface Assembly Fixture	SV806488CT003	S, SE-Pri
Cabin Air Inlet ORU Assembly Fixture	SV811840CT003	S, SE-Pri
Cabin Air Heat Exchanger ORU Fixture	SV813900CT007	S, SE-Pri
Water Separator Assembly ORU Fixture	SV813920CT003	S, SE-Pri
Temperature Sensor ORU Fixture	SV813923CT001	S, SE-Pri
Intermodule Ventilation Fan Assembly Fixture	SV809111CT003	S, SE-Pri

Appendix A-1 Hardware Responsibility

Spacer Assembly	PPRV-1-980	S, SE-Pri
Coldplate – 1 (for DDCU)	2351410-2-1	S, SE-Pri
Coldplate – 1	683-56045-1 (2351410-1-1)	S, SE-Pri
Coldplate – 4 (for ATU)	2351440-2-1	S, SE-Pri
Coldplate – 4	683-56045-4 (2351440-1-1)	S, SE-Pri
Coldplate – 6 (for SPDA)	2351460-3-1	S, SE-Pri
Coldplate – 6	683-56045-6 (2351460-1-1)	S, SE-Pri
Coldplate – 7 (for PEHG)	2351470-3-1	S, SE-Pri
Coldplate – 7	683-56045-7 (2351470-1-1)	S, SE-Pri
Coldplate – 8 (for MDM)	2351480-2-1	S, SE-Pri
Coldplate – 8	683-56045-8 (2351480-1-1)	S, SE-Pri
DDCU-Int	R076500-221	S, SE-Pri
Emerg Egress – Lighting Strip (36’')	683-26007-3	S, SE-Pri
Emerg Egress – Lighting Strip (57’')	683-26007-2	S, SE-Pri
Emerg Egress – Power Supply	683-26007-1	S, SE-Pri
External Power Cable Outline	2365470-2-1	S, SE-Pri
External Signal Cable Outline	2365460-1-1	S, SE-Pri
Gen Light – Lamp Housing Assy (-10 & -11)	219010	S, SE-Pri
Headset (LSG)	683-28015-1	S, SE-Pri
IMV Fan Assy	SV809111-6	S, SE-Pri
Intra Vehicular Antenna Assy	683-28005-1	S, SE-Pri
Long Duration Foot Restraint (LDFR)	G11F5000-1	S, SE-Pri
Short Duration Foot Restraint (SDFR)	G11F5001-1	S, SE-Pri
Foot Anchor Restraint Assembly	G11F5002-1	S, SE-Pri
Torso Restraint Assembly	G11F5030-1	S, SE-Pri
Equipment Seat Track Anchor Assembly	G11F5120-1	S, SE-Pri
Equipment Handrail Anchor Assembly	G11F5121-1	S, SE-Pri
Articulation Post Assembly	G11F5122-1	S, SE-Pri
Tether Assembly	G11F5140-1	S, SE-Pri
Fixed Length Tether Assembly	G11F5140-2	S, SE-Pri
Equipment Bag Assembly	G11F5160-1	S, SE-Pri
Handrail Assembly, 21.5’'	G11F5200-2	S, SE-Pri
Handrail Assembly, 8.5’'	G11F5200-3	S, SE-Pri
Foot Plate Assembly (SRU)	G11F5005-1	S, SE-Pri
Foot Plate Assembly (SRU)	G11F5001-2	S, SE-Pri
Foot Loop Assembly (SRU)	G11F5006-1	S, SE-Pri
Left Hand Brace Assembly (SRU)	G11F5007-1	S, SE-Pri
Left Hand Brace Assembly (SRU)	G11F5007-2	S, SE-Pri
Rail Assembly (SRU)	G11F5008-1	S, SE-Pri

Appendix A-1 Hardware Responsibility

Foot Plate (SRU)	G11F5002-2	S, SE-Pri
Belt Sub Assembly	G11F5031-1	S, SE-Pri
Extension Rod Assembly	G11F5032-1	S, SE-Pri
Retractable Tether Assembly	G11F5033-1	S, SE-Pri
MDM CAM	8258906-929	S, SE-Pri
Microbial Check Valve	80508-RT	S, SE-Pri
Non-Airlock Pressure Control Panel Duct Outline	2355606-1-1	S, SE-Pri
PEHB (Payload Ethernet Hub Bridge) (LSG)	AN-60611-001-01	S, SE-Pri
PEHB (Payload Ethernet Hub Bridge) (CR)	C21D281014-1	S, SE-Pri
PEHB (Payload Ethernet Hub Bridge) (NON-FLT) (CR)	C21D281714-1	S, SE-Pri
PEHG (Payload Ethernet Hub Gateway)	AN60231-001-03	S, SE-Pri
Portable Fire Extngr Assy	683-10050-1 (2351510-2-1)	S, SE-Pri
Pressure Control Panel	2351290-4-1	S, SE-Pri
Pressure Control Panel	2351290-2-1	S, SE-Pri
Pressure Control Panel	2351290-1-1	S, SE-Pri
Rack Flow Control Assy	683-56186-1 (2353180-1-1)	S, SE-Pri
Rack Power Switch	683-50370-3	S, SE-Pri
Remote Control System – On/Off	219006-2	S, SE-Pri
RPCM Type V – Int	R077419-51	S, SE-Pri
RPCM Type V – Int	R077419-71	S, SE-Pri
RPCM Type VI - Int	R077420-31	S, SE-Pri
RPCM Type VI – Int	R077420-51	S, SE-Pri
SPCU Heat Exchanger	2351350-2-1	S, SE-Pri
Temp Sensor (stand alone)	2365430-1-1	S, SE-Pri
Terminator (for IAA) (SRU)	683-28005-4	S, SE-Pri
Thermowell	2366305-1	S, SE-Pri
Utility Outlet Panel	683-27710-5	S, SE-Pri
Utility Outlet Panel	683-27710-6	S, SE-Pri
Utility Rail 4 Position	2F01001-1	S, SE-Pri
Valve – 3-Way (.125")	B40204-12	S, SE-Pri
Valve – IMV	2353024-4-1	S, SE-Pri
Valve – Negative Pressure Relief	683-16322-3	S, SE-Pri
Valve – N2 Isolation Valve	2353052-2-1	S, SE-Pri
Valve – Positive Pressure Relief	683-16321-11	S, SE-Pri
Valve – Three-Way Mix	683-56185-1 (2365504-1-1)	S, SE-Pri
Valve – Vent Relief	2353026-1-1	S, SE-Pri
Video Switching Unit (Harris)	3000008-301	S, SE-Pri
Shell Patch Heater (External, 30 Watt Each)	1F97615-1	S, SE-Pri
Shell Patch Heater (Internal, 30 Watt Each)	1F97605-1	S, SE-Pri

Appendix A-1 Hardware Responsibility

Cargo Track-Equipment Rack	683-50222-1	S, SE-Pri
Portable Seat Track Adapter	683-60110-1	S, SE-Pri
RMA Attach Plate	683-60114-1	S, SE-Pri
Rack Handle Assembly	683-60120-1	S, SE-Pri
10GB-SSMSD (CR)	320101	S, SE-Pri
BRP SSPCM (NON FLT)	9070328-509	S, SE-Pri
BRP SSPCM (NON FLT)	9070328-505	S, SE-Pri
CENTRIFUGE RACK INTERFACE CONTROLLER	683-83612-1	S, SE-Pri
Cupola HW		SE-Sec
PCBM	S683-28943	S, SE-Pri
Audio Terminal Unit	3000001-301	S, SE-Pri
Utility Operating Panel	683-27710	S, SE-Pri
Pressure top pane (window)	683-11591	S, SE-Pri
Pressure side pane (window)	683-11592	S, SE-Pri
Debris top pane (window)	683-11587	S, SE-Pri
Debris side pane (window)	683-11588	S, SE-Pri
Scratch top assembly (window)	683-11577	S, SE-Pri
Scratch side assembly (window)	683-11577	S, SE-Pri
PCBM to Element IVA Seal Kit	683-13660-2	S, SE-Pri
MPLM HW		SE-Sec
IMV Shut Off Valve	B404823-2	S, SE-Pri
Cabin Fan Assembly	SV81951-4	S, SE-Pri
Duct Smoke Detector	2119814-3-1	S, SE-Pri
Manual Pressure Equalization Valve	Part of Hatch	S, SE-Pri
Total Pressure Sensor	SV822093-1	S, SE-Pri
Quick Disconnect (Air Revitalization System)	683-19485-3	S, SE-Pri
Multiplexer De-Multiplexer (MDM) (Flight)	8266726-903	S, SE-Pri
MATE (Ground Test)	8265700-905	S, SE-Pri
FEU (Ground Test)	8266937-901	S, SE-Pri
General Luminaire Assembly	219003-1	S, SE-Pri
Lamp Housing Assembly	219010	S, SE-Pri
Baseplate Ballast Assembly	219011	S, SE-Pri
Remote Control Assembly	219006-1	S, SE-Pri
Emergency Egress Lighting Power Supply	683-26007-1	S, SE-Pri
Passive Common Berthing Mechanism	683-13471-19	S, SE-Pri
Hatch / Track Assembly	683-13100-11	S, SE-Pri
Positive Pressure Relief Assembly	B40484	S, SE-Pri
Negative Pressure Relief Assembly	B40483-1	S, SE-Pri
Depress Assembly	B40481-1	S, SE-Pri
Trace Gas Sample Line Shut Off Valve	C11949-1	S, SE-Pri
Payloads		SE-Sec
AAA Fan	SV809992	S, SE-Pri
CVIUs	3000028	S, SE-Pri

Appendix A-1 Hardware Responsibility

Coldplates	683-56045	S, SE-Pri
Smoke Detector	2351520-1-1	S, SE-Pri
Rack Pivots	683-20100-1	S, SE-Pri
Rack Pivots	683-20100 -2	S, SE-Pri
Rack Pivots	683-61711-31	S, SE-Pri
Rack Pivots	683-61711-32	S, SE-Pri
Rack Pivots	683-61711-33	S, SE-Pri
Rack Pivots	683-61711-37	S, SE-Pri
Payload MDM FEU	683-30169	S, SE-Pri
SFCA	683-27557	S, SE-Pri
RFCA	683-27541	S, SE-Pri
KBARs	683-62201-1	S, SE-Pri
KBARs	683-62201-2	S, SE-Pri
KBARs	683-62201-3	S, SE-Pri
KBARs	683-62201-7	S, SE-Pri
Payload Ethernet hub Gateway (PEHG)	AN60231-001-03	S, SE-Pri
MATE-3	8264900	S, SE-Pri
MATE-4	8270902	S, SE-Pri
Payload Ethernet Hub Bridge (PEHB)	683-46328-1	S, SE-Pri
BRIC	683-83614-1	S, SE-Pri
RIC	683-46323-1	S, SE-Pri
SSPCM	683-6314-1	S, SE-Pri
BSSPCM	683-46313-1	S, SE-Pri
BEMU	683-42584-1	S, SE-Pri
SSPCM Unit Tester	907184-1, -501	S, SE-Pri
RIC Test Sets	683-4216 683-42665	S, SE-Pri
Avionics Test Bed	683-36037	S, SE-Pri
Rack Software Test Bed	683-40350	S, SE-Pri
Payload Software Integration/Verification Facility	683-21420	S
Node 2 HW		SE-Sec
MDM CONNECTOR MOUNTING PLATE	NRP-A-MP8A3F	S, SE-Pri
VESTIBULE AVIONICS JUMPER SET (N2 TO JEM)	1F46290-1	S, SE-Pri
VESTIBULE AVIONICS JUMPER SET (N2 TO CAM)	1F46321-1	S, SE-Pri
VESTIBULE AVIONICS JUMPER SET (N2 TO APM)	1F46348-1	S, SE-Pri
VESTIBULE AVIONICS JUMPER SET (N2 TO MPLM)	1F46379-1	S, SE-Pri
VESTIBULE AVIONICS JUMPER SET(N2 TO LAB)	1F46392-1	S, SE-Pri
BULKHEAD AVIONICS SET (N2 to PMA2)	1F46423-1	S, SE-Pri

Appendix A-1
Hardware Responsibility

UMBILICAL JAM NUT CONNECTOR KIT AFT DEBRIS SHIELD	1F46431-1	S, SE-Pri
Gore Panel to Umbilical Stanchion Harness Connector Kit (Fwd & Aft)	1F46432-1	S, SE-Pri
VESTIBULE AVIONICS SET (N2 to ELM)	1F46434-1	S, SE-Pri
CAUTION AND WARNING PANEL	1F51710-1	S, SE-Pri
Vestibule Avionics Jumper Set (N1 to N2)	1F90006	S, SE-Pri
1553 Drag Through Jumper	683-22011	S, SE-Pri
1553 Drag Through Jumper	683-22018	S, SE-Pri
MDM WEDGE CLAMP KIT	1F97458-1	S, SE-Pri
AUDIO TERMINAL UNIT	3000001-301	S, SE-Pri
AUDIO BUS COUPLER	3000005-301	S, SE-Pri
VIDEO SWITCH UNIT	3000008-301	S, SE-Pri
COMMON VIDEO INTERFACE UNIT	3000028-301	S, SE-Pri
BULKHEAD AVIONICS FEED THRU KIT (AFT)	683-11628-1	S, SE-Pri
BULKHEAD AVIONICS FEED THRU KIT (FWD)	683-11628-2	S, SE-Pri
BULKHEAD AVIONICS FEED THRU KIT (STRBD)	683-11628-3	S, SE-Pri
BULKHEAD AVIONICS FEED THRU KIT (PORT)	683-11628-4	S, SE-Pri
BULKHEAD AVIONICS FEED THRU KIT (NADIR)	683-11628-5	S, SE-Pri
BULKHEAD AVIONICS FEED THRU KIT (ZENITH)	683-11628-6	S, SE-Pri
GORE PANEL AVIONICS FEED THRU KIT (Fwd & Aft)	683-11638-1	S, SE-Pri
INTRA VEHICULAR ANTENNA ASSEMBLY (PATCH)	683-28005-1	S, SE-Pri
IVA ANTENNA TERMINATOR	683-28005-4	S, SE-Pri
IVA ANTENNA COUPLER	683-28005-7	S, SE-Pri
FIBER OPTIC ATTENUATOR	683-50357-1	S, SE-Pri
ELECTRICAL CONNECTOR, STRAIGHT PLUG	683-50901-1	S, SE-Pri
SPDU HARNESS KIT	683-52013-2	S, SE-Pri
MDM-16 (N2-1) also delivered 1 ea CCU-IOCU P/N 8260920-904, S/N 97030134	8258906-928	S, SE-Pri
MDM-16 (N2-1) also delivered 1 ea CCU-IOCU P/N 8260920-904, S/N 98060169	8258906-931	S, SE-Pri
Internal Video camera I/F Port	NATC07T25N20SN	S, SE-Pri
MULTI CONDUCTOR AUDIO CABLE	T6145-0002-004	S, SE-Pri

Appendix A-1
Hardware Responsibility

RACK POWER SWITCH, RH W/LED	683-50370-3	S, SE-Pri
ABSOLUTE PRESSURE TRANSDUCER (0-20 PSIA)	1F08013-1	S, SE-Pri
CABIN AIR LINEAR DIFFUSERS	1F70841-1	S, SE-Pri
CONTROL ASSEMBLY, VAVDA	1F89998-1	S, SE-Pri
O-RING	2-248S0604	S, SE-Pri
O-RING	2-255S0604	S, SE-Pri
AREA SMOKE DETECTOR	2351520-2-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-2-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-3-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-4-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-5-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-6-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-7-1	S, SE-Pri
IMV VALVE ASSEMBLY	2353024-8-1	S, SE-Pri
PORTABLE FIRE EXTINGUISHER ASSEMBLY	683-10050-1(E4482)	S, SE-Pri
CCAA MOUNTING HARDWARE KIT	683-11644-1	S, SE-Pri
IMV DIFFUSER ASSEMBLY	683-15011-1	S, SE-Pri
IMV DIFFUSER ASSY	683-15011-2	S, SE-Pri
IMV DUCT (NODE 2)	683-15012-2	S, SE-Pri
IMV SCREEN ASSEMBLY (NODE 2)	683-15013-1	S, SE-Pri
IMV CAP	683-15016-6	S, SE-Pri
IMV CAP	683-15016-8	S, SE-Pri
CABIN AIR SUPPLY DIFFUSER ASSEMBLY	683-15110-4	S, SE-Pri
VARIABLE AIR VOLUME DAMPER ASSEMBLY	683-15144-3	S, SE-Pri
IMV RETURN GRILLE (NODE 2)	683-15196-1	S, SE-Pri
POSITIVE PRESSURE RELIEF VALVE	683-16321-11	S, SE-Pri
NEGATIVE PRESSURE RELIEF VALVE	683-16322-3	S, SE-Pri
NITROGEN INTERFACE ASSEMBLY	683-16353-1	S, SE-Pri
SAMPLE PROBE KIT	683-19370-1	S, SE-Pri
VALVE, THREE WAY, 0.125 INCH	683-19446-1	S, SE-Pri
WASTE WATER CHECK VALVE	683-52817-1	S, SE-Pri
IMV FAN SILENCER ASSEMBLY	683-56036-1	S, SE-Pri
MANUAL VALVE, 0.125 INCH	B40496-1	S, SE-Pri
IMV V-BAND CLAMP (CAP CLAMPS)	MS27115-21R	S, SE-Pri
IMV V-BAND CLAMP (INTERNAL CLAMPS)	MS27115-21R	S, SE-Pri
IMV V-BAND CLAMP (CAP CLAMPS)	MS27115-21R	S, SE-Pri
Resistor, Variable Composition	R4SAYS501E	S, SE-Pri
ELECTRICAL INTERFACE ASSY	SV806488-3	S, SE-Pri
LIQUID SENSOR	SV806609-1	S, SE-Pri
CABIN AIR BACTERIA	SV806630-2	S, SE-Pri

Appendix A-1 Hardware Responsibility

FILTER/HOUSING		
IMV FAN ASSEMBLY	SV809111-6	S, SE-Pri
CABIN AIR INLET	SV811840-4	S, SE-Pri
CABIN AIR INLET	SV811840-6	S, SE-Pri
HEAT EXCHANGER	SV813900-2	S, SE-Pri
WATER SEPARATOR	SV813920-2	S, SE-Pri
TEMPERATURE SENSOR	SV813923-1	S, SE-Pri
WS/CHX 2-HOSE SET	SV828085-1	S, SE-Pri
PORTABLE SEAT TRACK ADAPTER	683-60110-1	S, SE-Pri
RESTRAINT ASSY., FOOT-SHORT DURATION	G11F5001-1	S, SE-Pri
RESTRAINT ASSY., FOOT-ANCHOR	G11F5002-1	S, SE-Pri
RESTRAINT ASSY, TORSO NODE 2	G11F5030-1	S, SE-Pri
ANCHOR ASSY., EQUIPMENT-SEAT TRACK (To KSC)	G11F5120-1	S, SE-Pri
ANCHOR ASSY., EQUIPMENT-HANDRAIL (To KSC)	G11F5121-1	S, SE-Pri
POST ASSY., ARTICULATING (To KSC)	G11F5122-1	S, SE-Pri
ADJUSTABLE LENGTH TETHER ASSY	G11F5140-1	S, SE-Pri
FIXED LENGTH TETHER ASSEMBLY	G11F5140-2	S, SE-Pri
HANDRAIL ASSEMBLY, 41.5 INCHES	G11F5200-1	S, SE-Pri
HANDRAIL ASSEMBLY, 21.5 INCHES	G11F5200-2	S, SE-Pri
HANDRAIL ASSEMBLY, 8.5 INCHES	G11F5200-3	S, SE-Pri
BULKHEAD FLUID FEED THRU KIT (AFT)	683-11627-1	S, SE-Pri
BULKHEAD FLUID FEED THRU KIT (FWD)	683-11627-2	S, SE-Pri
BULKHEAD FLUID FEED THRU KIT (STARBOARD)	683-11627-3	S, SE-Pri
BULKHEAD FLUID FEED THRU KIT (PORT)	683-11627-4	S, SE-Pri
BULKHEAD FLUID FEED THRU KIT (NADIR)	683-11627-5	S, SE-Pri
BULKHEAD FLUID FEED THRU KIT (ZENITH)	683-11627-6	S, SE-Pri
MPLM VESTIBULE OUTFITTING KIT	683-13783-1	S, SE-Pri
N2 VESTIBULE OUTFITTING KIT	683-13787-1	S, SE-Pri
APM VESTIBULE OUTFITTING KIT	683-13790-1	S, SE-Pri
JEM VESTIBULE OUTFITTING KIT	683-13791-1	S, SE-Pri
CAM VESTIBULE OUTFITTING KIT	683-13794-1	S, SE-Pri
PDGF CONNECTOR CAP KIT	1F46433-1	S, SE-Pri
GENERAL LUMINAIRE LAMP HOUSING ASSY	219010	S, SE-Pri
GENERAL LUMINAIRE BASEPLATE BALLAST ASSY	219011	S, SE-Pri

Appendix A-1
Hardware Responsibility

UTILITY RAIL (1F97009-1)	1F97009-1	S, SE-Pri
UTILITY RAIL (1F97036-1)	1F97036-1	S, SE-Pri
UTILITY RAIL (1F97039-1)	1F97039-1	S, SE-Pri
UTILITY RAIL (1F97042-1)	1F97042-1	S, SE-Pri
UTILITY RAIL (1F97048-1)	1F97048-1	S, SE-Pri
REMOTE POWER ON/OFF SWITCH	219006-2	S, SE-Pri
REMOTE POWER SOURCE, EEL	683-26007-1	S, SE-Pri
EMERGENCY EGRESS LIGHTING, LIGHT STRIP(57")	683-26007-2	S, SE-Pri
UTILITY OUTLET PANEL	683-27710-1	S, SE-Pri
UTILITY OUTLET PANEL	683-27710-2	S, SE-Pri
RACK POWER SWITCH, RH W/O LED	683-50370-4	S, SE-Pri
RPCM MOUNTING BRACKETS	R0703894-1	S, SE-Pri
RPCM MOUNTING BRACKETS	R073894-1 G255	S, SE-Pri
DC TO DC CONVER UNIT INTERNAL (DDCU-1) 6.25KW	R076500-1	S, SE-Pri
REMOTE POWER CONTROLLER MODULE (RPCM) 3.5 AMP TYPE V	R077419-51	S, SE-Pri
REMOTE POWER CONTROLLER MODULE (RPCM) 3.5 AMP TYPE V	R077419-71	S, SE-Pri
REMOTE POWER CONTROLLER MODULE (RPCM) 25 AMP TYPE VI	R077420-31	S, SE-Pri
SHIELD ASSEMBLY KIT – FWD ENDCONE	683-11642-1	S, SE-Pri
HATCH ASSY, AXIAL	683-13105-1	S, SE-Pri
HATCH ASSY, RADIAL	683-13105-2	S, SE-Pri
PCBM CONTAMINATION COVER KIT	683-13612-1	S, SE-Pri
CBM RING/SEAL KIT (ACTIVE) – AXIAL	683-13910-1	S, SE-Pri
CBM RING/SEAL KIT (ACTIVE) – RADIAL	683-13910-2	S, SE-Pri
CBM RING/SEAL KIT (AFT), PASSIVE	683-13912-1	S, SE-Pri
CBM MECHANISM KIT (STARBOARD), ACTIVE	683-13914-1	S, SE-Pri
CBM MECHANISM KIT (NADIR) – ACTIVE	683-13914-2	S, SE-Pri
CBM MECHANISM KIT (PORT) – ACTIVE	683-13914-3	S, SE-Pri
CBM MECHANISM KIT, (ZENITH) ACTIVE	683-13914-4	S, SE-Pri
CBM MECHANISM KIT, ACTIVE (FORWARD)	683-13914-5	S, SE-Pri
CBM MECHANISM KIT (AFT), PASSIVE	683-13916-1	S, SE-Pri

Appendix A-1
Hardware Responsibility

ACTIVE CBM M/D HARDWARE KIT- AXIAL	683-13918-1	S, SE-Pri
ACTIVE CBM M/D HARDWARE KIT – RADIAL	683-13918-2	S, SE-Pri
RADIAL PORT CLOSEOUT SHIELD KIT	683-13918-3	S, SE-Pri
RACK STRUCTURE	683-50243-3	S, SE-Pri
Washer W/Tag DD 1149 HSV9285-006	683-55276-2	S, SE-Pri
MLI BERTHING MECHANISM (Blankets)	683-58007-3	S, SE-Pri
MLI ASSEMBLY LABA , BERTHING	683-58007-7	S, SE-Pri
MLI BERTHING MECHANISM	683-58007-8	S, SE-Pri
KNEE BRACE KIT	683-60728-1	S, SE-Pri
GROUND STUD, ALTERED ITEM	683-60738-1	S, SE-Pri
ARIS PIVOT PINS – Left Hand	683-61711-31	S, SE-Pri
ARIS PIVOT PINS – Right Hand	683-61711-32	S, SE-Pri
KBAR ATTACHMENT	683-62201-1	S, SE-Pri
KBAR ATTACHMENT	683-62201-2	S, SE-Pri
KBAR CAPTURE MECHANISM	683-62201-5	S, SE-Pri
KBAR CAPTURE MECHANISM	683-62201-6	S, SE-Pri
RETAINING RING	991W04-1BP	S, SE-Pri
ZERO-G STORAGE RACKS	9K70002	S, SE-Pri
ZERO-G STORAGE RACKS	9K70002-501	S, SE-Pri
ZERO-G STORAGE RACKS	9K70002-503	S, SE-Pri
Active CBM Bracket Mod Kit (Port)	TBD	S, SE-Pri
Active CBM Bracket Mod Kit (Starboard)	TBD	S, SE-Pri
Active CBM Bracket Mod Kit (Forward)	TBD	S, SE-Pri
COLLAR, ANTI-DEPRESSION, QUICK DISCONNECT	1F00799-509	S, SE-Pri
NH3/H2O HEAT EXCHANGE ORU (HIGH LOAD)	1F28940-1	S, SE-Pri
NH3 LINE QD’S (NODE 2 HALF, 1” MALE)	1F45540-517	S, SE-Pri
NH3 LINE QD’S (NODE 2 HALF, 1” FEMALE)	1F45541-517	S, SE-Pri
NH3 QD CAPS	1F45580-505	S, SE-Pri
NH3/H2O HEAT EXCHANGE ORU (LOW LOAD)	1F96060-1	S, SE-Pri
SUIT PROCESSING COOLING UNIT (SPCU)	2351350-1-1	S, SE-Pri
PUMP PACKAGE ASSY	2353170-1-1	S, SE-Pri
RACK FLOW CONTROL ASSEMBLY	2353180-1-1	S, SE-Pri
SYSTEM FLOW CONTROL ASSY	2353190-1-1	S, SE-Pri
TEMPERATURE SENSOR	2365430-1-1	S, SE-Pri
MANUAL FLOW CONTROL VALVE ASSEMBLY	2366110-1-1	S, SE-Pri
GORE PANEL FLUID FEED THRU KIT	683-11637-1	S, SE-Pri

Appendix A-1 Hardware Responsibility

Pressure Cap	683-16348-806	S, SE-Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY	683-20193-2	S, SE-Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY	683-20193-3	S, SE-Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY	683-20193-TBD	S, SE-Pri
COLD PLATE – 1	683-56045-1	S, SE-Pri
COLD PLATE – 4	683-56045-4	S, SE-Pri
COLD PLATE – 6	683-56045-6	S, SE-Pri
COLD PLATE – 8	683-56045-8	S, SE-Pri
ITCS COOLANT SAMPLING TOOL (1/2 in)	683-56147-1	S, SE-Pri
3-WAY MIX VALVE	683-56185-1	S, SE-Pri
WELDED T RECEPTICLE 1.0”	683-66711-111	S, SE-Pri
WELDED T RECEPTICLE 0.75 “	683-66711-113	S, SE-Pri
WELDED T RECEPTICLE, 0.50 “	683-66711-115	S, SE-Pri
EVA CLAMP 1”	NCCS EI-D-A-22-1	S, SE-Pri
PLATE,IDENTIFICATION	TBD	S, SE-Pri
Node 3 HW		
RPCM TYPE II – INTERNAL	R077417-71	SE/SE- Pri
DDCU 6.25 KW	R076500-221	SE/SE-Pri
RPCM 25 AMP TYPE VI	R077420-31	SE/SE- Pri
RPCM 50 AMP TYPE III	R077418-31	SE/SE-Pri
RPCM 3.5 AMP TYPE V	R077419-51	SE/SE- Pri
RPCM 25 AMP TYPE II	R077417-31	SE/SE-Pri
RPCM 3.5 AMP TYPE V	R077419-51	SE/SE- Pri
WS/CHX 2-HOSE	SV8010029-2	SE/SE-Pri
WS/CHX 2-HOSE	SV8010031-2	SE/SE- Pri
LCZ-1 ESSMDM	8259015-915	SE/SE-Pri
LCZ-2 ESSMDM	8259015-915	SE/SE- Pri
CAUTION AND WARNING PANEL	1F51710-1	SE/SE-Pri
HEAT EXCHANGER ASSEMBLY	1F28900-920	SE/SE- Pri
HEAT EXCHANGER ASSEMBLY	1F28940-1	SE/SE-Pri
S0 TO N3 JUMPERS (AVIONICS)	1F77578-1	SE/SE- Pri
AVIONICS INSTALL KIT (NODE 1 TO NODE 3)	1F90008-1	SE/SE-Pri
NODE 3-1 SSMDM	8258906-926	SE/SE- Pri
NODE 3-2 SSMDM	8258906-927	SE/SE-Pri
UTILITY RAIL ASSEMBLY, TYPE A	1F51998	SE/SE- Pri
UTILITY RAIL ASSEMBLY, TYPE B	1F51991	SE/SE-Pri
UTILITY RAIL ASSEMBLY, TYPE C	1F51994	SE/SE- Pri
COLDPLATE -6	2351460-3-2	SE/SE-Pri
COLDPLATE -1	2351410-2-2	SE/SE- Pri
MDM CONNECTOR MOUNTING PLATE	NRP-A-MP8A3F	SE/SE-Pri

Appendix A-1
Hardware Responsibility

COUPLING QD, FLUID SELF-SEALING, INTERNAL (MALE)	683-16348-181	SE/SE- Pri
COUPLING QD, FLUID SELF-SEALING, INTERNAL (MALE)	683-16348-182	SE/SE-Pri
COUPLING QD, FLUID SELF-SEALING, INTERNAL (MALE)	683-16348-302	SE/SE- Pri
COUPLING QD, MALE, AMMONIA EXTERNAL (1 IN.)	1F45540-517	SE/SE-Pri
COUPLING QD, FEMALE, .125 INCH, FEEDTHROUGH-MTD.	683-19485-3	SE/SE- Pri
COUPLING QD, DISCONNECT, FLUID, SELF-SEALING, INTERNAL (MALE CAP)	683-16348-806	SE/SE-Pri
COUPLING QD, DISCONNECT, FLUID, SELF-SEALING, INTERNAL (MALE CAP)	683-16348-808	SE/SE- Pri
NON PROPULSIVE VENT (NPV) ASSEMBLY	683-60453-3	SE/SE-Pri
COUPLING QD, FLUID SELF-SEALING, INTERNAL (MALE)	683-16348-303	SE/SE- Pri
OUTLINE, CABLE, SIGNAL MOTOR/ACTUATOR, VENT AND RELIEF VALVE	2365460-3-1	SE/SE-Pri
OUTLINE, CABLE, POWER, PRESSURE CONTROL VENT AND RELIEF VALVE	2365470-4-1	SE/SE- Pri
DUCT, NON-AIRLOCK	2355606-1-1	SE/SE-Pri
METAL SEALS, SPECIAL (SPARES)	220F01200-001	SE/SE- Pri
NUT, FLANGED HEX, TYPE NATC, SIZE 13	683-95089-3	SE/SE-Pri
NUT, FLANGED HEX, TYPE NATC, SIZE 13	683-95089-2	SE/SE- Pri
NUT, FLANGED HEX, TYPE NATC, SIZE 13	683-95089-1	SE/SE-Pri
CONNECTOR	NATC06G25N35SC	SE/SE- Pri
CONNECTOR	NATC06G13N35SB	SE/SE-Pri
CONNECTOR	NATC06G25I9SD	SE/SE- Pri
BACKSHELL	NZGA-SG-13-N-12	SE/SE-Pri
BACKSHELL	NZGA-SG-13-N-16	SE/SE- Pri
BACKSHELL	NZGA-SG-13-N-24	SE/SE-Pri
BACKSHELL	NZGA-SG-25-N-24	SE/SE- Pri
BACKSHELL	NZGA-SX-25-N-16	SE/SE-Pri
BACKSHELL	NZGA-SX-25-N-20	SE/SE- Pri
BACKSHELL	NZGA-SX-33-N-36	SE/SE-Pri
GORE PANEL FEEDTHROUGH	FTH14705-43-E	SE/SE- Pri
GAMAH FITTING	683-16347-7	SE/SE-Pri
PIN	220F01187	SE/SE- Pri
EXTERNAL VENT FLANGE ASSY	220F01107-003	SE/SE-Pri
ARS RACK (INCLUDES -4 COLDPLATE)	683-53000-3	SE/SE- Pri
COLDPLATE -4	683-56045-4	SE/SE-Pri
COLDPLATES -10	683-56045-10	SE/SE- Pri

Appendix A-1
Hardware Responsibility

IMV VALVE	B42630-3	SE/SE-Pri
IMV VALVE	B42630-5	SE/SE- Pri
IMV VALVE	B42630-6	SE/SE-Pri
IMV VALVE	B42630-8	SE/SE- Pri
ACTIVE CBM M/D HARDWARE (RADIAL)	683-13948-1	SE/SE-Pri
IMV VALVE	B42630-7	SE/SE- Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY (SCD)	683-20193-19	SE/SE-Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY (SCD)	683-20193-20	SE/SE- Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY (SCD)	683-20193-21	SE/SE-Pri
NH3/H2O HX HEATER/TEMP SENSOR ASSY (SCD)	683-20193-22	SE/SE- Pri
MCA VENT ASSEMBLY KIT – EXTERNAL	683-11659-1 (S/N 000001 & 000002)	SE/SE-Pri
COLDPLATE -1	683-56045-1	SE/SE- Pri
RACK STRUCTURE (4-POST)	683-50243-3	SE/SE-Pri
RACK STRUCTURE (6-POST)	683-50243-2	SE/SE- Pri
RPDA (1-SLOT)	683-27100-1	SE/SE-Pri
AAA FAN	SV809992-6	SE/SE- Pri
AREA SMOKE DETECTOR	2351520-2-1	SE/SE-Pri
RPDA (2-SLOT)	683-27100-2	SE/SE- Pri
UTILITY OUTLET PANEL	683-27710-5	SE/SE-Pri
GENERAL LUMINAIRE LAMP HOUSE ASSY	219010	SE/SE- Pri
EMERGENCY LIGHTING POWER SUPPLY	683-26007-1	SE/SE-Pri
EMERGENCY EGRESS LIGHT SYSTEM – 36”	683-26007-3	SE/SE- Pri
EMERGENCY EGRESS LIGHT SYSTEM – 57”	683-26007-2	SE/SE-Pri
AUDIO TERMINAL UNIT	3000001-301	SE/SE- Pri
SYSTEM REMOTE ON/OFF CONTROL	219006-1	SE/SE-Pri
AUDIO BUS COUPLER	3000005-301	SE/SE- Pri
VIDEO SWITCH UNIT	3000008-301	SE/SE-Pri
AUDIO INTERFACE UNIT	3000002-301	SE/SE- Pri
COMMON VIDEO INTERFACE UNIT (CVIU)	3000028-301	SE/SE-Pri
3 WAY SAMPLE VALVE	B40204-12	SE/SE- Pri
SAMPLE PROBE KITS	683-19370-1	SE/SE-Pri
CO2 VENT AND VALVE	B40202-1	SE/SE- Pri
WASTE WATER CHECK VALVES	683-52817-1	SE/SE-Pri
PRESSURE CONTROL ASSEMBLY (PCA)	2351290-2-1	SE/SE- Pri
MANUAL ISOLATION VALVE	B40496-1	SE/SE-Pri
IMV FAN ASSEMBLY	SV809111-6	SE/SE- Pri
IMV VALVE	2353024-2-1	SE/SE-Pri

Appendix A-1
Hardware Responsibility

VARIABLE AIR VOLUME DAMPER ASSEMBLY	683-15144-3	SE/SE- Pri
COMMON CABIN AIR BACTERIA/FILTER ASSY	SV806630-2	SE/SE-Pri
PORTABLE FIRE EXTINGUISHER	E4482 OR 683-10050-1	SE/SE- Pri
N2 INTERFACE ASSEMBLY	683-16353-1	SE/SE-Pri
RACK FLOW CONTROL ASSEMBLY	683-56186-1	SE/SE- Pri
PUMP PACKAGE ASSEMBLY	2353170-1-1	SE/SE-Pri
INTERNAL REGENERATIVE HEAT EXCHANGER (SPCU)	2351340-1-1	SE/SE- Pri
SYSTEM FLOW CONTROL ASSEMBLY	683-56187-1	SE/SE-Pri
PASSIVE CBM MECHANISM	683-13946-1	SE/SE- Pri
ACTIVE CBM RING AND SEAL KIT (RADIAL)	683-13940-2	SE/SE-Pri
PASSIVE CBM RING AND SEAL (RADIAL)	683-13942-1	SE/SE- Pri
HATCH ASSY KIT (AXIAL)	683-13105-1	SE/SE-Pri
ACTIVE CBM MECHANISM KIT	683-13944-1	SE/SE- Pri
HATCH ASSY KIT (RADIAL)	683-13105-2	SE/SE-Pri
RACK POWER SWITCH, RH WITH LED (ECLSS)	683-50370-3	SE/SE- Pri
RACK POWER SWITCH, RH WITH LED (W&HC)	683-50370-3	SE/SE-Pri
RPDA (1-SLOT)	683-27100-1	SE/SE- Pri
AREA SMOKE DETECTOR	2351520-2-1	SE/SE-Pri
MANUAL FLOW CONTROL VALVE	2366110-1-1	SE/SE- Pri
IVA ANTENNA	683-28005-1	SE/SE-Pri
COLDPLATE -6	683-56045-6	SE/SE- Pri
COLDPLATE -7	683-56045-7	SE/SE-Pri
COLDPLATE -8	683-56045-8	SE/SE- Pri
GENERAL LUMINAIRE BASEPLATE BALLAST ASSY	219011	SE/SE-Pri
IMV VALVE	2353024-7-1	SE/SE- Pri
FEEDTHRU CONNECTORS	683-16347-205	SE/SE-Pri
FEEDTHRU CONNECTORS	683-16347-214	SE/SE- Pri
VENT RELIEF VALVE	2353026-1-1	SE/SE-Pri
ACTIVE CBM M/D HARDWARE (AXIAL)	683-13948-2	SE/SE- Pri
ACTIVE CBM MECHANISM KIT	683-13944-2	SE/SE-Pri
ACTIVE CBM MECHANISM KIT	683-13944-3	SE/SE- Pri
ACTIVE CBM MECHANISM KIT	683-13944-4	SE/SE-Pri
ACTIVE CBM MECHANISM KIT	683-13944-5	SE/SE- Pri
ACTIVE CBM RING AND SEAL KIT (AXIAL)	683-13940-1	SE/SE-Pri
K BAR ATTACHMENT	683-62201-1	SE/SE- Pri
K BAR CAPTURE MECHANISM	683-62201-27	SE/SE-Pri
K BAR ATTACHMENT	683-62201-2	SE/SE- Pri

Appendix A-1 Hardware Responsibility

K BAR CAPTURE MECHANISM	683-62201-28	SE/SE-Pri
RACK POWER SWITCH	683-50370-3	SE/SE- Pri
CO2 VALVE	B40202-1	SE/SE-Pri
PUMP PACKAGE BYPASS VALVE	2351169-1-1	SE/SE- Pri
N3 CONTINGENCY THERMAL JUMPER	683-56836-341	SE/SE-Pri
N3 CONTINGENCY THERMAL JUMPER	683-56836-342	SE/SE- Pri
GROUND STUD, ALTERED ITEM	683-60738-1	SE/SE-Pri
RETAINING RING	991W04-1BP	SE/SE- Pri
SYSTEM REMOTE ON/OFF CONTROL ASSY UPGRADE	219006-2	SE/SE-Pri
UTILITY OUTLET PANEL	683-27710-5	SE/SE- Pri
MOD KIT UTILITY OUTLET PANEL	683-28289-1	SE/SE-Pri
K BAR ASSY MOD KIT – LEFT	683-62201-33	SE/SE- Pri
K BAR ASSY MOD KIT – RIGHT	683-62201-34	SE/SE-Pri
RPDA 2 SLOT KIT	683-27100-2	SE/SE- Pri
VENT RELIEF KIT – INTERNAL	683-11647-1	SE/SE-Pri
IMV DIFFUSER ASSEMBLY	683-15011-1	SE/SE- Pri
IMV TRANSITION DUCT	683-15012-2	SE/SE-Pri
IMV SCREEN ASSEMBLY	683-15013-1	SE/SE- Pri
IMV RETURN GRILLE	683-15196-1	SE/SE-Pri
THREADED FLUID FITTING	683-16347-109	SE/SE- Pri
THREADED FLUID FITTING	683-16347-151	SE/SE-Pri
THREADED FLUID FITTING	683-16347-173	SE/SE- Pri
THREADED FLUID FITTING	683-16347-185	SE/SE-Pri
THREADED FLUID FITTING	683-16347-205	SE/SE- Pri
THREADED FLUID FITTING	683-16347-214	SE/SE-Pri
THREADED FLUID FITTING	683-16347-73	SE/SE- Pri
THREADED FLUID FITTING	683-16347-74	SE/SE-Pri
WASHER	683-55276-5	SE/SE- Pri
CLAMP ASSEMBLY, KIT MODEL	1F97458-1	SE/SE-Pri
IMV VALVE (HONEYWELL)	2353024-2-1, S/N D0006	SE/SE- Pri
WELD TEE FITTING, TEMP SENSOR RECEPTACLE	683-66711-113	SE/SE-Pri
BONDING STRAP, KT MODEL	1F97459-1	SE/SE- Pri
IMV FAN SILENCER ASSEMBLY	683-56036-1	SE/SE-Pri
CLAMP, ROUND, V-BAND	5737A-712-A	SE/SE- Pri
CLAMP, RECTANGULAR, V-BAND	VC1626	SE/SE-Pri
IMV CAP	683-15016-1	SE/SE- Pri
IMV CAP	683-15016-6	SE/SE-Pri
IMV CAP	683-15016-8	SE/SE- Pri
SHIELD ASSEMBLY KIT – FWD ENDCONE	683-11642-1	SE/SE-Pri
PCBM CONTAMINATION COVER KIT	683-13612-1	SE/SE- Pri
RADIAL PORT CLOSEOUT SHIELD KIT	683-13918-3	SE/SE-Pri
PCBM M/D SHIELD KIT	683-13948-3	SE/SE- Pri

Appendix A-1 Hardware Responsibility

MLI BERTHING MECHANISM (BLANKET)	683-58007-3	SE/SE-Pri
MLI ASSEMBLY LAB A BERTHING	683-58007-7	SE/SE- Pri
ARIS PIVOT PIN (LEFT)	683-61711-31	SE/SE-Pri
ARIS PIVOT PIN (RIGHT)	683-61711-32	SE/SE- Pri
MLI INSTALLATION HARDWARE KIT	683-11658-1	SE/SE-Pri
THREADED FLUID FITTING	683-16347-841	SE/SE- Pri
THREADED FLUID FITTING	683-16347-845	SE/SE-Pri
COAXIAL LOOP BACK ASSEMBLY	683-26053-1	SE/SE- Pri
DEAD FACE CONNECTOR ASSEMBLY	1F46318-1	SE/SE-Pri
CABLE 1553 TERMINATION ASSEMBLY	683-26050-1	SE/SE- Pri
CABLE 1553 TERMINATION ASSEMBLY	683-26051-1	SE/SE-Pri
ANTENNA COUPLER (SCD)	683-28005-5	SE/SE- Pri
LINEAR DIFFUSER ASSEMBLY	1F70841-1	SE/SE-Pri
CONTROL ASSEMBLY – DAMPER VALVE, VARIABLE AIR VOLUME	1F89998-1	SE/SE- Pri
PLATE, MOUNT AVIONICS AIR COOLING	683-15334-1	SE/SE-Pri
RPS BRACKET ASSEMBLY	683-50371-6	SE/SE- Pri
THREADED FLUID FITTING	683-16347-7	SE/SE-Pri
EVA CLAMPS	NCCS-EI-D-A-24-1	SE/SE- Pri
CAUTION LABEL	683-14049-1	SE/SE-Pri
Station-Shuttle Transfer System (SSPTS)		
SSPTS Z-1 Truss Cable Mod Kit	1F15395-1	SE-Pri
SSPTS PMA2 Cable Mod Kit	1F15396-1	SE-Pri
Advanced ECLSS Racks HW		SE-Sec
Boeing delivered common hardware provided GFE for Advanced ECLSS Racks	Tbd	S, SE-Pri
Avionics Equipment		
Wireless Access Point Kit	1F15938	N
Ethernet Cable Repair Kit	1F15939	N
Ethernet User Cable Kit	1F15940	N
EVR	See Appx A-2	SE-Integ
<u>REGEN ECLSS</u>		
Oxygen Generation Assembly		
Water	SV827690-1	S, SE-Pri*
Inlet Deionizing Bed	SV825569-1	S, SE-Pri*
Hydrogen ORU	SV825526-1	S, SE-Pri*
Pump	SV825565-1	S, SE-Pri*
Oxygen Outlet	SV825582-1	S, SE-Pri*
Hydrogen Sensor	SV826167-1	S, SE-Pri*
Nitrogen Purge ORU	SV828110-1	S, SE-Pri*
Power Supply Module	96M11700	SE-Integ*
Oxygen Generation Assembly Power Supply Module (OGA PSM)	96M11700	SE-PRI, H
Process Controller	SV826025-1	S, SE-Pri*

Appendix A-1 Hardware Responsibility

OGA Hydrogen ORU Calibration Kit (HOCK):		
• Manifold	SV1016277-2	S, SE-Pri
• EMI Filter	SV1014546-1	S, SE-Pri
• Shorting Plug	SV1016060-1	S, SE-Pri
• Wire Harness	SV1014926-1	S, SE-Pri
• Adapter Harness	SV1015833-1	S, SE-Pri
OGA Hydrogen Sensor ORU Purge Adapter (HOPA):	528-38602-1 (ASSY DWG)	S, SE-Pri
• Evacuation Tool	SV1013141-1	S, SE-Pri
• Inlet Tool	SV1013102-1	S, SE-Pri
• Outlet Tool	SV10131145	S, SE-Pri
Water Delivery System (WDS):		
• Controller	96M22020-1	S, SE-Pri
• ORU Power Cable	96M23040-1	S, SE-Pri
• ORU Data Cable	96M23041-1	S, SE-Pri
• Control Power Cable	96M23039-1	S, SE-Pri
Thermal Expansion Device (TED) & Hoses:		
• Pump ORU Inlet Expansion Hose	96M12549-1	S, SE-Pri
• Pump ORU Inlet Expansion Hose	96M12549-3	S, SE-Pri
• Pump ORU Inlet Expansion Hose	96M12549-5	S, SE-Pri
• Pump ORU Inlet Expansion Hose	96M12549-7	S, SE-Pri
• Pump ORU Inlet Expansion Hose	96M12549-9	S, SE-Pri
Hydrogen ORU TED Assembly	96M35019-1	S, SE-Pri
OGS Utility Panel Closeout Assembly	96M35015-1	S, SE-Pri
* SE PRI begins October 1 st , 2008		
Urine Processor Assembly		
Separator Plumbing Assy	96M12250	SE-Integ*
Firmware Controller Assy	96M13115	SE-Integ*
Wastewater Storage Assy	96M12280	SE-Integ*
Recycle Filter Tank Assy	96M12320	SE-Integ*
Recycle Filter Tank Assemblies	96M12320-1	S, SE-Integ*
Distillation Assy	96M12360	SE-Integ*
Fluids Control & Pump Assy	96M11900	SE-Integ*
Pressure Control Pump Assy	96M11900	SE-Integ*
Condensate Transfer Pump Power Cable (EXPRESS Rack)	5A2.963.016 (Russian) 96M23055-3	S, SE-Pri
Condensate Transfer Pump Power Cable (KU Band PS)	96M23055-1	S, SE-Pri
Condensate Transfer Pump Power Cable (WHC)	96M23055-5	S, SE-Pri
Russian Compressor Power Cables (KU	96M23056-1	S, SE-Pri

Appendix A-1 Hardware Responsibility

Band)		
Russian Compressor Power Cables (WHC)	96M23056-3	S, SE-Pri
SPA Bypass Hose	96M12568-9	S, SE-Pri
Cooling Jacket Purge Assembly	96M12559-1	S, SE-Pri
RFTA Depress Flexline Assembly	96M12568-7	S, SE-Pri
WSTA Bypass Manifold Assembly	96M12585-1	S, SE-Pri
* SE INTEG begins October 1 st , 2008		
Water Processing Assembly		
Catalytic Reactor	SV825455-1	S, SE-Pri*
Water Delivery	SV825449-1	S, SE-Pri*
Wastewater	SV825412-1	S, SE-Pri*
Pump/Separator	SV825426-1	S, SE-Pri*
Separator Filter	SV825438-1	S, SE-Pri*
Particulate Filter	SV825442-1	S, SE-Pri*
Multifiltration Bed #1	SV825452-1	S, SE-Pri*
Sensor	SV825447-1	S, SE-Pri*
Water Storage	SV825502-1	S, SE-Pri*
Microbial Check Valve	SV825499-1	S, SE-Pri*
Process Controller	SV826000-1	S, SE-Pri*
Ion Exchange Bed	SV825493-1	S, SE-Pri*
Reactor Health Sensor	SV826302-1	S, SE-Pri*
Gas Separator	SV825487-1	S, SE-Pri*
Oxygen Filter	SV828118-1	S, SE-Pri*
WPA T Hose:		
• Product T Hose	96M12550-1	S, SE-Pri
• Sample Door Plate Assembly	96M12553-1	S, SE-Pri
WPA Check Valve	SV1015439-1	S, SE-Pri
Water Transfer Pump – low speed	96M12316-3	S, SE-Pri
Water Transfer Pump – high speed	96M12316-1	S, SE-Pri
Water Transfer Pump power cables (WHC)	96M23074-1	S, SE-Pri
Manifold – Condensate Transfer	96M12317-1	S, SE-Pri
Manifold – CWC Transfer	96M12317-3	S, SE-Pri
Manifold – Microbial Shock Kit:		
• Manifold	96M12317-5	S, SE-Pri
• Station Pump Assembly	96M12316-3	S, SE-Pri
• Flex Line Assembly	96M12568-1,	S, SE-Pri
• Flex Line Assembly	96M12568-3,	S, SE-Pri
• Flex Line Assembly	96M12568-5	S, SE-Pri
• Check Valve Assembly	96M35021-1	S, SE-Pri
WPA Vent Hose	96M12568-11	S, SE-Pri
WPA waste tank bypass assembly (not hose)	96M35031-1	S, SE-Pri
ECLS purge hose C (WPA purge Assembly 1/4” syringe fill)	96M35027-1	S, SE-Pri

Appendix A-1 Hardware Responsibility

ECLS purge hose D (WPA purge Assembly 1/4" syringe fill)	96M35027-3	S, SE-Pri
ECLS purge hose E (WPA purge Assembly 1/2" syringe fill)	96M35028-1	S, SE-Pri
ECLS purge hose F (WPA purge Assembly 1/2" syringe fill)	96M35028-3	S, SE-Pri
WPA Shutoff valve assembly	96M35035-1	S, SE-Pri
WRS1 Utility Panel Closeout Assembly	96M35017-1	S, SE-Pri
WRS2 Utility Panel Closeout Assembly	96M35018-1	S, SE-Pri
WRS Water transfer fuse	FM09A-3A	S, SE-Pri
WRS Manifold tubing	96M12588-1	S, SE-Pri
WRS Manifold filter (RFTA exit filter)	96M12564-1 *Note: Exit Filter is a source control drawing that is a borrowed component from the RFTA ORU and as such is still a MSFC design controlled component so no drawing will be provided except for a PDF.	S, SE-Pri
WRS manifold tubing clamp	9579K65 CAGE: OKVE6	S, SE-Pri
* SE PRI begins October 1 st , 2008		
Other Items		
Russian built ACY/HC	TBD	SE-Pri,
Russian Built Electronic Commutator	Part Number ЕИЖА468347.044, serial number1272742220	S
Crew Quarters	TBD	SE-Integ*
TOCA2	TBD	SE-Integ*
Galley ExPRESS rack	TBD	SE-Integ*
Food Warmer	TBD	SE-Integ
Hot water dispenser	TBD	SE-Integ*
MERLIN fridge	TBD	SE-Integ*
ARS Utility Panel Closeout Assembly	96M35016-1	S, SE-Pri
Portable Fan Assembly	96M52440-1	S, SE-Pri
Internal Sampling Adapter	97M55830-1	S, SE-Pri
External Sampling Adapter	97M54015-1	S, SE-Pri
Internal Sampling Adapter Pressure Probe	1525,760MMHGA/30PSIA	S, SE-Pri
CRK Conical Adapter Assembly	96M52563	S, SE-Pri
Face Seal	96M52566	S, SE-Pri
LiOH Top Flange	96M52567	S, SE-Pri
Portable Fan Subassembly	96M68020	S, SE-Pri
Flight Bag Parts Assembly:		
• O-Ring	96M33012-1	S, SE-Pri

Appendix A-1
Hardware Responsibility

• O-Ring	96M33012-7	S, SE-Pri
• O-Ring	96M33012-9	S, SE-Pri
• Filter	SV828518-1	S, SE-Pri
• Screen	SV828413-1	S, SE-Pri
• Shorting Plug Assembly	SV1016060-1	S, SE-Pri
• Connector Adapter EMI Filter	SV1014546-1	S, SE-Pri
• Water Transfer Fuse	96M33012-17	S, SE-Pri
• Separator Pump Shorting Plug	96M23054-1	S, SE-Pri
• Shorting Plug Assembly, WDC	96M23042	S, SE-Pri
Wire Harness Assembly, RIP to Laptop 1553, OGS	96M23038	S, SE-Pri
Wire Harness Assembly, RIP to Laptop 1553, WRS	96M23046	S, SE-Pri
Wire Harness Assembly, DM to Laptop RS-422, WRS	96M23047	S, SE-Pri
Wire Harness Assembly, Russian Compressor Power, WRS	96M23053	S, SE-Pri
* SE Integ begins October 1 st , 2008		
COMMERCIAL HARDWARE		
MHI O-Ring, Outside Active/Passive (QTY 1)	683-13530-15	S, SE-PRI
MHI O-Ring, Inside Passive (QTY 1)	683-13520-1	S, SE-PRI
“H” – LIMITED HRFF		
WHC Dry Components		
Inserts ACY (kit)	A8-9060-400	H
Wipes (kit)	A8A-9060-750	H
Solid Waste Container Lid	11F615.8720A55-10	H
Solid Waste Container Body	11F615.8720A55-20	H
Urine Receptacle	A8-9060-800-04	H
Insert Filter	10182.5514.000	H
Fan	A8-9060-1500	H
Pump Separator	H50.2.428.01.000	H
Air Filter	A8-9060-250-01	H
Electronic Unit of Pretreat Indicator	5B2.390.934-01	H
ACY Control Panel #2	A8-9060-1800-01	H
Pump-Separator blocker and cables	H50.2.584.00.000	H
ACY Control Panel #2 and cables	10361.6269.00.000	H
Filter (kit)	10463.6610.000	H
Liquid Indicator	A8A-9060-900	H
Solid Waste Receptacle	A8-9060-3600	H
Hose	A8A-9060-1470	H

Appendix A-1 Hardware Responsibility

Hose	A8A-9060-1480	H
Hose	A8A-9060-1490	H
Hose	A8-9060-3400-23.10	H
T-Adapter	A8A-9060-180	H
Corner Fitting	A8-9060-220	H
Piping	10166.5182.000-03	H
Urine and Water EDV	11F615.8711-OA15-1	H
Wring Collector	11F615.8711-OA15-3	H
HARDWARE TRANSFERRED FROM GODDARD SPACE FLIGHT CENTER (Sustaining effective on May 1, 2011)		
Express Logistics Carriers	2091050	S, SE Pri
<u>ELC Payload Test Equipment</u>		
ELC Suitcase Simulator	2115115	S, SE Pri**
ELC Simulator	2121556	S, SE Pri
ELC Functional Equivalent Unit (FEU)	2092664, 2121594	S, SE Pri
ASIST Workstation	NASA 079053 (asset tag number)	S, SE Pri
ESP3 Passive CAS	2066480	S, SE Pri
Note: ** S, SE PRI ends September 2014 (5 months after RAPTR delivered)		
Legend:		
S: Sustaining, which is repair, retest, and acceptance for flight		
SE: Sustaining engineering, which includes anomaly resolution, engineering for Post Production		
SE-Pri: Primary sustaining engineering, responsible for overall anomaly resolution at this part level. Where it is not shown, it indicates that the prime responsibility resides outside the 10K contract.		
SE-Sec: Secondary sustaining engineering, responsible for supporting overall anomaly resolution at this part level, but only for the specified subassembly or function.		
SE-Integ: Sustaining engineering integration, responsible for integration or compatibility issues of the specified hardware only.		
H: Perform Limited Hardware Ready for Flight processing which is cleaning to “visually clean”, inspecting, correcting minor non-conformances, and packing for shipment to the next level integrator. Repair of minor non-conformances are limited to repairs that do not require special tests or ground support equipment.		
N: No sustaining engineering, maintenance or logistics responsibility after hardware delivery.		

APPENDIX A-2 EVR HARDWARE RESPONSIBILITY

Hardware	Part #	Institution	Vehicle Segment Sustaining	Assembly Complete Element Assignment																Grasp Fixtures								Targets								
				SD	S1	P1	S3	P3	Z1	S4	P4	S5	P5	S6	P6	N1	USL	AVL	PMA	MBS	SPDM	Hdw Qty	Grasps JORU	Flanged MCF	Std MCF	Mod Micro	Mod MCF	H-Fixture	Total Fixtures	Fixture Provider	Boeing DHT	Boeing Trunc Cone	MTC-001	MTC-002	Total Targets	Target Provider
SPDM Compatible																																				
ACBSP	10033177		SE-Integ		1	1																2	1	2					2	GFE					0	N/A
Battery	RE1804, RE3308		SE-Integ							12	12			12	12							48	2			96			96	Boeing	96			96	Boeing	
BCDU	RE1807, RE3309		SE-Integ							6	6			6	6							24	2			48			48	Boeing	48			48	Boeing	
DCSU	R072610		SE-Integ							2	2			2	2							8	2			16			16	Boeing	16			16	Boeing	
DDCU-E	R076522		SE-Integ	4	1	1				2	2			2	2							14	2			28			28	Boeing	28			28	Boeing	
ECU	R072341		SE-Integ							2	2			2	2							8	1			8			8	Boeing	8			8	Boeing	
ESSMDM (MDM-16)	8259065		SE-Integ	2																		2	1	2				2	GFE					N/A	N/A	
ETVCG	10033194		SE-Integ		2	2																4	1	4				4	GFE					N/A	N/A	
EVCPS (GFE)	SEG16102821		SE-Integ	1																		1	1	1				1	GFE			2		2	GFE	
Video Switch	10033180		SE-Integ	3																		3	1	3				3	GFE					N/A	N/A	
MBSU	R072591		SE-Integ	4																		4	2		8			8	Boeing	8			8	Boeing		
MDM-4	8260500		SE-Integ		2	2	2	2														8	1	8				8	GFE					N/A	N/A	
MDM-10	8259056		SE-Integ	2	1	1																4	1	4				4	GFE					N/A	N/A	
MT Stop	1F83270		SE-Integ					1	1													2	1	2				2	GFE			2		2	GFE	
PFCS	RE2614, RE3310		SE-Integ							2	2			2	2							8	4			32			32	Boeing	32			32	Boeing	
PVCU	R071818, R071826		SE-Integ							2	2			2	2							8	1			8			8	Boeing	8			8	Boeing	
RJMC-TRRJ	5842400		SE-Integ		2	2																4	1	4				4	GFE					N/A	N/A	
RPCM TYPE II	R077417		SE-Integ	4	1	1	2	2														10	1			10			10	Boeing	10			10	Boeing	
RPCM TYPE III	R077418		SE-Integ	2																		2	1			2			2	Boeing	2			2	Boeing	
RPCM TYPE IV	R072702		SE-Integ	4	4	4	2	2														16	1			16			16	Boeing	16			16	Boeing	
RPCM TYPE V	R077419		SE-Integ	10	7	7	4	4	2													34	1			34			34	Boeing	34			34	Boeing	
RPCM TYPE VI	R077420		SE-Integ	1						2												3	1			3			3	Boeing	3			3	Boeing	
SSU	RE1806		SE-Integ							2	2			2	2							8	1		8	3		8	Boeing	8			8	Boeing		
SD Bay 3 SPDA Door	1F77163, 1F77164		SE-Integ	2																		2	1		2			2	GFE			2		2	GFE	
TDRSS Transponder	10033177		SE-Integ		1	1																2	1	2				2	GFE					N/A	N/A	
Tether Shuttle Stop	1F86039, 1F85075		SE-Integ				1	1														2	1				2		2	GFE			2		2	GFE
H Fixture Assembly	Various		SE-Integ	5	4	4	3	3	3	6	6			6	6							N/A						46	GFE			46		46	GFE	
Robotic Offset Tool	RH000020		SE-Integ																		1	1	1			1		1	Boeing					N/A	N/A	
Offset Tool Holster	RH000451		SE-Integ																		1	1						N/A	N/A			1		1	GFE	
6B MTC Target Installs	Various		SE-Integ	22	27	27	6	6														N/A							N/A	N/A			88		88	GFE
Berthing Mechanisms																																				
RTAS	Various		SE-Integ							1	1	1	2	2	1	1						9														
CBM	683-13914, -13916		SE-Integ							1							6	2	1	3		13														
MBM	683-55226		SE-Integ							1												1														
MTSAS/LCA	SP-M-595		SE-Integ	1														1				2														
SSAS	222057		SE-Integ	2	2	2	1	1														8														
CAS	Various		SE-Integ				4	2														6														
MCAS	1F95894		SE-Integ																	1		1														
Grapple Fixtures																																				
GF Installations	Various		SE-Integ	1	1	2	2	2	1					4	4			2	1	2		22														
SAAGFA	RH000100		SE-Integ																			4														
PVRGF	RH000043		SE-Integ									1	1									2														
Adjustable Grapple Bar	1F82020		SE-Integ																			2														
Fixed Grapple Bar	1F82000		SE-Integ																			2														
HRS Radiator Grapple Bar	1F81220		SE-Integ																			2														
Miscellaneous																																				
EBCS target bracket and doubler	1F70182, 1F70185		SE-Integ				4	2												1		7														
MSS Extension Cable and Stowage Bag Assembly	1F71200		SE-Integ																	1		1														
Early Ammonia Servicer	RH000186		SE-Integ													1						1														
Mobile Transporter	SP-M-129		SE-Integ		1																	1														
TUS	1F45284, 1F45285		SE-Integ		2																	2														
Robotic Test Articles																																				
Battery and Worksite			SE-Integ																			1														
PCU and Worksite			SE-Integ																			1														
PVCU and Worksite			SE-Integ																			1														
ROST and Holster Dev Units			SE-Integ																			2														
RPCM and Worksite			SE-Integ																			1														
SSU			SE-Integ																			1														
ECU			SE-Integ																			1														
Beta Gimbal Worksite			SE-Integ																			1														

NOTE: All hardware delivered under NAS15-10000 shall be fully sustained under this contract as defined in Appx A-1. This Appx A-2 defines the EVR Integration responsibility only.

APPENDIX B – SOFTWARE TO BE SUSTAINED UNDER THIS CONTRACT

This appendix contains tables of CSCI products for the U.S. portion of the ISS program, by software developer. All of the information is based on the program understanding at the time of the document release. Appendix B-1, SVF Software, lists the SVF CSCIs. Appendix B-2, Flight Software CSCI and Major CSC, contains the Flight Software CSCIs and shared CSCs. Shared CSCs are those produced by a Tier 1 Subcontractor other than the CSCI Owner. Appendix B-3, Ground Software including MBF, lists the Ground Software CSCIs, including MBF, Appendix B-4, GSE/TSE Software, lists the GSE/TSE software CSCIs, and Appendix B-5, Test Software Including Simulations, lists the test software, including flight software simulations for use in FQT.

APPENDIX B-1 SVF SOFTWARE

CSCI Name	Provider	Capability
SVF Output CSCIs		
Base Support	B-HOU	Non-real time support
Real Time Process Control Support Services	B-HOU	Non-real time support
Real Time Display Support Services	B-HOU	Non-real time support
Post Processing Support Services	B-HOU	Non-real time support
Session Setup and Staging Support Services	B-HOU	Non-real time support
TDCS Capture	B-HOU	Test data capture
TDCS Retrieval	B-HOU	Test data capture
TDCS Data Acquisition	B-HOU	Test data capture
SVF Input CSCIs		
CES Command and Control Environment Simulation	B-HOU	Simulation
NES Node 1 Control Environment Simulation	B-HOU	Simulation
ETCS Simulation	B-HB	Simulation
GN&C Simulation	B-HB	Simulation
EXT Simulation	B-HB	Simulation
SARJ Simulation	B-HB	Simulation
SDMS Simulation	B-HB	Simulation
Secondary Electrical Power System Simulation	B-CP	Simulation
Power Management Control Application MATE Simulation	B-CP	Simulation
Photovoltaic Control Application MATE Simulation	B-CP	Simulation
Integrated Lab Simulation through 8A	B-HSV	Simulation
Integrated Lab & Node 2 Simulation through 15A	B-HSV	Simulation
Integrated Lab& Node 2 Simulation through 14A	B-HSV	Simulation
Integrated Lab, Node 2, and Node 3 through 20A	B-HSV	Simulation
Lab Power & Switching	B-HOU	Simulation

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC

Location	CSCI Acronym	1 st Flt	CSCI/ CSC	CSCI Name	Developer	Host MDM	Lang Used
			CSC	SMDM Utilities	B-HB/HI	FGB-1,-2	Ada/Asm
FGB, S1, Node 1, Lab, P1, Node 2, , AL, S3, P3, S4, P4, S6, P6, PMA1, S0,	SMDMBF	1A	CSCI	Standard MDM Boot and Diagnostics FC	B-HB/HI	PVCU-1-4 ^a , PVCU-1-4B, S0-1,-2, S1-1,-2, P1-1,-2, S3-1,-2, P3-1,-2, , N1-1,-2, AL-1, STR-1, FGB-1,-2, PTR-1, N2-1,-2, LA-1,-2,-3	Ada/Asm
FGB, S1, Node 1, Lab, P1, Node 2, , AL, S3, P3, S4, P4, S6, P6, PMA1, S0,	SPD 1553	1A	CSCI	Serial/Parallel Data Card 1553 Firmware	B-HB/HI	All MDMs	Asm
PMA1	NCS	2A	CSCI	Node 1 Control Software (Release 1)	B-HOU	N1-1,-2	Ada
			CSC	SMDM Utilities	B-HB/HI	N1-1,-2	Ada/Asm
Node 1, JEM, Lab, Node 2,	CBMMLC	2A	CSCI	Common Berthing Mechanism Master/Latch Controller	B-HSV	FC	C
Node 1, JEM, Lab, Node 2,	CBMBC	2A	CSCI	Common Berthing Mechanism Bolt Controller	B-HSV	FC	C

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC (Continued)

Location	CSCI Acronym	1st Flt	CSCI/ CSC	CSCI Name	Devel- oper	Host MDM	Lang Used
Node 1, AL, Lab, Z1, S1, P1, Node 2, S0, , S3/S4, P3/P4,	RPCM	2A	CSCI	Sec. Power Control Application FC	B-CP	FC	Asm
PMA1	NCS R2	2A.1	CSCI	Node 1 Control Software (Release 2)	B-HOU	N1-1,-2	Ada
			CSC	SMDM Utilities	B-HB/HI	N1-1,-2	Ada/ Asm
P1, S1	ACBSP	3A	CSCI	S-Band Baseband Signal Processor FC	B-HB	FC	C
P1, S1	ACRFG	3A	CSCI	S-Band RF Group FC	B-HB	FC	Ada
P1, S1	XPDR	3A	CSCI	Standard TDRSS Transponder FC	B-HB	FC	C
Z1	SG TRC	3A	CSCI	Ku-Band Transmitter/Receive r Controller FC	B-HB	FC	Ada
Z1	PCU	3A	CSCI	Plasma Contactor Unit FC	B-CP	FC	Asm
P4, S4, P6, S6	PVCA	4A	CSCI	Photovoltaic Controller Application	B-CP	PVCU-1- 4A, PVCU- 1-4B	Ada
			CSC	SMDM Utilities	B-HB/HI	PVCU-1- 4A, PVCU- 1-4B	Ada/ Asm
PV	ECU BGA	4A	CSCI	Electronic Controller Unit/Beta Gimbal Assembly FC	B-CP	FC	Asm
PV	ECU SAW	4A	CSCI	Electronic Controller Unit/Solar Array Wing FC	B-CP	FC	Asm
PV, S0	LDI	4A	CSCI	Local Data Interface FC	B-CP	FC	Asm
Lab, S0, S1, P1, Node 2, ,	DDCU	4A	CSCI	DC/DC Converter Unit FC	B-CP	FC	Asm
S0	SCA	4A	CSCI	Switch Gear Controller Assembly FC	B-CP	FC	Asm

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC (Continued)

Location	CSCI Acronym	1st Flt	CSCI/ CSC	CSCI Name	Devel- oper	Host MDM	Lang Used
Lab, S0,	EMDMBF	5A	CSCI	Enhanced MDM Boot and Diagnostics FC	B-HB/HI	C&C-1,-2,- 3, GN&C- 1,-2, PL-1,- 2, INT-1,-2, EXT-1,-2, PMCU-1,-2	Ada/ Asm
Lab, S0	HRDL	5A	CSCI	High Rate Data Link Firmware	B-HB/HI	C&C-1,-2,- 3, GN&C- 1,-2, PL-1,- 2, INT-1,-2, EXT-1,-2, PMCU-1,-2	Ada/ Asm
Lab, AL,	PCA	5A	CSCI	Pressure Control Assembly	B-HSV	FC	Ada/ Asm
Lab	GN&C	5A	CSCI	GN&C MDM	B-HB	GN&C-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	GN&C-1,-2	Ada/ Asm
Lab	SGS HRFM	5A	CSCI	Ku-Band High Rate Frame MUX FC	B-HB	FC	C
Lab	SGS HRM	5A	CSCI	Ku-Band High Rate Modem FC	B-HB	FC	C
Lab, , Node 2,	PPMC	5A	CSCI	Pump Package Motor Controller	B-HSV	FC	C
Lab	VBSP	5A	CSCI	Ku-Band Video Baseband Signal Processor FC	B-HB	FC	Ada
Lab	CCS	5A	CSCI	Command & Control Software	B-HOU	C&C-1,-2,-3	Ada
			CSC	EMDM Utilities	B-HB/HI	C&C-1,-2,-3	Ada/ Asm
			CSC	Timeliner UIL Kernel and Adapter	CSDL*	C&C-1,-2,-3	
Lab	PMCA	5A	CSCI	Manage Electric Power Systems	B-CP	PMCU-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	PMCU-1,-2	Ada/ Asm
			CSC	Control Solar Alpha Rotary Joint	B-HB	PMCU-1,-2	Ada
Lab	LSYS1	5A	CSCI	LAB Systems 1	B-HSV	LA-1	Ada
			CSC	SMDM Utilities	B-HB/HI	LA-1	Ada/ Asm
Lab	LSYS2	5A	CSCI	LAB Systems 2	B-HSV	LA-2	Ada

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC (Continued)

Location	CSCI Acronym	1st Flt	CSCI/ CSC	CSCI Name	Devel- oper	Host MDM	Lang Used
			CSC	SMDM Utilities	B-HB/HI	LA-2	Ada/ Asm
Lab	LSYS3	5A	CSCI	LAB Systems 3	B-HSV	LA-3	Ada
			CSC	SMDM Utilities	B-HB/HI	LA-3	Ada/ Asm
Lab	PEP	5A	CSCI	Payload Executive Processor	B-HSV	PL-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	PL-1,-2	Ada/ Asm
			CSC	Timeliner UIL Kernel and Adapter	CSDL	PL-1,-2	
LAB	INTSYS	5A	CSCI	Internal Systems	B-HSV	INT-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	INT-1,-2	Ada/ Asm
			CSC	SEPS – Control and Monitor RPCMs	B-CP	INT-1,-2	Ada
Lab,	AMP	5A	CSCI	Audio Management Processor	B-HSV	FC	Ada/ Asm
Lab, AL, Node 2, JEM, APM, ,	ATU	5A	CSCI	Audio Terminal Unit	B-HSV	FC	C / Asm
Lab,	AIUA	5A	CSCI	Audio Interface Unit Audio	B-HSV	FC	C / Asm
Lab	TP	5A	CSCI	Tone Processor	B-HSV	FC	C / Asm
Lab,	BMP	5A	CSCI	Bus Management Processor	B-HSV	FC	C / Asm
Z1	CMG	5A	CSCI	CMG Control FC	B-HB	FC	Asm
Lab,	AIUC	5A	CSCI	Audio Interface Unit Command	B-HSV	FC	C / Asm
Lab	SCU	5A	CSCI	Sync and Control Unit	B-HSV	FC	C / Asm
Lab,	MCA	6A	CSCI	Major Constituent Analyzer	B-HSV	FC	Ada/ Asm
Lab	HCOR	6A	CSCI	High Rate Communications Outage Recorder	B-HB/ SEAKR	FC	Ada
Airlock	ALSYS1	7A	CSCI	Airlock Systems 1	B-HSV	AL-1	Ada
			CSC	SMDM Utilities	B-HB/HI	AL-1	Ada/ Asm
Node 2, S0, Lab	EVSU	8A	CSCI	External Video Switch FC	B-HB	FC	Ada

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC (Continued)

Location	CSCI Acronym	1st Flt	CSCI/ CSC	CSCI Name	Developer	Host MDM	Lang Used
S0	EXT	8A	CSCI	External MDM (Release 1)	B-HB	EXT-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	EXT-1,-2	Ada/ Asm
			CSC	SEPS – Control and Monitor RPCMs	B-CP	EXT-1,-2	Ada
Lab	GN&C	8A	CSCI	GN&C MDM	B-HB	GN&C-1,-2	Ada
P3/P4, S0, S3/S4, S1, P1	IMCA	8A	CSCI	Integrated Motor Controller Assy FC	B-HB	FC	Asm
S0	RG	8A	CSCI	Rate Gyro FC	B-HB	FC	Asm
S0	EXT R2	9A	CSCI	External MDM (Release 2 – Adding TRRJ, EATCS & Complete DSM)	B-HB	EXT-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	EXT-1,-2	Ada/ Asm
			CSC	SEPS – Control and Monitor RPCMs	B-CP	EXT-1,-2	Ada
S1, P1	MPS	9A	CSCI	Pump Module Assembly FC	B-HB	FC	Ada / C
S1, P1	S1/P1	9A	CSCI	S1/P1 MDM	B-HB	S1-1,-2, P1-1,-2	Ada
			CSC	SMDM Utilities	B-HB/HI	S1-1,-2, P1-1,-2	Ada/ Asm
S1, P1	STR/PTR	9A	CSCI	STR/PTR MDM	B-HB	STR-1,-2, PTR-1,-2	Ada
				SMDM Utilities	B-HB/HI	STR-1,-2, PTR-1,-2	Ada/ Asm
Node 2	N2SYS1	10A	CSCI	Node 2 Systems 1	B-HSV	N2-1	Ada
			CSC	SMDM Utilities	B-HB/HI	N2-1	Ada/ Asm
Node 2	N2SYS2	10A	CSCI	Node 2 Systems 2	B-HSV	N2-2	Ada
			CSC	SMDM Utilities	B-HB/HI	N2-2	Ada/ Asm
S0	S0	10A	CSCI	S0 MDM	B-HB	S0-1,-2	Ada
			CSC	SMDM Utilities	B-HB/HI	S0-1,-2	Ada/ Asm
S0	EXT R3	12A	CSCI	External MDM (Release 3 – Adding SARJ & CAS)	B-HB	EXT-1,-2	Ada
			CSC	EMDM Utilities	B-HB/HI	EXT-1,-2	Ada/ Asm

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC (Continued)

Location	CSCI Acronym	1 st Flt	CSCI/ CSC	CSCI Name	Devel- oper	Host MDM	Lang Used
			CSC	SEPS – Control and Monitor RPCMs	B-CP	EXT-1,-2	Ada
S3, P3	S3/P3	12A	CSCI	S3/P3 MDM	B-HB	S3-1,-2, P3-1,-2	Ada
			CSC	SMDM Utilities	B-HB/HI	S3-1,-2, P3-1,-2	Ada/ Asm
	UPA	13A	CSCI	Urine Processor Assembly	B-HSV	FC	Ada

APPENDIX B-2: FLIGHT SOFTWARE CSCI AND MAJOR CSC (Concluded)

Location	CSCI Acronym	1 st Flt	CSCI/ CSC	CSCI Name	Devel- oper	Host MDM	Lang Used
All modules with an MDM	MDMLU†	n/a	CSCI	MDM Loader Utility	B-HB/HI	Any MDM	Ada
Lab	SSMMU	TBD	CSCI	Solid State Mass Memory Unit	B-HB/HI	Lab	Ada
		2A	CSCI	Early Portable Computer System Software	GFE	PCS	C++
		5A	CSCI	Portable Computer System Software	GFE	PCS	C++
		5A	CSCI	Portable Computer System Operating System	GFE	PCS	
MOOT CD	TCS	UF2	CSCI	Test Control Software	B-HB/HI		C++
	TAS	UF2	CSCI	Test Application Software	B-HB/HI		Ada
Node 3	N3SYS1	20A	CSCI	Node 3 Systems 1	B-HSV	N301	Ada
			CSC	SMDM Utilities	B-HB/HI	N3-1	Ada/ A sm
Node 3	N3SYS2	20A	CSCI	Node 3 Systems 2	B-HSV	N3-2	Ada
			CSC	SMDM Utilities	B-HB/HI	N3-2	Ada/ A sm
HCS	HCS	20A	CSCI	Hub Control Software	B-HOU	HCS-1	Ada
ELC ExPCA (sustaining to begin on 5/1/2011)	N/A	ULF 3	CSCI	ELC Flight Software	GSFC	Payload MDM	C

APPENDIX B-2 GROUND SOFTWARE INCLUDING MBF

CSCI/CSC	Software Developer	Destination
Data Integration Tool Set	B-HB	MBF
Mission Database Application	ESA	MBF
Oracle RDBMS	Oracle	MBF
Software Processing & Storage Tool	B-HB	MBF
Software Release Distribution Tool (SRDT)	B-HB	MBF
SQL *Net	Oracle	MBF
SQL *Pro Ada	Oracle	MBF
SQL *Pro C	Oracle	MBF
Sun Ada	SUN	MBF
SunOS Operating System	SUN	MBF
VAX Ada	DEC	MBF
VAX C	DEC	MBF
VaxSet Software Management Tools	DEC	MBF
VMS Operating System	DEC	MBF
Simulations I/O Services	B-HB	FEUs
EEPROM Header Tool	B-HB	MDMs
Timeliner Compiler Kernel and Adapter	GFE	MBF
Aonix Alsys AdaWorld VAX/VMS to 80386 Cross Compiler w/Optimizer, Debugger, Linker	Aonix	MBF
Aonix Alsys AdaWorld VAX/VMS to 80386 Problem Reporting Compiler	Aonix	MBF
Aonix ActivAda Real-Time Cross to 80386 Problem Reporting Compiler (Windows NT Platform)	Aonix	MBF
Destination – e.g., Segment, LAB, ORU, SVF, etc.		

APPENDIX B-3 GSE/TSE SOFTWARE

CSCI Acronym	CSCI /CSC	CSCI Name	SW Developer
VTS	CSCI	Video Test Set	B-HB
	CSCI	Ku-Band Test Set	B-HB
	CSCI	S-Band Test Set	B-HB

APPENDIX B-4 FQT SUPPORT SOFTWARE INCLUDING SIMULATIONS

CSCI Name	SW Developer	Destination
LSYS1SIM Lab Systems 1 Simulation	B-HSV	MATE
LSYS2SIM Lab Systems 2 Simulation	B-HSV	MATE
LSYS3SIM Lab Systems 3 Simulation	B-HSV	MATE
N2SYS1SIM Node 2 Systems 1 Simulation	B-HSV	MATE
N2SYS2SIM Node 2 Systems 2 Simulation	B-HSV	MATE
N3SYS1SIM Node 3 Systems 1 Simulation	B-HSV	MATE
N3SYS2SIM Node 3 Systems 2 Simulation	B-HSV	MATE
PCASIM Pressure Control Assembly Simulation	B-HSV	AG
WPSIM Water Processor Simulation	B-HSV	AG

ALSYS1SIM Airlock Systems 1 Simulation	B-HSV	MATE
PEPSIM Payload Executive Processor Simulation	B-HSV	MATE
INTSYSSIM Internal Systems Simulation	B-HSV	MATE
CES Command and Control Environment Simulation	B-HOU	MATE
NES Node 1 Control Environment Simulation	B-HOU	MATE
ETCS Simulation	B-HB	MATE
GN&C Simulation	B-HB	MATE
External Simulation	B-HB	MATE
SARJ Simulation	B-HB	MATE
SDMS Simulation	B-HB	MATE
IACO MATE Simulation Components	B-HB	MATE
Power Management Control Application MATE Simulation	B-CP	MATE
Photovoltaic Control Application MATE Simulation	B-CP	MATE
Local Bus Controller	B-HB	PC
Sensor / Effector Simulator	B-HB	TBD
MATE-3 Development and Control Services	B-HB	MATE
MATE-3 I/O Services	B-HB	MATE
MATE-3 I/O Utilities	B-HB	MATE

APPENDIX B-5 FLIGHT TRAINER SOFTWARE SUSTAINING

CSC Name	SW Developer	Destination
RUSSIAN SEGMENT TRAINER (RST) SOFTWARE	RSC-E	SSTF

APPENDIX B-6 PAYLOAD GROUND SOFTWARE

CSCI/CSC	SW Developer	Destination
CSCI (sustaining to begin on 5/1/2011)	GSFC	ELC Suitcase Simulator Software/ELC Simulators

APPENDIX B-7 GROUND AND FLIGHT PAYLOAD SOFTWARE

CSCI/CSC	SW Developer
Software Toolkit for Ethernet Lab-Like Architecture (STELLA)	B-HSV
Remote Advanced Payload Test Rig Software (RAPTR)	B-HSV

APPENDIX C – NASA FACILITIES TO BE MAINTAINED AND OPERATED

**The Software Development and Integration Lab (SDIL), which consists of the following:
(SSCN 13327 – S/A 1904)**

- Prime Software Production Facility, (PSPF)
- Mission Build Facility (MBF)
- ISS Software Integration Laboratory (ISIL)/Integrated Test Rig (ITR)
- Software Verification Facility (SVF)
- Hardware and Software Integration Laboratory (HSIL)
- ISS Power Lab (IPL)
- SDIL Host Room Common Assets
- Simulation Integration Platform (SIP)
- Joint Station LAN (JSL) Lab
- ISS Guidance, Navigation and Control Laboratory (IGL)
- Integrated Communications Unit (ICU) Lab
- Portable Computer System (PCS) Independent Verification and Test (IVT) Lab
- SDIL Configurable Remote Access Capability

APPENDIX D –Reserved

APPENDIX E – ISS PROGRAM DOCUMENTS TO BE BOOK COORDINATED

Document Number	Title
683-71106	International Space Station Program Internal Systems R2 (INTSYS R2) Computer Software Configuration Item 683G93A Pre-Position Loads (PPL) Version Description Drawing
D683-35473-01	Payload Data Library (PDL) Users Guide
D683-47376-1	Payload MDM Users Manual
D684-10025 Vol 1	Integration and Verification Plan for ISS System
D684-10293 Vol 1	Software Configuration Handbook
684-10409	Node Control Software (NCS) Release 2 Multiplexer/Demultiplexer (MDM) Version Description Drawing (VDD)
684-10573	Display Data Control Tables (DDCT) for the Command And Control Software (CCS) Multiplexer/Demultiplexer (MDM) Version Description Drawing (VDD)
684-10649	International Space Station Program Command and Control Software (CCS) Release 4 (R4) Multiplexer/Demultiplexer (MDM) Version Description Drawing (VDD)
684-10716	International Space Station Program Hub Control Software (HCS) Multiplexer/Demultiplexer (MDM) Version Description Drawing (VDD)
S684-11032	Software Requirements Specification for the R2 command Control (C&C)
684-10716	International Space Station Program Hub Control Software (HCS) Multiplexer/Demultiplexer (MDM) Version Description Drawing (VDD)
S684-11032	Software Requirements Specification for the R2 command Control (C&C)
CSDL-306626-V01	User Interface Language Flight System Software Requirements Volume 1: Timeliner Kernel
CSDL-306626-V02	User Interface Language Flight System Software Requirements Volume 2: ISS Timeliner Adapter
D683-21459-1	PSIV/F Maintenance Concept for the STEP
D683-27519-1	User's Guide for the Payload Rack Checkout Unit (PRCU)
D683-27522-1	PRCU Maintenance Plan
D683-80552-1	Consolidated Sustaining Engineering Plan
D684-10017-01	Prime Contractor Software Development Plan
D684-10056-01	Prime Contractor Software Standards and Procedures Specifications
D684-10175-01	Software Test Plan For the Command and Control (C&C) Multiplexer/Demultiplexer (MDM) Computer Software Configuration Item (CSCI)
D684-10177-01	ISS MISSION Build Facility Standard Output Definition Part 1
D684-10189-01	Data Base Design Document (DBDD) for the Node 1 Control Software (NCS)
D684-10191-01	Software User's Manual for the Node 1 Control Software
D684-10195-01	Software Top Level Design Document for the Node 1 Control Software
D684-10696-01	ISS Post Production Support Warehouse Operations Plan
D684-10749-01	ISS Product Support Team TCTI Mod Kit Procedure
D684-10773-01	Product Support ISS Managed Asset Retention and Utilization Plan

D684-10850-01	Program Management and Implementation Plan for Hardware History Retrieval System
D684-11424-01	Product Support ISS PRCU H/W Calibration Process
D684-11074-01	ISS Product Support Inventory Management Plan
D684-11179-01	ISS Obsolescence Management Plan
D684-11424-01	Product Support ISS PRCU H/W Calibration Process
D684-11428-01	Science and Utilization Segment Payload Rack Checkout Unit (PRCU) Training & Certification Program
ISAC-245, Rev S	VMDB Release 9.0 Requirements Document
ISAC-319	Orbital Replacement Unit Data Directory (ORUDD) to International Space Station (ISS) Vehicle Master Database (VMDB) Interface Control Document (ICD)
ISS MPLM IDD 006	MPLM Interface Definition Document
JSC-26656	Project Technical Requirements Specification for the ISS Global Positioning System (GPS) Subsystem
JSC-26961	ACS Moding Indicator Critical Item Specification
JSC-26975	PCS Displays Software Requirements Specification
JSC-26976	ISS Displays Software Design Document for the Portable Computer System (PCS)
JSC-27274	Development Specification for the Portable Computer System (PCS)
JSC-27437	Command And Data Software Software Design Document for the Portable Computer System (PCS)
JSC-27440	Command And Data Software Software Requirements Specification (CDS SRS) for the Portable Computer System (PCS)
JSC-36387	Software Design Document for the Automated Procedure Viewer
JSC-36393	Software Requirements Specification for the Automated Procedure Viewer
NSTS-21000-IDD-ISS	Shuttle Orbiter/International Space Station Cargo Standard Interfaces
RP AI 0030	MDM Connectivity Document for Node 3
RR-00022V2	Component Data Interface Format Specification Volume 2: Remote Power Control Module
RR-00022V4	Component Data Interface Format Specification Volume 4: Power Converter Controller
RR-00022V6	Component Data Interface Format Specification Volume 6: Power Electronics Unit
S683-29523	Prime Item Development Specification for U.S. Laboratory
S683-70870	Internal Systems R2 CSCI 683G93A Software Requirements Specification
S683-70918	International Space Station Program Node 3 Systems 1 CSCI 683042A Software Requirements Specification
S683-70919	International Space Station Program Node 3 Systems 2 CSCI 683043A Software Requirements Specification
S684-10101	Prime Item Development Specification for Rack Standard/Payload
S684-10102	Prime Item Development Specification for Node 1
S684-10109	Addendum Specification for Photovoltaic Module S4
S684-10111	Prime Item Development Specification for Integrated Truss Segment S0
S684-10115	Prime Item Development Specifications for Pressurized Mating Adapter-1
S684-10122	Prime Item Development Specification for Photovoltaic Module P4

S684-10123	Prime Item Development Specification for Truss Element, Short Spacer, S5
S684-10124	Prime Item Development Specification for S6
S684-10131	Software Requirements Specification for the R1 Command And Control (C&C) Multiplexer/Demultiplexer (MDM) CSCI
S684-10137	Critical Item Development Specification for Main Bus Switching Unit
S684-10142	Prime Item Development Specification for Airlock
S684-10143	Prime Item Development Specification for Station Management and Control
S684-10144	Prime Item Development Specification For Guidance Navigation and Control Processor
S684-10145	Prime Item Development Specification for Power Management Control Unit
S684-10150	Addendum Specification for Truss Element, Short Spacer, P5
S684-10151	PIDs for Photovoltaic Module S6
S684-10154	PIDs for Integrated Truss Segment Z1
S684-10158	Prime Item Development Specification for Active Rack Isolation
S684-10439	Prime Item Development Specification for ARIS/Express Installation And Maintenance Trainer
S684-10584	Noncomplex Item Development Specification for the Payload Crew Aids Kit
S684-10585	Prime Item Development Specification for the Passive Rack Isolation System (PaRIS)
S684-10644	Software Requirements Specification (SRS) for the Hub Control Software (HCS) Computer Software Configuration Item (CSCI)
S684-11034	Software Requirements Specification for the R4 Command and Control (C&C) Multiplexer/Demultiplexer (MDM) Computer Software Configuration Item (CSCI)
SN-C-0005	Contamination Control Requirements
SP-M-229	Addendum Specification for Integrated Truss Segment S3
SP-M-233	PIDs for Integrated Truss Segment P1
SP-M-235	PIDs for Integrated Truss Segment P3
SP-M-301	Prime Item Development Specification For Pressurized Mating Adapter
SP-M-321	PIDS for Integrated Truss Segment S1
SSP 50257	Program Controlled Document Index
SSP 50936	Common Communications for Visiting Vehicles (C2V2) to International Space Station (ISS) Interface Control Document (ICD)
SSP 50937	International Space Station (ISS) Common Communications for Visiting Vehicles (C2V2) Ethernet Interface Control Document
SSP 50976	International Space Station (ISS) to Visiting Vehicle (VV) Ethernet Interface Control Document (ICD)
SSP-52000-ETRD-ERP	Expedite the Processing of Experiments to Space Station (EXPRESS) Transportation Requirements Document
SSP 52000-ICD-ERP	EXPRESS Rack Payloads Interface Control Document Blank Book

SSP 52000-ICD-WRP	WORF Rack Payloads Interface Control Document Blank Book
SSP-52000-PIH-WRP	Window Observational Research Facility (WORF) Payload Integration Handbook
SSP-52050	International Standard Payload Rack to ISS ICD Part 1
SSP 57005	ARIS To Payload ICD
SSP 57006	ARIS User's Handbook
SSP 57007	International Standard Payload Rack (ISPR) Structural Integrator's Handbook
SSP 57058	PaRIS-to-ISPR ICD
SSP 57239	BEAM to ISS Interface Control Document (ICD)
SSP-30233	Space Station Requirements for Materials and Processes
SSP-30237	Space Station Electromagnetic Emission and Susceptibility Requirements
SSP-30238	Space Station Electromagnetic Techniques
SSP-30240	Space Station Grounding Requirements
SSP-30242	Space Station Cable/Wire Design and Control Requirements for Electromagnetic Compatibility
SSP-30243	Space Station Requirements for Electromagnetic Compatibility
SSP-30245	Space Station Electrical Bonding Requirements
SSP-30256-001	SSP Extravehicular Activity (EVA) Standard Interface Control Document
SSP-30262-010	Portable Fire Extinguisher Standard ICD Part 1
SSP-30312	Electrical, Electronic, and Electronmechanical (EEE) and Mechanical Parts Management and Implementation Plan
SSP-30423	Space Station Approved Electrical, Electronic, and Electromechanical Parts List
SSP-30425	Space Station Program Natural Environment Definition for Design
SSP-30426	Space Station External Contamination Control Requirements
SSP-30482-01	Electric Power Specifications and Standards: V2 Consumer Constraints
SSP-30482-02	Electric Power Specification and Standards, Volume 2: Consumer Constraints
SSP-30512	Space Station Ionizing Radiation Design Environment
SSP-30513	Ionizing Radiation Environment Effects Test And Analysis
SSP-30559	Structural Design and Verification Requirements
SSP-30573	Space Station Program Fluid Procurement and Use Control Specification
SSP-41004-PART 1	Common Berthing Mechanism to Pressurized Elements Interface Control Document Part 1
SSP-41004-PART 2	Common Berthing Mechanism to Pressurized Elements Interface Control Document Part 2
SSP-41015-PART 1	Common Hatch And Mechanism to Pressurized Elements Interface Control Document Part 1
SSP-41015-PART 2	Common Hatch And Mechanisms to Pressurized Elements Interface Control Document Part 2
SSP-41017-PART 1	Rack to Mini Pressurized Logistics Module Interface Control Document Part 1

SSP-41017-PART 2	Rack to Mini Pressurized Logistics Module Interface Control Document Part 2
SSP-41143-PART 2	Space Station Program Node Element 2 to U.S. Laboratory Element Interface Control Document Part 2
SSP-41145	Node Element 1 to Airlock Element Interface Control Document, Part 1
SSP 41153-01	Node Control Software General Software Interfaces Interface Control Document, Part 2
SSP-41153-02	Node Control Software to Common Berthing Mechanism ICD Part 2
SSP-41153-03	Node Control Software to Communications And Tracking Orbital Replaceable Units ICD Part 2
SSP-41153-04	Node Control Software to Remote Power Control Module ICD Part 2
SSP-41153-06	Node Control Software Release 1 to GFE ICD Part 2
SSP-41153-07	Node Control Software to Remote Power Control Module, DC/DC Converter Unit, and Plasma Contactor Unit ICD Part 2
SSP-41154	Software Interface Control Document Part 1 United States On-Orbit Segment To United States Ground Segment Command and Telemetry
SSP-41155	Refrigerator/Freezer Rack to Mini Pressurized Logistics Module Interface Control Document
SSP 41158	Software Interface Control Document Part I United States On-Orbit Segment To International Ground System Segment Ku-Band Telemetry Formats
SSP-41162	Segment Specification for the United States On-Orbit Segment
SSP-41164	Italian Mini-Pressurized Logistics Module
SSP-41172	Qualification and Acceptance Environmental Test Requirements
SSP-41175-01	Software ICD Part 1 SMC-to-ISS Book 1, Hardware Architecture
SSP-41175-02	Software ICD Part 1 SMC-to-ISS Book 2, General Software Interface Requirements
SSP-41175-03	Software ICD Part 1 SMC-to-ISS Book 3, Portable Computer System Interface
SSP-41175-04	Software ICD Part 1 SMC-to-ISS Book 4, Guidance, Navigation and Control Interface
SSP-41175-05	Software ICD Part 1 SMC-to-ISS Book 5, Power Management and Control Application
SSP-41175-06	Software Interface Control Document Station Management and Control To International Space Station Book 6, Internal Multiplexer/Demultiplexer Interface
SSP-41175-07	Software ICD Part 1 SMC-to-ISS Book 7, External Multiplexer/Demultiplexer Interface
SSP-41175-08	Software ICD Part 1 SMC-to-ISS Book 8, Payload Multiplexer/Demultiplexer Interface
SSP-41175-09	Software ICD Part 1 SMC-to-ISS Book 9, Node Control Software Interface
SSP-41175-10	Software ICD Part 1 SMC-to-ISS Book 10, Control Electronics Unit Interface
SSP-41175-14	Software ICD Part 1 SMC-to-ISS Book 14, Space-to-Space Station Radio Interface
SSP-41175-15	Software ICD Part 1 SMC-to-ISS Book 15, Video Baseband Signal Processor Interface
SSP-41175-16	Software ICD Part 1 SMC-to-ISS Book 16, High-Rate Frame Multiplexer Interface
SSP-41175-17	Software ICD Part 1 SMC-to-ISS Book 17, High-Rate Multiplexer Interface
SSP-41175-18	Software ICD Part 1 SMC-to-ISS Book 18, Assembly Contingency Baseband Signal Processor Interface
SSP-41175-19	Software ICD Part 1 SMC-to-ISS Book 19, Synchronization and Control Unit Interface
SSP-41175-20	Software ICD Part 1 SMC-to-ISS Book 20, Video Switching Unit Interface

SSP-41175-21	Software ICD Part 1 SMC-to-ISS Book 21, Internal Audio Controller Interface
SSP-41175-22	Software ICD Part 1 SMC-to-ISS Book 22, Transponder Interface
SSP-41175-23	Software ICD Part 1 SMC-To-ISS Book 23, External Video Switching Unit Interface
SSP-41175-24	Software ICD Part 1 SMC-to-ISS Book 24, Radio Frequency Group Interface
SSP-41175-25	Software ICD Part 1 SMC-to-ISS Book 25, Space-to-Ground Transmitter/Receiver Controller Interface
SSP-41175-26	Software ICD Part 1 SMC-to-ISS Book 26, Integrated Motor Controller Assembly Interface
SSP-41175-28	Software ICD Part 1 SMC-to-ISS Book 28, Monitor Interface
SSP-41175-29	Software ICD Part 1 SMC-to-ISS Book 29, Secondary Interface
SSP-41175-31	Software Interface Control Document Station Management and Control to ISS Book 31, Communication Outage Recorder (COR) Interface
SSP-41175-32	Software Interface Control Document Station Management And Control to ISS Book 32, Hub Control Zone (HCZ) Multiplexer/Demultiplexer Interface
SSP-41175-35	Software Interface Control Document, Station Management and Control to International Space Station PROX Interface Book 35
SSP-41175-37	Software ICD: Station Management and Control to ISS Book 37, SpaceX Commercial Orbital Transportation Services Ultra High-Frequency Communications Unit Interface
SSP-41175-39	Software Interface Control Document Station Management and Control to International Space Station (ISS) Book 39, Commercial Orbital Transportation Services (COTS) Free Flyer Common Interface
SSP-41176-01	Software ICD Part 1 PMC-to-ISS Book 1, Hardware Architecture
SSP-41176-04	Software ICD Part 1 PMC-to-ISS Book 4, Photovoltaic Control Unit Interface
SSP-41177-01	Software ICD Part 1 GN&C-to-ISS Book 1, Hardware Architecture
SSP-41177-03	Software ICD Part 1 GN&C-to-ISS Book 3, Control Momentum Gyroscope Interface
SSP-41177-04	Software ICD Part 1 GN&C-to-ISS Book 4, Rate Gyro Assembly Interface
SSP-41177-05	Software ICD Part 1 GN&C-to-ISS Book 5, Global Position System Receiver Processing
SSP-41177-07	Software ICD Part 1 GN&C-to-ISS Book 7, MDM/Node 1 MDM Pass thru Interfaces to Aft Flight Deck PCS/ECOMM and OIU
SSP-41177-08	ICCA to CEV SW ICD
SSP-41178-01	Software ICD Part 1 Internal MDM-to-ISS Book 1, Hardware Architecture
SSP-41178-03	Software ICD Part 1 Internal MDM-to-ISS Book 3, Pump Package Assembly Interface
SSP-41178-07	Software ICD Part 1 Internal MDM-to-ISS Book 7, Laboratory Module 1 Interface
SSP-41178-08	Software ICD Part 1 Internal MDM-to-ISS Book 8, Laboratory Module 2 Interface
SSP-41178-09	Software ICD Part 1 Internal MDM-to-ISS Book 9, Laboratory Module 3 Interface
SSP-41178-10	Software ICD Part 1 Internal MDM-to-ISS Book 10, Airlock Interface
SSP-41178-12	Software ICD Part 1 Internal MDM-to-ISS Book 12, Major Constituent Analyzer Interface
SSP-41178-13	Software ICD Part 1 Internal MDM-to-ISS Book 13, Pressure Control Assembly Interface
SSP-41178-15	Software ICD Part 1 Internal MDM-to-ISS Book 15, Defibrillator Interface
SSP-41178-17	Software ICD Part 1 Internal MDM-to-ISS Book 17, Charged Particle Directional Spectrometer – LV
SSP-41178-18	Software ICD Part 1 Internal MDM-to-ISS Book 18, Volatile Organic Analyzer

	Interface
SSP-41178-20	Software ICD Part 1 Internal MDM-to-ISS Part 1, Charged Particle Directional Spectrometer – EV
SSP-41178-21	Software ICD Part 1 Internal MDM-to-ISS Book 21, Tissue Proportionate Counter Interface
SSP-41178-23	Software ICD Part 1 Internal MDM-to-ISS Book 23, Node Control Software Interface
SSP-41178-24	Software Interface Control Document Internal Multiplexer/Demultiplexer to International Space Station Book 24, Node 2 -1 Interface
SSP-41178-25	Software Interface Control Document Internal Multiplexer/Demultiplexer to International Space Station Book 25, Node 2-2 Interface
SSP-41178-27	Software ICD Part 1 Internal MDM-to-ISS Book 27, Common Berthing Mechanism Interface
SSP-41178-35	Software Interface Control Document, Internal Multiplexer/Demultiplexer to ISS Book 35, HTY Interface
SSP-41178-41	Software ICD: Internal Multiplexer/Demultiplexer to ISS Book 41, SpaceX Commercial Orbital Transportation Services (COTS) Vehicle Interface
SSP-41178-42	Software ICD: Internal Multiplexer/Demultiplexer to ISS Book 42, SpaceX Commercial Orbital Transportation Services (COTS) Berthed Common Interface
SSP-41179-01	Software ICD Part 1 External MDM-to-ISS Book 1, Hardware Architecture
SSP-41179-03	Software ICD Part 1 External MDM-to-ISS Book 3, External Control Zone Tier 3 Com
SSP-41179-05	Software ICD Part 1 External MDM-to-ISS Book 5, Integrated Motor Controller Assembly Interface
SSP-41184-01	Multilateral Training Management Plan – Volume 1
SSP-41184-02	Multilateral Training Management Plan – Volume 2
SSP-41186	Software ICD Space Station Manned Base to Columbus Attached Pressurized Module
SSP-42011	Integrated Truss Segment S0 to United States Laboratory Interface Control Document Part 1
SSP-42014	Crew Health Care System (CheCS) to Laboratory Interface Control Document
SSP-42017	Space Station To Global Positioning System Interface Control Document
SSP-42018	ISS United Space On-Orbit Segment to Ground (Through Tracking & Data Relay Satellite System) Interface Control Document Part 1
SSP-42018-PART 2	ISS United Space On-Orbit Segment to Ground (Through Tracking & Data Relay Satellite System) Interface Control Document Part 2
SSP-42097-PART 2	Pressurized Mating Adapter 2 & 3 to U.S. Pressurized Elements Core (Node 2 to Pma2) Interface Control Document, Part 2
SSP-42104	United States On-Orbit Segment to Space Station Control Center Video ICD
SSP-42105	United States On-Orbit Segment to Space Station Control Center Audio ICD Part 1
SSP-42108	MDA GSE to LLS GSE Interface Control Document
SSP-42120-PART 1	Androgynous Peripheral Assembly System to Pressurized Mating Adapter Interface Control Document Part 1
SSP-42120-PART 1-AppA	Androgynous Peripheral Assembly System to Pressurized Mating Adapter Interface Control Document Part 1 – Appendix A
SSP-42120-PART 2 Core	Androgynous Peripheral Assembly System to Pressurized Mating Adapter Interface Control Document, Part 2, Core (APAS to PMA-2 & 3)
SSP-42120-PART	Androgynous Peripheral Assembly System to Pressurized Mating Adapter Interface

2-AppA	Control Document, Part 2, Appendix A (APAS To PMA-1)
SSP-42124	Integrated Truss Segment S0 to Node 2 Interface Control Document Part 1
SSP-42124-PART 2	Space Station Program Integrated Truss Segment S0 to Node 2 Interface Control Document Part 2
SSP-42125	Integrated Truss Segment P1 to Integrated Truss Segment P3 Interface Control Document Part 1
SSP-42126	Integrated Truss Segment S0 to Integrated Truss Segment P1 ICD Part 1
SSP-42127	Integrated Truss Segment S0 to Integrated Truss Segment S1 ICD Part 1
SSP-42132	Mobile Transporter to Integrated Truss Segments S0, S1, S3, P1, P3, Interface
SSP-42150	SSP Space to Space Station Radio (SSSR) to U.S. Laboratory Standard ICD
SSP-44025 PART 2	Integrated Truss Segment S3 to Integrated Truss Segment S4 Interface Control Document, Part 2
SSP-44026	Part 2 Integrated Truss Segment P3 to Photovoltaic Module P4 Interface Control Document, Part 2
SSP-44029	PG-2 Ground Support Equipment (GSE) to Launch And Landing Site (LLS) GSE Interface Definition Document (IDD)
SSP-44030	Integrated Truss Segment Z1 to Node 1 Interface Control Document Part 1
SSP-44032	Integrated Truss Segment Z1 to Laboratory Umbilicals ICD Part 1
SSP-44033	Integrated Truss Segment Z1 to Integrated Truss Segment S0 ICD Part 1
SSP-50002	ISS Video Standard
SSP-50004	Ground Support Equipment Design Requirement
SSP-50005	International Space Station Flt Crew Integration
SSP-50026	Software Verification Facility (SVF) to Space Station Control Center ICD Part 1
SSP-50061-01	U.S. Laboratory to Global Positioning System Interface Control Document Part 1
SSP-50061-02	U.S. Laboratory to Global Positioning System Interface Control Document Part 2
SSP-50093-PART 1	Extravehicular Charged Particle Directional Spectrometer (EVCPS) ICD Part 1
SSP-50093-PART 2	Extravehicular Charged Particle Directional Spectrometer (EVCPS) ICD Part 2
SSP-50097-02	Space Station Manned Base to Russian Segment Software Interface Control Document Book 2, Caution And Warning
SSP-50097-03	Space Station United States On-Orbit Segment to Russian Segment Software Interface Control Document Book 3, Caution and Warning
SSP-50097-04	Space Station Manned Base to Russian Segment S/W ICD BK 4, Integrated RS/US GN&C Software Mode Configurations & Attitude Control Handover Descriptions
SSP-50097-PART 1	Space Station Manned Base to Russian Segment Software Interface Control Document Part 1
SSP-50103-PART 1	Integrated Truss Segment S0 to Global Positioning System Interface Control Document Part 1
SSP-50103-PART 2	Integrated Truss Segment S0 to Global Positioning System Interface Control Document Part 2
SSP-50104	Portable Breathing Apparatus Standard Interface Control Document

SSP-50142-01	Russian Segment (RS) to the Software Development and Integration Laboratory (SDIL) Interface Control Document Part 1
SSP-50142-02	Russian Segment (RS) to the Software Development and Integration Laboratory (SDIL) Interface Control Document Part 2
SSP-50144-01	Software ICD Part 1 NCS-to-ISS Book 1, Hardware Architecture Requirements
SSP-50144-03	Software ICD Part 1 NCS-to-ISS Book 3, Node Control Software (NCS) Non-1553 Input/Output (I/O) Interface
SSP-50144-04	Software ICD Part 1 NCS-to-ISS Book 4, Common Berthing Mechanism (CBC) Interface
SSP-50144-05	Software ICD Part 1 NCS-to-ISS Book 5, Assembly/Contingency Baseband Processor Interface
SSP-50144-06	Software ICD Part 1 NCS-to-ISS Book 6, Radio Frequency Group Interface
SSP-50144-07	Software ICD Part 1 NCS-to-ISS Book 7, Transponder Interface
SSP-50144-08	Software ICD Part 1 NCS-to-ISS Book 8, Plasma Contactor Interface
SSP-50144-09 – PART 1	Software Interface Control Document, Part 1, Node Control Software to International Space Station, Book 9, Remote Power Controller Module Interface
SSP-50144-10	Software ICD Primary NCS-to-ISS Book 10, Photovoltaic Control Unit (PYCU) Interface
SSP-50144-11	Software ICD Part 1 NCS-to-ISS Book 11, DC-to-DC Converter Unit (DDCU) Interface
SSP-50144-12	Software ICD Part 1 NCS-to-ISS Book 12, Secondary Node Control Software (NCS) Interface
SSP-50144-13	Software ICD Part 1 NCS-to-ISS Book 13, Portable Computer System Interface
SSP-50147-01	Mobile Service System (MSS) to the Software Development and Integration Laboratory (SDIL) Interface Control Document Part 1
SSP-50147-02	Mobile Service System (MSS) to the Software Development and Integration Laboratory (SDIL) Interface Control Document Part 2
SSP-50193-01	Software ICD Part 1, Payload MDM-to-ISS Book 1, Hardware Architecture Requirements
SSP-50193-03	Software ICD Part 1, Payload MDM-to-ISS Book 3, Charged Particle Directional Spectrometer-Extravehicular Interface
SSP-50193-04	Software ICD Part 1, Payload MDM-to-ISS Book 4, Defibrillator Interface
SSP-50193-05	Software ICD Part 1, Payload MDM-to-ISS Book 5, Tissue Equivalent Proportional Counter Interface
SSP-50193-06	Software ICD Part 1, Payload MDM-to-ISS Book 06, Volatile Organic Analyzer Interface
SSP-50193-07	Software ICD Part 1, Payload MDM-to-ISS Book 7, Blood Pressure and Electrocardiograph Interface
SSP-50193-08	Software ICD Part 1, Payload MDM-to-ISS Book 8, Incubator Interface
SSP-50193-09	Software ICD Part 1, Payload MDM-to-ISS Book 9, Medical Equipment Computer Interface
SSP-50193-10	Software ICD Part 1, Payload MDM-to-ISS Book 10, Spectrophotometer Interface
SSP-50193-11	Software ICD Part 1, Payload MDM-to-ISS Book 11, Charged Particle Directional

	Spectrometer Intravehicular Interface
SSP-50193-13	Software ICD Part 1, Payload MDM-to-ISS Book 13, Automated Payload Switch Interface
SSP-50193-14	Software ICD Part 1, Payload MDM-to-ISS Book 14, Payload Ethernet Hub/Gateway Interface
SSP-50193-17	Software Interface Control Document Payload Multiplexer/Demultiplexer to Internaitonal Space Station Book 17, Intra-Vehicular – Tissue Equivalent Proportional Counter Interface
SSP-50193-18	Software Interface Control Document Payload Multiplexer/Demultiplexer to International Space Station Book 18, Radiation Assessment Detector Interface
SSP-50200-04	Station Program Implementation Plan, Volume IV: Payload Engineering Integration
SSP-50200-05	Station Program Implementation Plan (SPIP) Vol. V Logistics and Maintenance (Part 1&2)
SSP-50200-05-ANXP	NASA/ASI Bilateral Operations Processes for PMM
SSP-50221	ACS Moding Indicator to Pressurized Mating Adapter Standard Interface Control Document
SSP-50228-09	Space Station Program Configuration and Assembly Standard Interface Control Document Volume 9: Advanced Vision Function to Integrated Truss Segment P1
SSP-50228-10	Space Station Program Configuration and Assembly Standard Interface Control Document Volume 10: Advanced Vision Function to Integrated Truss Segment S3
SSP-50228-11	Space Station Program Configuration and Assembly Standard Interface Control Document Volume 11: Advanced Vision Function to Integrated Truss Segment P3
SSP-50228-13	Space Station Program Configuration and Assembly Standard Interface Control Document Volume 13: Advanced Vision Function to United States Laboratory
SSP-50235	Interface Definition Document (IDD) for ISS Visiting Vehicles
SSP-50276	Depot/Manufacturing Facility Certification Plan
SSP-50276-ANX1	NPLD Facility and ORU Certifications-Increment 1 Annex
SSP-50276-ANX2	NSLD Facility and ORU Certifications – Increment 2 Annex
SSP-50276-ANX3	Boeing Reusable Space Systems – Palmdale Facility and ORU Certifications – Increment 3 Annex
SSP-50280	Node 2 Bilateral Hardware and Software Exchange Agreements Lists and Schedules For Node 2
SSP-50285	Shuttle-Based Wireless Instrumentation System (SWIS) to ISS Elements Interface Control Document
SSP-50290	Prime Item Development Specification for Node 2
SSP-50324	U.S. Oversize Hardware Transportation Roles and Responsibilities Plan – Super Guppy Transportation System
SSP-50335	ATV Demonstration and Nominal Operations Flight Plan
SSP-50337	Software Requirements Specification for Mobile Servicing System (MSS) Graphical User Interface (GUI)
SSP-50337-01-ANX08A	Software Requirements Specification for Mobile Servicing System (MSS) Graphical User Interface (GUI) Volume 1: Space Station Remote Manipulator System (SSRMS), Annex 8a
SSP-50337-02	Software Requirements Specification for Mobile Servicing System (MSS) Graphical User Interface (GUI) Volume 2: Mobile Base System (MBS)

SSP-50342	Mil-Std 1553 Remote Terminal Test Exceptions Report
SSP-50351	Software Interface Control Document Part 2 Mobile Servicing System PCS/GUI Configuration Files
SSP-50405-01	Software Interface Control Document, Hub Control Zone Multiplexer/Demultiplexer to International Space Station Book 1, Hardware Architecture
SSP-50405-03	Software Interface Control Document Hub Control Zone (HCZ) Multiplexer/Demultiplexer (MDM) to ISS Book 3 Hub Control Zone (HCZ) to N3-1 Interface
SSP-50405-04	Software Interface Control Document Hub Control Zone (HCZ) Multiplexer/Demultiplexer (MDM) to ISS Book 4 Hub Control Zone (HCZ) to N3-2 Interface
SSP-50405-05	Software Interface Control Document Hub Control Zone (HCZ) Multiplexer/Demultiplexer (MDM) to ISS Book 5 Oxygen Generator Assembly (OGA) Interface
SSP-50405-06	Software Interface Control Document Hub Control Zone (HCZ) Multiplexer/Demultiplexer (MDM) to ISS Book 6 Urine Processor Assembly (UPA) Interface
SSP 50978	System Specification for NASA Docking System (NDS)
JSC 65795	NASA Docking System Interface Definition Document
JSC 64600	Executive Summary NASA Docking System (NDS) Concept of Operations

SSP-50405-07	Software Interface Control Document Hub Control Zone (HCZ) Multiplexer/Demultiplexer (MDM) to ISS Book 7 Water Processor Assembly (WPA) Interface
SSP-50405-08	Software Interface Control Document Hub Control Zone (HCZ) Multiplexer/Demultiplexer (MDM) to ISS Book 8 Pump/Fan Motor Controller (PFMC) Interface
SSP-50451	Electrical Flight Grapple Fixture to Strela Cargo Crane Adapter Interface Control Document
SSP-50461	Interim Resistive Exercise Device (IRED) to Node 1 Interface Control Agreement (ICA) Hardmounted and Isolated IRED Assemblies
SSP-50462	International Space Station (ISS) Telemetry Format Definition Document
SSP-50478	Payload Data Library Requirements Document
SSP-50482	ISSP Software Management Plan
SSP-50493	Prime Item Development Specification for the Direct Current Switching Unit Interface Flight Support Equipment
SSP-50520	International Space Station Logistics & Maintenance Operational Support Concepts and Requirements
SSP-50531	FRAM AVT Card
SSP-50539	Software Interface Definition Document Application Process Identifiers and Logical Data Path Identifier Definition
SSP-50540	Software Interface Definition Document for Broadcast Ancillary Data
SSP-50610	External Maintenance Operations
SSP-50672	Software Interface Control Document, United States On-Orbit Segment to Japanese Experiment Module
SSP-50720	Space Station Operations Databook (SSODB)
SSP-50790	NASA/JAXA Common Spares Pool (CSP) Joint Implementation Plan for Japanese Experiment Module (JEM)
SSP 50822	H-II Transfer Vehicle Avionics Simulator to the Software Development and Integration Laboratory Interface Control Document
SSP-50835	ISS Pressurized Volume Hardware Common Interface Requirements Document (CIRD)
SSP-50858	PCS to Orion Ethernet
SSP-50859	ISS to Orion ICCA Ethernet
SSP 50860	Prime Item Development Specification (PIDS) for International Space Station (ISS) High Rate Communication System (HRCS)
SSP-50887	High Rate Communications Systems to U. S. Lab Interface Control Document
SSP-50891	Joint Station LAN (JSL) Management Plan
SSP-50906	Unique Requirements Specification for International Space Station (ISS) Advanced Recycle Filter Tank Assembly (ARFTA) and ARFTA Drain Kit (ADK)
SSP-50916	Orbital Sciences Corporation Commercial Orbital Transportation Services Avionics Interface Test Units to the Software Development and Integration Laboratory Interface Control Document
SSP-52000-EIA-	EXPRESS Integration Agreement Blank Book

ERP	
SSP-52000-IDD-ERP	EXPRESS Rack Payloads Generic Payload Verification Plan
SSP-52000-PDA	Ayload Data Sets Blank Book
SSP-52000-PIA-SP	Payload Integration Agreement (PIA) Blank Book for Small Pressurized Payloads
SSP 52000-PVP-ERP	EXPRESS Rack Payloads Generic Payload Verification Plan
SSP 52005	Payload Flight Equipment Requirements and Guidelines for Safety Critical Structures
SSP-52052	Portable Computer System (PCS) Interface Description Document (IDD)

SSP-57000	Pressurized Payloads Interface Requirements Document
SSP-57001	Pressurized Payloads Hardware Interface Control Document Template
SSP-57002	Payloads Software Interface Control Document Template
SSP-57003	Attached Payload Interface Requirements Document
SSP-57004	Attached Payloads Hardware Interface Control Document Template
SSP-57008	Pressurized Payload Non-Rack ICD Template
SSP-57011	Payload Verification Program Plan
SSP 57012	Flight Releaseable Attachment Mechanism (FRAM) based Common Payload Interface Requirements Document (IRD)
SSP 57012	ISS FRAM Based Payload Common Launch Interface Requirements Document (IRD)
SSP-57027	ISS Payload Interface Fault Tolerance Document
SSP-57059	Standard Payload Integration Agreement (SPIA) for Pressurized Payloads
SSP-57061	Standard Payload Integration Agreement (SPIA) for Attached Payloads
SSP-57063	Standard Payload Integration Agreement (SPIA) for Small Pressurized Payloads
SSP-57072	Standard Payload Integration Agreement for ISS Payloads
SSP-53109	EXPRESS Rack ICD for Potable Water Dispenser (PWD)
SSP-53110	EXPRESS Rack ICD for ISS Food Warmer
SSP-57206	EXPRESS Rack 6 Hardware ICD
SSP-58029	Payloads Software Management Plan
SSP-TBD	External Payload to FRAM IRD
SSQ 21005	Resistor, Fixed, Film, Chip, Space Quality
SSQ 21006	Resistor, Network, Fixed Film 10 PIN SIP, Space Quality
SSQ 21007	Resistor, Network, Fixed Film 16 PIN SIP, Space Quality
SSQ 21008	Resistor, Network, Fixed Film 4 PIN SIP Space Quality
SSQ 21009	Resistor, Network, Fixed Film 6 PIN SIP Space Quality
SSQ 21010	Resistor, Network, Fixed, Film 8 PIN SIP, Space Quality Specification For
SSQ 21111	Capacitors, Fixed, Supermetalized, Plastic Film Dielectric (DC, AC or DC & AC), Hermetically Sealed, Space Quality
SSQ 21112	Capacitors, Chip, Fixed, Tantalum High Reliability
SSQ 21113	Capacitors, Ceramic, High Voltage Radial-Leaded, High Reliability General Specification For
SSQ 21215	Filters, Radio Frequency/Electromagnetic Interface Suppression, Hermetically Sealed, Space Quality
SSQ 21216	Filters, Radio Frequency/Electromagnetic Interface Suppression, Resin Sealed Space Quality
SSQ 21217	Filters, Radio Frequency/Electromagnetic Interface Suppression, Hermetically Sealed On One End, Space Quality
SSQ 21218	Filters, Radio Frequency/Electromagnetic Interface Suppression, Hermetically Sealed, Space Quality

SSQ 21635	Connectors and Accessories Electrical Circular Miniature IVA/EVA Compatible Space Quality General Specification For
SSQ 21636	Connectors and Accessories Electrical Rectangular Rack And Panel Space Quality General Specification For
SSQ 21637	Connectors and Accessories Electrical Umbilical Interface Environmental Space Quality General Specification For
SSQ 21644	Clamp Electrical Cable Harness Space Quality, General Specification For
SSQ 21652	Wire, Electric, Silicone Insulated, Nickel Coated Copper, Space Quality General Specification For
SSQ 21653	Cable, Coaxial, Twinaxial and Triaxial Flexible and Semirigid General Specification For
SSQ 21654	Cable Single Fiber Multimode Space Quality, General Specification For
SSQ 21655	Cable, Electrical MIL-STD-1553 Data Bus Space Quality, General Specification For
SSQ 21656	Wire And Cable, Electric, Fluoropolymer-Insulated Nickel Coated Copper Or Copper Alloy, General Specification For
SSQ 21676	Coupler Data Bus MIL-STD-1553B Space Quality General Specification For
SSQ 21678	Switch MIL-STD-1553B Data Bus, Space Quality General Specification For
SSQ 21936	Semiconductor Device, Diode, Silicon, Fast Recovery, Power Rectifier (Similar To 1N5816 Type)
SSQ 21937	SSPO Semiconductor Device Diode Silicon Schottky Barrier Fast Recovery Specification
SSQ 22039	Semiconductor Device, Transistor, Silicon, PNP Power (Similar To 2N5153)
SSQ 22039	Microcircuit, Digital, Advanced Schottky TTL Monolithic Silicon (Selected 54F Device Types)
SSQ 22263	Microcircuit, Digital, Advanced Schottky TTL Monolithic Silicon (Selected 54F Device Types)
SSQ 22264	SSPO Microcircuit, Digital High Speed CMOS Monolithic Silicon General Specification
SSQ 22563	SSPO Microcircuit, Linear, CMOS, Analog Switch Monolithic Silicon Specification
SSQ 22569	Microcircuit, Linear, CMOS/Analog Single 8 Channel Multiplexer/Demultiplexer With Overvoltage Protection, Monolithic Silicon, Positive Logic (508A)
SSQ 22580	Microcircuit, Linear, Quad High Speed Differential Line Driver, Monolithic Silicon (26LS31)
SSQ 22581	Microcircuit, Linear, Quad Differential Line Receiver, Monolithic Silicon (26LS32)
SSQ 22582	SSPO Microcircuit Linear Regulating Pulse – Width Modulator Monolithic Silicon (1526 and 1527A) General Specification For
SSQ 22662	Microcircuit Digital CMOS, Microprocessor, Monolithic Silicon (80C86)
SSQ 22663	Microcircuit Digital CMOS Programmable Interval Timer, Monolithic Silicon (82C54)
SSQ 22665	Microcircuit Digital CMOS, Programmable Interrupt Controller, Monolithic Silicon (82C59A-5)
SSQ 22667	SSPO Microcircuit Digital 16 Bit Microprocessor, CHMOS Monolithic, Silicon General Specification For
SSQ 22668	Microcircuit Digital 32 Bit Microprocessor CHMOS Microcircuit, Circuit Digital 32

	Bit
SSQ 22669	SSPO Microcircuit Digital 80 Bit Numeric Process SSPO Microcircuit, Digital, 80 Bit Numeric Processor, CHMOS Monolithic, Silicon General Specification For
SSQ 22670	SSPO Microcircuit Multi-Bus II Interface Controller CHMOS Monolithic, Silicon General Specification For

SSQ 22673	Microcircuit, Digital, CMOS, MIL-STD-1553, BUS Controller, Monolithic, Silicon
SSQ 22676	Transformer, MIL-STD-1553, Terminal Interface, Space Quality
SSQ 22678	SSPO Microcircuit, Hybrid, MIL-STD-1553 Terminal Interface, and Transceiver Space Quality General Specification For
SSQ 22679	Microcircuit, Interface, Bipolar, MIL-STD-1553, Dual BUS Transceiver
SSQ 22680	Connectors Rectangular (ORU) Space Quality General Specification For
SSQ 22681	Connectors, Modular, Rectangular Space (RPCM), Quality, General Specification For
SSQ 22684	Semiconductors, Device, Coupler, Opto-Electronic Solid State Types 4N47, 4N48, and 4N49
SSQ 22685	Microcircuit Linear High Speed Pulse Width Modulator Controller 1825
SSQ 22687	Microcircuit Bipolar Hall Effect Digital Latch Omh-3075
SSQ 22689	MOS Field Effect Transistor Semiconductor Device N-Channel Silicon IRHM 7450SE
SSQ 22691	Microcircuit, Hybrid, Smart Power 3-Phase Motor Drivers
SSQ 22698	Connectors Electrical Circular EVA/IVA Compatible Space Quality General Specification For
SSQ 22720	Wire, Electrical, Super Flex, Tefzel Insulated, Nickel Coated, Space Quality, General Specification For
SSQ 25000	Destruct Physical Analysis Testing Specification For The Space Station Program
SSQ 25001	Upgrade Screening EEE Parts Requirements
SSQ 26000	Space Station Program, Standard Repair For Sharp Edges on SSQ 21635 NZGL Type Connector Assemblies and Components
SSP 41175-38	Software Interface Control Document, Station Management and Control to ISS Book 38, ICU Interface
SSP 41177-09	Software Interface Control Document Guidance Navigation and Control Multiplexer/Demultiplexer to International Space Station Book 9, International Docking Adapter (IDA) – Docked Visiting Vehicle Interfaces
SSP 41178-36	Software Interface Control Document, Internal MDM to ISS Book 35, HTY Interface
SSP 41178-37	Software Interface Control Document, Internal MDM to ISS Book 37, OGA Interface
SSP 41178-38	Software Interface Control Document, Internal MDM to ISS Book 38, WRS2 Interface
SSP 41178-39	Software Interface Control Document, Internal MDM to ISS Book 39, WRS1 Interface
SSP 50405-09	Software Interface Control Document, HCZ MDM to ISS Book 09, Sabbatier Interface
SSP 30261:001	Space Station Program Office Command & Data Handling(C&DH) Standard Interface Control Document
SSP 30261:002	Space Station Program Office Space Station Multiplexer/Demultiplexer (SSMDM) Standard Interface Control Document
SSP 30261:004	Space Station Program Enhanced Space Station Multiplexer/Demultiplexer (ESSMDM) Standard Interface Control Document
SSP 30261:005	EPIC MDM ICD

SSP 50892	Ethernet Requirements for Interoperability with the Joint Station LAN (JSL)
SSP 50193-15	Software Interface Control Document Payload MDM to ISS Book 15, Improved Automated Payload Switch Interface
SSP 50193-16	Software Interface Control Document Payload MDM to ISS Book 16, Improved Paload Ethernet Hub/Gateway Interface
SSP 50193-XX	Software Interface Control Document Payload MDM to ISS Book XX, Tissue Equivalent Proportional Counter IVA interface
SSP 50097-05	ISS Manned Base to Russian Segment Software Inteface Control Dcoument Book 5, Mobile Servicing System (MSS) to Mini Research module 1 (MRM 1) Interface
CMC-00002-ESP3-013.A1	Prime Item Development Specification for External Stowage Platform 3
SSP 50699-01	USOS Certification Baseline Volume 1: ISS Orbital Replacement Unit (ORU) Certification Baseline
SSP 50699-02	USOS Certification Baseline Volume 1: ISS Orbital Replacement Unit (ORU) Limit Expansions
SSP 50699-04	ISS Certification Baseline Volume IV: ISS Lifetime Extension
SSP 50760	External Stowage Platform 3 to International Space Station Interface Definition Document
SSP 50866	NASA/ESA Common Spares Pool (CSP) Joint Implementation Plan for Columbus
SSP 57210	Payloads to COLUMBUS (COL) Exposed Payload Facility (EPF), Command and Data Handling (C&DH), and Common Transport Interface Control Document (ICD)

APPENDIX F – ANALYTICAL MODELS & TOOLS TO BE MAINTAINED

- 3D CAD models of all ISS elements
- Integrated ISS Passive Thermal Control System Models
- Integrated ISS Active Thermal Control System Models
- Integrated ISS EPS Models: Electrical Power Simulation Model (EPSIM)
 - Power Usage analysis Model w/user guide
 - SABER Circuit Simulation Models w/user guide
 - EPSOP w/user guide
 - EPS models w/user guide
 - SEPS (Analysis) – Secondary Electrical Power System
 - Software, documentation, procedures, etc., required to maintain System Test beds (SPEL and Firmware Lab)
 - MER EPS Tools
 - Verification Tools (OPMT, RTM, VPCM, PDS, Verification Databases)
 - SABER Power Transfer Unit (PTU) and System Circuit Model
- Integrated ISS ECLS Models
 - N₂O₂ Logistics Model
 - Water Logistics Model
 - SINDA Fluent Models
 - Computational Fluid Dynamics Model
 - Pressure Equalization Model
 - CO₂ Model
- Integrated ISS Structural Models
 - Component/ORU Stress models in bulk data format
 - Component Stick Beam Models
 - Component Dynamic Models with output transformation
 - Articulating and partially deployed component dynamic models
 - Integrated ISS Stick Beam Models
 - Integrated ISS Dynamic Models with output transformations
 - Mechanism and Non-linear Joint Models and tools
 - Forcing Function models and generation tools
 - Loads database and processing tools
 - SDMS data processing tools
 - Quasi-steady modeling and analysis tools (SSMRBS)
 - SAMA/MAMS/IWIS data processing tools
 - Acoustic (AutoSEA) modeling and analysis tools
 - Signal processing tools (MATLAB)
 - Finite element analysis tools (NASTRAN)
- Integrated C&T Models
 - Solar Array Beta Gimbal and Ku-band Antenna Control Analysis
 - Fiber Optic Monte Carlo Model
- Integrated C&DH Models
 - Network Response Simulator (NRS)
 - Optical Time Domain Reflectometer (OTDR)
 - HRDL links analysis tool
 - Remote Terminal Validation Tool

- Payload Ethernet Hub Gateway (PEHG) models and tools
- Integrated GN&C Tools and Models
 - Monster Matrix
 - 4D client (IPCL Database)
 - MOODS (Multiple Object Orbital Dynamics Simulation)
 - Monte Carlo, CVS, CMS, etc
 - XSIM
 - LVLH Momentum Manager Design Tool (MMCON), Inertial Momentum Manager Design Tool (IMCON)
 - MET and MSIS models – atmospheric density models
- Natural and Induced Environments Models
 - NASAN-II
 - SPHINX
 - LMSC/Boeing ISS External Contamination Data Base
 - Boeing/BREL ISS EEE parts IR test and analysis data base
 - Boeing Optical Surface Degradation Effects {by natural and induced environments} Data Base
- EEE Parts
 - Alchemy database

APPENDIX G – RESERVED

APPENDIX H – LIST OF ACRONYMS

AAA.....	Allocations, Assessments and Analyses
ACA.....	Associate Contractor Agreement
ADP.....	Acceptance Data Package
AOH.....	Assembly Operations Handbook
APAS	Androgynous Peripheral Attachment System
APC.....	Auxiliary Power Converter
APCU.....	Assembly Power Converter Unit
ARES.....	Crew Launch Vehicle (formerly called CLV)
ASAP	Aerospace Safety Advisory Panel
ATCS	Active Thermal Control Subsystem
ATP	Acceptance Test Procedure
ATV.....	Automated Vehicle Transfer
BFS	Backup Flight Software
BIVP	Bilateral Integration and Verification Plan
C&DH.....	Command and Data Handling Subsystem
C&T	Communication and Tracking Subsystem
C&W	Caution and Warning
CAD	Computer Aided Design
CAM	Centrifuge Accommodation Module
CAR	Certification Approval Request
CAU	Cockpit Avionics Upgrade
CCA	Circuit Card Assembly
CCAA	Common Cabin Air Assembly
CCB.....	Configuration Control Board
CDR	Critical Design Review
CEI.....	Contract End Item
CEV.....	Crew Exploration Vehicle (see Orion)
CI.....	Configuration Item
CIL	Critical Items List
CIR.....	Cargo Integration Review
CITRIX	Paragraph 3.8.10.1 Not an acronym – software vendor name
CLV.....	Crew Launch Vehicle (see ARES)
CM	Configuration Management
CMG	Control Moment Gyroscope
CN.....	Change Notice
CoFR.....	Certificate of Flight Readiness
COSMOS	Paragraph 1.3.3.1.1
COTS.....	Commercial Orbital Transportation System
CPDS.....	Computer Program Development Specification
CPR.....	Cost Performance Reports
CR	Certification Requirement
CR	Change Requests
CSAS.....	Configuration Status and Accounting System
CSCI.....	Computer Software Configuration Item
CSPF	Consolidated Software Production Facility

CVAS	Configuration Verification Accounting System
D&C	Displays and Controls
DCN	Document Change Notice
DCR	Design Certification Review/Data Change Request
DDT&E	Design, Development, Test and Evaluation
DFI	Development Flight Instrumentation
DFL	Decommuration Format Load
DIL	Deliverable Items List
DM	Documentation Management
DO	De-Orbit Through Landing
DoD	Department of Defense
DPA	Digital Pre-Assembly
DQA	Data Quality Assurance
DR	Discrepancy Report
DRD	Data Requirements Description
DRR	Data Review Room
DSC	Dedicated Signal Conditioner
DSE	Development Support Environment
DTO	Developmental Test Objective
Eagle	Enhance Automated Graphical Logistics Environment
ECLS	Environmental Control and Life Support Subsystem
ECN	Electrical Change Notice
EDMS	Engineering Data Management System
EEE	Electrical, Electronic, and Electromechanical
EMC	Electromagnetic Compatibility
EME	Electromagnetic Effects
EMI	Electromagnetic Interference
EO	Engineering Order
EPCE	Electrical Power Consuming Equipment
EPD&C	Electrical Power Distribution and Control
EPIMS	EEE Parts Information Management System
EPO	Element Project Office
EPS	Electrical Power Subsystem
EPSL	Electrical Power System Laboratory
ESD	Electro Static Discharge
ET	External Tank
EVR	Extravehicular Robotic Subsystem
FACI	First Article Configuration Inspection
FCP	Flight Software Change Proposal
FDM	Frequency Division Multiplexer
FEL	First Element Launch
FDF	Flight Data File
FDIR	Fault Detection, Isolation, and Recovery
FOR	Flight Operations Reviews
FMEA	Failure Modes Effects Analysis
FMEA/CIL	Failure Modes Effects Analysis and Critical Items List
FPL	Fetch Pointer Load

FPSWG	Flight Production Schedules Working Group
FRR	Flight Readiness Review
FSE	Flight Support Equipment
FSOH	Flight Software Operations Handbook
FSR	Flight Software Requirements
FSSE	Flight Systems and Software Engineering
FSSR	Functional Subsystem Software Engineering
FSW	Flight Software
GAO	General Accounting Office
GIDEP	Government-Industry Data Exchange Program
GFE	Government Furnished Equipment
GFD	Government Furnished Data
GNC	Guidance, Navigation and Control Subsystem
GOLD	Government On-Line Data
GPC	General Purpose Computer
GSE	Ground Support Equipment
H ₂	Liquid Hydrogen
HDBK	Handbook
HR	Hazard Report
IAV	Integrated Avionics Verification
ICD	Interface Control Document
IDAGS	Integrated Display and Graphic Standards
IDR	Interim Design Review/interim Discrepancy Report
IDRD	Increment Definition Requirements Document
IDRP	Increment Definition and Requirements Plan
IFL	Integrated Flight Loads
IG	Inspector General
IGA	Intergovernmental Agreements
IMS	Information Management System
IP	International Partners
IPCL	Instrumentation Program and Components List
IPL	Initial Program Load
IPL	ISS Power Laboratory
IP/P	International Partner/Participant
IMMT	Increment Mission Management Team
INC	Installation Notice Card
IRD	Information Requirements Document
ISIL	ISS Software Integration Laboratory
ISS	International Space Station
ISS Program	International Space Station Program
IT	Information Technology
IV	Integrated Vehicle
JEM	Japanese Experiment Module
JMP	Joint Management Plans
JPD	Joint Program Directive
JPMP	Joint Project Management Plan
JPRCB	Joint Program Requirements Control Board

JSC	Johnson Space Center
KHB	Kennedy Handbook
KSC	Kennedy Space Center
L	Launch
LCC	Launch Commit Criteria
LO	Lift-off through Orbit Insertion
LRU	Line Replaceable Unit
L/S	Post-Landing/Safing
LSAR	Logistics Support Analysis Records
LSRR	Launch Site Readiness Review
LTA	Launch Through Activation
MADS	Modular Auxiliary Data Systems
MAPTIS	Materials and Process Technical Information System
MAST	Measurement and Stimuli
MATCO	Material Analysis, Tracking and Control
MBF	Mission Build Facility
MCC	Mission Control Center
MCR	Master Change Record
MDCA	Main Distribution Control Assembly
MDM	Multiplexer-De-Multiplexer
MEDS	Multifunction Electronic Display Subsystem
MEL	Minimum Equipment List
MER	Mission Evaluation Room
MICB	Mission Integration Control Board
MIL	Military
MIP	Mission Integration Plan
MIS	Measurement Implementation Sheet
MIS	Management Information System
MIUL	Materials Identification and Usage List
MML	Master Measurement List
MMU	Mass Memory Unit
Mod	Modification
MOD	Mission Operations Directorate
MOU	Memoranda of Understanding
MR	Material Review
M/S	Measurements and Stimuli
MSID	Measurement/Stimulus Identification
MUA	Material Usage Agreement
MVP	Master Verification Plan
NASA	National Aeronautics and Space Administration
NCR	Non-Conformance Report
NDC	Notification of Document Change
NOPAR	Non-Orbiter Project Parts List (OPPL) Part Approval Request
NLT	No Later Than
NSTS	National Space Transportation System
O ₂	Liquid Oxygen
OEM	Original Equipment Manufacturer

OI Operational Instrumentation
 OMI Orbiter Maintenance Instruction
 OMRS Operations and Maintenance Requirements and Specifications
 OMRSD Operations and Maintenance Requirements and Specifications Document
 OO Orbital Operations
 OPC Orbiter Power Converter
 OPCU Orbiter Power Converter Unit
 OPF Orbiter Processing Facility
 OPPL Orbiter Project Parts List
 OPR Orbiter Project Parts Requirements
 Orion Crew Exploration Vehicle (formerly called CEV)
 ORU On-Orbit Replaceable Unit
 OSE Orbital Support Equipment
 OV Orbiter Vehicle
 OVEI Orbiter Vehicle End Item
 PASS Primary Avionics Software System
 PCASS Program Compliance Assurance and Status System
 PCM Pulse Code Modulator
 PCM-MUX Pulse Code Modulator Multiplexer
 PCS Portable Computer System
 PCTAP Personal Computer Transport Analysis Program
 PDIT Program Data Integration Team
 PDR Preliminary Design Review
 PDRD Program Definition and Requirements Document
 PIRN Preliminary/Proposed Interface Revision Notice
 P/L Payload
 PL Pre-Launch
 PMA Pressurized Mating Adapter
 PMM Permanent Multi-purpose Module
 PMR Performance Management Review
 PMR Project Management Reviews
 PMS Performance Measurement System
 PPL Pre-Positioned Load
 PPS Post Production Support
 PR Problem Report
 PRACA Problem Resolution and Corrective Action
 PRCB Program Requirements Control Board
 PRCBD Program Requirements Control Board Directives
 PRD Program Requirements Document
 PRMS Program Risk Management System
 PRR Production Readiness Review
 PTCS Passive Thermal Control Subsystem
 PTT Part Task Trainer
 PTU Power Transfer Unit
 PVCS Process Version and Control System
 QA Quality Assurance
 QSA Qualification Site Approval

R&M	Reliability and Maintainability
RBD	Reliability Block Diagrams
RCN	Requirements Change Notice
RHFA	Reusable Hardware Flight Authorization
RIT	Requirements Issue Tracking
RME	Risk Mitigation Experiments
RMS	Remote Manipulator System
RPCM	Remote Power Controller Module
RST	Russian Segment Trainer
S&M	Structures and Mechanical Subsystem
S&MA	Safety and Mission Assurance
SAIL	Shuttle Avionics Integration Laboratory
SAN	Software Authorization Notice
SAR	System Acceptance Review/Safety Analysis Report
SASCB	Shuttle Avionics Software Control Board
SCA	Shuttle Carrier Aircraft
SCR	Software Change Request
SCN	Specification Change Notice
SD	Shuttle Document
SDIL	Software Development and Integration Lab
SDRP	Shuttle Data Recon Products
SDTO	Station Development Test Objective
SE	Sustaining Engineering
SFAC	Space Flight Advisory Committee
SFOC	Space Flight Operations Contract
SM	Systems Management
SODB	Shuttle Operations Data Book
SODF	Station Operations Data File
SOP	Standard Operating Procedure
SOW	Statement of Work
SPDM	Special Dexterous Manipulator
SPF	Software Production Facility
SPN	Station Program Notes
SPOC	Space Program Operations Contract
SPRT	System Problem Resolution Team
SRB	Solid Rocket Booster
SRD	System Requirements Document
SRMS	Space Shuttle Remote Manipulator System
SRR	System Requirements Review/Software Readiness Review
SRS	Software Requirements Specification
SRU	Shop Replaceable Unit
SSCM	Space Station Change Memo
SSCN	Space Station Change Number
SSME	Space Shuttle Main Engine
SSODB	Space Station Operational Data Book
SSP	Space Shuttle/Station Program
SSP	Space Station Program

SSPF.....Space Station Processing Facility
SSPTS.....Station-Shuttle Power Transfer System
SSRMS.....Space Station Remote Manipulator System
SSRP.....System Safety Review Panel
SSTF.....Space Station Training Facility
SSUAS.....Space Station Utilization Advisory Subcommittee
SSV.....Space Shuttle Vehicle
STD.....Standard
STE.....Special Test Equipment
SVF.....Software Verification Facility
SW.....Software
TCM.....Technical Coordination Meeting
TCT.....Time Compliance Technical Instruction
TFL.....Telemetry Format Load
TIM.....Technical Interchange Meeting
TIP.....Test Implementation Plan
TLM.....Telemetry
TRR.....Test Readiness Review
UPF.....Universal Patch Format
US.....United States
USA.....United States Alliance
UTC.....United Technologies Corporation
USOS.....United States On-Orbit Segment
VCN.....Verification Closure Notice
VCN.....Verification Compliance Notice
Vdc.....Volts Direct Current
VE.....Vehicle Engineering
VLN.....Verification Logic Network
VMDB.....Vehicle Master Database
VPS.....Verification Planning Sheet
VTL.....Verification Tracking Log
WBS.....Work Breakdown Structure

APPENDIX I – RESERVED

APPENDIX J –KEY TERMS AND DEFINITIONS

Assembly Complete Vehicle: The on-orbit Space Station configuration as specified in SSP 41000.

Book Coordinator: A function that provides for developing new documents or updates to existing documents. Tasks include the following: integrating inputs from technical experts, submitters and reviewers; maintaining the technical consistency of the document; updating the document using the Configuration Management (CM) Change Request (CR) process; interfacing with CM and Data Quality Assurance (DQA); coordinating International Partner/Participant (IP/P) inputs and IP/P issue resolution; developing Notification of Document Changes (NDCs) for documents that affect RSC-E; coordinating translations as required; coordinating and conducting Technical Concurrence Meetings (TCMs); production, distribution and resolution of minutes and actions from TCMs; and developing and presenting presentations to the appropriate control boards as required for CR and document approvals.

Common Hardware and Software: NASA developed and certified hardware and software that is used by both USOS elements and IP/P elements. The common hardware and software can be that hardware provided to IP/P's as Government Furnished Equipment (GFE) or procured directly by the IP/P from the US Original Equipment Manufacturer (OEM). Common software is generally software that resides with the hardware, e.g., Multiplexer De-Multiplexer (MDM) boot code, or common hardware application software, like the MDM software required to control and operate a Environmental Control and Life Support Subsystem (ECLSS) Common Cabin Air Assembly (CCAA).

Component: A functional unit which is an entity for purposes of analysis, manufacturing, testing, maintenance, and record-keeping (e.g., batteries, electronic boxes).

Configuration Item/Computer Software Configuration Item (CI/CSCI): Hardware or software (or an aggregation of both) designated by the contracting agency for configuration management.

Conformed: All outstanding document changes (e.g., Specification Change Notices (SCNs), Document Change Notices (DCNs), Preliminary/Proposed Interface Revision Notices (PIRNs), etc.) have been consolidated into the document. Also referred to as consolidated.

Contingency Kits/Items: Items that are not part of the original design of a CI/Contract End Item (CEI)/Element/Segment but developed as operational needs of the ISS mature or are positioned on ISS as risk mitigation tools (e.g., the Ammonia Servicer, jumper kits).

Contract End Item (CEI): Hardware or software (or an aggregation of both) identified in the contract as a deliverable entity. A CEI may be a separate CI or CSCI, or an aggregate of CIs/CSCIs grouped as a set.

Control Board: A management forum which establishes and control changes to the baseline and associated documentation and provides a forum for resolving related technical and schedule

issues. The specific board scope, responsibilities, authority, and membership are defined in their charter.

Control Panel: A subordinate forum to a parent control board with delegated responsibility and control as defined in their charter.

Data Owners: The individuals that are identified as the authorized source for each data category in the Vehicle Master Database (VMDB). Data owners are documented in the Team Authorization list located in the VMDB.

Data Quality Assurance (DQA): An administrative function to ensure documentation and documentation updates are prepared in accordance with documentation standards contained in SSP 50010.

Design, Development, Test, and Evaluation (DDT&E): Development, verification and delivery of hardware and software for the USOS elements.

Development: The acquisition of hardware, software and support products. Includes the design, manufacture, qualification & acceptance testing, production and required verification or life cycle testing, through formal delivery (e.g., DD250) to NASA. This includes modifications or replacement of hardware and/or software as required for enhanced designs, inferior designs, obsolescence, or new capabilities.

Element: An integrated, assembled set of hardware and/or software capable of supporting an operational role such as the U.S. Lab module. It is the primary subdivision of the ISS Vehicle for purpose of accommodation in a launch vehicle.

Flight Support Equipment (FSE): An item required to integrate ORU/Contingency Items into/onto the carrier used in the shuttle payload bay or any pressurized volume which is transported to orbit by a launch vehicle (e.g., adapter plates, shrouds).

Government Furnished Data (GFD): The data associated with International Partners (IP) (in accordance to the Bilateral Data Exchange Agreements Lists (BDEALS)) and GFE manufacturers/providers (in accordance with SSP 50177).

Government Furnished Equipment (GFE) Flight Elements: The ISS GFE flight elements are the Node 2, Node 3, PMM, and Cupola.

Ground Support Equipment (GSE): Equipment required to support launch processing and post landing operations (e.g., dollies, lifting devices, slings).

Increment: The time frame is defined by each crew expedition. The duration of an increment is the time period from the launch of a designated flight crew to the undocking of the return vehicle for that crew.

Increment Definition Requirements Document (IDRD): Documentation of ISS Program requirements for the flights and increments within a planning period. These include the launch dates, traffic plans, top-level manifest, resource allocations, and specific flight/increment requirements and priorities.

Information Technology (IT): Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information that is used by ISSP. IT includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources.

Integration and Operations (I&O): Integration and sustaining engineering of the USOS elements and other system elements necessary to assemble and operate a safe and productive International Space Station. Design work to be accomplished under I&O is limited to systems, hardware, and software sustained under SOW Appendices.

International Partners/Participants: Those non-U.S. space agencies that formally participate in the ISS. The International Partners are the Canadian Space Agency (CSA), European Space Agency (ESA), National Space Development Agency of Japan (NASDA), and Russian Aviation and Space Agency (Rosaviakosmos). The Italian Space Agency (ASI) is an International Participant.

ISS System: The composite of hardware, software, facilities, personnel, and services needed to perform the ISS mission. This includes on-orbit, ground, and IP/P assets. ISS System requirements are specified in SSP 41000.

ISSP Management Center: A program facility in the Mission Control Center (MCC) to support real-time ISS operations that is staffed and operated by program personnel.

Launch Package: Full complement of ISS hardware and software delivered to, or returned from, the ISS.

Management Information System (MIS): A computerized information-processing system designed to keep ISSP and other personnel apprised of the most current ISS technical, financial, workforce, schedule and operational information, including issues and risks. MIS links ISS core business issues and goals with the technical aspect of the Program.

Mission Evaluation Room (MER): The MER provides on-console engineering support during real time operations.

Nominal: The expected value or condition, as measured in terms of functional or performance characteristics, of a component, subsystem, or system operating normally in its intended environment.

Operational Item: Equipment, miscellaneous in nature, but required to ensure the integrity, performance and use of the ORU or Contingency Kit/Item while on-orbit, as applicable through the phases of the International Space Station applicable to cycling an ORU/Contingency Item to

orbit, deploying it on-orbit, recovering the ORU/Contingency Item it is replacing back to the return carrier, and returning that ORU/Contingency Item to ground (a.k.a. mission phases) (e.g., bump protectors and connector protective covers).

Orbital Replacement Unit (ORU): Equipment that may be removed from the on-orbit ISS and replaced with a like unit for maintenance activities.

Orbital Support Equipment (OSE): An item required to support Flight hardware in the On-orbit ISS. OSE items are required to accommodate integrated assemblies used to deliver ORU/Contingency Items to/from on-orbit worksites and on-orbit storage locations (e.g., micro-meteoroid debris protection).

Other Produce Development: Design, development, verification, and delivery of hardware and software components to support and enhance operation of the ISS elements.

Part: A single piece not normally subject to disassembly without destruction or impairment of use (e.g., resistors, transistors, relays, gears, etc.).

Segment: A grouping of elements that are functionally related and often physically interface (e.g., U.S. On-Orbit Segment or U.S. Ground Segment).

Spares: Acquisition and deployment of space hardware components for ISS maintenance and repair.

Stage: The elements comprising the orbital vehicle at a given point in the assembly sequence. Each stage begins with orbital insertion of a flight containing Vehicle elements.

Subsystem: A functional grouping of components that combine to perform a major function (e.g., electrical power, attitude control, propulsion, etc.).

Support Equipment: An item required to transport, access, handle, protect, service, or verify a qualification/flight item. Equipment included in the category of Support Equipment is GSE, FSE, OSE, and Operations Items.

Sustaining: Ongoing support of on-orbit systems, hardware and software after formal delivery (e.g., DD250) to NASA. Includes hardware and software expertise, integration and analyses required to assess the detailed performance of the vehicle and ISS Equipment and to maintain a functional/operational vehicle. It also includes the required ground infrastructure required to support the on-orbit vehicle, e.g., MER, depots, software development facilities, original equipment manufacturers, SMA, CM, etc. Should also include modifications to hardware and/or software as required for anomaly resolution and parts obsolescence issues that maintain the accepted design certification/functionality and/or optimize the operational aspect of the hardware/software.

Sustaining Engineering: The design engineering expertise provided after the development of hardware/software items is completed and these items have been provisionally accepted.

United States On-Orbit Segment (USOS): An Earth orbiting facility which houses experiment payloads, distributes resource utilities, and supports permanent human habitation for conducting research and science experiments in a microgravity environment. The USOS supplies the ISS with services and capabilities as specified in SSP 41162.

Validation: The process of formally approving the developed process, services, or products at the conclusion of operational test and evaluation. This approval indicates developed processes, services, or products satisfy their intended operational mission.

Vehicle: The Vehicle includes the whole, integrated, on-orbit station (including hardware and software) as it is currently configured On-Orbit and the future station configurations as it evolves to the Assembly Complete (AC) configuration. The vehicle configuration is defined by the particular point in time under assessment or discussion.

Verification: The process for demonstrating compliance with the ISS System and U.S. On-Orbit Segment Specifications. For the ISS System Specification-level verification, this includes interfaces with the International Partners/Participants and U.S. Ground Segments.

APPENDIX K – DEPTH OF PENETRATION FOR IPs/Ps, COMMERCIAL VISITING VEHICLES (SpaceX AND ORBITAL), GFE, AND PAYLOADS

Depth of Penetration (DOP) for International Partners/Participants (IPs/Ps), Commercial Visiting Vehicles (SpaceX and Orbital), Government Furnished Equipment (GFE) and Payloads (PLs):

II. Purpose and Scope

This direction defines the roles and responsibilities of NASA and the contractor regarding treatment of International Partner and Participants (IP/P) elements and subsystems (including FGB), Commercial Visiting Vehicles (SpaceX and Orbital), Government Furnished Equipment (GFE) and Payloads (PL) relative to ISS stage certification. It identifies appropriate ground rules for the subsystem and technical discipline teams to define the scope of work required to technically integrate the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital systems and support the Certificate of Flight Readiness (CoFR) process.

III. General

B. General Groundrules:

1. The depth of penetration into IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital HW/SW design, development, verification processes and fabrication will be to the extent required to ensure physical, functional, safety, and operational compatibility at the system level and element-to-element interface.
2. The IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital provider is responsible for verification and certification that their elements meet end-item and segment specification requirements. NASA provides the IP/P elements to the contractor as Government Furnished Equipment (GFE), suitable for its intended use.
3. The contractor is responsible for end-to-end subsystem management for the ISS vehicle. The contractor is expected to understand the interfaces to the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital systems, however the contractor will only be expected to understand IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital designs sufficiently to assess the impacts of IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital hardware and software performance on overall system performance.
4. For real-time anomalies with IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital hardware and software, the appropriate provider (IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital) will be responsible for resolution of the anomaly. The contractor will understand IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital hardware/software designs sufficiently to assess the impacts of anomalies to overall system performance and to ensure that no hazard controls have been violated.
5. The contractor will not be responsible for IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital hardware/software (HW/SW) Certification of Flight

Readiness (CoFR) with regard to the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital satisfying end-item design and segment specification requirements.

6. The contractor will be expected to perform analytical integration of the total ISS System, including integration of IP/P and Commercial Visiting Vehicles SpaceX and Orbital models, and will produce and maintain integrated schematics. When the contractor performs IP/P verification in accordance with the Bilateral Integration and Verification Plan (BIVP), the contractor CoFR will extend to that component of the verification process.
7. Data furnished through NASA from the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and orbital providers will not be independently verified except in items suspected of not meeting requirements and after specific direction from NASA. NASA/the contractor will not duplicate element verification activities performed by the providers. Where necessary, data/models from the providers will be incorporated into U.S. integrated models as required to support stage verification.

C. Scope:

In order to support the CoFR process for the stage, the following areas shall be addressed by each team when performing their stage integration task, including documented system knowledge and Program processes.

1. Knowledge Base

- a) Each subsystem and technical discipline teams should have data on their respective ISS stage subsystem or area (including IP/P/Payload/GFE/Commercial Visiting Vehicles SpaceX and Orbital portions). This data can exist in the form of provider-produced data. This data can also exist in the form of US-generated products, which incorporate traceable IP/P-provided data. This data will be used for incorporation into appropriate products and maintained by the appropriate NASA or contractor expert.
- b) This data should be sufficient to understand the functional operation and performance of the subsystem, and will include integrated models, top level schematics, design descriptions, Safety Hazard Reports (including failure detection, isolation, and recovery assessments,) failure tolerance assessments, and all contract deliverables pertaining to the respective subsystem or area of expertise.
- c) The level of penetration into the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital element, segment or hardware should be sufficient to identify the point in the architecture where the subsystem architecture is isolated from the the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital element, segment or hardware for stage functionality and performance.

C. Processes

- a) NASA provides IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital data to the contractor in accordance with this contract. NASA obtains the IP/P data via the Government Furnished Data (GFD), the Bilateral Data Exchange Agreement, Lists and Schedules (BDEALS) processes. These are used for identifying, tracking, receiving, and approving (if required) data from the IP/Ps.
- b) Technical Interchange Meetings (TIMs), teleconferences and videoconferences are used with IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital providers in order to resolve technical issues and exchange technical information. IP/P data collected through protocols, or faxes signed by IP/P management are considered valid.
- c) Joint operating plans for assembly, nominal operations and off-nominal operations will be developed to support FOR, Operations Data File and Chits affecting the real-time mission support.
- d) Process Sampling is used to confirm the IP/P end-item provider has a valid verification program. Critical requirements by subsystem or discipline will be processed sampled by exception at NASA request.
- e) Joint testing and analysis will be documented in the Bilateral Interface Verification Plan (BIVP), and subsystem verification plans, as appropriate. Joint verification activities used to close requirements will be documented in Verification Logic Network / Detailed Verification Objectives (VLN/DVOs) for assembly flights or Verification Objectives (VOs) for post assembly complete flights.
- f) The Safety Review Panel is used to assess safety and reliability data provided by the IP/P/GFE/PL/Commercial Visiting Vehicles SpaceX and Orbital providers, including safety hazard controls, failure detection, isolation, and recovery assessments, and failure tolerance assessments.
- g) The VLN/DVO process is used to provide a traceable, auditable trail of requirements verification and closeout for each Stage through assembly complete. Post assembly complete, the ISS CoFR Validation process shall be used for each visiting vehicle flight and stage.
- h) The Verification Analysis Cycle (VAC) is used to perform verification analysis for integrated systems through assembly complete. Post assembly complete, the ISS CoFR Validation process shall be used. (S/A 1614)

APPENDIX L – NON-BOEING SUSTAINED PAYLOAD FACILITIES FOR FUNCTION ANALYSIS

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
Absorber Cartridge	67212MFAM71000	CIR-FIR
Air Hose Adapter	67212MFAN10030	CIR-FIR
Air Velocity Probe	67211MFAD40001	CIR-FIR
ATCU Fan	67211MFAD11010	CIR-FIR
ATCU Fan Filter Electronics	67211MFAD11063	CIR-FIR
ATCU Fan Lint Screen	67211MFAD11009	CIR-FIR
ATCU Smoke Detector	67211MFAD40024	CIR-FIR
ATCU to Bench Seal - Center	67212MFAH20025	CIR-FIR
ATCU to Bench Seal - RH/LH	67212MFAH20020	CIR-FIR
Chamber Fan	67212MFAH30021	CIR-FIR
Chamber Window - Coated	67212MFAH33013	CIR-FIR
Chamber Window - Uncoated	67212MFAH33000	CIR-FIR
Common AIM	67211MFAB40000	CIR-FIR
Dew Point Sensor Electronics and Probe	67212MFAM60000	CIR-FIR
Digital Control Module	67211MFAB20000	CIR-FIR
Digital Control Module (LTCF configuration)	67211MFAB20500	CIR-FIR
ECS Electronics Unit	67211MFAD10050	CIR-FIR
Electrical Power Control Unit	67211MFAG40010	CIR-FIR
EPCU Rack Power Switch	67211MFAB60020	CIR-FIR
Fiber Optic Cleaning Kit	67211MFKG10026	CIR-FIR
Filter Compensator Module #2	67212MFAN42200	CIR-FIR
Fixed Mirror Module	67212MFAN31000	CIR-FIR
Focus Prism Module	67212MFAN80000	CIR-FIR
FOMA Calibration Unit	67212MFAM62000	CIR-FIR
FOMA Control Unit	67212MFAM40000	CIR-FIR
FOMA Recirculation Pumps	67211MFAM23000	CIR-FIR
Gas Chromatograph Instrument Package	67212MFAM30000	CIR-FIR
HiBMs 30mm Relay Optics Module	67235MFAB11201	CIR-FIR
HiBMs 50mm Relay Optics Module	67212MFAN62000	CIR-FIR
HiBMs 90mm Objective Optics Module	67212MFAN51000	CIR-FIR

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
HiBMs Common Relay Optics Module	67212MFAN61000	CIR-FIR
HiBMs Compensator Module	67212MFAN42200	CIR-FIR
HiBMs Imaging Package - IAM	67212MFAN11000	CIR-FIR
I/O Processor Hard Disk Drives	67211EFAB10831	CIR-FIR
IAM Air Hose #3	67212MFAN10040	CIR-FIR
IAM F/O Cable #1	67212EFAH20812-1	CIR-FIR
Illumination Control Module	67212MFAN91000	CIR-FIR
Illumination Objective Optics Module	67212MFAN56000	CIR-FIR
Illumination Source Module	67212MFAN90000	CIR-FIR
Illumination Source Module F/O Cable	67212MFAN13010	CIR-FIR
Image Processing and Storage Unit	67211MFAB30100	CIR-FIR
Image Processing and Storage Unit - Analog	67211MFAB31100	CIR-FIR
Input/Output Processor	67211MFAB10300	CIR-FIR
Instrument Resource Ring GC Filter	67212MFAM00100	CIR-FIR
Instrument Resource Ring Vent Filter	67212MFAM00101	CIR-FIR
Krytox Kit	67211MFKG10250	CIR-FIR
Lint Free Wipe Assembly	67211MFAG10243	CIR-FIR
Liquid Crystal Tunable Filter Module	67212MFAN40000	CIR-FIR
LLL-UV 50mm Relay Optics Module	67212MFAN65000	CIR-FIR
LLL-UV Filter Module	67212MFAN52000	CIR-FIR
Low Light Level Air Hose	67212MFAN14010	CIR-FIR
Low Light Level-UltraViolet Image Acquisition Module	67212MFAN70000	CIR-FIR
MDCA Avionics Handle	67235MEAD12001	CIR-FIR
MDCA Avionics Package	67235MEAD12000	CIR-FIR
MDCA Boot Selector	67235EFAG70008	CIR-FIR
MDCA Chamber Insert Assembly	67235MFAC17100	CIR-FIR
MDCA Color Camera	67235MFAC14000	CIR-FIR
MDCA Fiber Arm	67235MFAC17146	CIR-FIR
MDCA Fuel Reservoir Sub Assembly	67235MFAC13500	CIR-FIR
MDCA Igniter Tip	67235MFAL21007	CIR-FIR
MDCA Needle 1	67235MFAC13310	CIR-FIR
MDCA Needle 2	67235MFAC13300	CIR-FIR

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
MDCA Radiometer Package	67235MFAC13950	CIR-FIR
MDCA Retractable Indexing Fiber Kit Assembly	67235MFAL21050	CIR-FIR
MDCA Return Hose	67235MFAC17191	CIR-FIR
MDCA Supply Hose	67235MFAC17192	CIR-FIR
Optics Bench UML Cover Plate	67212MFAH20600	CIR-FIR
Optics Housing Module	67212MFAN20000	CIR-FIR
Rack Door Switch	67211EFAB50024	CIR-FIR
SAMS Head (TSH-ES)	60005MA5000	CIR-FIR
Seals Kit	67211MFKG10225	CIR-FIR
UML Latch Handle	67211MFAB21000	CIR-FIR
Valve Timer	67212MFAM10200	CIR-FIR
Water Flow Controller Assembly	67211MFAD20040	CIR-FIR
WFCA Controller Box Assembly	67211MFAD20056	CIR-FIR
Air Velocity Probe and FDS Bracket	67211MFAD40010	CIR-FIR
Air Velocity Probe Electronics	67211MFAD40017	CIR-FIR
ATCU Fan	67211MFAD11010	CIR-FIR
ATCU Fan Filter Electronics	67211MFAD11063	CIR-FIR
ATCU Fan Lint Screen	67211MFAD10043	CIR-FIR
ATCU Smoke Detector	67211MFAD40025	CIR-FIR
ECS Electronics Unit	67211MFAD10050	CIR-FIR
Electrical Power Control Unit	67211MFAG40010	CIR-FIR
EPCU Rack Power Switch	67211MFAB60020	CIR-FIR
Fluid Science Avionics Package	67213MFAF40000	CIR-FIR
I/O Processor Hard Disk Drives	67211EFAB10831	CIR-FIR
Image Processing and Storage Unit - Analog	67211MFAB31100	CIR-FIR
Input/Output Processor	67211MFAB10300	CIR-FIR
Light Microscopy Module	67215MEAB2000	CIR-FIR
LMM BIO Base	S1051MFA0025	CIR-FIR
LMM Clean Up Kit	67215MEAB23600	CIR-FIR
LMM Control Box Assembly	67215MEAB23700	CIR-FIR
LMM Gloves	67215MFKB20123	CIR-FIR
LMM Lens 100x	67215MFLA11040	CIR-FIR

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
LMM Lens 10x	67215MFLA11035	CIR-FIR
LMM Lens 2.5x	67215MFLA11051	CIR-FIR
LMM Lens 20x	67215MFLA11036	CIR-FIR
LMM Lens 50x	67215MFLA11038	CIR-FIR
LMM Lens 63x	67215MFLA11035	CIR-FIR
LMM Monochrome Camera	67215MEAB21031	CIR-FIR
LMM Surveillance Camera	67215MEAB23250	CIR-FIR
LMM X-Y Stage	67215MEAB21758	CIR-FIR
PACE LED Base	S1052MFA1000	CIR-FIR
PACE Oil Desensor	S1051MFA0009	CIR-FIR
Rack Door Switch Assembly	67211EFAB50024	CIR-FIR
SAMS Head (TSH-ES)	60005MA5000	CIR-FIR
Seals Kit	67211MFKG10225	CIR-FIR
Water Flow Controller Assembly	67211MFAD20010	CIR-FIR
WFCB Controller Box Assembly	67211MFAD20056	CIR-FIR
White Light Chasis	67213MFAL70710	CIR-FIR
White Light F/O Cable	67213MFAL70702	CIR-FIR
White Light Lamp	67213MFAL70750	CIR-FIR
Glacier - Main Flight Unit	CBSE-F10060-1	Cold Stowage
Glacier - Fan Motor (ORU)	CBSE-E70110-1	Cold Stowage
Glacier - Blower Assy (ORU)	CBSE-E70109-1	Cold Stowage
Glacier - Hybrid Capacitors	CBSE-F50336-1	Cold Stowage
Glacier - Electrical Boards	Non-COTS	Cold Stowage
Glacier - Water Supply Lines	CBSE-F10065-1	Cold Stowage
Glacier - Water Supply Lines	CBSE-F10065-5	Cold Stowage
Glacier - Water Return Lines	CBSE-F10066-1	Cold Stowage
Glacier - Water Return Lines	CBSE-F10066-5	Cold Stowage
Glacier - Volume Compensators	PCG-F10052-1	Cold Stowage
Glacier - Cryocoolers	CBSE-F21540-3	Cold Stowage
Glacier - Desiccant Filter	CBSE-F10067-1	Cold Stowage
Glacier - IVA Handle	CBSE-F10075-1	Cold Stowage
Glacier - Type V Trays	CBSE-F10083-1	Cold Stowage

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
Glacier - Type X Trays	CBSE-F10102-1	Cold Stowage
MERLIN Flight Assembly	PCG-F10045-1	Cold Stowage
MERLIN Flight Assembly	PCG-F10045-3	Cold Stowage
MERLIN Water Supply Line	PCG-F10053-1	Cold Stowage
MERLIN Water Return Line	PCG-10054-1	Cold Stowage
MERLIN Double Water Supply Line	PCG-F10055-1	Cold Stowage
MERLIN Double Water Supply Line	PCG-F10056-1	Cold Stowage
Volume Compensator	PCG-F10052-1	Cold Stowage
MERLIN Aux Sensor Harness	CBSE-F50401-1	Cold Stowage
IVA Handle	PCG-F20583-1	Cold Stowage
MERLIN Pouch	CBSE-F10077-1	Cold Stowage
Desiccant Pack Assembly	24400-20074-701	Cold Stowage
D-Ring Pallet Assembly	WLSI242134-302	Cold Stowage
ARCTIC Tray Assembly	WLSI242108-301	Cold Stowage
Brayton Machine	03102	Cold Stowage
Electronic Unit	03301	Cold Stowage
Rack Interface Unit	03480	Cold Stowage
Rack Interface Unit Switchbox	03407	Cold Stowage
Temperature Data Recorder Battery Pack	03370	Cold Stowage
Master Controller	96M21060-1	MSRR
SSPCM	96M21166-1	MSRR
Thermal and Environmental Control system	96M00066-3	MSRR
Vacuum Sensor Assembly	96M00804-1	MSRR
Avionics Shelf Maintenance Kit (Shelf Removal)	VASAVIOT1	MSRR
TECS Cap Kit (Shelf Removal)	TECSKIT2	MSRR
TECS Cap Kit (Shelf Removal)	TECSKIT1	MSRR
Shelf Accumulator	96M19616-1	MSRR
MSRR-1 W021 (Laptop Cable)	96M21021-1	MSRR
Vacuum Valve	B43553-1	MSRR
Pressure Transducer	7200-8281	MSRR
Video Box	96M21140-1	MSRR
MSL MASS SPECTROMETER ELECTRONICS BOX	2494-302 021 00	MSRR/MSL

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
MSL MASS SPECTROMETER SENSOR	QMA 200 BKM25299	MSRR/MSL
MSL MOTOR VALVE	2494-302 060 00	MSRR/MSL
MSL PRESSURE SENSOR 2 BAR	2494-302 042 50	MSRR/MSL
MSL PRESSURE SENSOR	2494-302 070 00	MSRR/MSL
MSL PRESSURE SENSOR 7 BAR	PCDR314-2664	MSRR/MSL
MSL SOLENOID VALVE LARGE	2494-302 042 40	MSRR/MSL
MSL SOLENOID VALVE SMALL	2494-302 042 10	MSRR/MSL
MSL CORE FACILITY SEAL O-RING 1	VITON V80 340 X 4	MSRR/MSL
MSL CORE FACILITY SEAL O-RING 2	VITON V80 360 X 4	MSRR/MSL
MSL FILTER UNIT	2494-302-040 00	MSRR/MSL
MSL GAS FILTER	2494-302-020 40	MSRR/MSL
MSL PUMP LUBRICATION KIT	PM 073 073-T	MSRR/MSL
MSL SAMPLE CARTRIDGE DATA CABLE	CPD 194	MSRR/MSL
MSL SERVICING FLEX LINE	2494-350 220A00C	MSRR/MSL
MSL TURBOMOLECULAR PUMP	PM 901 350	MSRR/MSL
MSL TURBOMOLECULAR PUMP ELECT BOX	2494-302 120A00C	MSRR/MSL
MSL VACUUM SENSOR	2494-302 220 12	MSRR/MSL
MSL PRESSURE SWITCH	2494-302 070 40	MSRR/MSL
MSL VACUUM SENSOR COMBI	2494-302 070 30	MSRR/MSL
MSL GAS SUPPLY	2494-303 000A00C	MSRR/MSL
MSL HEATER CURRENT SOURCE	MSL-305-410F	MSRR/MSL
MSL WATER REFILLING DEVICE	2494-350 210A00C	MSRR/MSL
MSL LGF	1714-1100-0000	MSRR/MSL
MSL SQF	1783-1000-0000	MSRR/MSL
MSL Power Supply Unit	2494-305 000A00C	MSRR/MSL
MSL Facility Control Unit	2494-304 000A00C	MSRR/MSL
MSL Core Facility	2494-301 000A00C	MSRR/MSL
MSL Vacuum Gas System/Water Pump Package	2494-302 000A00C	MSRR/MSL
MSL Water Pump	6011M-040-01	MSRR/MSL
MSL Buffer Volume	2494-302 011 00	MSRR/MSL
MSL Drive Unit	CT51475C001	MSRR/MSL
MSL Water Pump Elect Box	6011M-080-01	MSRR/MSL

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.XX and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
Microgravity Acceleration Measurement System	400000	MAMS
SAMS Interim Control Unit	60005MA17100	SAMS
SAMS Remote Triaxial Sensor	60005MA31400	SAMS
Triaxial Sensor Head - Ethernet Standalone	60005MA50000	SAMS
Seat Track Device	60005MA50043	SAMS
Sensor Enclosure	60005MA12100	SAMS
Fan Assembly (Spare Fan for SAMS ICU or RTS drawer)	60005MA17400	SAMS
Temp Sensor (Spare for SAMS ICU or RTS drawer)	60005MA17309	SAMS
Power Control Box (Spare for SAMS ICU drawer)	60005MA17300	SAMS
Electronics Enclosure	60005MA12200	SAMS
Standard Payload Computer	2000001	MSG
WV Sensor Bracket Assembly	436.103.AA	MSG
MSG Work Volume Illumination Unit Assembly	436.104.AA	MSG
Gas Sensor Conditioner	436.107.AC	MSG
Filter Delta P Sensor Box left	436.107.AD	MSG
WV Delta P Sensor Box Assy	436.107.AF	MSG
AHU Fan	436.108.AA	MSG
Internal Ctrl Panel	436.110.AA	MSG
Test Conditioner Box	436.112.AA	MSG
E-Box Assembly	436.140.AB	MSG
MSG Temperature Sensor Conditioner MTL IN	436.160.AG	MSG
Front Filter	500.104.AA	MSG
AAA Fan Assembly	6047.03.AB	MSG
AAA Fan Filter	6047.03.AC	MSG
AAA Fan Filter	6047.03.AC	MSG
AAA Control Unit (E-Box)	6047.03.AD	MSG
Area Smoke Detector Assembly	64647 2119818	MSG
Video Fuse Cartridge	7009.20.AH	MSG
Footswitch	7009.20.AO	MSG
STD Camera 4	7009.80.AA	MSG

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
STD Spare Lens	7009.80.AB	MSG
WA Spare Lens	7009.80.AC	MSG
Digital Recorder 2	7009.80.AD	MSG
Hi8 Recorder 3	7009.80.AE	MSG
Video Monitor 2	7009.80.AF	MSG
Touchpad	7009.80.AG	MSG
Velcro Mounting Pad	7009.80.AI	MSG
MSG Velcro Mounting Pad	7009.80.AI	MSG
Extension Cable	7009.80.AJ	MSG
Video multipurpose arm	7009.80.AM	MSG
C Track Adapter	7009.80.AP	MSG
Fuse 3A	F03A250V-3A	MSG
Fuse 5A	F06A250V5A	MSG
AL Pressure and Temperature Sensor Box	MSG357	MSG
AL Front Door Seal	MSG506	MSG
AL Top Lid Seal	MSG507	MSG
ESEM1	SPO-PD-030200	MSG
ESEM 2	SPO-PD-030300	MSG
ESEM 3	SPO-PD-030400	MSG
ESEM 4a	SPO-PD-030500	MSG
SIDE PORT	436.100.AB	MSG
Front Window Assembly	436.100.AH	MSG
Fire Hole	436.100.AJ	MSG
Flapper Unit Assembly	436.101.AA	MSG
MSG PCV Motor Drive Assy	436.109.AE	MSG
MSG CMP Power Status Panel	436.130.AD	MSG
MSG CMP Test Interface Panel	436.130.AE	MSG
MSG CMP Switch Panel	436.130.AF	MSG
MSG CMP Information and Control Center Panel	436.130.AG	MSG
MSG CMP Health and Status Panel	436.130.AH	MSG
Power Distribution and Control Box	436.160.AB	MSG

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
Lust Inverter	436.180.AA	MSG
Loading Port Seal 16"	500.100.58	MSG
4" Gloveport Plug	500.100.AF	MSG
MSG 4" Closed Glove Ring	500.100.AQ	MSG
6" Glovering Assy. (size 7)	500.100.AS.07	MSG
6" Glovering Assy. (size 9)	500.100.AS.09	MSG
MSG Glove Ring Assy (Size 10)	500.100.AS.10	MSG
MSG AL Glove Ring Assy (size 7)	500.100.AT.07	MSG
MSG AL Glove Ring Assy (size 9)	500.100.AT.09	MSG
MSG AL Glove Ring Assy (size 10)	500.100.AT.10	MSG
Rear Filter	500.104.AB	MSG
2" Feedthru Assembly Type 3	500.106.AD	MSG
6" Closed Gloveport Assembly	500.108.AA	MSG
J403 Feedthru	96M53036-1	MSG
J404 Feedthru	96M53037-1	MSG
Fuse 4A	FM09A250V4A	MSG
Airlock E-Box	MSG349	MSG
Airlock Tray	MSG351	MSG
MSG Airlock Illumination Unit	MSG359	MSG
AL Top Lid Interlocking Assembly	MSG365	MSG
Airlock Toplid Handle Assy	MSG366	MSG
AL Tray Bungee	MSG-ATB	MSG
MSG Recompression Valve Assembly	436.020.AB	MSG
UIP Fluid QD MTL Out	683-16348-247	MSG
UIP Fluid QD MTL In	683-16348-248	MSG
UIP GN2 QD	683-16348-332	MSG
UIP VRS QD	683-16348-51	MSG
UIP VES QD	683-16348-57	MSG
Flapper Bank Cover	436.101.AC	MSG
Filter Cap Assembly	500.100.AC	MSG
Filter Cap with Adapter	500.100.AD	MSG

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
L-6 Fastener	500.100.84	MSG
L-12 Fastener	500.100.85	MSG
L-18 Fastener	500.100.86	MSG
L-24 Fastener	500.100.87	MSG
L-30 Fastener	500.100.88	MSG
Particle Catcher	500.100.AE	MSG
6" Gloveport Plug	500.100.AR	MSG
100mm Bungee Cords	MSG1022	MSG
150mm Bungee Cords	MSG1023	MSG
200mm Bungee Cords	MSG1024	MSG
Filter Cartridge	MSG1145	MSG
Straylight Cover	MSG376	MSG
Straylight Cover Side	MSG377	MSG
Spotlight	MSG760	MSG
Gooseneck	MSG830	MSG
AL Airlock Inlet Removal Tool	436.100.100	MSG
GN2 Test Connector	436.800.01	MSG
Vacuum QD Test Connector	436.800.02	MSG
Vent QD Test Connector	436.800.03	MSG
Particle Catcher Adapter	500.100.BA	MSG
Video Drawer	7009.20.AA	MSG
W101	96M00553-01	MSG
W102	96M00554-01	MSG
W201	96M00557-01	MSG
W202	96M00558-01	MSG
W203 Ethernet	96M00559-01	MSG
W205	96M00561-01	MSG
W209	96M00563-01	MSG
Airlock Return Bezel Assembly	96M44005-1	MSG
Plug Assembly	96M44006-1	MSG
MSG Comp Based Training	96M53001-1	MSG

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
MLC	96M53004-1	MSG
Fuse Box	96M53005	MSG
Assorted Ziplock Bags	96M53008	MSG
Tissues	96M53009-1	MSG
Velcro Cable Ties	96M53011-1	MSG
MLC 28V Brick	96M53014-1	MSG
RS422/232 Converter	96M53016-1	MSG
Ethernet Cable	96M53017-1	MSG
Ethernet Card	96M53017-1	MSG
1553 Card Cable Assy.	96M53018-1	MSG
1553 Card	96M53018-1	MSG
W206	96M53020-01	MSG
Short Velcro Strip	96M53032-3	MSG
Long Velcro Strip	96M53032-7	MSG
System Software CD	96M53034-1	MSG
MSG Compact Disk Assembly	96M53034-3	MSG
MLC Bogen Arm	96M53040	MSG
Multipurpose Mount	96M53041-1	MSG
W204 Sams Data	96M53043-01	MSG
W210	96M53046-01	MSG
W105	96M53047-01	MSG
Threaded Fastener Bag	96M53050	MSG
W212 MLC Ethernet Cable	96M53406-1	MSG
MSG Cartridge Adapter	96M53407-1	MSG
MSG USB E-Net Adapter	96M55014-001	MSG
Fuse 12A	F03A250V12A	MSG
Fuse 5A	F03A250V5A	MSG
Spotlight Cable	MSG832	MSG
Rack Power Switch Label	SDG32107033-001	MSG
Fire Port Label LAB1S2_J2	SDG32108589-004	MSG
Contents Label LAB1S2_H1	SEG32106109-029	MSG

Appendix L - Non-Boeing Sustained Payload Facilities for Functional Analysis (SOW 6.88 and 3.3.8.2.2)		
Nomenclature	Part Number	Associated Function
MSG Tool - 3/8" DRIVE TRIPLE SQUARE M5	SF49X-M5	MSG
ESEM General Assembly	SPO-PD-032000	MSG
ESEM Housing	SPO-PD-032100	MSG

**APPENDIX M – FUNCTIONAL CARGO BLOCK (FGB) HARDWARE TO BE
ANALYZED FOR SPARING**

APPENDIX M- FUNCTIONAL CARGO BLOCK (FGB) HARDWARE TO BE ASSESSED (SOW 6.89)	
Part Name	Part Number
Container КР-МПА	АФЕК.464512.001
Container КП-МПА	АФЕК.468179.002
Container КС1-МПА-01	АФЕК.468179.003-01
Container КД1-МПА	АФЕК.468364.071
Terminal strip ЛКВ-П	АФЕК.687228.012
Terminal strip ЛКВ-О	АФЕК.687228.013
Terminal strip ЛКП	АФЕК.687228.005
Terminal strip ЛКК	АФЕК.687228.015
Terminal strip ЛКК	АФЕК.687228.015-01
Set of cables	АФЕК.442611.088
Digital user I/O adapter (23A287M) (program logic control device (УПЛУ))	Т63.036.053
Relay user signal I/O adapter (23A288) (УПЛУ)	Т63.036.041
Custom logic processor (23A291) (УПЛУ)	Т63.031.107
Status monitoring device (ПКС) УПЛУ (41А-01)	Т62.393.108
23A281-4 standard switching device	Т62.393.085
23A281-5 standard power switching device	Т62.393.087
11М157М circuit breaker unit	Т62.395.001
АП-1М automatic switch	6АГ.296.072 ТУ
УКТ-90 amplifier switch	СЛИЮ.461241.005
РБС-10/3 onboard outlet	17КС.10Ю.2454-0
ЩО-ЛО lighting panel	17КС.10Ю.2406-0
Light ССД-305	НКГД.441467.066ТУ
Radio telemetry device ТА-948.04	ИЮ2.158.024-04
Transmitter ША 262С	ИЮ2.010.039-14
Transmitter ША 262И	ИЮ2.010.039-08
Local switch ТА203М	ЦХ2.148.004
Local switch ТА204М	ИЮ2.148.063

APPENDIX M- FUNCTIONAL CARGO BLOCK (FGB) HARDWARE TO BE ASSESSED (SOW 6.89)	
Part Name	Part Number
Temperature measuring system СИТ 9Л	ИЮ2.148.054 СП
Static memory device СЗУ-ЦУ8	ЦВИЯ.467666.013
Cross connection unit TA601	ИЮ2.148.060 СП
Cross connection unit TA604	ИЮ3.027.014 СП
Distribution unit TA044	ИЮ2.393.506
Time transducer ЮА059 М1	ИЮ3.097.680
Sawtooth voltage sensor ДПН9	ИЮ3.263.001 СП
Set of cables to check the system	TBD
Data output subsystem TA124	ИВЯФ.468173.069
ПТАБ-2 storage battery current converter	ЕИГА 435241.001-02 ТУ
БУПТ-2 current converter control unit	ЕИГА 468333.001-02 ТУ
РТ-50-2 current controller	ЕИГА 435264.001-02 ТУ
СНТ-120/28 V voltage and current stabilizer	ЕИГА 435253.014 ТУ
СНТ-28/120 V voltage and current stabilizer	ЕИГА 435253.015 ТУ
800A storage battery	ИКШЖ.563534.007 ТУ
МИПТ-3 charge-discharge current integrator	СЛИЮ.411613.001 ТУЭ
Current source	ИТ-50М
Digital voltmeter	GDM type
Oscilloscope	TDS type
Power source	Б5-49 type
Replaceable low-noise dust collector filter	МБП-1Ф
Set of sanitary wipes for treating surfaces kits	Хт4.160.003 ТУ
Low-noise dust collector fan	МО-2М-01
Low-noise dust collector (per specs 342-3160.000 ТУ)	МБП-1
Smoke detector СBT 1592.00.000	ИДЭ 3
Fire extinguisher	ОСП-4,11Ф77-7892-0
Gas mask	ИПК -1М, Вт 8.068.09.000
Fungistat set	Хт4.160.657 ТУ
Samplers kit	Хт4.160.001 -03
Fan	МО-1М
Fan	МО-2М
Fluid flow regulator replaceable panel (СП РРЖ)	77KM-7651-900-01
Internal hydraulic loop replaceable pump panel (СПН ВГК)	77KM-7618-100
External hydraulic loop replaceable pump panel (СПН НГК)	77KM-7651-300
Air duct	77KM-7660-340
Air duct	17КС-7664-70-01
Air duct	17КС-7664-70-02
Air duct	77KM-7660-50

APPENDIX M- FUNCTIONAL CARGO BLOCK (FGB) HARDWARE TO BE ASSESSED (SOW 6.89)	
Part Name	Part Number
Air duct	77KM-7660-130
Matching unit [УС-31]	ПИМЖ.466225.026
Converter (ПС) 28.5/120-90	МКТН.435151.002
Terminal switch unit [КСР]	17КС.33Ю 2334-0
Local analog switch TA249M	ИВЯФ.468349.014-03
Local digital switch TA250	ИВЯФ.468349.015
Local temperature switch TA251	ИВЯФ.468349.055
Local analog switch TA252	ИВЯФ.468349.017
Local digital switch TA253	ИВЯФ.468349.018
Local group secondary power source TA818M	ИВЯФ.436734.039
Programmable memory device TA765Б	ИВЯФ.431212.005
Switch TA056	ИЮ2.393.568
Command generator (БФК)	37КС.1610-0
Nitrogen pumping system avionics unit (БАСПА)	17КС.32Ю 2506-0
Compressor power unit (БПК)	17К.8281-0А
Filter unit (БФ)	17КС.32Ю 2505А-0
Power distribution panel (-) (РЦМ)	17КС.10Ю 2412-0
Power distribution panel (+) (РЦП-С)	17КС.10Ю 2414-0
Power distribution panel (+) (РЦП-С1)	17КС.10Ю 2415-0
Power supply switching unit (БКПТ)	17КС.10Ю 2722-0
High gain antenna [ОНА] power switching unit (БСК)	17КС.10Ю 2740-0
Power switching unit БСК-1	17КС.10Ю 2703-0
Power switching unit БСК-1В	17КС.10Ю 2704-0
Power switching unit БСК-2	17КС.10Ю 2705-0
Power switching unit БСК-2В	17КС.10Ю 2706-0
Power switching unit БСК-5	17КС.10Ю 2707-0
Power switching unit БСК-5В	17КС.10Ю 2708-0
Power switching unit БСК-7.5В	17КС.10Ю 2710-0
Power switching unit БСК-25	17КС.10Ю 2715-0
Power switching unit БСК-50	17КС.10Ю 2719-0
Power switching unit БСК-50В	17КС.10Ю 2720-0
Integrated propulsion system (ОДУ) power switching unit (БСК)	17КС.10Ю 2733-0
Standard relay unit (БРУ)	11Ф732.7854-0
Fuse box panel БПП-2	17КС.10Ю 2441-0-01
Fuse box panel БПП-20	17КС.10Ю 2441-0-19
Docking system command processing unit (БОК СС)	17КС.10Ю 2231А-0
Command processing unit (БОК) for the DC	17КС.10Ю 2244-0

APPENDIX M- FUNCTIONAL CARGO BLOCK (FGB) HARDWARE TO BE ASSESSED (SOW 6.89)	
Part Name	Part Number
Command processing unit (БОК) for the МД [unexplained abbreviation]	37ҚД.2127-0
Short circuit monitoring unit (БККЗ)	17КС.10Ю 2108-0
Sanitary/hygiene water regeneration system (СРВ СГ) command processing unit (БОК)	17КС.10Ю 2219-0
Command processing unit БОК-3	17КС.10Ю 2243-0
Intermodule connection matching unit (БСМС)	17КС.10Ю 2248-0
Matrix commutator for restored channels [КМБК]	17КС.10Ю 2101-0
Matrix commutator with backup commands (КМДК)	17К.7412-0
Triple channel matrix commutator [КМТК]	17К.7413-0
Triple command commutator [КТК]	37ҚД.2812-0
Backup command commutator (ҚДК)	37ҚД.2813-0
Matrix commutator (КТКИ)	17КС.10Ю 2117-0
Command output unit БВК-2	17КС.10Ю 2427-0-04
Command output unit БВК-2	17КС.10Ю 2427-0-05
РБС-10/3 outlet	17КС.10Ю 2454-0
Caution & warning panel (ПСС)	СТИК.468.382.004
Current stabilizer [СТ-25]	ТУ16-87 ИЖЕА.435151.002ТУ
Matching device ВСБ-589	ИХ2.032.260 ТУ
User panel ВСБ-95	ИХ3.624.533 ТУ
ЯУ2.000.032-01	ЯУ2.000.032-01
ЯУ2.008.050	ЯУ2.008.050
ЯУ2.998.064	ЯУ2.998.064
Air flow sensor ИП-1-1	17КС.210Ю1806-30
Air flow sensor ИП-1-2	17КС.210Ю1806-40
Air flow sensor ИП-1-3	17КС.210Ю1806-10

SECTION D - PACKAGING AND MARKING

D.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

(End Of Clause)

D.2 PACKAGING, HANDLING, AND TRANSPORTATION (NFS 1852.211-70) (SEPTEMBER 2005)

- (a) The Contractor shall comply with NASA Procedural Requirements (NPR) 6000.1, "Requirements for Packaging, Handling, and Transportation for Aeronautical and Space Systems, Equipment, and Associated Components", as may be supplemented by the statement of work or specifications of this contract, for all items designated as Class I, II, or III.
- (b) The Contractor's packaging, handling, and transportation procedures may be used, in whole or in part, subject to the written approval of the Contracting Officer, provided (1) the Contractor's procedures are not in conflict with any requirements of this contract, and (2) the requirements of this contract shall take precedence in the event of any conflict with the Contractor's procedures.
- (c) The Contractor must place the requirements of this clause in all subcontracts for items that will become components of deliverable Class I, II, or III items.

(End of Clause)

{END OF SECTION}

SECTION E - INSPECTION AND ACCEPTANCE

E.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-8	May 2001	INSPECTION OF RESEARCH AND DEVELOPMENT-- COST-REIMBURSEMENT

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

(End Of Clause)

E.2 MATERIAL INSPECTION AND RECEIVING REPORT (NFS 1852.246-72) (JUN 1995)

(a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in 4 copies, an original and 3 copies.

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.672-1. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of Clause)

E.3 HUMAN SPACE FLIGHT ITEM (NFS 1852.246-73) (MARCH 1997)

The Contractor shall include the following statement in all subcontracts and purchase orders placed by it in support of this contract, without exception as to amount or subcontract level:

"FOR USE IN HUMAN SPACE FLIGHT; MATERIALS, MANUFACTURING, AND WORKMANSHIP OF HIGHEST QUALITY STANDARDS ARE ESSENTIAL TO ASTRONAUT SAFETY.

IF YOU ARE ABLE TO SUPPLY THE DESIRED ITEM WITH A HIGHER QUALITY THAN THAT OF THE ITEMS SPECIFIED OR PROPOSED, YOU ARE REQUESTED TO BRING THIS FACT TO THE IMMEDIATE ATTENTION OF THE PURCHASER."

(End of clause)

E.4 INSPECTION AND ACCEPTANCE

1. The Government will conduct inspections of work being performed from time to time in accordance with the "inspection of Research and Development – Cost Reimbursement" clause in Section I hereof. Except for the categories addressed in 2 below, Inspection and Acceptance for general effort under the contract Statement of Work (SOW) will be documented as depicted in DRD F-PM-09. The Contractor shall comply with the clause in E.2 Material Inspection and Receiving Report (NFS 1852.246-72)(JUN 1995) for all deliveries specified in Section F.5 Deliverables (items listed in Attachments J-5, J-9 and J-27).

2. It is generally expected that Inspection and Acceptance activities will be conducted as stated below for the following categories of effort:

(a) Flight Items.

- (1) Inspection of flight items required under this contract will take place at the Contractor's facility. Provisional acceptance of flight items required under this contract will take place at the launch site. Except:
 - i. Provisioned Item Orders (PIOs, also known as spares) as defined in H.53 Spares Provisioning Procedures and listed in Attachments J-9 and J-27 (e.g. ship in place or to a contractually designated storage facility), final acceptance will occur at origin.
 - ii. Flight Hardware that is not delivered to the launch site (e.g. another NASA site, their designated supplier or an International Partner for further processing), final acceptance will occur at origin.
 - iii. Flight Software that does not deliver to the launch site (e.g. another NASA site, the contractor's designated supplier or an International Partner for further processing), final acceptance will occur at point of delivery.
- (2) Final acceptance of flight items required under this contract (hardware and software) will take place after items have been delivered, launched, and assembled and integrated in space except for the following:
 - i. Final acceptance will be on ground for those flight items that are delivered but not launched, assembled and integrated on orbit at the expiration of the contract period of performance.
- (3) NASA shall be responsible for the conduct of on-orbit testing to verify acceptable performance of space station elements as contemplated in (a) (2) above during on-orbit checkout to determine that the overall space station is in conformance with functional requirements specified in the ISS system specification (SSP 41000).
- (4) If any delivered item or items do not perform in accordance with the requirements of the ISS system specification because of reasons beyond the Contractor's control (e.g., misuse or damage of the items by Government personnel), nonperformance for such reasons will not

constitute a basis for non-acceptance of the items delivered by the Contractor.

- (b) Ground Support Equipment: GSE that facilitates launch activities will be accepted at the Launch site.
- (c) Other Deliverable Hardware: Hardware other than flight hardware will be accepted at place of manufacture.
- (d) Non-Flight Software: Non-Flight software deliverables will be accepted at the Software Verification Facility in Houston, Texas.
- (e) Data and Documentation: Data and documentation will be accepted at the place of delivery.
- (f) On-orbit Orbital Replacement Units (ORU) Support Equipment

- (1) Inspection of each On-orbit ORU Support Equipment item required under this contract will take place at the Contractor's facility.
- (2) Acceptance of each On-orbit ORU Support Equipment item required under this contract will take place at the launch site, after completion of a Mini-Acceptance Review (MAR) per SSP 50287 Hardware/Software Acceptance Process. The basis for acceptance at the MAR will be the successful completion of a First Article Inspection (FAI) and a First Article Capability Demonstration (FACD).
- (3) If any delivered ORU Support Equipment item or items do not perform in accordance with the requirements of the ISS systems specification because of reasons beyond the Contractor's control (e.g., misuse or damage of the items by Government personnel), nonperformance for such reasons will not constitute a basis for non-acceptance of the items delivered by the Contractor.
- (4) If any delivered On-orbit ORU Support Equipment item or items do not perform in accordance with the requirements of the applicable Support Equipment Item Description because of reasons beyond the Contractor's control (e.g., misuse or damage of the items by Government personnel), nonperformance for such reasons will not constitute a basis for non-acceptance of the items delivered by the Contractor.

(g) Piece parts and Components

- (1) For maintenance and repair components that are procured under the Post Production Support (PPS) portions of the Statement of work, Government inspection will be indicated on the associated Acceptance Data Package and shipping document (as applicable). Acceptance will be documented for the applicable SOW section as depicted in DRD F-PM-09.
- (2) For items that are provided directly to NASA that are procured under the PPS portions of the Statement of Work as replenishments of previously delivered quantities that are by nature expendable, consumable, and/or time sensitive materials, Government Inspection will be indicated on the associated Acceptance Data Package and shipping document. Acceptance will be documented for the applicable SOW section as depicted in DRD F-FM-09.
- (3) Items which are subcomponents to be utilized in build up of high level assemblies shall comply with all applicable quality requirements. Inspection will be documented via a DD Form 1149 which shall be accompanied by applicable quality assurance documentation. Acceptance will be

documented for the applicable DIL or PIO end item listed in Attachment J-5, J-9, or J-27.

(End of clause)

E.5 INSPECTION OF SERVICES--COST-REIMBURSEMENT

(52.246-5, APR 1984)

(a) Definition. "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by reperformance, the Government may –

(1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and

(2) reduce any fee payable under the contract to reflect the reduced value of the services performed.

(e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may –

(1) by contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances or

(2) terminate the contract for default.

(End of clause)

E.6 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (FAR 52.246-11) (FEB 1999)

The Contractor shall comply with the higher-level quality standard identified in section 3.8 of the Statement of Work in section C.

(End of clause)

E.7 QUALITY ASSURANCE SURVEILLANCE PLAN (JSC 52.246-93) (JUL 1996)

A Quality Assurance Surveillance Plan (QASP) will be developed and implemented by the Contracting Officer's Technical Representative (COTR) as a part of the contract administration and monitoring activities conducted to assure that the Government receives products and

services that conform to contract requirements. The nature and extent of quality assurance surveillance contemplated in this plan will be based, in part, on the specific content of the contractor's Safety & Mission Assurance/Risk Management Plan (included in Section J-25).

(End of clause)

{END OF SECTION}

SECTION F - DELIVERIES OR PERFORMANCE

F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.211-15	SEP 1990	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.242-15	AUG 1989	STOP-WORK ORDER (ALTERNATE I) (APR 1984)
52.247-29	JUN 1988	F.O.B. ORIGIN

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

(End Of Clause)

F.2.A COMPLETION OF WORK - EXHIBIT A

All work required under this contract shall be completed on or before September 30, 2015.

Exceptions are as follows:

(a) All deliverable items shall be delivered on or before the applicable dates in the deliverable items list (DIL) set forth in Section J, Attachment J-5 Deliverable Items List, and Section J, Attachment J-27 Deliverable Items List.

(b) All documentation required by DRD's shall be delivered in accordance with the Data Requirements List.

(c) All deliverable Items authorized by Provisioned Item Order (PIO) set forth in Section J, Attachment J-9 Provisioned Item Order, in accordance with clause H.2 shall be delivered on or before the delivery date specified in the PIO.

(End of clause)

F.2.B COMPLETION OF WORK - EXHIBIT D

All work required under Exhibit D of this contract shall be completed on or before September 30, 2001.

F.2.C COMPLETION OF WORK – AMERICAN RECOVERY AND REINVESTMENT ACT

All work for the Common Docking Adaptor Phase II (SSCN 11885) under the American Recovery and Reinvestment Act shall be completed on or before September 30, 2010.

(End of Clause)

F.3 BILLS OF LADING (NFS 1852.247-73) (JUN 2002)

The purpose of this clause is to define when a commercial bill of lading or a government bill of lading is to be used when shipments of deliverable items under this contract are f.o.b. origin.

(a) Commercial Bills of Lading. All domestic shipments shall be made via commercial bills of lading (CBLs). The Contractor shall prepay domestic transportation charges. The Government shall reimburse the Contractor for these charges if they are added to the invoice as a separate line item supported by the paid freight receipts. If paid receipts in support of the invoice are not obtainable, a statement as described below must be completed, signed by an authorized company representative, and attached to the invoice.

"I certify that the shipments identified below have been made, transportation charges have been paid by (company name), and paid freight or comparable receipts are not obtainable.

Contract or Order Number: _____

Destination: _____".

(b) Government Bills of Lading. (1) International (export) and domestic overseas shipments of items deliverable under this contract shall be made by Government bills of lading (GBLs). As used in this clause, "domestic overseas" means non-continental United States, i.e. Hawaii, Commonwealth of Puerto Rico, and possessions of the United States.

(2) At least 15 days before shipment, the Contractor shall request in writing GBLs from: Cynthia Ratliff, Traffic Management Specialist , 2101 NASA Rd. 1, Houston, TX 77058.

If time is limited, requests may be by telephone: 281-483-3208.

Requests for GBLs shall include the following information.

- (i) Item identification/ description.
- (ii) Origin and destination.
- (iii) Individual and total weights.
- (iv) Dimensional Weight.
- (v) Dimensions and total cubic footage.
- (vi) Total number of pieces.
- (vii) Total dollar value.
- (viii) Other pertinent data.

(End of clause)

F.4 FLIGHT ITEM
(JSC 52.247-95) (SEP 1989)

Block 16 of each DD Form 250 prepared for hardware of equipment to be shipped under this contract must be annotated as follows in 1/4 inch letters or larger by hand printing or rubber stamp:

“THIS IS A FLIGHT ITEM” or “THIS IS MISSION ESSENTIAL
GROUND SUPPORT EQUIPMENT,” as applicable.

(End of clause)

F.5 DELIVERABLES

The Contractor shall provide the following deliverables, as described in Section C and elsewhere in this contract. Delivery shall be accomplished as indicated for that particular deliverable:

1. Flight Hardware

The Contractor shall deliver the flight hardware (and associated software) items required to satisfy the contract requirements as defined by Attachment J-5. The list describing the items required to be supplied by the Contractor is incorporated in Part III, List of Documents, Exhibits, and other Attachments, Section J, List of Attachments, Attachment J-5.

2. Support Equipment

The Contractor shall deliver the support equipment necessary to satisfy the contract requirements as defined by Attachment J-5. The list describing the items required to be supplied by the Contractor is incorporated in Part III, List of Documents, Exhibits, and other Attachments, Section J, List of Attachments, Attachment J-5.

3. Spares

The Contractor shall deliver spares and repair services as provisioned in accordance with clause H.2.

4. Data Deliverables

The Contractor shall deliver data in accordance with the Data Requirements Descriptions. The list describing the data items required to be supplied by the Contractor is incorporated in Part III, List of Documents, Exhibits, and other Attachments, Section J, List of Attachments, Attachment J-4.

5. Other Deliverables

The Contractor shall deliver the items incorporated in Part III, List of Documents, Exhibits, and other Attachments, Section J, List of Attachments, Attachment J-5, other than Flight Hardware and Support Equipment. These items fulfill Government requirements stated in Section C, Statement of Work and elsewhere in this contract.

(End of clause)

END OF SECTION]

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.223-71	DEC 1988	FREQUENCY AUTHORIZATION
1852.227-70	MAY 2002	NEW TECHNOLOGY
1852.242-73	JUL 2000	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING
1852.245-70	JUL 1997	CONTRACTOR REQUESTS FOR GOVERNMENT- OWNED EQUIPMENT

(End Of Clause)

G.2 SUBMISSION OF VOUCHERS FOR PAYMENT (NFS 18-52.216-87) (DEC 1988)

1. Public vouchers for payment of costs shall include a reference to this contract NAS15-10000 and be forwarded to:

NASA Johnson Space Center
International Space Station (ISS) Program Office
ATTN: BG/Contracting Officer
Houston, TX 77058

This is the designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract.

2. The Contractor may submit cost vouchers by email every two weeks and shall prepare vouchers as follows:
 - (a) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment.
 - (b) Two copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment.

- (c) The Contractor shall mark SF 1034A copies 1, 2, 3, and such other copies as may be directed by the Contracting Officer by insertion in the memorandum block the names and addresses as follows:

- (i) Copy 1 NASA Contracting Officer;
- (ii) Copy 2 Auditor;
- (iii) Copy 3 Contractor;

3. Public vouchers for payment of fee shall be prepared similarly and be forwarded to:

NASA Johnson Space Center
International Space Station (ISS) Program Office
ATTN: BG/Contracting Officer
Houston, TX 77058

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

4. In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.
5. The following additional invoicing procedures will be employed during the period in which the contractor is performing tasks associated with the American Recovery and Reinvestment Act (ARRA):
- (a) All requests for payment for work performed subject to the ARRA shall be submitted separately from requests for payment for any other work performed under the contract. The contractor will be allowed to submit one additional cost voucher per month to recoup ARRA costs. Performance fee vouchers shall be submitted upon the successful completion of the milestones established in clause H.62 of the contract.
 - (b) All requests for payment for work on contracts, funded in whole or in part, with Recovery Act funds, shall identify the applicable Contract Line Item Number(s) (CLINs) associated with the supplies or services being invoiced. CLIN #3 is being utilized for all ARRA projects under this contract.
 - (c) All invoices/vouchers shall be submitted to the designated billing office identified in paragraph 1 of this clause.

(End of clause)

G.3 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 1852.227-72) (JUL 1997)

- (a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights -- Retention by the Contractor (Short Form)", whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

NEW TECHNOLOGY REPRESENTATIVE

New Tech Rep and Patent Rep HA/Technology Transfer & Commercialization Office NASA
Johnson Space Center Houston, TX 77058

PATENT REPRESENTATIVE

New Tech Rep and Patent Rep HA/Technology Transfer & Commercialization Office NASA
Johnson Space Center Houston, TX 77058

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights--Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

(End of clause)

G.4 TECHNICAL DIRECTION (NFS 18-52.242-70) (SEP 1993)

1. Performance of the work under this contract is subject to the written technical direction of the Contracting Officer's Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 18-42.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

2. The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that—

- (a) Constitutes an assignment of additional work outside the statement of work;
- (b) Constitutes a change as defined in the changes clause;
- (c) Constitutes a basis for an increase or decrease in the total estimated contract cost, fee, or the time required for contract performance;
- (d) Changes any of the expressed terms, conditions, or specifications of the contract; or
- (e) Interferes with the contractor's rights to perform the terms and conditions of the contract.

3. All technical direction shall be issued in writing by the COTR.

4. The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph 2 above, the Contractor shall not proceed but shall notify

the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is—

(a) Rescinded in its entirety; or

(b) Within the requirements of the contract and does not constitute a change under the changes clause of the contract, and that the Contractor should proceed promptly with its performance.

5. A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the Changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.

6. Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of clause)

G.5 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (NFS 1852.245-73) (AUG 2001)

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.

(b)(1) Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(2) The Contractor shall mail the original signed NF 1018 directly to the cognizant NASA Center Deputy Chief Financial Officer, Finance, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration been delegated to DOD) to the following address: NASA Space Station Program Office, Attn: JA/Property Administrator, Houston, TX 77058, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 31. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 31. The Contracting Officer may, in NASA's interest, withhold payment until a reserve not exceeding \$25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports in accordance with 1845.505-14 and any supplemental instructions for the current reporting period issued by NASA. Such reserve shall be withheld until the Contracting Officer has determined that the required reports have been received by NASA. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) through (3) of this clause.

(End of clause)

**G.6 LIST OF GOVERNMENT-FURNISHED PROPERTY
(NFS 18-52.245-76) (OCT 1988)**

For performance of work under this contract, the Government will make available Government property identified below or in Attachment J-2 of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at the destinations identified in Attachment J-2, and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245 Government Property clause of this contract, the Contractor is accountable for the identified property.

(End of clause)

**G.7 USE OF GOVERNMENT PRODUCTION AND RESEARCH PROPERTY
ON A NO-CHARGE BASIS (NFS 18-52.245-80) (MAR 1989)**

In performing this contract, the Contractor is authorized to use on a no-charge, noninterference basis the Government-owned production and research property provided to the Contractor under the contract(s) specified below and identified in the cognizant Contracting Officer's letter approving use of the property. Use is authorized on the basis that it will not interfere with performance of the Government contract(s) under which the property was originally furnished. Use shall be in accordance with the terms and conditions of these contracts and the cognizant Contracting Officer's approval letter.

Contract No(s): NAS8-50000, NAS8-50001, NAS9-02099, NAS10-02007, NAS9-02098,
NNJ06VA01C

(End of clause)

G.8 USE OF GOVERNMENT FACILITIES BY SUBCONTRACTORS

1. The following subcontractors having Government-owned facilities provided under the contracts set forth below, in effect on the date of this contract, are authorized to use such facilities on a no-charge, non-interference basis for the subcontract items listed below, and the subcontracts shall so provide:

Subcontractor: Rocketdyne
Contract Number: NAS9-14000, NAS9-17800

Subcontractor: McDonnell Douglas
Contract Number: NAS9-18200

2. If the Contractor enters into other subcontracts with subcontractors who have Government-owned facilities provided to them under contracts which provide that no-charge use may be authorized, the Contracting Officer may authorize the use of such facilities on a no-charge basis; provided:

(a) he determines that such use will not give the subcontractor a favored competitive position; and

(b) this contract is amended to reflect adequate consideration to the Government for the use of such facilities on a no-charge, non-interference basis. Such subcontracts shall specifically authorize the no-charge use, and require the written approval of the Contracting Officer. No additional consideration will be required, as provided in (b) above, if the Contracting Officer determines that an elimination of charge for use of such facilities will, of itself, result in an adequate decreased cost to the Government under this contract.

3. If the Government-owned facilities provided to the contractor or any subcontractor hereunder on a no-charge basis are increased or decreased or do not remain available during the performance of this contract, or if any change is made in the terms and conditions under which they are made available, such equitable adjustments as may be appropriate will be made in the terms of this contract, unless such increase or decrease was contemplated in the establishment of the price of this contract or a subcontract.

4. The Contractor agrees that he will not directly or indirectly, through overhead charges or otherwise, include in the price of this contract, or seek reimbursement under this contract for, any rental charge paid by the Contractor for the use on other contracts of the facilities referred to herein. Any subcontract hereunder which authorizes the subcontractor to use Government facilities on a no-charge basis shall contain a provision to the same effect as this paragraph 4.

(End of clause)

**G.9 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY
(NFS 1852.245-71) (JUN 1998) (ALTERNATE I) (MAR 1989)**

(a) The Government property described in the clause at 1852.245-77 List of Installation-Accountable Property and Services, shall be made available to the Contractor on a no-charge basis for use in performance of this contract. (See attachment J-3) This property shall be utilized only within the physical confines of the NASA installation that provided the property. Under this clause, the Government retains accountability for, and title to, the property, and the Contractor assumes the following user responsibilities:

The responsibilities of the Contractor as contemplated by this clause are defined in the following property management directives and installation supplements to these directives.

- a. NPG 4200.1, NASA Equipment Management Manual
- b. NPG 4200.2, NASA Equipment Management Procedures and Guidelines for Property Custodians
- c. NPG 4300.1, NASA Personal Property Disposal Procedures and Guidelines
- d. NPG 4100.1, NASA Materials Inventory Management Manual.
JSC will provide the Contractor with all applicable regulations, handbooks, and other materials that may be required.
- e. JPG 5151.2, Johnson Space Center Support Contractor Procedures and Guidelines

The contractor shall establish and adhere to a system of written procedures for compliance with these user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(b)(1) The official accountable recordkeeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

- (i) The contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;
 - (ii) The contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area:
 - (iii) The contractor shall establish a record of the property as required by FAR 45.5 and 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the contractor. The contractor is accountable for all contractor-acquired property until the property is transferred to the Government's accountability.
 - (iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the contracting officer and notification of the SEMO. The contractor shall assume accountability and financial reporting responsibility for such property. The contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.
- (2) After transfer of accountability to the Government, the contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the contracting officer.
- (3) The contractor shall not utilize the installation's central receiving facility for receipt of Contractor-acquired property. However, the Contractor shall provide listings suitable for establishing accountable records of all such property received, on a quarterly basis, to the Contracting Officer and Supply and Equipment Management Officer.

(End of clause)

G.10 REQUEST FOR WAIVER OR DEVIATION

If the Contractor believes that the best interests of the Government would be served by the waiver of, or deviation from, any requirements of this contract, including particularly technical requirements (whether physically included in the contract or incorporated by reference), any such proposed waivers or deviations shall be submitted to the Contracting Officer and Contracting Officer's Technical Representative through the ISS Program process for submitting waivers/deviations for approval. Any such waivers or deviations, or any waivers or deviations initiated by the Government, shall be treated as changes under the "Changes" clause hereof, and equitable adjustments shall be made to the extent provided by the clause and any other related provisions of this contract.

(End of clause)

G.11 CHANGE IN GOVERNMENT-PROVIDED SERVICES (JSC 52.245-98) (FEB 1991)

If the Government fails to provide the services specified in Attachment J-3, and that failure adversely affects the Contractor's ability to perform the contract, the Contracting Officer shall, upon timely written request from the Contractor, (1) make a determination of the effect on the Contractor, and (2) equitably adjust the contract in accordance with the procedures provided in the Changes clause of this contract. Equitable adjustments made pursuant to this clause, however, shall not include adjustments in fee.

(End of clause)

G.12 GOVERNMENT-FURNISHED MATERIALS

The Government will furnish to the Contractor and its subcontractors the materials identified in Attachment J-2, to the extent such materials are reasonably needed for performance of the contract. The Contractor shall identify the required GFM, including quantities, their respective delivery dates and destinations, thirty (30) days in advance of need. In addition, the Contractor shall provide a paper copy of Engineering Drawings to the JSC Decal Design and Production Facility (DDPF) 30 days in advance of need to request GFM decals, placards, and labels.

(End of clause)

G.13 RESERVED

G.14 Providing Facility Items (NFS 1852.245-97) (APR 1994)

The purpose of this clause is to set forth the parties' intent regarding their respective responsibilities for providing facility items for the Hardware History Retrieval System (HHRs) effort. The parties accordingly agree to the following:

1. "Provide," as used in this clause, has the same meaning as set forth in NASA FAR Supplement 1845.301. "Facilities," as used in this clause, has the same meaning as set forth in FAR 45.301.

2. The Government shall provide to the contractor the following facilities for use in performance of this contract:

<u>Description</u>	<u>Quantity</u>
Iomega Jaz Drive	6
Dell Portable Computers	5
Cannon Printers	2
Cannon Scanners	6
Dell Spare Batteries	4
Dell Port Replicators	5

3. The contractor shall replace any of the existing facilities identified in 2. above that reach the end of their useful life during the contract period or which are beyond economical maintenance or repair, if the facilities are still needed for contract performance. Such replacements shall be made with contractor-owned facilities and shall not be a direct charge to the contract.

4. The contractor shall not acquire facility items for the Government, unless specifically authorized by the contract or consent has been obtained in writing from the contracting officer pursuant to FAR 45.302-1(a). The contractor agrees to provide all facilities necessary for performance of this contract except as provided in 2. above.

(End of Clause)

G.15 Providing ISS Unique Test Equipment for the Repair and Testing of NASA Orbital Replacements Units (ORUs)

As part of Post Production Support of the ISS, the contractor is required to repair and test Flight Orbital Replacement Units (ORUs) at various Government depots. In order to provide this repair and test support, the contractor will require test equipment, including commercial off-the-shelf hardware and general purpose hardware, which will be required to be incorporated as

components of ISS specific test sets. The contractor will obtain approval of the Contracting Officer prior to acquiring any such hardware as special test equipment. The specific test equipment, which becomes a test set for special testing purposes of flight ORUs, will remain at the Government Depots and be considered government property.

The contractor agrees that test equipment approved by the Contracting Officer for procurement under this provision, and used in the build up and configuration of an ISS unique test environment, will be used solely for the STE environment for which it was acquired. No alternative uses or allocation of the test equipment will be done without prior written consent of the contracting officer. The contractor also agrees to manage, control, and report this test equipment and maintain the test equipment in an appropriate STE environment for its preservation and control in accordance with applicable Federal Acquisition Regulations.

(End of Clause)

G.16 MANAGEMENT OF POST DD 250 PROPERTY

The parties agree that the contractor will retain accountability of ISS Government Property to be delivered to the International Space Station. This accountability will occur when assets have been transitioned from the Design, Development, Test, and Evaluation phase to Integrations & Operations (I&O) of the contract.

Property included and excluded from this clause is identified in Section J-26 of this Contract. The parties agree that Integration Prime Contractors' must report any loss, damage, or destruction of such ISS property in their possession, or in the possession of their subcontractors, to the Boeing Property Manager, as well as the delegated NASA or DOD Government Property Administrator cognizant of the Integration Prime Contractors' when the property is accountable to the NAS 15-10000 Contract. The parties agree to cooperatively communicate any such incidents or related issues to the Boeing Property Manager.

This clause does not add to or diminish the Integration Prime Contractors' rights, responsibilities, or obligations with respect to ISS property accountable to the ISS Contract (NAS 15-10000) in their possession. In addition, this clause does not relieve the Integration Prime Contractors' from any other property provisions set forth in their respective contracts.

(End of Clause)

G. 17 SOCIO-ECONOMIC SUBCONTRACTING GOALS

(a) NASA's objective is to ensure the execution of a vigorous program at the prime contract and subcontractor levels which will optimize the opportunity for subcontract participation of small business, Small Disadvantaged Business (SDB), Women-Owned Small Business (WOSB), HUBZones, Veteran-Owned Small Businesses (VOSBs), Service-Disabled Veteran-Owned Small Businesses (SDVOSBs), and Historically Black Colleges and Universities/Minority Institutions (HBCU/MIs). To this end the Contractor shall comply with the approved subcontract plan set forth in Attachment J-8. Changes to the plan will be authorized only by contract modification. Performance by the Contractor in exerting its best effort to operate in accordance with this plan shall be a factor in determining award fee under this contract.

(b) The contractor will be evaluated on its efforts toward achieving the percentage goals outlined in paragraph (c) below. The percentages of contractor performance for each award fee period shall be calculated based on the dollars expended to the concerns for the evaluation period as compared to Contract total actual expenditures for the evaluation period. For purposes of calculating percentage goals outlined in paragraph (c) below, Contract total expenditures shall not include expenditures to entities outside the United States or its outlying areas. The contractor

may include all lower tiered subcontractors in reporting progress toward meeting the goals set forth in paragraph (c) below. (Reference DRD F-PM-03)

(c) The contractor is expected to meet or exceed the following subcontracting goal percentages (including lower tier subcontracts):

Small Business (SB)
Small Disadvantaged Business (SDB)
Women-Owned Small Business (WOSB)
Historically Black Colleges/Minority Institutions (HBCU/MI)
Historically Underutilized Business Zones (HUBZone)
Veteran Owned Small Business (VOSB)
Service Disabled Vet-Owned Small Business (SDVOSB)

(b) (4)

(End of Clause)

SECTION H – SPECIAL CONTRACT REQUIREMENTS

H.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.223-5	AUG 2003	POLLUTION PREVENTION AND RIGHT- TO-KNOW INFORMATION

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.204-74	MAY 2002	CENTRAL CONTRACTOR REGISTRATION
1852.208-81	OCT 2001	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.225-70	FEB 2000	EXPORT LICENSES (ALTERNATE I) (FEB 2000)
1852.228-72	SEP 1993	CROSS-WAIVER OF LIABILITY FOR SPACE SHUTTLE SERVICES
1852.228-76	DEC 1994	CROSS-WAIVER OF LIABILITY FOR SPACE STATION ACTIVITIES
1852.242-72	AUG 1992	OBSERVANCE OF LEGAL HOLIDAYS
1852.242-78	APR 2001	EMERGENCY MEDICAL SERVICES AND EVACUATION
1852.244-70	APR 1985	GEOGRAPHIC PARTICIPATION IN THE AEROSPACE PROGRAM
1852.246-70	MAR 1997	MISSION CRITICAL SPACE SYSTEM PERSONNEL RELIABILITY PROGRAM

(End Of Clause)

H.2 SPECIAL PROVISIONS REGARDING LOCKHEED SUBCONTRACT ASSIGNED TO BOEING

1. Notwithstanding any other provision of this contract, the parties agree that the Contractor is not required to update or modify any of the FAR or NASA FAR Supplement clauses in NAS 9-17830 upon or after the assignment of this contract from the Government to the Contractor.

2. RESPONSIBILITIES OF THE PARTIES:

- (a) NASA and Lockheed shall look only to each other in resolving any claims or disputes which may arise during the performance of the NASA-Lockheed prime contract NAS9-17830.
- (b) Lockheed and Boeing shall look only to each other in resolving any claims or disputes which are based on the performance of the Boeing-Lockheed subcontract.

- (c) NASA and Boeing shall look only to each other in resolving any claims or disputes which are based on the performance of this Boeing prime contract.

(End of clause)

H.3 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS (JSC 52.209-90) (SEP 1988)

This contract incorporates Section K, Representations, Certifications, and Other Statements of Offerors, as set forth in the Contractor's proposal 2-1150-94-0300, dated October 10, 1994, by reference, with the same force and effect as if it were given in full text.

(End of clause)

H.4 TECHNICAL INFORMATION RELEASES AND PUBLICATIONS

As authorized by paragraph (d)(1) of the Rights in Data - General Clause of this contract, the following exception shall apply:

During the performance of this contract, if data relating to this contract is planned for use in oral or written presentations, professional meetings, seminars, or in articles to be published in professional, scientific, and technical journals and similar media, the Contractor shall assure that an advance information copy of the presentation or article is sent to the Space Station Program (SSPO) to have the benefit of advance information concerning accomplishments of interest, and will provide the SSPO an opportunity to make suggestions to the Contractor concerning revisions if it is considered that such comments might be useful to the Contractor to help assure the technical accuracy of the information to be presented or published. The information copy will be forwarded to the technical monitor of the contract at least four weeks in advance of the date the author intends to give the presentation or submit the article for publication.

The advance information copy may be submitted in the format or medium which will be utilized in its ultimate release.

(End of clause)

H.5 MANNED SPACE FLIGHT MOTIVATION AWARENESS PROGRAM

The Contractor shall maintain a product oriented motivation (awareness) program in accordance with Safety NHB 1700.1(VI-B). The program objective shall be the prevention of human error by instilling in individuals performing on the contract and on critical subcontracts, an awareness of individual responsibility for the International Space Station Alpha (ISSA) mission success, flight crew safety, and motivating the exemplary performance necessary to achieve success. The program shall include as a minimum¹.

1. Participation in the NASA-Industry Manned Flight Awareness Program (MFA).
2. Goal setting and measurement to provide documented practical goals and performance standards for the reduction and elimination of human errors at organizational and individual employee levels.
3. Error Cause Identification and Removal System for detecting human errors, relating them to an identifiable cause, and action to remove the cause⁴.
4. Methods to obtain and distribute ISSA motivational information and materials to concerned Contractor personnel, subcontractors, and vendors supplying critical flight and ground support hardware and software.

5. Motivational (awareness) indoctrination for Contractor ISSA supervisory personnel and indoctrination of the work force in workmanship needs.
6. Recognition of personnel who demonstrate their awareness through exceptional craftsmanship, error free workmanship and attention to careful performance in their job responsibility. The Contractor shall flow down the provisions of this clause to the critical subcontractors identified in H.18 entitled "Key Product Groups."

(End of clause)

H.6 PRICING OF COMMON ITEMS TO INTERNATIONAL PARTNER

1. The Government has entered into agreements with International Partners (IP) which contemplates that certain space station "common items," previously intended to be procured by NASA, will now be acquired directly by the contractors of these organizations from the United States development contractor. These agreements provide, among other things, that NASA will take the necessary contractual steps to enable that common items can be procured by International Partner contractors for Space Station use, and to ensure that the recurring cost to such contractors consistent with the cost basis paid by NASA. The common items subject to this clause are found in Appendix J-11.

2. In order to carry out the intent of the above, the contractor (Boeing) agrees as follows:

- (a) If a Product Group is requested by an IP contractor to submit a proposal for any of the common items identifies, the Product Group agrees to estimate such items to such contractor consistent with the recurring costs estimated for such items in the NASA Space Station contract (NAS15-10000); provided, however, that if there are differences in the circumstances under which the items are being priced to the contractor (e.g., greater or lesser quantities, configuration changes, alternative business relationships, variances in schedule requirements, break in production, actual price experience, etc.), the Product Group's estimate of the items may vary to the extent of such different circumstances. For the purposes of establishing a pricing baseline, Boeing, the Product Groups, and the Government anticipate reaching an agreement on cost estimates for the common items listed in Attachment J-11 no later than 90 days after definitization of the prime contract. Appendix J-11 shall be modified to include the agreed-upon cost estimates.

Each proposal provided to an International Partner contractor for common items shall include a reference to the base target cost identified in Appendix J-11 as well as an explanation of any differences from the base target cost.

- (b) Boeing and the Product Groups agree to negotiate in good faith with any International Partner contractors desiring to buy common items as identified in Attachment J-11, and to do so in a manner consistent with the terms of this clause.
- (c) Boeing agrees to insert the substance of this clause in all subcontracts negotiated between Boeing and a Product Group which is furnishing to Boeing one or more of the common items identified in Attachment J-11. The Product Groups will flow this clause to lower tier subcontracts to the extent practical and possible. This clause has no application to contracts between Product Groups and IP contractors entered into prior to the effective date of this contract.

(End of clause)

H.7 GOVERNMENT APPROVALS/CONCURRENCE

1. In the performance of this function, exercise by the NASA of any rights provided for in this contract shall not relieve the contractor of his responsibility for performance of hardware provided under this contract or for any other contract obligations. Such rights include, by way of example, but not by limitation, the Government's right to:

- (a) approve or disapprove certain contractor documentation;
 - (b) issue technical direction in accordance with the article of this contract entitled "Technical Direction and Surveillance";
 - (c) approve of design approaches, design solutions, and specifications and
 - (d) concur in "Make or buy" decisions or source selections
2. Nothing in this clause shall be construed to be in derogation of the rights of the Contractor provided for elsewhere in this contract.

(End of clause)

H.8 INDEMNIFICATION

The Government is not aware at this time that any unusually hazardous risks exist in carrying out the Space Station Program. Should the Contractor request indemnification under PL 85-804 in the future, and the facts and circumstances warrant the inclusion of an indemnification clause at that time, the Government will pursue in good faith the indemnification of the contractor and subcontractors for liabilities in excess of their respective insurance coverages in effect at the time of space product liability exposure, without additional consideration flowing to the Government.

(End of clause)

H.9 SPECIAL TERMINATION COST

1. Definition.

"Special termination costs," as used in this clause, means those allowable costs as defined in Part 31 of the Federal Acquisition Regulation (FA-- including but not limited to

- (a) Severance pay, as provided in FAR 31.205-6(g);
 - (b) Reasonable cost continuing after termination, as provided in FAR 31.250-42(b)
 - (c) Settlement of expenses as provided in FAR 31.205-42(g);
 - (d) Costs of return of field service personnel from sites, as provided in FAR 31.205-35 and FAR 31.205-46(c); and
 - (e) Subcontractor termination settlements including, but not limited to, the costs in subparagraph 1 (a)(b), (c), and (d) of this clause.
2. Notwithstanding the Limitation of Funds clause of this contract, the Contractor shall not include in its estimate of costs incurred or to be incurred, any amount for special termination costs to which the Contractor may be entitled in the event this contract is terminated for the convenience of the Government
3. In the event of a termination for convenience, and subject to negotiation of a termination settlement, the Government agrees to pay the Contractor for special termination costs from amounts reserved within NASA's Human Space Flight appropriation or from such other funds appropriated or to be appropriated by Congress for this purpose. In the event any additional funding is required to reimburse the Contractor for its full termination liability, NASA will seek such funds and provide them to the Contractor when available.
4. In the event of termination for the convenience of the Government, this clause shall not be construed as affecting the allowability of special termination costs in any manner other than limiting the source of funds from which the Government would pay allowable costs.

5. This clause shall remain in full force and effect until this contract is fully funded or other mutually agreeable provisions are established to cover such termination costs⁶. Nothing in this clause shall be deemed to commit or bind Congress to take any future appropriation action.

(End of clause)

H.10 PROPERTY/DATA TO BE FURNISHED BY INTERNATIONAL PARTNER.

1. Property identified in Attachment J-12, will be made available to the Contractor on or before the dates indicated for the Contractor's use in performing this contract, together with such related data and information as the Contractor may request and as may be reasonably required for the intended use of the property. The identified property in Attachment J-12 with a disposition of "Requires NASA Protocol," have been agreed to be provided by NASA, although the International Partners have not agreed via protocol. The J-12 lists categories of data to be furnished by the International Partners and their respective contractors for which NASA has obtained authority over the course of the ISS to share as required in order to fulfill its obligations under the various Agreements cited in the applicable sections of the J-12. The contractor shall honor restrictive markings and protect such data from further disclosure pursuant to the Data Rights and Data Protection requirements contained elsewhere in this contract.
2. In the event any of the property/data identified above is not furnished on or before the established need date, or is not in a condition suitable for use when furnished, and either or both of these conditions increase the cost of performance of this contract, such increased cost shall be excluded from costs evaluated under the Award Fee Plan. In the event either or both conditions otherwise affect the Contractor's ability to perform this contract in accordance with its terms, an equitable adjustment shall be made in other appropriate terms and conditions hereof in accordance with the procedures of the "CHANGES" clause .
3. If the Contractor proposes an equitable adjustment, or the exclusion of certain costs from award Fee evaluations, based on this clause, the Contractor shall submit to the Contracting Officer such supporting data as the Contracting Officer may reasonably request for purposes of evaluation and reaching a conclusion on the Contractor's position.

(End of clause)

H.11 IDENTIFICATION AND APPROVAL FOR USE OF RESTRICTED COMPUTER SOFTWARE AND/OR COMMERCIAL COMPUTER SOFTWARE

- A. The Contractor shall identify, in writing, within 30 days of definitization, all restricted computer software and/or commercial computer software, as defined in the "Rights in Data-General" and the "Commercial Computer Software Licensing" clauses of this contract, that will be delivered in performance of this contract. The Government shall approve or disapprove, in writing, delivery of the identified restricted computer software and/or commercial computer software within 60 days from receipt of request.
- B. The Contractor shall be responsible for notifying the Government on a continuous basis of additional restricted computer software and/or commercial computer software to be delivered.
- C. If the Government disapproves the use of restricted computer software and/or commercial computer software, when such software is identified, the Contractor may submit a proposal for equitable adjustment to the Contracting Officer. Such proposals shall be handled according to the provisions of the "Changes" clause of this contract.

(End of clause)

H.12 KEY PRODUCT GROUPS

For the purpose of the provisions of this contract wherein appears the term "Product Group" ("PG"), the term is defined as a subcontractor/Boeing Division which is considered essential to the performance of the work under this contract by reason of possessing an exclusive or a predominant capability to provide the required supplies, services, and/or processes at the time(s) and in the manner specified.

The following firms are designated Product Groups:

- PG-1 McDonnell Douglas, A wholly owned subsidiary of The Boeing Company
Huntington Beach, California
- PG-2 The Boeing Company
Space and Communications Group
Rocketdyne Propulsion & Power
Canoga Park, California
- PG-3 The Boeing Company
Space and Communications Group
International Space Station
Huntsville, Alabama

(End of clause)

H.13 ORDER OF PRECEDENCE

Any inconsistency in this contract shall be resolved by giving precedence in the following order:

1.	The Schedule (including the SOW)
2.	Representations and other instructions
3.	Contract clauses
4.	Other Contract Section "J" documents, exhibits, and attachments not listed below, excluding documents listed in Attachment J-6
5.	ISSA System specification
6.	U.S. On-Orbit Segment specification
7.	Inter-segment Interface Control Documents
8.	SSP 50257 sections 2.1 and 2.2, and other applicable documents as listed in Attachment J-6, Applicable Documents List

(End of clause)

H.14 SPECIAL PROVISION FOR CONTRACT CHANGES

1. The parties agree that notwithstanding the provisions of Clause I.8 "Change--Cost-Reimbursement (Deviation)," no change made pursuant to Clause I.8 shall give rise to an equitable adjustment in the estimated cost and applicable fees when such change causes, (i) contract cost increase(s) totaling less than \$700,000, or (ii) contract cost decrease(s) totaling less than \$700,000, or (iii) a combination of contract cost increases and decreases which in the aggregate total (i.e., the absolute value of which is) less than \$700,000. Each such change shall be controlling in making this determination, and such change shall not, for purposes of determining the applicability of the clause, be added to any other change(s) nor shall any change be split into sub-elements. The parties recognize that several changes may be grouped together in bilateral contract modification for administrative purposes
2. The clause applies to all contract changes issued and authorized pursuant to Clause I.8, and shall continue to apply to all such changes issued and authorized from October 1, 2013 to September 30, 2014 under this contract. Change request issued dates under this clause

shall be based on the date authorized by Contract Change Order (CCO), Supplemental Agreement (SA), or Contracting Officer's Letter (COL). The contractor shall submit a proposal in July of each year which includes identifying all changes that were authorized by this clause during the period from July 1st through June 30th of the previous year.

3. "This clause shall not apply to waivers or deviations approved pursuant to clause G.10, "Request for Waivers or Deviation."

(End of Clause)

H.15 SPACE STATION FREEDOM HARDWARE AND SOFTWARE USAGE

Hardware and software developed under the Space Station Freedom (SSF) program may be used for the ISSA program applications. Hardware and software for which the design had been completed and manufacturing had been initiated at contract definitization shall be considered for exclusion from the requirement to meet ISSA applicable documents design requirements. The SSF items identified for transition to the ISSA program shall meet applicable ISSA performance, interface, survivability, and crew safety requirements. The Contractor shall submit design assessments, analyses, rationale, or records to support transition of the SSF items. This data shall be sufficient to substantiate that the items satisfy applicable performance, survivability, and safety requirements. Initial rationale shall be provided no later than 90 days after contract definitization and final rationale (which will include applicable detailed data, assessments, and analysis) shall be provided at the appropriate corresponding first-use-on element critical design review.

For hardware and software developed under the Space Station Freedom (SSF) program, the Contractor is not required to flow ISSA applicable documents to lower tier subcontractors provided that the subcontractor performs a "meets-or-exceeds" exercise to confirm the verification of items designed and built to SSF requirements meet the ISSA requirements and includes this analysis in the compliance documentation.

In the event the SSF hardware and software identified for use in the ISSA program contained in the SSF Equipment List as described in Attachment J-14, are not excluded from the requirement to meet ISSA applicable documents design requirements, the Contractor shall be entitled to an equitable adjustment pursuant to the Changes Clause. Attachment J-14 is subject to a one-time modification to add the PG-3 items to the list in accordance with clause H.31.

(End of clause)

H.16 SPECIAL PROVISION FOR GOVERNMENT FURNISHED DATA

- (a) Government Furnished Data made available under this clause shall in every respect be subject to FAR 52.245-5 Government property clause of this contract. Such data requested by the Contractor shall from time to time be added by mutual agreement of the parties to Attachment J-2, Section III, together with the date such data shall be provided.
- (b) GFD identified in Attachment J2 is not required to be returned to the Government unless specifically requested by the Government at the time the data is provided to the Contractor.
- (c) The contractor is not responsible for retaining an archival copy of the data provided.
- (d) All other data shall be considered abandoned in place in accordance with FAR 52.245-5 (j) (2) at Contractor facility and shall be destroyed by the Contractor regardless of the format in which it was delivered.

(End of clause)

H.17 UNPRESSURIZED LOGISTICS CARRIER/DRY CARGO CARRIER (ULC/DCC) DELETION

The capabilities to support prelaunch and post landing operations and resupply and return requirements for the transportation of external cargo as defined in SSP 41000 System Specification Revision E paragraphs 3.2.1.3.1.1, and 3.2.1.3.2.1 and SSP 41162 United States On-orbit Segment Specification Revision E paragraphs 3.2.1.3.1.1, 3.2.1.3.2.2 will be met by GFE hardware provided by the Government to the Contractor. The Government will ensure that the functional performance of the GFE hardware provides full compliance with the functional requirements for the transportation of external cargo specified in SSP 41000 System Specification Revision E paragraphs 3.2.1.3.1.1, 3.2.1.3.2.1, 3.7.1.3.28.1, and 3.7.1.3.29.1, and SSP 41162 United States On-orbit Segment Specification Revision E paragraphs 3.2.1.3.1.1, and 3.2.1.3.2.2. The Government will also ensure that the GFE hardware provides full compliance with ISS program requirements defined in SSP 41000 System Specification Revision E and SSP 41162 United States On-orbit Segment Specification Revision E paragraphs 3.2.2 through 3.6.2 inclusive.

(End of clause)

H.18 SPECIFICATION EVALUATION PROVISION

The ISS shall be considered compliant with the quantitative reliability requirement as defined in the system specification when one of the following occurs: a) compliance is demonstrated per the system specification; or b) compliance is demonstrated through analysis of assembly complete on-orbit performance data prior to completion of the contract. Since this requirement is allocated to the approved assembly complete configuration, any award fee evaluation of this requirement shall be based on the approved assembly complete configuration and not on any interim configurations. The timing of the award fee evaluation of this requirement shall be based on the contractor's chosen method for demonstrating compliance as specified in either a) or b) above. Nothing in this clause shall preclude the evaluation of this requirement in the final award fee milestone.

(End of clause)

H.19 RESERVED

H.20 ADDITIONAL EXCUSABLE DELAYS

In the event subcontract performance is excused pursuant to the provision titled "Force Majeure" of subcontract HX3295 between the contractor and KhSC (shown for reference below in full text), this will represent an addition to the excusable delays listed in clause 52.249-14, to the extent that the contractor's performance is thereby affected. The contractor shall immediately provide to the Government any notice of force majeure that the subcontractor may identify and include the extent to which contract performance may be affected. Requests for revised delivery schedule under this clause will be processed in accordance with clause 52.249-14 of this contract.

"20 FORCE MAJEUR

- A. Where a Party is unable, wholly or in part, by reason of force majeure, to carry out any obligation under this Subcontract that Party:
 - 1. Gives the other Party prompt notice of that force majeure with reasonably full particulars thereof and, insofar as known, the probable extent to which it will be unable to perform or be delayed in performing that obligation; and
 - 2. Uses all possible diligence to mitigate the effects of the force majeure as quickly as possible; that obligation is suspended as far as it is affected by force majeure during the continuance thereof
- B. If after a period of one month the force majeure has not ceased, the Parties shall meet in good faith to discuss the situation and endeavor to achieve a mutually satisfactory resolution to the problem.

- C. The requirement that the effect of any force majeure shall be mitigated with all possible diligence shall not require the settlement of any strike, lockouts or other labor disputes, or claims or settlement of demands, by any Government on terms contrary to the wishes of the Party affected.
- D. In the event of an excusable delay, resulting from events of force majeure under this Subcontract, the performance schedule of this Subcontract shall be extended equitably. Subcontractor shall provide Boeing with evidence supporting Subcontractor's claim of excusable delay and shall exert its best efforts to mitigate such schedule impact to the extent reasonable, including providing a work around schedule.
- E. In this Subcontract, "force majeure" means an act of God, strike, lockout or other interference with work, war declared or undeclared, blockage, disturbance, lightning, fire, earthquake, storm, flood, explosion, government or quasi-government restraint, expropriation, prohibition, intervention, direction, or embargo, unavailability or delay in availability of equipment or transport, inability or delay in obtaining governmental or quasi-governmental approvals, consents, permits, licenses, authorities or allocations. and any other cause whether of the kind specifically enumerated above or otherwise which is not reasonably within the control of the Party affected,"

(End of clause)

H.21 SPECIAL PROVISION REGARDING ALLOWABILITY OF FGB COSTS

All applicable taxes (sales, use, service occupation, retailer's occupation, personal property, excise, tariffs, duties, license fees, royalty fees, custom fees, and similar liabilities whatsoever imposed by the Russian Federation or any subdivision thereof ("taxes")) with the FGB manufacture, test, or delivery requirements are not allowable costs under this contract.

(End of clause)

H.22 RELIEF FROM CENTRIFUGE ACCOMMODATIONS MODULE (CAM) AND RS-FGB VOLUME ALLOCATION REQUIREMENTS

The CAM internal user payload volume requirement of 264.5 cubic feet as included in SSP 41000, paragraph 3.2.2.2 and the CAM stowage volume requirement of 324 cubic feet as included in SSP 41000, paragraph 3.2.2.8 and Table XI-A, and SSP 41162, Table XVIII-B are out of the scope of this contract.

The RS-FGB internal user payload volume requirement of 212 cubic feet as included SSP 41000, paragraph 3.2.2.8 and Table XI-A is out of the scope of this contract.

(End of clause)

H.23 CERTIFICATES OF FLIGHT READINESS (CoFRs)

The parties shall execute Certificates of Flight Readiness (CoFRs), in accordance with SSP 50108. The intent of the Boeing signature is to reflect satisfactory completion of particular contract efforts. The parties agree that the signing of Certificates of Flight Readiness (CoFRs) by Contractor and subcontractor personnel participating in the International Space Station (ISS) Program shall not give rise to any obligations or liabilities under this contract which are in addition to those which Boeing has assumed under other terms and conditions hereof. In particular, Contractor and its subcontractors do not assume (1) any liability or responsibility for express, or implied warranties of any type not otherwise provided in the contract, or (2) any additional responsibilities under statute, law or regulation, which they would not have if no certification was requested or provided.

(End of Clause)

H.24 ACCOUNTING FOR ENVIRONMENTAL TAXES

A reduction of \$2,322,200 to the billable/reimbursable contract costs will be made at a below the line calculation, thus not impacting the contract targets, award fee or obligated funds. This reduction is the result of a settlement reached on a CAS 405 issue between the DCMC CACO and The Boeing Company on environmental taxes. The CAS 405 settlement used this contract as means of receiving payment from The Boeing Company for unallowable costs previously billed to and paid by the Government.

(End of Clause)

H.25 GRCI Commercialization

The Contracting Officer has granted permission to establish claim to copyright, publish and release to others, the computer programs developed under Contract NASW-615 and NAS9-19610 as "Paths Data System (PDS)" and subsequently enhanced by GRC and renamed "MultiLinx," and the computer program developments and enhancements to MultiLinx Version 1.2, which are first produced in performance of Boeing subcontract number HS1354 and Boeing contract number NAS15-10000 and subject to the following conditions:

- (1) GRCI agrees to use its best efforts to commercially market and distribute the computer software including supporting and updating services;
- (2) GRCI shall affix the copyright notice of 17 U.S.C. 401 to the computer software when it is delivered to the Government and released or furnished to third parties;
- (3) NASA reserved a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, perform publicly and display publicly by or on behalf of the U. S. Government all such copyrighted computer software;
- (4) In the event GRCI has not, or is not, making the efforts or achieved the objectives set forth in paragraph (1) above, NASA reserves the right to obtain assignment of the copyright(s) in order to foster the desired commercialization efforts;
- (5) GRCI agrees to deliver without charge copies of any updated or enhanced versions of the software covered by the permission herein granted which are generated by GRCI internally within a period of 3 years after completion of the Boeing subcontract. If GRCI desires such updated or enhanced versions may be delivered with restrictions on use by NASA and its contractor(s) for NASA internal purposes only; and
- (6) The foregoing permission does not affect in any way the applicability of the U.S. export control laws and regulations on any use and release of such software which GRCI may contemplate under this permission.

(End of Clause)

H.26 NODE 1 STRUT STRAIN GAUGE OUTFITTING

There are eight titanium struts in the ISS Node 1. Each of these struts has a strain gauge circuit that was installed to measure loads in the struts during installation of the struts into the Node 1. These strain gauges were planned to be removed before launch. SSCN 987 directs the contractor to prepare the eight strain gauges for launch and on-orbit use. These strain gauges were for temporary use only, and were not intended to meet the requirements of flight rated equipment on the Space Shuttle or ISS. Therefore the parties agree the contractor will not be held responsible for ability of the strain gauges to meet the launch and on-orbit requirements and that the contractor will not be held responsible for the strain gauge performance.

(End of Clause)

H.27 PERMISSION TO COPYRIGHT SOFTWARE

On behalf of its subcontractor, Honeywell, Inc., the Contractor has requested permission to use MDM Application Test Environment ("MATE") software ("the MATE Software"), which was first produced under the ISS contract, in a commercial software product line for "Mini-MATE" hardware developed by Honeywell. The Mini-MATE software shall consist of the MATE Software, plus additional software developed by Honeywell using its own funds. This additional software qualifies as Restricted Computer Software under FAR 52.227-14.

The Contracting Officer hereby grants such request, subject to the following conditions.

- a. Honeywell agrees to use its best efforts to commercially market and distribute the Mini-MATE software including supporting and updating services;
- b. If Honeywell determines to assert copyright protection for the MATE software, Honeywell shall affix the copyright notice of 17 U.S.C. 401 to the MATE Software when it is delivered to the Government and released or furnished to third parties;
- c. If Honeywell establishes claim to copyright to the MATE Software, NASA shall have a paid-up, nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, and perform publicly and display publicly on behalf of the Government the MATE Software;
- d. Honeywell agrees to deliver promptly without charge a copy of the Mini-MATE Software, and of any updated or enhanced versions of the Mini-MATE Software covered by the permission granted herein which are generated within a period of three (3) years after the execution of this modification incorporating this clause into the contract. If Honeywell desires, such updated or enhanced versions (including Mini-MATE) may be delivered with restricted rights as set forth in subparagraph (g) (3) of the "Rights in Data General of FAR 52.227-14; as modified to implement this agreement; and
- e. The foregoing permission does not affect in any way the applicability of the U.S. export control laws and regulations on any use and release of the MATE Software which Honeywell may contemplate under the permission.

(End of Clause)

H.28 EEATCS TEST FACILITY

There is an agreement between the parties relative to implementation of the change that can be identified by reference to SSCN 311 (Modify Early External Active Thermal Control System), that (a) the Government will provide contractor access and Government furnished equipment and services required for the Kennedy Space Center Processing Facility (SSPF) and (b) the immediately preceding agreement constitutes a "mutually agreeable plan."

(End of Clause)

H.29 ISIL CAPITAL EQUIPMENT MAINTENANCE AND OPERATION AGREEMENT

The Contractor agrees to invest up to \$31.4 million to purchase, upgrade, and integrate equipment for the purpose of developing the International Space Station (ISS) System Integration Laboratory (ISIL). The parties further recognize and agree that any such contractor expenditures will be capitalized and depreciated in accordance with the contractor's established cost accounting practices and procedures. Any property incorporated into the ISIL or transferred to the contractor for incorporation into the ISIL is subject to the provisions of this clause.

The intent of the parties is to develop a laboratory where high fidelity subsystem integration, hardware/software interface troubleshooting, and anomaly investigations can be performed in support of the ISS Program, as well as other NASA and Boeing programs on a non-interference basis.

The Contractor will maintain records of capital expenditures and items where title has been transferred to the contractor. All capital items will be tagged and recorded for tracking purposes only.

NASA agrees to provide all required facilities and utilities for the installation and operation of the ISIL Laboratory. This includes its physical location in the Sonny Carter Training Facility (SCTF) in Houston, Texas. Provision of the facilities, and any facility modifications required, as well as on-going support, such as utilities required for operations during, and for the duration of this contract, is the sole responsibility of the Government (NASA).

NASA will transfer to Boeing title to excess ISS Program property which is determined to be appropriate for incorporation into the ISIL. The parties recognize that much, if not all, of the transferred property will require modification and/or repair. Transfer to Boeing shall constitute NASA's approval for modification and installation of property into the ISIL. As equipment is identified for use in the ISIL, up to an original acquisition value of \$6 million, it will be screened to re-issue by the Johnson Space Center's Property and Equipment Branch to determine if it can otherwise re-issued or used within the agency. If no requests are made for identified assets during screening, the transfer will be accomplished using an approved DD 1149. Following the transfer, the equipment will become Boeing company owned property. If the total original acquisition value of excess property requested for transfer exceeds \$6 million, transfers will be reviewed on a case by case basis and will require the written approval of the Contracting Officer. Except for depreciation of Boeing capital costs expended to modify, install, or otherwise improve transferred equipment, the value of any equipment transferred by the Government to Boeing shall not be recognized as an allowable cost.

Boeing agrees that during the life of the ISS contract or any extension or follow-on thereto, it shall not transfer, sell or otherwise dispose of ISIL property to a third party without the written consent of the NASA Contracting Officer.

Boeing will be responsible for funding the maintenance of all Boeing owned property, for the period of time said property is required for operating the ISIL. NASA will be responsible for funding the maintenance of all NASA owned property, for the period of time said property is required for operating the ISIL.

(End of Clause)

H.30 OPTION TO PURCHASE THE ISIL LABORATORY

The parties agree that if the Government does not extend the ISS contract beyond on-Orbit Performance, September 30, 2006, and does not there after contract with the contractor for the performance of the same, or substantially the same services contemplated by this contract, the contractor will, upon request by the Contracting officer, transfer title of its capital assets identified and listed as components of the ISIL Laboratory by the contracting officer from the records referenced in Clause H.29 ISIL Capital Equipment Maintenance and Operation Agreement of this contract, to either (a) the Government, or (b) a successor contractor. It is also agreed by the parties that the Government may exercise this option to acquire the contractor's capital assets in the ISIL Laboratory at any time during the contract period of performance.

If a request for transfer of title to the Government is made, the Government agrees to recognize as allowable cost under the contract an equitable adjustment to the contract value equal to the remaining un-depreciated balance of Boeing capitalized expenditures allocated to ISIL assets plus profit equal to 10% of that amount attributed to the period beyond September 30, 2008.

If a request for transfer of title to a successor contractor is made, the Contractor agrees to transfer title of its ISIL capital assets to the successor contractor for the un-depreciated balance of Boeing capitalized expenditures allocated to ISIL assets plus profit equal to 10% of that amount attributed to the period beyond September 30, 2008, subject to reasonable terms and conditions regarding payment and other matters to be agreed upon by the parties.

For purposes of determining the value of any equitable adjustment required to exercise this option, the value of any equipment transferred by the Government to the contractor shall be limited to the un-depreciated amount of Boeing capitalized expenditures used to improve such equipment.

(End of Clause)

H.31 DELIVERY OF GOVERNMENT FURNISHED EQUIPMENT AND GOVERNMENT FURNISHED DATA

The items listed in Section J-2 Government Furnished Equipment and Government Furnished Data, and J-12 International Partner Government Furnished Equipment and Government Furnished Data, are to be provided to the contractor for use in accomplishing the work specified under this contract. The Government acknowledges that the contractor's performance is predicated on such items being provided in a timely manner (i.e., in time to avoid an impact to the contractor's performance) and in a condition suitable for its intended use.

Tracking of need dates, timeliness of delivery, and early identification of potential impacts shall be accomplished through the GFE/GFD integration panel. Through this panel the Contractor shall assess impacts associated with untimely deliveries.

Nothing construed herein shall prohibit the Contractor from asserting rights and remedies pursuant to FAR 52.245-5 as incorporated under Section I.

(End of Clause)

H.32 IPS and NSTS-21000

The parties recognize that requirements of NSTS 21000-IDD-ISS Revision A, including the constraints for the Shuttle Cargo Bay and Middeck, and Shuttle Remote Manipulator System (SRMS), were not allocated from SSP 41000 (ISS System) to the SSP 41160 (APM), SSP 41164 (MPLM), and SSP 41165 (JEM) Segment Specifications. The parties agree the contractor is not responsible for negative system performance that is attributable to the misalignment of NSTS 21000-IDD-ISS Revision A and the APM, MPLM and JEM Segment Specifications.

(End of Clause)

H.33 CREW CAPABILITY TO TERMINATE PROGRESS REBOOST AT FGB NADIR WITHOUT SM PRESENT

The parties recognize that during a translational/reboost maneuver using the Progress at FGB Nadir and SM not present, the FGB does not have the capability to allow crew termination of this maneuver. The Contractor shall not be responsible for providing this capability during this configuration. If it is determined that this capability is needed, then a follow-on change will be processed and this provision will be deleted from the contract, via separate administrative contract action, upon NASA, RSA, and KhSC signatures on the updated SSP 50128 containing the requirements necessary to support crew capability to terminate a maneuver.

(End of Clause)

H.34 ESA EEE PARTS

The parties recognize that the parts control requirements of Node 2 PIDS Revision A allow application of European Space Agency inventory which are qualified and certified to different EEE requirements than are required by U.S. Segment Specification paragraph 3.3.1.4. The parties agree that the contractor is not responsible for negative performance at the element, segment, or system level that is attributable to application of ESA EEE parts.

(End of Clause)

H.35 AWARD FEE LOOK BACK

1. This clause supersedes the previous Clause H.66 of this contract, "EARLY LOOK-BACK INCENTIVES," in its entirety.
2. The Contractor will submit provisional fee vouchers for payment in the amount of \$7,000,000 each in the months of July 2002, August 2002, and September 2002. Provisional payments will be made to the Contractor on a monthly basis after receipt of the Contractor's voucher. After the final on-ground evaluation provided for in Table V.B.1 in Attachment J-1 is complete, the final "look-back" incentive On-Ground Award Fee determination amount will be reconciled with the cumulative provisional fee payments made hereunder in accordance with the methodology set forth in paragraph III.D, Provisional Payments, of Attachment J-1 Award Fee Plan for Exhibit A.

(End of Clause)

H.36 SPECIAL PROVISION REGARDING INTERNATIONAL PARTNERS/PARTICIPANTS' SPECIFICATIONS

The parties recognize that due to agreements between the International Partner/Participants (IPs) and NASA, some discrepancies between the ISSA System Specification and the IP Segment Specifications may arise. The parties agree that any ISSA System Specification compliance deficiency created as a result of these discrepancies shall be considered property/data not suitable for its intended purpose as described in the Special Contract Requirement H.10 PROPERTY/DATA TO BE FURNISHED BY INTERNATIONAL PARTNERS. It is agreed that Boeing shall identify to NASA any specific discrepancies, as they arise, in sufficient detail for NASA to take action to resolve specification issues, which arise from these discrepancies.

The parties agree that the resolution of discrepancies, to the extent possible, shall be processed through the proper board structure. In no case shall the Contractor's Award Fee evaluation be negatively impacted by an IP deficiency resulting from a discrepancy, caused by the agreements referenced above, that has been identified to NASA for resolution in a timely fashion.

(End of clause)

H.37 MANAGEMENT OF I&O TASKS

Tasks identified as Integration and Operations (I&O) in Section C, USOS Acceptance & Vehicle Sustaining Engineering Contract Statement of Work are subject to the procedures set forth herein:

To provide for efficient and effective administration, the parties have structured an Integration and Operations Work Plan (Data Requirement No. PC-22). The work plan, consisting of multiple work packages, will be used to manage the total resources and requirements necessary to implement the I&O SOW within the authorized budget. This plan provides specific tasks, schedules, and associated resource estimates. Procedures for updating task content within the Integration and Operations Work Plan are described below:

1. Initial Integration and Operations (I&O) Baseline: The contractor shall provide a baseline, which documents the negotiated contract value of all I&O tasks throughout the entire period of performance including operations.

2. Yearly Integration and Operations (I&O) Baseline: Each fiscal year, the content and estimated resources/cost for I&O work will be jointly developed by the Government and the Contractor and approved by the Government. The yearly I&O baseline shall contain the currently defined Integration and Operations tasks in Section C, Statement of Work. The yearly I&O baseline plan will be adjusted as tasks are reprioritized, work is deleted, or new work is authorized. (see paragraph 3 below)
3. Added/Modified Tasks: When a task that is within the general scope of work, but not currently within the statement of work is approved, the Contracting Officer will issue written direction in the form of a Contract Change Order (CCO) before the task can be added to the I&O Work Package. When a task that is within the statement of work is modified, the Contracting Officer or the Contracting Officer's Technical Representative (COTR) will issue direction pursuant to Article G.4, Technical Direction via the Work Package Revision Request (WPRR) form. The process to add, delete, reprioritize, reschedule or otherwise modify tasks within approved Work Package is defined in the Joint Program Directive ISSP-JPD-341 (current version). Work package adjustments shall be reviewed monthly to assess the effect of new tasks, modified tasks, or reprioritizations and to update the baseline.
4. The I&O Work packages may not reflect accomplishment of the SOW tasks and should not be construed as proof of completion. Upon contract completion, each I&O SOW task will require proof of closure in accordance with DRD F-PM-09.

(End of clause)

H-38 ASSOCIATE CONTRACTOR AGREEMENT FOR ISS OPERATIONS AND UTILIZATION ACTIVITIES

- (a) The success of the International Space Station (ISS) Program is dependent on the efforts of multiple contractors. The NAS 15-10000 contractor is a key participant. The other contracts of the key participating contractors are:

NNJ09HA15C	Integrated Mission Operations Contract (IMOC)
NNJ10GA35C	Cargo Mission Contract (CMC)
NNJ10TB01C	Extravehicular Activity Space Operations Contract (ESOC)
NNJ12GA46C	Mission and Program Integration (MAPI) Contract
NNJ12GA47C	Russian Language and Logistics Services (RLLS) Contract
NNJ12GA69C	Common Communications for Visiting Vehicles (C2V2) Contract
NNK13MA14C	Test and Operations Support Contract (TOSC)

Under the aforementioned contracts the contractors will provide the necessary technical, engineering and processing products and services required to develop, operate, maintain and utilize the International Space Station.

- (b) In order to achieve efficient and effective implementation of the operation and utilization phase of the ISS, the contractor shall establish the means for coordination and exchange of information with associate contractors. The information to be exchanged shall be that required by the contractors in the execution of their respective contract requirements. The contractors are strongly encouraged to seek out and foster cooperative efforts that will benefit the ISS Program with increased safety, efficiency, and productivity.
- (c) Given the unique role of this contract in developing, operating, maintaining and utilizing the ISS, the contractor will engage in cooperative relationships that facilitate effective management of the overall ISS effort. This joint cooperation will be evaluated as part of the

contract award fee process, as defined in the Award Fee Plan for the contract. Successful performance will be determined by the Government's assessment of the overall and combined performance of the operation and utilization requirements in the contracts, as modified. This clause will be effective during the award fee period starting November 01, 2003.

- (d) To ensure successful implementation and utilization of the ISS, the contractors shall establish formal guidelines to address coordination, cooperation and communication. All program elements shall work in a coordinated fashion. Each contractor shall establish the means for the exchange of such data as needed to keep other project elements fully informed.

(End of Clause)

H.39 JSC HAZARDOUS MATERIALS USE (JSC 52.223-92) (DEC 1999)

- (a) This clause is JSC-unique, and the requirements are in addition to any U.S. Environmental Protection Agency, U.S. Occupational Safety and Health Administration, or other state or Federal regulation or statute. Therefore, the following requirements do NOT supercede any statutory or regulatory requirements for any entity subject to this clause.
- (b) "Hazardous materials," for the purposes of this clause, consist of the following:
 - 1) Those materials defined "s "highly hazardous chemicals" in Occupational Safety and Health Administration Process Safety Management Regulation, 29 Code of Federal Regulation 1010.119, without regard for quantity.
 - 2) Those "extremely hazardous substances" subject to the emergency planning requirements in the Environmental Protection Agency Emergency Planning and Community Right-to-Know Regulation, 40 Code of Federal Regulation 355, Part 355, without regard for quantity.
 - 3) Those "hazardous substances" subject to the release notification requirements under Environmental Protection Agency's Emergency Planning and Community Right-to-Know Regulation, 40 Code of Federal Regulation 302.4, without regard for quantity.
 - 4) Any radioisotope material or device that produces ionizing radiation.
 - 5) Any Class II, III, or IV laser as defined by the American National Standards Institute No. Z136.1 (1986)
 - 6) Any explosive or any pyrotechnics.
 - 7) Any pesticide.
- (c) The contractor shall develop and maintain an inventory listing the identity and quantity of hazardous materials stored or used onsite at JSC for the performance of the contract.
- (d) The contractor shall ensure that the proper training of its employees in the use and inherent hazards of these materials is accomplished prior to use.
- (e) The contractor shall notify the JSC Occupational Health and Test Support Office (SD13) prior to any initial use or different application of these materials.
- (f) The contractor shall use all hazardous materials properly and take all necessary precautions to ensure no harm is done to humans or the environment.

- (g) The contractor shall insert the substance of this clause, including this Paragraph F with appropriate changes of designations of the parties, in subcontracts under which hazardous materials will be utilized, or may reasonably be expected to be utilized, onsite at JSC.
- (h) In the event the contractor fails or refuses to comply with any aspect of this clause, such failure or refusal may be considered a material breach of this contract.

(End of clause)

H.40 Post-Production Support (PPS) Orbital Replacement Unit (ORU) Repair/Scheduled Maintenance, Replenishment Parts, and Transition Subcontracts Costs

The values provided for the materials pool and the associated usage are depicted in the table below:

Time Period	Estimated Cost	Usage
FY02	(b) (4)	ORU repair, replenishment parts, transition
10/1/2002-12/31/2003	(b) (4)	ORU repair, replenishment parts, transition
10/1/2003-12/31/2003	(b) (4)	Replenishment of the pool
01/01/2004-09/30/2004	(b) (4)	ORU repair, replenishment parts, transition
FY05	(b) (4)	ORU repair, replenishment parts, transition
FY06	(b) (4)	ORU repair, replenishment parts, transition
FY07	(b) (4)	ORU repair, replenishment parts, transition
FY08	(b) (4)	ORU repair, replenishment parts, transition
FY09	(b) (4)	ORU repair, replenishment parts, transition
FY10	(b) (4)	ORU repair, replenishment parts, Commercial Bills of Lading, residual asset management process (RAMP) & transition, which represents critical repairs and parts for items to be manifested through 3/2011
FY11	(b) (4)	ORU repair, replenishment parts, Commercial Bills of Lading, residual asset management process (RAMP) & transition.
FY12	(b) (4)	Commercial Bill of Lading (estimated cost of (b) (4)), replenishment parts (estimated cost of (b) (4)), Residuals (estimated cost of (b) (4)) and 188 repairs at an average cost of (b) (4) (estimated cost of (b) (4))
FY13	(b) (4)	Commercial Bill of Lading (estimated cost of (b) (4)), replenishment parts (estimated cost of (b) (4)), residual assets (estimated cost of (b) (4)) and 179 repairs at an average cost of (b) (4) (estimated cost of (b) (4))

FY14	(b) (4)	Commercial Bill of Lading (estimated cost of (b) (4) replenishment parts (estimated cost of (b) (4) residual assets (estimated cost of (b) (4) transitions (Moog to UTC Windsor; estimated cost of (b) (4) and repairs as follows (estimated cost of (b) (4)): 85 simple repairs, 14 medium repairs, and 8 complex repairs (see definitions below).
TOTAL	(b) (4)	

Simple repairs are defined as repairs that cost less than \$50,000 and typically consist of scratches, dings, dents, and parts replacements (back to print). TT&E is not required and a simple or no post repair acceptance testing is required. This type of repair includes preventative maintenance and minor repairs.

Medium repairs are defined as repairs that cost between \$50,000 and \$250,000 and require TT&E to determine the parts replacement and test requirements.

Complex repairs are defined as repairs that cost between \$250,000 and \$1,500,000 and require an extensive TT&E, requiring multiple go backs to determine failure, and potential MRB disposition.

The estimated cost of this pool will be increased on an as-needed basis. The contractor shall track and report all cost status information in accordance with PC27, entitled "Contractor Financial Management Report (533M)". The contractor shall submit a price proposal to replenish this pool for follow-on fiscal years in July of each year.

In the event the contractor forecasting shows that the costs incurred under this pool will exceed the negotiated amount prior to the end of the year, the contractor shall submit a proposal no later than 30 days prior to the date costs are expected to exceed the negotiated amount.

The work covered under H.40 is located in the Section C, Statement of Work, paragraph 3.3.8.

H.41 System Administrator Security Certification Program

In addition to any other requirements of this contract, all individuals, contractors or subcontractors who perform tasks as a system administrator or have authority to perform tasks normally performed by system administrator shall be required to demonstrate knowledge appropriate to those tasks. This demonstration, referred to as the NASA System Administrator Security Certification, is a NASA funded two-tier assessment to verify that system administrators are able to –

1. Demonstrate knowledge in system administration for the operating systems for which they have responsibility.
2. Demonstrate knowledge in the understanding and application of Network and Internet Security.

Certification is granted upon achieving a score above the certification level on both an Operating System test and the Network and Internet Security Test. The Certification earned under this process will be valid for three years. The criteria for this skills assessment has been established by the NASA Chief Information Officer. The objectives and procedures for this certification can be obtained by contacting the IT Security Awareness and Training Center at (216) 433-2063.

A system administrator is one who provides IT services, network services, files storage, web services, etc. to someone else other than themselves and takes or assumes the responsibility for the security and administrative controls of that service or machine. A lead system administrator

has responsibility for information technology security (ITS) for multiple computers or network devices represented within a system; ensuring all devices assigned to them are kept in a secure configuration (patched/mitigated); and ensuring that all other system administrators under their lead understand and perform ITS duties. An individual that has full access or arbitrate rights on a system or machine that is only servicing themselves does not constitute a "system administrator" since they are only providing or accepting responsibility for their system. An individual that is only servicing themselves is not required to obtain a System Administrator Certification.

(End of clause)

H.42 RESERVED

H.43 ACCESS TO CONTRACTOR DATA

- (a) "Data" for purposes of this clause, means recorded information, regardless of the form or media on which it may be recorded by Boeing or its subcontractors. The term includes technical data; computer software; and information incidental to contract performance. Types of data contained in the definition also include the results of contractor internal audits of any discipline, procedures, system, or task which directly or indirectly supports the performance of this contract as well as data from any audit of subcontractor(s) performing under this contract. The term is limited to data that is archived as a normal part of contractor performance.
- (b) The Contracting Officer or designee shall, through closeout, have access to and the right to examine any of the data produced or specifically used in the performance of this contract. The purpose of this access provision is to permit sampling of contractor data to verify requirements compliance and continuous improvement without unduly increasing the number of data deliverables to this contract.
- (c) The Contractor shall make available at all reasonable times for Government inspection the most current data produced or used in the performance of this contract for examination
- (d) Notwithstanding the Additional Data Requirements clause, the Government shall have the right to reproduce any data found during the examination that it wishes to retain. The Government will reimburse reproduction costs only when it uses Contractor equipment for the reproduction. The Government shall retain no greater rights in the reproduced data than it would have under the Rights in D--a--General clause.
- (e) The Contractor shall flow this clause to all cost-type subcontracts valued at \$1,000,000 or more.

(End of clause)

H.44 GOVERNMENT INSIGHT

- (a) Definitions. For the purpose of this contract, the following definitions apply:

"Insight," as used in this clause, means technical visibility into the Program, maintained through audit, surveillance, assessment of trends and metrics, software independent verification and validation, the flight readiness review process, and review or independent assessment of out-of-family anomalies occurring in any phase of the program.

"Surveillance," as used in this clause means continual monitoring and verification of the status of manufacturing, testing, and processing of Station hardware, software and operations preparations to ensure that requirements are being fulfilled. Items to be monitored and verified are selected—this is not an all inclusive activity.

“Audit,” as used in this clause, means the implementation of procedures and requirements of the NASA Engineering Quality Audit (NEQA) or other equivalent audit techniques used to perform periodic audit of all aspects of processes and procedures required to manufacture, assemble, test, and process hardware for flight. Audits may include an examination of all disciplines and tasks which are involved with or support Shuttle launch and landing operations, hardware and software production and maintenance, safety and quality assurance, logistics, procurements and operations. These descriptions are illustrative only and shall not be construed as any limitation on the Government's right to conduct an audit of the Contractor and subcontractors to determine performance on this contract.

- (b) The Government shall have the right to audit the Contractor and cost-reimbursement subcontractors (with values exceeding \$1 million) to determine compliance with the requirements of this contract. One purpose of these audits is to afford the Government insight into and understanding of Contractor and selected subcontractor processes and procedures to determine whether the processes or procedures (1) adversely affect safety; (2) are not within contract performance standards; or (3) adversely affect future launch schedules.
- (c) The Government may schedule fact-finding meetings with the Contractor and subcontractors as necessary to discuss issues requiring Government insight. Scheduling and format of these meetings shall indicate whether exchange of information will be required, and the number and expertise of Contractor/subcontractor personnel who shall attend the meetings. When requested by the Contracting Officer or designee, the Contractor and subcontractors shall provide necessary support to the Government when it audits the Contractor or subcontractor and for the Government-Contractor/subcontractor meetings. The purpose of these meetings is to understand the findings of the Government audits. The parties understand and agree that no direction from the Government or constructive change to the contract shall result from any of these meetings.

(End of clause)

H.45 ISS CONTRACT STRATEGY CONFLICT OF INTEREST AGREEMENT

An organizational conflict of interest exists for this contract as it relates to the contracts awarded as part of the overall ISS Contract Strategy in that the contractor may be in a position to favor its own products or capabilities. Two of the six contracts to be awarded will be responsible for support to ISS Program Management. These two contracts are the Program Integration and Control contract and the ISS Mission Integration contract. The other four contracts to be awarded will be responsible for the overall implementation of these Program requirements. These four contracts are: Cargo Mission, ISS Payload Integration/Payload Mission, ISS Vehicle Segment Sustaining, and the Flight Equipment Sustaining and Operations contract. The intent of this clause is to prohibit a contractor from developing Program requirements in one of the aforementioned two contracts designed for “Support to ISS Program Management” and also implementing those requirements in one of the additional five contracts responsible for “ISS Program Implementation”. Therefore, the contractor, by signing this contractual document, fully understands, agrees and will comply with the following conditions:

- 1) The contractor will not perform work as a prime and will not submit any proposal(s) for the Program Integration and Control and the Mission Integration procurements.
- 2) The contractor will perform no more than 49% (total contract costs) of the work as a subcontractor under any of the contracts mentioned above in number 1.
- 3) The contractor shall not and will not make the day-to-day management decisions under any of the contracts set forth in number 1.

If by the performance of this contract, or by any other means, the contractor believes he may violate any of these conditions above, the contractor shall notify the Contracting Officer in writing immediately.

(End of Clause)

H.46 GOVERNMENT-PROVIDED RUSSIAN LANGUAGE AND LOGISTICS SERVICES (RLLS)

The contractor is authorized use of the following RLLS in performance of this contract or any subcontract entered into under this contract:

1. Russian Translations
2. Russian Interpretations
3. Russian Language training
4. Russian Logistics services (both in the U.S. and in Russia), including a) Ground Services (e.g. airport pickup/drop-off, transportation between hotels and meeting locations); b) Meeting Services (e.g. coordination of schedules, agendas, and protocols); c) Hotel Reservations at the Renaissance Hot-I - Olympic Penta in Russia; and d) Visa Coordination.

The Contracting Officer shall be promptly notified by the contractor upon identification of a need for RLLS. The Contracting Officer shall provide instructions as to the point of contact for submitting a request for RLLS. Failure of the Government to provide adequate or timely RLLS shall entitle the contractor to an equitable adjustment in all affected contract terms and conditions, exclusive of any adjustment to fee. This provision, including this flow-down requirement, shall be inserted in all subcontracts where it is anticipated that RLLS may be necessary for contract performance.

(End of Clause)

H.47 ADDITIONAL EXPORT CONTROL REQUIREMENTS

In addition to the requirements set forth in NFS 1852.225-70 EXPORT LICENSES, the contractor shall perform the following tasks when they facilitate exports of NASA hardware, software or technical data according to the Export Administration Regulations, International Traffic in Arms Regulations or any other U.S. export control regulations (e.g. Nuclear Regulatory Commission, Drug Enforcement Agency etc.) pursuant to this contract:

1. Provide to the Johnson Space Center (JSC) Export Services Team (EST), in writing, an "Advanced Notification of Export" (ANE) for all program related exports (hardware, software and technical data) where NASA is considered the "U.S. Principal Party in Interest" (USPPI)". The requirements below shall be met by the contractor and its subcontractors, respectively, when accomplishing the following activities:
 - a. Submitting requests for NASA to apply for an export license with the Department of Commerce or Department of State for use under the contract activity in support of the International Space Station Program.
 - b. Submitting notice of the contractor's intent to use Department of Commerce or Department of State export licenses obtained by NASA as they apply to the contract activity in support of the International Space Station Program.
 - c. Submitting notice of the contractor's intent to use any export license exceptions or exemptions as they apply to the contract activity in support of the International Space Station Program.
2. For all program related exports (hardware, software or technical data), submit the equivalent information described below to the Center Export Administrator (CEA) at the geographically closest NASA Space Flight Center (JSC, Marshall Space Flight Center (MSFC) or Kennedy Space Center (KSC)) according to the policies and procedures of that center (check with the cognizant Contracting Officer or CEA). A courtesy copy of

equivalent information submitted to MSFC or KSC shall be provided to the JSC CEA's office. Provide copies of shipping documents for shipments made under a NASA Export License, exemption or exception to the appropriate CEA within two weeks after the shipment.

- a. The contractor shall submit requests for NASA to apply for a license at least 7 months prior to the need date to export. Note that the agencies, which approve the licenses, can take up to 6 months or more to process them.
- b. The contractor shall submit an ANE in a formal letter, fax or e-mail (e-mail is preferred), containing the information described below (as applicable), addressed to the CEA's Office in accordance with the submission schedule below. The schedule provides a minimum amount of time required to process the information, however license requests may take longer than 6 months to process by the controlling agency.

Required Information	License Application	Use of License	Use Exemption/Exception
Submission Schedule	7 months prior to need date	At least 30 days prior to planned export date	At least 30 days prior to planned export date
Description of Commodity (as it appears on the license)	X	X	X
Specific End Use	X		X
1) NASA license number (include date of expiration), International Traffic in Arms Regulation (ITAR) license exemption (e.g. 125.4(b)(3)) or Export Administration Regulation (EAR) exception (e.g. GOV, RPL, TMP, ENC, etc.). *		X	X
2) Quantity and description as it appears on the applicable license.	X	X	X
3) Date of planned export	X	X	X
H)) Intermediate and Ultimate Consignees, End User (full name and address), and Destination of export (Country, city and company).	X		
6) Point of contact with current phone number and e-mail address (for technical questions – must be a representative of the contractor originating the export).	X	X	X
7) Contractor Point of contact, current e-mail address and phone number for CEA's use to send response	X	X	X

8) Export Classification Control Number (ECCN) under the Export Administration Regulations or category under the United States Munitions List regulations	X		X
9) The technical rationale used to support the classification	X		X
10) Requirement to export (i.e., MOU, contract number, meeting minutes). Upon request by the CEA or CO, the contractor shall provide a copy of the requirement within 3 working days	X		X
11) Additional information as necessary to clarify the export	X	X	X
12) A copy of the completed Pro Forma Invoice (JSC Form 1735) or equivalent form/ document attached to an email if prepared for the export	X	X	X
13) A copy of the completed electronically signed JSC Form 1724 (Export Control Request and Approval Worksheet) or equivalent form	X Signed by Civil Servant - Export Rep	X Copy of Signed form	X Signed by Civil Servant - Export Rep
NASA Point of Contact	X		X
Specific End Use	X	X	X

* Additional information is required for these exceptions.

- i. If using RPL, provide the license number, or copy of records confirming export authorization for the item being replaced.
- ii. If using ENC, provide reference to the manufacturer's record verifying eligibility for ENC (e.g. full internet address (URL), e-mail from manufacturer or copy of Commerce Department communication to manufacturer.
- iii. If using TMP, provide the expected return date.) **
- c. After all the information is submitted, the cognizant CEA's office will respond to the contractor or its subcontractor with a status within ten (10) working days. It is the CEA's goal to provide a notice of approval or other disposition within 10 working days for "Use of License" and "Use of Exemption/Exception" to the contractor or its subcontractors who are exporting on behalf of NASA. Once approved, NASA will provide the destination control statement to use on all export documentation via e-mail or hardcopy letter.
3. In addition to other applicable export exemptions, the contractor or its subcontractors are authorized to export hardware, software or data to ISS International Partner (IP) governmental offices that meet the conditions of license exception GOV (15 CFR 740.11(b)(2)(iii)(A)).
4. ** For temporary exports (TMP), the contractor or its subcontractors shipping on behalf of NASA shall submit written notice to the CEA and CO within five (5) business days of the date that the item was actually returned, along with the incoming documentation.

5. The contractor or its subcontractors shall keep those records required by Department of Commerce and Department of State regulations for all exports and make them available upon request to NASA and its representative
6. These requirements do not apply to contractor or subcontractor commercial contract related exports or exports pursuant to Technical Assistance Agreements or other license authorizations received by the contractor or its subcontractors and for which the contractor or its subcontractors will be the USPPI . and/or “exporter of record”.
7. These requirements do not apply to exports for which there is “No License Required” (e.g. EAR99, 9A004 to Canadian International Partners on ISS, etc.)
8. The contractor and its subcontractors shall report to the NASA JSC EST, in writing, any potential export issues (including those related to support of sustaining engineering and operations of ISS) that cannot be resolved by the contractor or its subcontractors, respectively. Such report and/or notification of issues and technical tasks should be reported to the NASA JSC EST at least three (3) months in advance of requested action.
9. Upon discovery of unforeseen adverse export issues, the contractor shall immediately notify NASA JSC EST by telephone with a follow up e-mail or hardcopy letter of said issue and shall report to the NASA JSC EST, in writing, as the facts become known.
10. This clause applies when the contractor or its subcontractors elect to export NASA owned Government Furnished Equipment and Property (GFE, GFP) (including data, software or hardware). In such instances, the contractor or its subcontractors are the USPPI. They shall provide verifiable evidence that a valid export license, exemption or exception has been processed and approved (as applicable). They shall also provide this information for additional property that is not GFE or GFP that the contractor or its subcontractors elect to include with the GFE and GFP.

(End of Clause)

H.48 SUBCONTRACTING WITH RUSSIAN ENTITIES FOR GOODS OR SERVICES)

(a) Definitions: In this provision:

(1) The term “Russian entities” means:

(A) Russian persons, or

(B) Entities created under Russian law or owned, in whole or in part, by Russian persons or companies including, but not limited to, the following:

(i) The Russian Federal Space Agency (Roscosmos),

(ii) Any organization or entity under the jurisdiction or control of Roscosmos,
or

(iii) Any other organization, entity or element of the Government of the Russian Federation.)

(2) The term “extraordinary payments” means payments in cash or in kind made or to be made by the United States Government prior to July 1, 2016, for work to be performed or services to be rendered prior to that date necessary to meet United States obligations under the Agreement Concerning Cooperation on the Civil International Space Station, with annex, signed at Washington January 29, 1998, and entered into force March 27, 2001, or any protocol, agreement, memorandum of understanding, or contract related thereto.

- (b) This clause implements the reporting requirement in section 6(i) of the Iran, North Korea, and Syria Nonproliferation Act. The provisions of this clause are without prejudice to the question of whether the Contractor or its subcontractor(s) are making extraordinary payments under section 6(a) or fall within the exceptions in section 7(1)(B) of the Act. NASA has applied the restrictions in the Act to include funding of Russian entities via U.S. Contractors.
- (c) (1) The Contractor shall not subcontract with Russian entities without first receiving written approval from the Contracting Officer. In order to obtain this written approval to subcontract with any Russian entity as defined in paragraphs (a), the Contractor shall provide the Contracting Officer with the following information related to each planned new subcontract and any change to an existing subcontract with entities that fit the description in paragraph (a):
- (A) A detailed description of the subcontracting entity, including its name, address, and a point of contact, as well as a detailed description of the proposed subcontract including the specific purpose of payments that will be made under the subcontract.
- (B) The Contractor shall provide certification that the subcontracting entity is not, at the date of the subcontract approval request, on any of the lists of proscribed denied parties, specially designated nationals and entities of concern found at:
- 'IS's Listing of Entities of Concern (see <http://www.access.gpo.gov/bis/ear/pdf/744spir.pdf>)
- 'IS's List of Denied Parties (see <http://www.bis.doc.gov/dpl/Default.shtm>)
- O'AC's List of Specially Designated Nationals (Adobe® PDF format) (see <http://www.treas.gov/offices/enforcement/ofac/sdn/t11sdn.pdf>)
- List of Unverified Persons in Foreign Countries (see http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified_parties.html)
- State Department's List of Parties Statutorily Debarred for Arms Export Control Act Convictions (see <http://www.pmddtc.state.gov/debar059.htm>)
- State Department's Lists of Proliferating Entities (see <http://www.state.gov/t/isn/c15231.htm>)
- (2) Unless relief is granted by the Contracting Officer, the information necessary to obtain approval to subcontract shall be provided to the Contracting Officer 30 business days prior to executing any planned subcontract with entities defined in paragraph (a).
- (d) After receiving approval to subcontract, the Contractor shall provide the Contracting Officer with a report every six months that documents the individual payments made to an entity in paragraph (a). The reports are due on July 15th and January 15th. The July 15th report shall document all of the individual payments made from the previous January through June. The January 15th report shall document all of the individual payments made from the previous July through December. The content of the report shall provide the following information for each time a payment is made to an entity in paragraph (a):
- (1) The name of the entity
 - (2) The subcontract number
 - (3) The amount of the payment
 - (4) The date of the payment

- (e) The Contracting Officer may direct the Contractor to provide additional information for any other prospective or existing subcontract at any tier. The Contracting Officer may direct the Contractor to terminate for the convenience of the Government any subcontract at any tier with an entity described in paragraph (a), subject to an equitable adjustment.
- (f) Notwithstanding FAR 52.216-7, "Allowable Cost and Payments," on or after June 30, 2016 the Contractor shall be responsible to make payments to entities defined in paragraph (a) of this provision. Any subcontract with entities defined in paragraph (a), therefore, shall be completed in sufficient time to permit the U.S. Government to make extraordinary payments on subcontracts with Russian entities on or before June 30, 2016.
- (g) The Contractor shall include the substance of this clause in all its subcontracts, and shall require such inclusion in all other subcontracts of any tier. The Contractor shall be responsible to obtain written approval from the Contracting Officer to enter into any tier subcontract that involves entities defined in paragraph (a).

(End of Clause)

H.49 ADVANCED AGREEMENT FOR PENSION COSTS

The parties understand that this contract is priced consistent with the terms of the Advanced Agreement effective September 29, 2003 entered into between the Boeing Company and the U.S. Government. Upon final determination by the DACO of the noncompliance issue, the parties will negotiate appropriate adjustments to contract prices in accordance with the terms of the advance agreement. It is understood that any pension costs will be billed and paid in accordance with the contractors current disclosure practices until the non-compliance issue is resolved.

(End of clause)

H.50 HARDWARE TRANSITION ACTIVITIES

The parties recognize that the Contractor may not complete the transition of hardware by 31 December 2003 pursuant to SSCN 7939, and that the Government remains accountable for hardware identified in SSCN 7939 until such time that the hardware is accountable to the Contractor under Contract NAS15-10000. It is understood that the contractor shall complete the transition of hardware pursuant to SSCN 7939 and be accountable for all of the hardware identified in Appendix A of the statement of work on or before March 31, 2004.

(End of clause)

H.51 EVIDENCE OF COMPLETION MATRIX

The Contractor shall submit a SOW Evidence of Completion Matrix in accordance with DRD F-PM-09. The SOW Evidence of Completion Matrix shall define completion criteria for each numbered paragraph of the statement of work. Upon contract completion, each SOW task will require proof of closure in accordance with the Evidence of Completion Matrix pursuant to DRD F-PM-09.

(End of clause)

H.52 QUARTERLY NF 1018 AND ISS MAJOR ELEMENT VALUES REPORTING

In addition to the property reporting requirements established by clause G.5 of this contract, the Contractor shall submit annual and quarterly NF 1018 and ISS Major Element Values reporting in accordance with DRD F-PM-08, Quarterly Capital Property Reporting with Element Pricing Methodology.

(End of clause)

H.54 Advance Settlement Of Contract Changes

NASA and Boeing recognize that the NAS15-10000 Period of Performance may be extended past its current end-date of September 30, 2006 by exercising the Options listed in Article B.5 Options to Extend Completion Date. To prepare for such extension, the parties have reached negotiated settlements on the following list of Space Station Change Notices (SSCNs).

Options 1 and 2 were exercised under contract modification 1308. The Cost and Award Fee values below for SSCN 7818, ISS MDM Upgrade Development, and SSCN 8644, Node 3 Hardware Support, ACBM and Port Hardware Installations and Tests, and Node 2/3 Stovepipe Installation at KSC were added to clause B.1, "Estimated Cost and Fee" in contract modification 1310.

Options 3 and 4 are exercised under contract modification 1365. The Cost and Award Fee values below for SSCN 8644, Node 3 Hardware Support, ACBM and Port Hardware Installations and Tests, and Node 2/3 Stovepipe Installation at KSC; SSCN 8529, Node 3 Analytical Integration; MOD 1333, ISS Payload Integration Contract (IPIC) transition into NAS15-10000, and MOD 1335, Return to Flight are added to clause B.1, "Estimated Cost and Fee" in contract modification 1367.

Option 1			
SSCN #	TITLE	CONTRACT VALUE	
		COST	AWARD FEE
7818	ISS MDM Upgrade Development	(b) (4)	
8644	Node 3 Hardware Support, ACBM and Port Hardware Installations and Tests, and Node 2/3 Stovepipe Installation at KSC	(b) (4)	

Option 2			
SSCN #	TITLE	CONTRACT VALUE	
		COST	AWARD FEE
7818	ISS MDM Upgrade Development	(b) (4)	
8644	Node 3 Hardware Support, ACBM and Port Hardware Installations and Tests, and Node 2/3 Stovepipe Installation at KSC	(b) (4)	

Option 3			
SSCN #	TITLE	CONTRACT VALUE	
		COST	AWARD FEE
8644	Node 3 Hardware Support, ACBM and Port Hardware Installations and Tests, and Node 2/3 Stovepipe Installation at KSC	(b) (4)	
8809	Centrifuge Accommodation Module (CAM) Software Sustaining	(b) (4)	
8529	Node 3 Analytical Integration	(b) (4)	

MOD 1333	ISS Payload Integration Contract (IPIC) transition into NAS15-10000	(b) (4)	(b) (4)
MOD 1335	Return to Flight	(b) (4)	

Option 4			
SSCN #	TITLE	CONTRACT VALUE	
		COST	AWARD FEE
8644	Node 3 Hardware Support, ACBM and Port Hardware Installations and Tests, and Node 2/3 Stovepipe Installation at KSC	(b) (4)	
8809	Centrifuge Accommodation Module (CAM) Software Sustaining	(b) (4)	
8529	Node 3 Analytical Integration	(b) (4)	
MOD 1333	ISS Payload Integration Contract (IPIC) transition into NAS15-10000	(b) (4)	
MOD 1335	Return to Flight	(b) (4)	

(End of Clause)

H.55 RESERVED

H.56 IPIC HARDWARE AND SOFTWARE ACCEPTANCE DATA PACKAGES

The parties hereby understand and agree that hardware and software transitioned from the ISS Payload Integration Contract (IPIC) program contract (NAS9-02099) to the ISS Vehicle Sustaining contract (NAS15-10000EXT) have Acceptance Data Packages (ADP) that were assembled and maintained under the then IPIC ADP Data Requirements Description (DRD), CM11, which are not necessarily compliant to the requirements in ISS ADP DRD, PC08. Further more, these ADPs are herewith agreed to as being acceptable in the existing delivered “as-is” configuration, for all history prior to transition to the ISS Vehicle Sustaining contract (NAS15-10000EXT). Specifically, for IPIC:

1. Software, designated in the Deliverable Items List (DIL) as either (1) Formal Release Software (FRL); (2) Ground Support Software (GSS); or End Item S/W (EIM), the delivered ADP did not have to comply with SSP 30695 Table 4.0-2, but rather the following table.

Data Items	Data Elements
Version Description Document. Establishes the as-built configuration items released and provides installation and adaptation information. Establishes the exact description of the actual configuration of the items as depicted by specifications, incorporated approved changes, approved exceptions, etc.	Identified by software identifier and version (May point to the software VDD data requirement, if applicable.)
Certifications. Documented evidence that delivered software meets specified requirements. Certificates will be presented in a form of Sample 1 or Sample 2 attached.	Deliverable software identifier and version. Identifier of certifying official. The requirements being satisfied. The source of the requirement.

2. Hardware designated in the DIL as (1) Test Support Equipment (TSE); (2) Ground Support Equipment (GSE); (3) Simulator (SIM); (4) Trainer (TRN); and Prototype H/W (PRO) the delivered ADP was required to only consist of Sections I through V, and XVI only, as defined in Section 5.1 (structure) of SSP 30695.

In the event that any IPIC hardware or software item is modified, altered, or maintained, subsequent to transition to the NAS15-10000EXT contract, in such a manner so as to require a change in the ADP, per SSP 30695, the “current version” of the ADP will be required to be updated as required to be fully compliant with the requirements in PC08 and SSP 30695; although the historical version will continue to be acceptable “as is”.

(End of clause)

H. 57 DELIVERABLES AFTER CONTRACT PERIOD OF PERFORMANCE

- A. The parties agree that certain effort specified in paragraphs C and D below involve long lead items which must be initiated during the current contract for delivery sometime after September 30, 2015.
- B. It is NASA's intention to extend the current contract through September 30, 2020. Upon the negotiation of the contract extension with The Boeing Company, the effort specified in paragraph C will be transferred to the contract extension, and cost and fee for program support and infrastructure will be negotiated as part of the contract extension.
- C. The following items will require delivery beyond the current completion date of the contract:

Mod No.	PIO or SSCN	DIL ID No.	Description	Qty	Destination		Completion Date
					DD250	Final	
1792	SSCN 12202	51513	Lithium-Ion Battery ORU	1	HSR	KSC	10/15/2015
1792	SSCN 12202	51514	Lithium-Ion Battery ORU	1	HSR	KSC	12/15/2015
1792	SSCN 12202	51515	Lithium-Ion Battery ORU	1	HSR	KSC	2/15/2016
1792	SSCN 12202	51516	Lithium-Ion Battery ORU	1	HSR	KSC	4/15/2016
1792	SSCN 12202	51517	Lithium-Ion Battery ORU	1	HSR	KSC	6/15/2016
1792	SSCN 12202	51518	Lithium-Ion Battery ORU	1	HSR	KSC	8/15/2016
1792	SSCN 12202	51519	Lithium-Ion Battery ORU	1	HSR	KSC	10/14/2016
1792	SSCN 12202	51520	Lithium-Ion Battery ORU	1	HSR	KSC	12/15/2016
1792	SSCN 12202	51521	Lithium-Ion Battery ORU	1	HSR	KSC	2/15/2017
1792	SSCN 12202	51522	Lithium-Ion Battery ORU	1	HSR	KSC	4/14/2017
1792	SSCN 12202	51523	Lithium-Ion Battery ORU	1	HSR	KSC	6/15/2017
1792	SSCN 12202	51524	Lithium-Ion Battery ORU	1	HSR	KSC	8/15/2017
1792	SSCN 12202	51525	Lithium-Ion Battery ORU	1	HSR	KSC	10/16/2017
1792	SSCN 12202	51526	Lithium-Ion Battery ORU	1	HSR	KSC	12/15/2017
1792	SSCN 12202	51527	Lithium-Ion Battery ORU	1	HSR	KSC	2/15/2018
1792	SSCN 12202	51528	Lithium-Ion Battery ORU	1	HSR	KSC	4/16/2018
1792	SSCN 12202	51529	Lithium-Ion Battery ORU	1	HSR	KSC	6/15/2018
1792	SSCN 12202	51531	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	10/15/2015
1792	SSCN 12202	51532	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	12/15/2015
1792	SSCN 12202	51533	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	2/15/2016
1792	SSCN 12202	51534	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	4/15/2016
1792	SSCN 12202	51535	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	6/15/2016
1792	SSCN 12202	51536	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	8/15/2016
1792	SSCN 12202	51537	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	10/14/2016
1792	SSCN 12202	51538	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	12/15/2016
1792	SSCN 12202	51539	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	2/15/2017
1792	SSCN 12202	51540	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	4/14/2017
1792	SSCN 12202	51541	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	6/15/2017
1792	SSCN 12202	51542	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	8/15/2017
1792	SSCN 12202	51543	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	10/16/2017
1792	SSCN 12202	51544	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	12/15/2017

Mod No.	PIO or SSCN	DIL ID No.	Description	Qty	Destination		Completion Date
					DD250	Final	
1792	SSCN 12202	51545	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	2/15/2018
1792	SSCN 12202	51546	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	4/16/2018
1792	SSCN 12202	51547	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	6/15/2018
1792	SSCN 12202	51549	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	11/15/2015
1792	SSCN 12202	51550	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	1/15/2016
1792	SSCN 12202	51551	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	3/15/2016
1792	SSCN 12202	51552	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	5/15/2016
1792	SSCN 12202	51553	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	7/15/2016
1792	SSCN 12202	51554	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	9/15/2016
1792	SSCN 12202	51555	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	11/14/2016
1792	SSCN 12202	51556	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	1/15/2017
1792	SSCN 12202	51557	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	3/15/2017
1792	SSCN 12202	51558	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	5/14/2017
1792	SSCN 12202	51559	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	7/15/2017
1792	SSCN 12202	51560	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	9/15/2017
1792	SSCN 12202	51561	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	11/16/2017
1792	SSCN 12202	51562	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	1/15/2018
1792	SSCN 12202	51563	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	3/15/2018
1792	SSCN 12202	51564	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	5/16/2018
1792	SSCN 12202	51565	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	7/15/2018
1792	SSCN 12202	51566	Assembly, Pressure Pad, Left	18	BHOU	KSC	7/15/2016
1792	SSCN 12202	51567	Assembly, Pressure Pad, Right	18	BHOU	KSC	7/15/2016
1792	SSCN 12202	51568	Assembly, Connector Bracket	18	BHOU	KSC	7/15/2016
1792	SSCN 12202	51569	Assembly, Tie-down, Front	18	BHOU	KSC	7/15/2016
1792	SSCN 12202	51570	Assembly, Tie-down, Rear	18	BHOU	KSC	7/15/2016
1792	SSCN 12202	51571	Rail, Guide, Battery ORU	72	BHOU	KSC	7/15/2016
1792	SSCN 12202	51574	Status/Charging Unit, Lithium-Ion Battery (STE)	3	Vendor	KSC	7/15/2016
1792	SSCN 12202	51637	Lithium-Ion Battery ORU	1	HSR	KSC	8/15/2018
1792	SSCN 12202	51638	Lithium-Ion Battery ORU	1	HSR	KSC	10/15/2018
1792	SSCN 12202	51639	Lithium-Ion Battery ORU	1	HSR	KSC	12/15/2018
1792	SSCN 12202	51640	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	8/15/2018
1792	SSCN 12202	51641	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	10/15/2018
1792	SSCN 12202	51642	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	12/15/2018
1792	SSCN 12202	51643	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	9/15/2018
1792	SSCN 12202	51644	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	11/15/2018
1792	SSCN 12202	51645	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	1/15/2019
1792	SSCN 12202	51646	Assembly, Pressure Pad, Left	3	BHOU	KSC	8/15/2018
1792	SSCN 12202	51647	Assembly, Pressure Pad, Right	3	BHOU	KSC	8/15/2018
1792	SSCN 12202	51648	Assembly, Connector Bracket	3	BHOU	KSC	8/15/2018
1792	SSCN 12202	51649	Assembly, Tie-down, Front	3	BHOU	KSC	8/15/2018
1792	SSCN 12202	51650	Assembly, Tie-down, Rear	3	BHOU	KSC	8/15/2018
1792	SSCN 12202	51651	Rail, Guide, Battery ORU	12	BHOU	KSC	8/15/2018
1792	SSCN 12202	51652	Lithium-Ion Battery ORU	1	HSR	KSC	2/15/2019
1792	SSCN 12202	51653	Lithium-Ion Battery ORU	1	HSR	KSC	4/15/2019
1792	SSCN 12202	51654	Lithium-Ion Battery ORU	1	HSR	KSC	6/15/2019
1792	SSCN 12202	51655	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	2/15/2019
1792	SSCN 12202	51656	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	4/15/2019
1792	SSCN 12202	51657	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	6/15/2019
1792	SSCN 12202	51658	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	3/15/2019
1792	SSCN 12202	51659	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	5/15/2019
1792	SSCN 12202	51660	Mod Kit, On-Orbit, Lithium-Ion Battery	1	BHOU	BHOU	7/15/2019
1792	SSCN 12202	51661	Assembly, Pressure Pad, Left	3	BHOU	KSC	2/15/2019
1792	SSCN 12202	51662	Assembly, Pressure Pad, Right	3	BHOU	KSC	2/15/2019
1792	SSCN 12202	51663	Assembly, Connector Bracket	3	BHOU	KSC	2/15/2019
1792	SSCN 12202	51664	Assembly, Tie-down, Front	3	BHOU	KSC	2/15/2019
1792	SSCN 12202	51665	Assembly, Tie-down, Rear	3	BHOU	KSC	2/15/2019
1792	SSCN 12202	51666	Rail, Guide, Battery ORU	12	BHOU	KSC	2/15/2019
1792	SSCN 12202	51667	Lithium-Ion Battery ORU	1	HSR	KSC	8/15/2019
1792	SSCN 12202	51668	Lithium-Ion Battery ORU	1	HSR	KSC	10/15/2019
1792	SSCN 12202	51669	Lithium-Ion Battery ORU	1	HSR	KSC	12/15/2019
1792	SSCN 12202	51670	Adaptor Plate, Lithium-Ion Battery	1	BHOU	KSC	8/15/2019
1792	SSCN 12202	51671	Assembly, Pressure Pad, Left	3	BHOU	KSC	8/15/2019
1792	SSCN 12202	51672	Assembly, Pressure Pad, Right	3	BHOU	KSC	8/15/2019
1792	SSCN 12202	51673	Assembly, Connector Bracket	3	BHOU	KSC	8/15/2019
1792	SSCN 12202	51674	Assembly, Tie-down, Front	3	BHOU	KSC	8/15/2019
1792	SSCN 12202	51675	Assembly, Tie-down, Rear	3	BHOU	KSC	8/15/2019
1792	SSCN 12202	51676	Rail, Guide, Battery ORU	12	BHOU	KSC	8/15/2019

Mod No.	PIO or SSCN	DIL ID No.	Description	Qty	Destination		Completion Date
					DD250	Final	
1936	SSCN 13144	20349	O-Ring	2	Parker Hanifan	KSC	10/16/2015
1936	SSCN 13144	20353	Distillate to QD-33M Hose	1	B-MSFC	KSC	10/19/2015
1936	SSCN 13144	20354	Gas Separator Purge Hose	1	B-MSFC	KSC	10/19/2015
1936	SSCN 13144	20355	Recycle Tank Feed Hose	2	B-MSFC	KSC	10/19/2015
1952	SSCN 13244	20235	Ammonia Tank Assembly (ATA) - ORU	1	BHOU	KSC	7/28/2016
1952	SSCN 13244	20236	Ammonia Tank Assembly (ATA) - ORU	1	BHOU	KSC	10/11/2016
1952	SSCN 13244	20239	Isolation Valve	7	Marotta	KSC	9/22/2016
1952	SSCN 13244	20240	Ammonia Tank	4	Honeywell	KSC	8/29/2016
1952	SSCN 13244	20250	Electronic Control Unit (ECU)	6	Marotta	KSC	10/26/2015
1961	PIO 105 SSCN 13191	20290	SPCU Heat Exchanger	1	Vender	KSC	4/25/2016
1978	SSCN 13287	20361	Nitrogen Interface Assembly ORU	1	B-MSFC	B-MSFC	5/17/2016
1978	SSCN 13287	20362	Relief Valve – Nitrogen Interface Assembly	2	B-MSFC	B-MSFC	5/17/2016
1978	SSCN 13287	20363	Pressure Regulator – Nitrogen Interface Assembly	1	B-MSFC	B-MSFC	5/17/2016
1995	SSCN 13763	51358	Solid State Light Assembly (SSLA)	20	Vendor	KSC	2/4/2016
1995	SSCN 13763	51359	Solid State Light Assembly (SSLA)	20	Vendor	KSC	6/13/2016
1995	SSCN 13763	51360	Solid State Light Assembly (SSLA)	20	Vendor	KSC	6/13/2016
1995	SSCN 13763	51361	Solid State Light Assembly (SSLA)	20	Vendor	KSC	8/22/2016
1995	SSCN 13763	51362	Solid State Light Assembly (SSLA)	20	Vendor	KSC	8/22/2016
2026	SSCN 13258	20297	Audio/Video Interface Card (AVIC) Assy	1	Vendor	KSC	2/1/2016
2026	SSCN 13258	20298	Audio/Video Interface Card (AVIC) Assy	1	Vendor	KSC	4/26/2016
2026	SSCN 13258	20408	Audio/Video Interface Card (AVIC) Assy	1	Vendor	KSC	5/5/2016
2026	SSCN 13258	20409	Audio/Video Interface Card (AVIC) Assy	1	Vendor	KSC	5/20/2016
2059	13283	20513	Fiber Optic Hybrid Transmitter Microcircuit	80	KSC	KSC	1/29/16
2059	13283	20514	Fiber Optic Hybrid Receiver Microcircuit	88	KSC	KSC	1/29/16
2060	SSCN 13079	51750	Digital User I/O Adapter (23A287M) (Program Logic Control Device (УПЛУ))	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51751	Relay User Signal I/O Adapter (23A288) (УПЛУ)	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51752	Custom Logic Processor (23A291) (УПЛУ)	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51753	23A281-4 Standard Switching Device	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51754	23A281-5 Standard Power Switching Device	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51755	11M157M Circuit Breaker Unit	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51790	Status Monitoring Device (ПК) УПЛУ (41A-01)	1	Moscow	Moscow	3/15/18
2060	SSCN 13079	51767	ПТАБ-2 Storage Battery Current Converter	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51768	БУПТ-2 Current Converter Control Unit	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51769	PT-50-2 Current Controller	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51770	CHT-120/28 V Voltage and Current Stabilizer	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51775	Matching Unit [УС-31]	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51776	Converter (П) 28.5/120-90	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51777	Terminal Switch Unit [КСР]	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51778	Local Analog Switch TA249M	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51779	Local Digital Switch TA250	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51780	Local Temperature Switch TA251	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51781	Local Analog Switch TA252	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51782	Local Digital Switch TA253	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51783	Local Group Secondary Power Source TA818M	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51784	Programmable Memory Device TA765Б	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51785	Switch TA056	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51786	Command Generator (БФК)	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51787	Nitrogen Pumping System Avionics Unit (БАЦПА)	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51788	Compressor Power Unit (БПК)	1	Moscow	Moscow	2/15/17
2060	SSCN 13079	51789	Filter Unit (БФ)	1	Moscow	Moscow	2/15/17
2062	13642	32430	Docking Adapter End Item Kit – NASA Docking System (NDS) Block 1	1	B-MSFC	B-MSFC	12/22/15
2062	13642	32431	Docking Adapter End Item Kit – NASA Docking System (NDS) Block 1	1	B-MSFC	B-MSFC	5/16/16
2062	13642	32432	Docking Adapter End Item Kit – NASA Docking System (NDS) Block 1	1	B-MSFC	B-MSFC	6/8/16
2062	13642	32433	Docking Adapter End Item Kit – NASA Docking System (NDS) Block 1	1	B-MSFC	B-MSFC	8/11/16

- D. The table below documents the estimated cost and fee negotiated for the identified SSCN/PIO beyond October 1, 2015. Modification 1961 (S/A) incorporated all cost and fee dollars for Value thru September 30, 2010.

Mod #	SSCN/ PIO	TITLE		VALUE THRU 9/30/10	VALUE PAST 10/01/15	TOTAL
1662				(b) (4)		
1792	12202	Mod Kit, Design, Development, and Delivery of Lithium-Ion Battery ORUs for Use as Superseding Configuration for Existing IEA Nickel Hydrogen Batteries	Cost			
			Fee			
1795	12198	Develop, Manufacture, and Deliver 100 Solid State Lighting Assembly (SSLA) Units	Cost			
			Fee			
1816	SSCN 13162/PIO101	Control Moment Gyroscope (CMG)	Cost			
			Fee			
1952	SSCN 13244/PIO 103	Ammonia Tank Assembly (ATA) Orbital Replaceable Unit (ORU)	Cost			
			Fee			
1961	SSCN 13191/PIO 105	Service Performance Checkout Unit (SPCU) Heat Exchanger	Cost			
			Fee			
1973		Incentive Fee, H. 69	Fee			
1978	SSCN13287/PIO113	Provisioning Item Order (PIO) 113 Brine Filter Assemblies, Nitrogen Interface Assembly and Crew Quarter Spares	Cost			
			Fee			
2026	SSCN 13258/PIO107	Network Circuit Card Assemblies (CCA) and Audio/Video Interface Cards (AVIC) to Support the Integrated Communications Unit (ICU)	Cost			
			Fee			
2060	SSCN 13079	Request for Service Life Extension of Functional Cargo Block (FGB): Phase IV FGB module maintenance and Orbital Replacement Units (ORU) replacement for the delta service life	Cost			
			Fee			
2062	SSCN 13642	Design, Development, Qualify and Delivery of NASA Docking System (NDS) Block 1 Flight Units	Cost			
			Fee			
2066	SSCN 13565	Permanenet Multipurpose Module (PMM) Relocation and Second Docking Port at Node 2 Zenith	Cost			
			Fee			
		Total for Paragraph D				

(End of Clause)

H.58 RESERVED

(End of Clause)

H.59 CENTRIFUGE ACCOMMODATION MODULE (CAM), CAM ROTOR (CR) AND LIFE SCIENCE GLOVEBOX (LSG) HARDWARE ACCEPTANCE DATA PACKAGES (ADPs) (S/A 1475)

The parties hereby understand and agree that hardware and software transitioned from the CAM, CR and LSG residual assets to the ISS Vehicle Sustaining contract (NAS15-10000 EXT) have ADPs that were assembled and maintained which are not necessarily compliant to the requirements in ISS ADP Data Requirement Document (DRD), PC-08. Further more, these ADPs are herewith agreed to as being acceptable in the existing delivered "as-is" configuration, for all history prior to transition to the ISS Vehicle Sustaining contract (NAS15-10000 EXT).

In the event that any CAM, CR and LSG hardware item is modified, altered, or maintained, subsequent to transition to the NAS15-10000 EXT contract, in such a manner so as to require a change in the ADP, per SSP 30695, the "current version" of the ADP will be required to be updated for the work performed as required to be fully compliant with the requirements in PC-08 and SSP 30695; although the historical version will continue to be acceptable "as is."

Commercially procured hardware has been accepted by NASA with acknowledgement that the United States Government inspections and acceptances were not required during International Partner (IP) acquisitions. In process inspection and verification activities during production and initial delivery to the IP entities are hereby waived and accepted into inventory.

Manufacturing and test documents associated with the IP procurement may not be contractually available for Boeing use during sustaining and utilization effort. Boeing will not be held responsible when there is an impact, NASA will assist upon request.

H.60 DISPOSITION OF FLOOD LOSSES UNDER AMPHENOL SUBCONTRACT

1. BACKGROUND:

- a. During record high rainfall in late June 2006, the Amphenol facility in Sidney, NY was flooded due to extreme rainfall and overflow from the Susquehanna River.
 - b. Approximately \$890,815 in NASA-owned EEE connector parts were damaged as a result of a combination of river water, oils, hydrochloric acid, and bleach which leached into the water.
 - c. Connector piece-parts were stored at Amphenol under a fixed-price subcontract to the Boeing ISS Prime Contract in order to facilitate expedited build-up of ISS connectors. (Designed to reduce lead time to >30 days as opposed to 52 weeks in some cases.)
 - d. Amphenol did not have insurance on GFP and did not request and obtain limited risk of loss from the NASA PCO, so Amphenol now bears full liability.
 - e. A significant portion (approximately \$600,000) of the loss was classified as excess to minimum needs based on an updated Logistics stock level analysis.
2. To provide a remedy for the Government for the electronic connector component parts lost or damaged in the June 2006 flood which occurred at the Amphenol Corporation Facility, Sidney, New York, the parties have agreed that the contractor shall replace the Amphenol Gold inventory to pre-flood levels using the following guidelines. More specific details can be found in the agreement between Boeing and Amphenol, a copy of which is contained in Attachment J-31 of this contract.

- a. Replace the Physical Inventory to a limited pool level that would allow building of connectors quickly, then replace them as they are consumed to this inventory level
 - b. Create a virtual inventory in Gold that reflects pre-flood level quantities less the replaced physical inventory
 - c. As components are consumed in the Physical Inventory at Amphenol, contractual direction shall be provided to Amphenol to produce replacement components in the physical inventory.
 - d. Lead time for hardware delivery should remain stable once the inventories are backfilled (Typically 2 to 4 weeks ARO).
 - e. At end of Program, virtual hardware will be dispositioned as residual hardware in the same manner as tangible inventory.
3. Boeing shall oversee replacement of Government Furnished Property (GFP) identified in Attachment J-31 through final disposition of all items identified therein through the termination or expiration of the NAS15-10000 Prime Contract. It is understood by the parties that the Government has the unilateral right to transfer this clause and Attachment J-31 to any follow-on contract for sustaining engineering of the ISS.
 4. Boeing shall maintain an ongoing electronic inventory of the GFP as described in Attachment J-31, and shall provide quarterly status reports of property balances to the JSC ISS Logistics office.
 5. Except as described herein, this clause does not alter NASA's or Boeing's rights, liabilities or obligations pursuant to FAR 52.245-5, Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts) (JAN 1986).

(End of Clause)

H.61 ADMINISTRATIVE LEAVE (JSC 52.242-94) (SEP 2008)

- (a) When the NASA installation grants administrative leave to its Government employees (e.g., as a result of inclement weather, potentially hazardous conditions, or other special circumstances), the following personnel should also be dismissed upon notification of a center closure provided by the Contracting Officer:
 1. Contractor personnel and its subcontractor personnel working on-site; and
 2. Contractor personnel and its subcontractor personnel dedicated to the Contract effort who are
 - A. working off-site within 10 miles of JSC; and
 - B. unable to perform their Contract duties at their off-site location because their normal place of business has been or is expected to be negatively impacted by an emergency situation (e.g. has sustained damage, has been evacuated, etc.).

However, contractor personnel and its subcontractors shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by Buyer or authorized representative.
- (b) Administrative leave granted under this clause shall be subject to modification or termination by the Contracting Officer and in all instances shall be subject to the availability of funds in accordance with the FAR clause 52.232-22 "Limitation of Funds Clause". The cost of salaries and wages to the contractor and its subcontractors for the period of any such excused absence shall be a reimbursable item of cost under this Contract for effected employees in accordance with contractor's established accounting policy.

1. If a labor hour-based Contract, administrative leave granted under this clause shall be accounted for consistent with productive hours under this Contract for employees in accordance with contractor's established accounting policy.
2. For fixed price Contracts based on other than labor hours for deliverables, the Contracting Officer and the contractor shall as a precondition to any reimbursement negotiate an advanced agreement to determine the appropriate method in which to grant administrative leave under this clause.
3. All invoices requesting payment under this clause shall be prepared in accordance with the contractor's established accounting procedures. This clause is not applicable to the contractor or their lower tier subcontractors who have adequate casualty damage insurance and or adequate suspended operations labor insurance as determined for each instance of a declared administrative leave. However, should the insurance as payer of first resort fail to cover costs of such leave, the coverage contained within this provision will then be applicable to the contractor and such subcontractors.

All invoices requesting payment under a labor hour or fixed price Contract shall be marked as "Administrative Leave in accordance with 52.242-94, Administrative Leave." All such invoices paid will be subject to review, audit, and revision when routine operations re-commence.

- (c) The contractor shall include this clause in all services subcontracts that include personnel in the categories described in (a) above.

(End of Clause)

H. 62 PERFORMANCE FEE MILESTONES ASSOCIATED WITH THE ISS COMMON DOCKING ADAPTER PHASE II (SSCN 11885)

- (a) The Government shall pay the Contractor the performance fees listed below upon the completion of the identified milestones per the baselined evidence of completion.

Milestone #	Milestone Description	Performance Fee Available	Anticipated Completion Date
1	Baseline the CDA System Requirement document and develop a draft of first tier subsystem specifications	(b) (4)	January 2010
2	Conduct a System Requirement Review (SRR)		May 2010
3	Conduct an Interim Design Review (IDR) of the Experimental Engineering Mockup Subassemblies (EEMS)		July 2010
4	Transfer the EMS via DD Form 1149		September 2010
5	Conduct CDA Project Interim review; perform subtasks pursuant to Modification 1602, Revision 1		September 2010
6	Conduct studies and analyses to support avionics upgrade docking system avionics		September 2010
7	Delivery of functional Experimental Engineering Mockup [See paragra(c) of this clause]		September 2010

- (b) The contractor is authorized to submit a voucher for payment of a milestone once the COTR has signed the evidence of completion statement referenced in clause

H.51 Evidence of Completion Matrix and DRD F-PM-09, SOW Evidence of Completion Matrix. Payment vouchers shall be prepared in accordance with Clause G.2 Submission of Vouchers for Payment. These vouchers will be paid within 30 days in accordance with the prompt payment clause of this contract. (FAR 52.232-25 MAR 1994)

- (c) The accomplishment of incentive milestone 7 is highly desirable to the Government. Performance above the target level is of significant value to the Government and the value of the higher level of performance is worth the additional fee to the Government. The attainment of the higher level of performance is clearly within the control of the contractor. In order to qualify for the (b) (4) fee payment, the following conditions must be met:
1. The hardware must be delivered on or before September 30, 2010 without any ship short items.
 2. The COTR has signed the evidence of completion statement referenced in clause H.51 Evidence of Completion Matrix and DRD F-PM-09, SOW Evidence of Completion Matrix.
 3. The contractor has not exceeded the estimated cost for this project which is called out in line item 26 of clause B.1 Estimated Cost and Fee. If for any reason, the estimated cost in line item 26 is exceeded after payment of milestone 7 is made by the Government; the contractor agrees that they will return the milestone 7 fee payment to the Government. If the payment of milestone 7 is returned because the contractor has exceeded the estimated cost in line item 26, any costs above the estimated cost in line item 26 will be paid in accordance with FAR 52.216-7 (Allowable Cost and Payment Dec 2002).
- (d) The Government will not make partial fee payments for partial completion of a milestone.

(End of Clause)

H.63 OVERLIMIT PROPOSAL PREPARATION/INFRASTRUCTURE COSTS

Any change made pursuant to Clause I.8 Changes – Cost Reimbursement will include proposal preparation costs. The contractor shall utilize the change directive process and defer firm proposal preparation until the government has authorized via change direction. Any costs incurred prior to the directive signature shall be charged to technical definition.

In response to a request for firm proposal the contractor shall capture proposal preparation costs from all impacted teams, with the exception of contracts management and pricing teams, and include as part of the firm proposal submittal. The contractor shall have a goal to spend less than 1% of the estimated cost of the proposal being submitted on proposal preparation costs. It is understood by the parties that proposal preparation costs over the established goal of 1% are non-fee bearing. The contractor shall account for, track, and provide actual proposal preparation costs for proposals with an estimated cost of \$30M or greater.

After September 30, 2010, changed with an estimated cost exceeding \$3M shall additionally include business, administration, and management infrastructure tasks, with the exception of pricing and estimating, necessary to perform the change identified in the change directive.

(End of Clause)

H.64 IT SECURITY REQUIREMENTS

The contractor shall implement FAR 52.204-9, *Personal Identity Verification of Contractor Personnel* (SEPT 2007) and NASA 1852.204-76 (PIC 09-14) *Security Requirements for Unclassified Information Technology Resources* (OCT 2009) as tailored by the Boeing Houston

Site IT security plan dated July 31, 2008. The controlling authority for all IT security requirements shall be NASA Procedural Requirement 2810.1A.

(End of Clause)

H.65 TRANSITIONED ITEMS GRANDFATHER CLAUSE

The following items are transferred to Boeing to assume Sustaining Engineering (SE) and cognizant design center Commercial and Government Entity (CAGE) code responsibilities, but are “grandfathered” by NASA to Boeing “as-is” with existing documentation per the GFD list. Boeing shall not validate, recreate, or update existing documentation at the time of sustaining transition; however these activities will be performed when required to implement a sustaining task, spares producibility change, or design modification. If a design modification or spares build is implemented via a Change Directive (CD), all effort associated with the updates to the documentation will be included in the CD proposal.

- Transition of Crew Quarters Sustaining to Boeing and Crew Quarters Spares Procurement (SSCN 12860)
- Early Transfer of Sustaining Engineering for USA Maintained and NASA Sustained ISS Flight Crew Equipment (FCE) Government Furnished Equipment (GFE) Hardware to Boeing (SSCN 12870)
- Transition Sustaining Responsibility of the Oxygen Generation Assembly Power Supply Module (OGA PSM) from the Marshall Space Flight Center (MSFC) to the Boeing NAS15-10000 Contract (SSCN 13097)
- Cargo Mission Contract (CMC) Flight Support Equipment (FSE), Resupply Stowage Rack (RSRs), Resupply Stowage Platform (RSPs) (Extension contract)
- Goddard Space Flight Center (GSFC) Express Logistics Carrier (ELC) hardware, software, and simulators
- GSFC External Stowage Platform 3 Passive Common Attachment System (ESP3 PCAS) (SSCN 11967)
- Regenerative ECLSS Hardware from Marshall Space Flight Center (MSFC) (SSCN 12204): OGA Rack and support equipment, WRS Rack 1 and Rack 2 and support equipment, and Contingency hardware
- SSCN 013267 Rev 2, Transition of Sustaining Engineering for Selected Johnson Space Center (JSC) Government Furnished Equipment (GFE) Boeing.

The procurement of spare parts for the items listed above shall be performed as “build to print” per the NASA provided transitioned product baseline unless directed otherwise in the Change Directive authorizing the spares build. For “build to print” hardware the following shall guidelines shall be used:

- The NASA provided flight-certified design drawings including the list of certified hardware components shall be used by Boeing.
- Boeing shall build the assembly per the NASA provided design documentation.
- Boeing shall not be responsible for the design documentation; however shall be responsible to identify issues and concerns with the design documentation as discovered during the hardware builds.
- Boeing shall provide an Acceptance Data Package (ADP) with the Certification of Conformances (C of C) of the material ordered, records of workmanship, and acceptance testing results.
- Boeing shall deliver the assembly and associated documentation to NASA as “in conformance with NASA-provided design documentation”. If any hardware modifications have been made; Boeing shall verify the modification as required by the contract.
- NASA will declare the hardware as Flight Certified after delivery and update the ADP with the certification. Boeing shall declare any hardware modifications as Flight Certified and update the ADP.

Required configuration and design changes on subsequent-build hardware shall be identified, processed and authorized in accordance with SSP 41170.

(End of Clause)

H. 66 ANOMALY RESOLUTION/FAILURE INVESTIGATION POOL

A cost of \$10,000,000 is provided for anomaly resolution/failure investigation for the period of performance of FY11 – FY15.

This pool shall be used to perform special studies, tests, and/or evaluations required for anomaly resolution/failure investigation and shall meet at least one of the following criteria:

- Requires a subcontractor not under contract for sustaining engineering. The subcontractors negotiated in the 2011 – 2015 contract extension are listed in attachment J-32 of this contract.
- Requires the purchase of equipment to conduct the effort.
- Requires the refurbishment and/or assembly of special test equipment or support equipment to conduct the effort.
- The effort is manpower extensive and requires additional sustaining resources for other baseline sustaining work to remain on schedule (cannot be WPRR'd).

The contractor is not authorized to spend anomaly resolution/failure investigation pool funding until authorization has been provided by the Contracting Officer or the Contracting Officer's Technical Representative (COTR) for this contract. For all work to be performed using this pool, the contractor shall provide the Government with an authorization request which shall include at a minimum the purpose of the study, test, analysis, or evaluation, start and completion events and dates, and a ROM value for the activity, and the criterion/criteria noted above under which the request is being made. For ROMs over \$700K, details driving the costs shall be provided. Costs exceeding the ROM value shall be considered as an overrun and not count against the value of the pool. Contractor technical teams are responsible to advise their NASA counterparts of anticipated efforts.

Budget for this pool shall be held at the program level. A summary briefing of expenditures and status of ongoing efforts shall be briefed by the Contractor at the quarterly CSTR.

The contractor shall track and report all cost status information in accordance with PC27, entitled "Contractor Financial Management Report (533M)." Once the pool is depleted; NASA may choose to replenish the pool by requesting a proposal or may require change requests to be used to fund these studies, tests/analyses, and evaluations.

The work covered under this clause is located in the Section C, Statement of Work, paragraphs 3.2.1.3.

Anomaly Number	Title	Total Approved
01	ECLSS	(b) (4)
02	ECLSS	
03	ECLSS	
04	ATCS	
05	ATCS	
06	EPS	
07	ECLSS	
08	C&T	

A detailed list of anomalies including the tasks, task descriptions/objectives, and completion criteria may be found at Attachment J-32 – Sustaining Engineering Subcontractors and Anomaly Pool/Failure investigation Tracking

(End of Clause)

H. 67 STELLA NANORACKS INTEGRATION (SSCN 13175 – S/A 1848)

The contractor shall provide the Software Toolkit for Ethernet Lab-Like Architecture (STELLA) software in accordance with SOW 8.7.6, and marked with a RESTRICTED RIGHTS NOTICE, in accordance with FAR 52.227-14 RIGHTS IN DATA – GENERAL (JUNE 1987) as modified by NASA FAR Supplement 1852.227-14 (OCT 1995), Alternate III. Item (b)(5) of this notice shall be modified to read as follows:

- Disclosed to and reproduced for use by U.S. and International Partner Payload Developers, in accordance with subparagraphs (b)(1) through (4) of this clause, provided the Government makes such disclosure or reproduction subject to these restricted rights.

NASA and support contractors may have access to STELLA software and information as required to perform standard ISS integration tasks.

The Government is paying the contractor to sustain the software. The parties recognize that once over 50% of the STELLA Software Version 2.0 source code software has been modified under this contract, the RESTRICTED RIGHTS NOTICE shall be removed and the Government shall have UNLIMITED RIGHTS in the use of the STELLA software.

(End of Clause)

H.68 BOEING PROVIDED TRANSPORTATION IN RUSSIA

In furtherance of ISS contractual objectives, Boeing may provide transportation to NASA employees in Russia at no additional cost to the Government. This clause and the associated transportation applies only to work associated with the NASA Docking System (NDS) changes.

(End of clause)

H.69 INCENTIVE FEE ASSOCIATED WITH LITHIUM-ION (LI-ION) BATTERIES (SSCN 12202)

The Government reserves an amount of (b) (4) for payment of incentive fee for the acceleration of deliveries of Li-Ion batteries and associated parts, as detailed below.

- Meeting 100% of the Milestone due dates (hardware delivered with no open paper) stated in this clause earns (b) (4) in incentive fee per Milestone. The Government will not make partial fee payments for partial completion of a milestone. Any project cost overrun not caused by The Government shall be deducted, dollar for dollar, from the earned incentive fee.
- The contractor is authorized to submit a voucher for 50% payment of each milestone after meeting the delivery requirements for that milestone. Payment vouchers shall be prepared in accordance with Clause G.2 Submission of Vouchers for Payment. These vouchers will be paid within 30 days in accordance with the prompt payment clause of this contract. (FAR 52.232-25 MAR 1994).
- Upon project completion, the Government will pay the remaining fee, excluding any project cost overruns not caused by the Government. If these overruns are greater than the amount of the incentive fee earned by, but not yet paid to, The Boeing Company, The Boeing Company will credit back to the Government the project cost overruns in excess of the remaining amount owed to the Boeing Company on a dollar for dollar basis up to the maximum of the incentive fee previously paid to The Boeing Company. Project cost evaluation value for overrun determination is defined as the cost identified in Contract Modification 1792 for SSCN12202 (b) (4), plus any future SSCNs which impact the Lithium Ion project costs in addition to any Government driven cost impacts including, but not limited to, rate changes from partial or total program terminations or cancellations and changes in accounting standards and laws which affect The Boeing Company or any of Boeing's suppliers.

The basis for evaluation of cost will be documented in PM-02. Project completion is evidenced as follows:

- The COTR has signed the evidence of completion statement referenced in clause H.51 Evidence of Completion Matrix and DRD F-PM-09, SOW Evidence of Completion Matrix.
- All DIL items have been delivered via DD250 and any ship shorts have been closed.
- All residual assets have been dispositioned.

MILESTONE 1

Due Date	ID	Nomenclature	Qty	DD250 Date	P/N
NLT 11/15/15	51566	Pressure Pad, Left	18	07/15/16	684-017031-0001
	51567	Pressure Pad, Right	18	07/15/16	684-017031-0002
	51568	Kit, Connector Bracket	18	07/15/16	684-017033-0001
	51569	Tie-down, Front	18	07/15/16	684-017034-0001
	51570	Kit, Tie-down, Rear	18	07/15/16	684-017037-0001
	51571	Rail, Guide, Battery ORU	72	07/15/16	684-017056-0001
	51574	Status/Charging Unit, Lithium-Ion Battery (STE)	3	07/15/16	684-017045-0001
NLT 04/15/16	51517	Lithium-Ion Battery ORU	1	06/15/16	684-017000-0001
	51535	Adapter Plate, Lithium-Ion Battery	1	06/15/16	684-017050-0001
	51552	Mod Kit, On-Orbit, Lithium-Ion Battery	1	05/15/16	684-017105-0001
	51553	Mod Kit, On-Orbit, Lithium-Ion Battery	1	07/15/16	684-017106-0001
NLT DD250 Date	51512	Lithium-Ion Battery ORU	1	08/14/15	684-017000-0001
	51513	Lithium-Ion Battery ORU	1	10/15/15	684-017000-0001
	51514	Lithium-Ion Battery ORU	1	12/15/15	684-017000-0001
	51515	Lithium-Ion Battery ORU	1	02/15/16	684-017000-0001
	51516	Lithium-Ion Battery ORU	1	04/15/16	684-017000-0001
	51530	Adapter Plate, Lithium-Ion Battery	1	08/14/15	684-017050-0001
	51531	Adapter Plate, Lithium-Ion Battery	1	10/15/15	684-017050-0001
	51532	Adapter Plate, Lithium-Ion Battery	1	12/15/15	684-017050-0001
	51533	Adapter Plate, Lithium-Ion Battery	1	02/15/16	684-017050-0001
	51534	Adapter Plate, Lithium-Ion Battery	1	04/15/16	684-017050-0001
	51548	Mod Kit, On-Orbit, Lithium-Ion Battery	1	09/14/15	684-017101-0001
	51549	Mod Kit, On-Orbit, Lithium-Ion Battery	1	11/15/15	684-017102-0001
	51550	Mod Kit, On-Orbit, Lithium-Ion Battery	1	01/15/16	684-017103-0001
	51551	Mod Kit, On-Orbit, Lithium-Ion Battery	1	03/15/16	684-017104-0001

MILESTONE 2

Due Date	ID	Nomenclature	Qty	DD250 Date	P/N
NLT 02/15/17	51522	Lithium-Ion Battery ORU	1	04/14/17	684-017000-0001
	51523	Lithium-Ion Battery ORU	1	06/15/17	684-017000-0001
	51540	Adapter Plate, Lithium-Ion Battery	1	04/14/17	684-017050-0001

	51541	Adapter Plate, Lithium-Ion Battery	1	06/15/17	684-017050-0001
	51557	Mod Kit, On-Orbit, Lithium-Ion Battery	1	03/15/17	684-017110-0001
	51558	Mod Kit, On-Orbit, Lithium-Ion Battery	1	05/14/17	684-017111-0001
	51559	Mod Kit, On-Orbit, Lithium-Ion Battery	1	07/15/17	684-017112-0001
NLT DD250 Date	51518	Lithium-Ion Battery ORU	1	08/15/16	684-017000-0001
	51519	Lithium-Ion Battery ORU	1	10/14/16	684-017000-0001
	51520	Lithium-Ion Battery ORU	1	12/15/16	684-017000-0001
	51521	Lithium-Ion Battery ORU	1	02/15/17	684-017000-0001
	51536	Adapter Plate, Lithium-Ion Battery	1	08/15/16	684-017050-0001
	51537	Adapter Plate, Lithium-Ion Battery	1	10/14/16	684-017050-0001
	51538	Adapter Plate, Lithium-Ion Battery	1	12/15/16	684-017050-0001
	51539	Adapter Plate, Lithium-Ion Battery	1	02/15/17	684-017050-0001
	51554	Mod Kit, On-Orbit, Lithium-Ion Battery	1	09/15/16	684-017107-0001
	51555	Mod Kit, On-Orbit, Lithium-Ion Battery	1	11/14/16	684-017108-0001
	51556	Mod Kit, On-Orbit, Lithium-Ion Battery	1	01/15/17	684-017109-0001

MILESTONE 3

Due Date	ID	Nomenclature	Qty	DD250 Date	P/N
NLT 12/15/17	51527	Lithium-Ion Battery ORU	1	02/15/18	684-017000-0001
	51528	Lithium-Ion Battery ORU	1	04/16/18	684-017000-0001
	51529	Lithium-Ion Battery ORU	1	06/15/18	684-017000-0001
	51545	Adapter Plate, Lithium-Ion Battery	1	02/15/18	684-017050-0001
	51546	Adapter Plate, Lithium-Ion Battery	1	04/16/18	684-017050-0001
	51547	Adapter Plate, Lithium-Ion Battery	1	06/15/18	684-017050-0001
	51562	Mod Kit, On-Orbit, Lithium-Ion Battery	1	01/15/18	684-017115-0001
	51563	Mod Kit, On-Orbit, Lithium-Ion Battery	1	03/15/18	684-017116-0001
	51564	Mod Kit, On-Orbit, Lithium-Ion Battery	1	05/16/18	684-017117-0001
	51565	Mod Kit, On-Orbit, Lithium-Ion Battery	1	07/15/18	684-017118-0001
NLT DD250 Date	51524	Lithium-Ion Battery ORU	1	08/15/17	684-017000-0001
	51525	Lithium-Ion Battery ORU	1	10/16/17	684-017000-0001
	51526	Lithium-Ion Battery ORU	1	12/15/17	684-017000-0001
	51542	Adapter Plate, Lithium-Ion Battery	1	08/15/17	684-017050-0001
	51543	Adapter Plate, Lithium-Ion Battery	1	10/16/17	684-017050-0001
	51544	Adapter Plate, Lithium-Ion Battery	1	12/15/17	684-017050-0001
	51560	Mod Kit, On-Orbit, Lithium-Ion Battery	1	09/15/17	684-017113-0001
	51561	Mod Kit, On-Orbit, Lithium-Ion Battery	1	11/16/17	684-017114-0001
	51646	Pressure Pad, Left	3	08/15/18	684-017031-0001
	51647	Pressure Pad, Right	3	08/15/18	684-017031-0002

	51648	Kit, Connector Bracket	3	08/15/18	684-017033-0001
	51649	Tie-down, Front	3	08/15/18	684-017034-0001
	51650	Kit, Tie-down, Rear	3	08/15/18	684-017037-0001
	51651	Rail, Guide, Battery ORU	12	08/15/18	684-017056-0001

MILESTONE 4

Due Date	ID	Nomenclature	Qty	DD250 Date	P/N
NLT 10/12/18	51638	Lithium-Ion Battery ORU	1	10/15/18	684-017000-0001
	51639	Lithium-Ion Battery ORU	1	12/15/18	684-017000-0001
	51652	Lithium-Ion Battery ORU	1	02/15/19	684-017000-0001
	51653	Lithium-Ion Battery ORU	1	04/15/19	684-017000-0001
	51654	Lithium-Ion Battery ORU	1	06/15/19	684-017000-0001
	51641	Adapter Plate, Lithium-Ion Battery	1	10/15/18	684-017050-0001
	51642	Adapter Plate, Lithium-Ion Battery	1	12/15/18	684-017050-0001
	51655	Adapter Plate, Lithium-Ion Battery	1	02/15/19	684-017050-0001
	51656	Adapter Plate, Lithium-Ion Battery	1	04/15/19	684-017050-0001
	51657	Adapter Plate, Lithium-Ion Battery	1	06/15/19	684-017050-0001
	51644	Mod Kit, On-Orbit, Lithium-Ion Battery	1	11/15/18	684-017120-0001
	51645	Mod Kit, On-Orbit, Lithium-Ion Battery	1	01/15/19	684-017121-0001
	51658	Mod Kit, On-Orbit, Lithium-Ion Battery	1	03/15/19	684-017122-0001
	51659	Mod Kit, On-Orbit, Lithium-Ion Battery	1	05/15/19	684-017123-0001
	51660	Mod Kit, On-Orbit, Lithium-Ion Battery	1	07/15/19	684-017124-0001
	51661	Pressure Pad, Left	3	02/15/19	684-017031-0001
	51662	Pressure Pad, Right	3	02/15/19	684-017031-0002
	51663	Kit, Connector Bracket	3	02/15/19	684-017033-0001
	51664	Tie-down, Front	3	02/15/19	684-017034-0001
	51665	Kit, Tie-down, Rear	3	02/15/19	684-017037-0001
	51666	Rail, Guide, Battery ORU	12	02/15/19	684-017056-0001
NLT DD250 Date	51637	Lithium-Ion Battery ORU	1	08/15/18	684-017000-0001
	51640	Adapter Plate, Lithium-Ion Battery	1	08/15/18	684-017050-0001
	51643	Mod Kit, On-Orbit, Lithium-Ion Battery	1	09/15/18	684-017119-0001

SPARES

Due Date	ID	Nomenclature	Qty	DD250 Date	P/N
NLT DD250 Date	51667	Lithium-Ion Battery ORU	1	08/15/19	684-017000-0001
	51668	Lithium-Ion Battery ORU	1	10/15/19	684-017000-0001
	51669	Lithium-Ion Battery ORU	1	12/15/19	684-017000-0001
	51670	Adapter Plate, Lithium-Ion Battery	1	08/15/19	684-017050-0001
	51671	Pressure Pad, Left	3	08/15/19	684-017031-0001
	51672	Pressure Pad, Right	3	08/15/19	684-017031-0002
	51673	Kit, Connector Bracket	3	08/15/19	684-017033-0001
	51674	Tie-down, Front	3	08/15/19	684-017034-0001
	51675	Kit, Tie-down, Rear	3	08/15/19	684-017037-0001

	51676	Rail, Guide, Battery ORU	12	08/15/19	684-017056-0001
--	-------	--------------------------	----	----------	-----------------

(End of Clause)

H.70 Non-Government Property

All hardware delivered under the Change Directives listed below is being developed under a fixed price subcontract. Only the hardware on the Deliverable Items List will become Government Property. NASA is not responsible for the development, sustaining, maintenance or repair of any of the tooling, ground support equipment and test equipment required to deliver this hardware.

- SSCN 12283 "Request for Service Life Extension of Functional Cargo Block (FGB): Phase IIIA FGB Non-Replaceable Hardware through 2028"
- SSCN 13079 "Request for Service Life Extension of Functional Cargo Block (FGB): Phase IV FGB module maintenance and Orbital Replacement Units (ORU) replacement for the delta service life"

(End of Clause)

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	DEC 2001	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 1997	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.203-15	MAR 2009	WHISTLEBLOWER PROTECTIONS UNDER THE ARRA OF 2009 (Applicable to Schedule 3/CLIN 3 only)
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER
52.204-11	MAR 2009	AMERICAN RECOVERY AND REINVESTMENT ACT – REPORTING REQUIREMENTS (Applicable to Schedule 3/CLIN 3 only)
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.215-2	MAR 2009	AUDIT AND RECORDS -- NEGOTIATION ALTERNATE I (Applicable to Schedule 3/CLIN 3 only)
52.215-9	OCT 1997	CHANGES OR ADDITIONS TO MAKE-OR-BUY PROGRAM
52.215-10	AUG 2011	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA
52.215-12	OCT 2010	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA
52.215-14	OCT 1997	INTEGRITY OF UNIT PRICES (ALTERNATE I) (OCT 1997)
52.215-15	DEC 1998	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-18	OCT 1997	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES

52.215-21	OCT 2010	REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA -- MODIFICATIONS
52.216-8	MAR 1997	FIXED FEE
52.216-7	DEC 2002	ALLOWABLE COST AND PAYMENT Insert 7 th in Paragraph (a)(3).
52.219-8	OCT 2000	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-9	JUL 2013	SMALL BUSINESS SUBCONTRACTING PLAN (Alternate II) (October 2001)
52.219-16	JAN 1999	LIQUIDATED DAMAGES SUBCONTRACTING PLAN
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-3	AUG 1996	CONVICT LABOR
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	APR 2002	EQUAL OPPORTUNITY
52.222-35	DEC 2001	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	DEC 2001	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.223-6	MAY 2001	DRUG-FREE WORKPLACE
52.223-10	AUG 2000	WASTE REDUCTION PROGRAM
52.223-12	MAY 1995	REFRIGERATION EQUIPMENT AND AIR CONDITIONERS
52.225-8	FEB 2000	DUTY-FREE ENTRY
52.225-13	OCT 2003	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.227-1	JUL 1995	AUTHORIZATION AND CONSENT (ALTERNATE I) (APR 1984)
52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL As modified by 1852.227-14 NASA FAR Supplement (OCT 1995)
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL (ALTERNATE II) (JUN 1987) As modified by 1852.227-14 NASA FAR Supplement (OCT 1995)
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL (ALTERNATE III) (JUN 1987) As modified by 18-5227-14 NASA FAR Supplement (OCT 1995)
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL (ALTERNATE V) (JUN 1987) As modified by 1852.227-14 NASA FAR Supplement (OCT 1995)
52.227-16	JUN 1987	ADDITIONAL DATA REQUIREMENTS
52.228-7	MAR 1996	INSURANCE--LIABILITY TO THIRD PERSONS
52.230-2	APR 1998	COST ACCOUNTING STANDARDS
52.230-6	NOV 1999	ADMINISTRATION OF COST ACCOUNTING STANDARDS
52.232-9	APR 1984	LIMITATION ON WITHHOLDING OF PAYMENTS
52.232-17	JUN 1996	INTEREST
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	MAR 1994	PROMPT PAYMENT Voucher payments will be made as follows: Cost vouchers within 7 days thru 9/30/2015 Fee vouchers within 30 days

52.232-33	OCT 2003	PAYMENT BY ELECTRONIC FUNDS TRANSFER – CENTRAL CONTRACTOR REGISTRATION
52.233-1	JUL 2002	DISPUTES (ALTERNATE I) (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-3	MAY 2001	PENALTIES FOR UNALLOWABLE COSTS
52.242-4	JAN 1997	CERTIFICATION OF FINAL INDIRECT COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.244-2	AUG 1998	SUBCONTRACTS (ALTERNATE 1) (MAR 2005) In paragraph (e) insert the following items: 1. All subcontracting actions with Spacehab 2. All subcontracting actions with Invocon 3. Any subcontract or contract modification over \$10M in value where consent was not provided at the time of Mod 1547 unless an exception at 15.403-1(b), "Exceptions to cost or pricing data requirements" applies.
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	AUG 2009	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-5	JAN 1986	GOVERNMENT PROPERTY (COST-REIM- BURSEMENT, TIME-AND-MATERIAL, OR LABOR- HOUR CONTRACTS)
52.245-18	FEB 1993	SPECIAL TEST EQUIPMENT
52.246-23	FEB 1997	LIMITATION OF LIABILITY
52.246-24	APR 1984	LIMITATION OF LIABILITY-HIGH VALUE ITEMS
52.246-25	FEB 1997	LIMITATION OF LIABILITY-- SERVICES
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.247-63	JAN 1997	PREFERENCE FOR U.S. -FLAG AIR CARRIERS
52.247-64	JUN 2000	PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (ALTERNATE I) (APR 1984)
52.247-67	JUN 1997	SUBMISSION OF COMMERCIAL TRANSPORTATION BILLS TO THE GENERAL SERVICES ADMINISTRATION FOR AUDIT
52.248-1	FEB 2000	VALUE ENGINEERING
52.249-6	SEP 1996	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES
52.251-2	JAN 1991	INTRAGENCY FLEET MANAGEMENT SYSTEM (IFMS) VEHICLES AND RELATED SERVICES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.203-70	JUN 2001	DISPLAY OF INSPECTOR GENERAL HOTLINE POSTERS
1852.204-76	JUL 2002	SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS

1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.219-77	MAY 1999	NASA MENTOR-PROTEGE PROGRAM
1852.219-79	MAR 1999	MENTOR REQUIREMENTS AND EVALUATION
1852.223-74	MAR 1996	DRUG AND ALCOHOL FREE WORKFORCE
18-52.227-86	DEC 1987	COMMERCIAL COMPUTER SOFTWARE LICENSING
18-52.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
18-52.235-70	NOV 1992	CENTER FOR AEROSPACE INFORMATION
18-52.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.237-72	JUNE 2005	ACCESS TO SENSITIVE INFORMATION
1852.237-73	JUNE 2005	RELEASE OF SENSITIVE INFORMATION
1852.243-71	MAR 1997	SHARED SAVINGS

(End Of Clause)

I.2 APPROVAL OF CONTRACT (FAR 52.204-1) (DEC 1989)

This contract is subject to the written approval of the JSC Procurement Officer and shall not be binding until so approved.

(End of clause)

I.3 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

_____ <http://www.arnet.gov/far/> _____

_____ <http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm> _____

(End of clause)

I.4 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed \$31,109,075 or the overtime premium is paid for work--

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connecting with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified

above shall include all estimated overtime for contract completion and shall--

- (1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;
- (2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
- (3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
- (4) Provide reasons why the required work cannot be performed by using multishift operations or any employing additional personnel.

(End of clause)

I.5 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA(FAR 52.223-3) (NOV 1991) ALTERNATE I (NOV 1991)

- (a) Hazardous material, as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).
- (b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract. The material and identification numbers are identified in Attachment J-13, List of Hazardous Material.
- (c) The apparently successful offeror, by acceptance of the contract, certifies that the list in paragraph (b) of this clause is complete. This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.
- (d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No., 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.
- (e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause or the certification submitted under paragraph (c) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.
- (f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.
- (g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the

obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable.
The purposes of this right are to--

- (i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
- (ii) Obtain medical treatment for those affected by the material; and
- (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No., 313, for all hazardous materials identified in paragraph b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to mail MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

(End of clause)

I.6 DUTY-FREE ENTRY SUPPLIES (NFS 18-52.225-73) (DEC 1988)

In accordance with the Duty-Free Entry clause of this contract, the following supplies will be given duty-free entry:

Product Group	Item Description	Part Number(s)
Boeing-Huntsville	PC Board	3000212-002, 3000214-003, 3000038-002, 3000128-002, 3000125-002, 3000140-002, 3000087-001
Boeing-Huntsville	Casting	3000096-301
Boeing-Huntsville	Die	3000096-101

Boeing-Huntsville	Tooling	3000096-101
Boeing-Huntsville	F/O Splitters	2000011-101, 2000015-101, 2000015-103, 2000015-104
Boeing-Huntsville	QCI Samples	2000011-101, 2000023-101, 2000049-101, 2000015-103
Boeing-Huntsville	F/O Combiners	2000023-101, 2000049-101
McDonnell Douglas	FHRC Hoses	5843393-501

(End of clause)

I.7 RIGHTS TO PROPOSAL DATA (Technical)
(FAR 52.227-23) (JUN 1987)

Except for data contained on pages NONE, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data-General" clause contained in this contract) in and to the technical data contained in the proposal dated October 10, 1994, upon which this contract is based.

(End of clause)

I.8 CHANGES-- COST-REIMBURSEMENT (DEVIATION)
(FAR 52.243-2) (AUG 1987) ALTERNATE V (APR 1984)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Drawings, designs, or specifications, or other technical descriptions of the work to be performed.

(2) Method of shipment or packing

(3) Place of inspection, delivery, or acceptance.

(4) Completion dates or delivery dates as a result of stretchout or acceleration of development, test, production, or delivery of deliverable items of hardware or software and services necessary to the delivery and flight of such items of hardware and software.

(b) If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, or otherwise affects any other terms and conditions of this contract the Contracting Officer shall make an equitable adjustment in the (1) estimated cost, delivery or completion schedule or both, (2) amount of any fixed fee and (3) other affected terms and shall modify the contract accordingly.

(c) The Contractor must assert its right to an adjustment under this clause within 90 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed:

(e) Notwithstanding the terms and conditions of paragraphs (a) and (b) above, the estimated cost of this contract and, if this contract is incrementally funded, the funds allotted for the performance of this contract, shall not be increased or considered to be increased except by specific written modification of the contract indicating the new contract estimated cost and, if this contract is incrementally funded, the new amount allotted to the contract. Until this modification is made, the Contractor shall not be obligated to continue performance or incur costs beyond the point established in the Limitation of Cost or Limitation of Funds clause of this contract.

(End of clause)

I.9 NOTIFICATION OF CHANGES (FAR 52.243-7) (APR 1984)

(a) Definitions. "Contracting Officer" as used in this clause, does not include any representative of the Contracting Officer. "Specifically Authorized Representative (SAR)" as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to be designated representative before the SAR exercises such authority.

(b) Notice. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within 5 calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor the notice shall state:

- (1) The date, nature, and circumstances of the conduct regarded as a change.
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct.
- (3) The identification of any documents and the substance of any oral communication involved in such conduct.
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause including--
 - (i) What contract line items have been or may be affected by the alleged change.
 - (ii) What labor or materials or both have been or may be added, deleted or wasted by the alleged change:
 - (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change:
 - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated, and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) Continued performance. Following submission of the notice required by (b) above, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in (b) above, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.

(d) Government response. The Contracting Officer shall promptly within 30 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either--

(1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance.

(2) Countermand any communication regarded as a change.

(3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance, or

(4) In the event the Contractor's notice information is inadequate to make a decision under (1), (2), or (3) above, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) Equitable adjustments. (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made--

(i) In the contract price or delivery schedule or both; and

(ii) in such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs, or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in (b) and (c) above. NOTE: The phrases "contract price" and "cost" wherever they appear in the clause may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(End of clause)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, Donna Blackshear-Reynolds, 2101 NASA Parkway, Houston, Texas, 77058, phone (281) 483-2874, facsimile (281) 244-2254, e-mail donna.m.blackshear-reynolds@nasa.gov or Lee Norbraten, 2101 NASA Parkway, Houston, Texas, 77058, phone (281) 483-1973, facsimile (281) 483-4707, e-mail g.l.norbraten@nasa.gov. Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management Division, at 202-358-0445, facsimile 202-358-3083, e-mail james.a.balinskas@nasa.gov. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(c) If this is a task or delivery order contract, the ombudsman shall review complaints from contractors and ensure they are afforded a fair opportunity to be considered, consistent with the procedures of the contract.

(End of clause)

**I.11 SMALL BUSINESS SUBCONTRACTING REPORTING (NFS 1852.219-75)
(MAY 1999)**

(a) The Contractor shall submit the Summary Subcontract Report (Standard Form (SF) 295) semiannually for the reporting periods specified in block 4 of the form. All other instructions for SF 295 remain in effect.

(b) The Contractor shall include this clause in all subcontracts that include the clause at FAR 52.219-9.

(End of clause)

**I.12 POTENTIALLY HAZARDOUS ITEMS (DEVIATION)
(NFS 18-52.223-72) (DEC 1988)**

(a) The Contractor shall furnish complete design information and drawings showing all details of construction, including materials, for the items or components listed in Attachment J-13. These items or components are designated as potentially hazardous to employees and subcontractors who are to perform any work in connection with installing them in combination with other equipment, or in testing them either alone or in combination with other items or components, or in handling them. The contractor shall inform such employees or subcontractors of the potentially hazardous nature of these items for components before requesting or directing the performance of work.

(b) This requirement for the delivery of data supersedes any terms of this contract permitting withholding of data.

- (c) The Contractor shall include this clause, including this paragraph c., in each subcontract at any tier under this contract that call for the manufacture or handling of the items or components designated according to paragraph a. above as potentially hazardous, except for the M. V. Khrunichev State Research and Space Center subcontract for the FGB. Notwithstanding this deviation, Boeing's responsibility for providing the data required by this clause remains unchanged.

(End of Clause)

I.13 SPACE HARDWARE REPORTING (NFS 18-52.245-78) (MAR 1989)

In accordance with the Financial Reporting of Government-Owned/Contractor-Held Property clause of this contract, the reporting of certain specified items of space hardware is required on a NASA Form 1018, Report of Government-Owned/Contractor-Held Property. The reporting of space hardware is in addition to the requirements of other property reporting on the form. At present, the items of space hardware to be reported are the following: **See NASA FAR Supplement 18-45.7101-1(i)**. The Contracting Officer shall update this list prior to June 1 of each year to be applicable beginning with the next reporting period.

(End of clause)

I.14 RESTRICTION ON FUNDING ACTIVITY WITH CHINA (DEVIATION) (NFS 1852.225-71) (FEB 2012)

- (a) Definition - "China" or "Chinese-owned company" means the People's Republic of China, any company owned by the People's Republic of China or any company incorporated under the laws of the People's Republic of China.
- (b) Public Laws 112-10, Section 1340(a) and 112-55, Section 539, restrict NASA from contracting to participate, collaborate, coordinate bilaterally in any way with China or a Chinese-owned company using funds appropriated on or after April 25, 2011. Contracts for commercial and non developmental items are exempted from the prohibition because they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.
- (c) This contract may use restricted funding that was appropriated on or after April 25, 2011. The contractor shall not contract with China or Chinese-owned companies for any effort related to this contract except for acquisition of commercial and non-developmental items. If the contractor anticipates making an award to China or Chinese-owned companies, the contractor must contact the contracting officer to determine if funding on this contract can be used for that purpose.
- (d) Subcontracts - The contractor shall include the substance of this clause in all subcontracts made hereunder.

(End of clause)

[END OF SECTION]

**PART III - LIST OF DOCUMENTS, EXHIBITS
AND OTHER ATTACHMENTS**

SECTION J - LIST OF ATTACHMENTS

<u>ATTACHMENT</u>	<u>TITLE</u>
J-1	Award Fee Plan for Exhibit A
J-2	Government Furnished Property
J-3	Installation Property and Services and On-Site Provisions for NASA Centers
J-4	Data Requirements Descriptions
J-5	Deliverable Items List (NOTE 1)
J-6	Applicable Documents List
J-7	Management Information System Description
J-8	ISS Individual Small Business Subcontracting Plan
J-9	Provisional Items Order (PIO) (NOTE 1)
J-10	Requisition Number/Accounting and Appropriation Data (Deleted in Mod 992)
J-11	Common Hardware
J-12	International Partners – Provided Property
J-13	Hazardous Material (Material Code Descriptions)
J-14	Space Station Freedom Equipment List
J-15	List of Installation-Provided Government Property Subject to Equitable Adjustments in Fee (NOTE 3)
J-16	Changes Applicable to the Contract Under Provision H.21 (NOTE 3)
J-17	Changes Applicable to the Contract Under Contract Provision H.32 (NOTE 3)
J-18	Form to be Utilized for Task Orders under Paragraph 1.10 of the Statement of Work (Section C) of this Contract (NOTE 3)
J-19	Settlement Agreement

**PART III - LIST OF DOCUMENTS, EXHIBITS
AND OTHER ATTACHMENTS**

SECTION J - LIST OF ATTACHMENTS

<u>ATTACHMENT</u>	<u>TITLE</u>
J-20	Contract Labor Confirmation of Negotiations
J-21	US Rack, Truss, and UOP Level Payloads for ISS
J-22	Information Technology Equipment Services
J-23	Extravehicular Activity Hardware
J-24	Loaned Equipment List
J-25	Boeing ISS Safety and Health Plan
J-26	Management of Post DD250 Property
J-27	Deliverable Items List (NOTE 2)
J-28	Reserved
J-29	Digital Pre-Assembly hardware Measurement List
J-30	Organizational Conflicts of Interest (OCI) Avoidance Plan
J-31	Boeing-Amphenol Flood Loss Disposition Agreement

NOTE 1: Inactive for requirements added after 31 December 2003.

NOTE 2: Active for requirements added after 31 December 2003 or J-5/J-9 contract end items to be
to be delivered on or after 01 January 2004.

NOTE 3: Inactive after 31 December 2003.

ATTACHMENT J-1

**AWARD FEE PLAN
FOR EXHIBIT A
Updated June 30, 2004**

Table of Contents

I.	Introduction	3
II.	Organizational Structure	4
III.	Evaluation Procedures	5
IV.	Evaluation Factors and Weightings for Exhibit A On-Ground Performance	9
V.	Evaluation Factors and Weightings for Exhibit D	10
VI.	On-Orbit Performance	10
VII.	Evaluation Periods and Award Fee Calculation	10
	Table V.B.1 On-Ground Award Fee	11
	Table V.B.2 FY 2000 Forward Technical Performance Award Fee	12
	Table V.B.3 FY 2000 Forward Cost Performance Award Fee	12
	Table V.B.4 Base Fee	13
	Table V.B.5 Exhibit D – LOE	13
	Table V.E On-Orbit Award Fee	15
VIII.	Evaluation Scale	15
	Table VI.B Exhibit A On-Ground Dollars Scoring	16
IX.	Disputes	16
	Addendum 1-- On-Orbit Award Fee Plan	17
	Addendum 2--On-Ground Award Fee Plan (Starting January 1, 2004 to September 30, 2006)	31
	Table V.B.6 CY 2004 Forward Performance Award Fee	36

Attachment J-1 Award Fee Plan

I. Introduction

This introduction is for general information; to the extent that it is incomplete or inconsistent with respect to the text of this plan, the latter shall control.

The award fee arrangement outlined in this plan has been established to motivate the Contractor to strive for excellence in managerial, technical, schedule, cost and subcontracting performance. Through this plan, the Contractor can earn award fee from a minimum as set forth in the base fee to the maximum amounts stated in clause B.1 of this contract. Effective October 1, 1999 two new award fee pools and a base fee pool are created for Exhibit A contract changes definitized or authorized after October 1, 1999. The pools are for technical and cost performance and base fee for the period FY 2000 forward entitled FY2000 Forward Technical Performance Pool, FY2000 Forward Cost Performance Pool, and Base Fee, respectively.

This plan calls for a periodic evaluation of Contractor Exhibit A "on-ground" performance in accordance with the factors called out in Section IV beginning in Fiscal Year 1996 and concluding with the final evaluation utilizing the dollars in Table V.B.1 in December 2002, and a final evaluation utilizing the dollars in Tables V.B.2 and V.B.3 in December 2003. The Exhibit D effort will be evaluated periodically in accordance with the factors called out in Section IV beginning in Fiscal Year 1999 and ending in FY 2001. The FY 2000 Forward Technical and Cost Performance Pools will be evaluated periodically beginning in fiscal Year 2000. The FY2000 Forward Technical Performance Pool, FY2000 Forward Cost Performance Pool, and Base Fee Pool are complete with Period 15, as of December 31, 2003. In addition, separate periodic evaluations of "on-orbit" performance will begin in Fiscal-Year 2000 and will conclude as identified in Section IV of Addendum 1 to this plan.

Exhibit A and Exhibit D performance evaluations will be performed by a single Performance Evaluation Board (PEB), which will recommend scores to the Fee Determination Official (FDO). Each periodic decision of the FDO will result in fee dollars earned which are equivalent to the available fee dollars in each pool multiplied by the final score as a percentage, with the exception of Base Fee, which is addressed in paragraph III.G below.

"On-orbit" evaluations will be performed by a "super board" independent from the PEB. This board will recommend a score to the Performance Incentive Determination Official (PIDO). Each periodic PIDO determination will be assessed against a percentage of earned Exhibit A "on-ground" performance dollars which are placed at risk. Any dollars retained during each on-orbit period become final and are no longer subject to be taken back. Fee earned for the FY2000 Forward Cost and Technical Performance pools, Base Fee, and for Exhibit D effort is not subject to any "take-back" provisions as set forth in Tables V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6.

Any changes to this award fee plan will be made via a bilateral contract modification, except for Exhibit A on-ground areas of emphasis and weightings, which are established unilaterally by the Government.

A hypothetical example of how this plan will operate over the lifetime of the contract is shown in Exhibit A of this Award Fee Plan.

Effective January 1, 2004 a new award fee pool (Table V.B.6, CY 2004 Forward Performance Award Fee) was created for the extension period of the contract, which began January 1, 2004. CY 2004 Forward Performance Award Fee is detailed in Addendum 2 of this plan.

II. Organizational Structure

A. Performance Evaluation Board

The PEB will evaluate the Contractor's performance as related to the factors listed in Section IV. At the end of each six-month evaluation period (the schedule for the six-month evaluation periods is identified in Tables V.B.1, V.B.2, V.B.3, V.B.4, and V.B.5) the PEB will prepare a written report of its evaluation which shall include recommendations as to the adjective rating and numerical score to be assigned to the Contractor's performance during that evaluation period for Exhibit A and Exhibit D.

B. Performance Monitors

1. NASA performance monitors shall monitor, evaluate and assess Contractor's performance in assigned areas and discuss the evaluation results with contractor counterparts as appropriate. Additionally, the performance monitors shall use, at their discretion, evaluations and assessments from NASA officials in preparing reports on assigned areas. The performance monitor will periodically prepare reports for the PEB.

2. The PEB Chair may change monitor assignments at any time without advance notice to the Contractor.

C. Fee Determination Official

1. All Exhibit A on-ground and Exhibit D performance recommendations made by the PEB will be considered by the Fee Determination Official (FDO). The Deputy Associate Administrator for the International Space Station Program will serve as the FDO. The FDO, after considering available pertinent information and recommendations, shall make a determination in accordance with the provisions of this plan.

2. The FDO shall appoint the PEB Chair and Members.

D. Super Board

An evaluation "super board," separate from the PEB described in paragraph II.A above, referred to in the fourth paragraph of the Introduction, shall be appointed for the purpose of evaluating on-orbit performance as related to evaluation milestones. It is intended that the super board provide an independent assessment of the Contractor's on-orbit performance. To this end, the PIDO shall seek to include non-governmental members when appointing the super board (e.g. academia, Vest committee members). The Performance Incentive Determining Official (PIDO) is the Deputy Associate Administrator for the International Space Station Program. The super board may be supported in its collection of performance data for evaluation purposes by NASA performance monitors or other individuals at the discretion of the PIDO.

E. Performance Incentive Determination Official (PIDO)

1. All on-orbit performance recommendations made by the super board will be considered by the PIDO. The PIDO, after considering available pertinent information and recommendations, shall make a determination in accordance with the provisions of this plan.

2. The PIDO shall appoint the super board Chair and Members. The Contractor will be notified of the appointment and changes to the super board Chair and Membership.

III. Evaluation Procedures

A. Interim Exhibit A On-Ground, FY 2000 Forward Technical and Cost Performance Pools, and Exhibit D Performance Evaluations

All Exhibit A on-ground (except for the FGB) and FY 2000 Forward Cost Performance Pool evaluations will be interim in nature. All FY 2000 Forward Technical Performance Pool evaluations and Base Fee (interim if overall score is 60 or below as set forth in VIII.A) are final in nature in that they are not subject to on-orbit take back provisions. However, unearned dollars from these pools, will be available for final evaluation upward only. All Exhibit D performance evaluations will be final in nature. A determination of the dollars earned for each evaluation period will be made by the FDO within 45 days after the end of the period. Procedures to be followed in monitoring, assessing, and evaluating Contractor performance

1. No later than 45 calendar days prior to the start of each evaluation period, the Contractor may submit to the Contracting Officer recommended areas of emphasis and weightings for the ensuing evaluation period that are within the general factors listed in Section IV of this plan. Consideration will be given to the Contractor's recommendations; however, it is the Government's responsibility to establish the specific areas of emphasis for each evaluation period.

2. No later than 30 days prior to the start of each new six-month evaluation period, the Contractor will be notified by the Contracting Officer of the selected areas of emphasis and weightings for that period. Emphasis will be directed at particular areas under the contract which appear to the Government to be deserving of special attention and will be used in judging the Contractor's performance. These areas of emphasis will not necessarily cover the entire spectrum of performance that will be evaluated in determining award fee dollars earned. Other pertinent factors included under the contract and general factors bearing upon overall performance will be considered as the facts and circumstances of each period may require.

3. The Contractor shall be apprised of a general assessment of his performance at the mid-point of the period, and at such other times as may be deemed appropriate. It shall be the purpose of these meetings to discuss any specific areas where the Contractor has excelled, and where future Contractor emphasis may be necessary.

4. Promptly after the end of each six-month evaluation period, the PEB shall meet to consider all the performance information it has obtained. At the meeting, the PEB will summarize its preliminary findings and recommendations in the Performance Evaluation Board Report (PEBR).

5. The Contractor may furnish a separate self-evaluation report for Exhibit A and Exhibit D within 10 calendar days after the expiration of each evaluation period. These self-evaluation reports shall not exceed 20 pages in length each. The PEB will not submit its recommendation to the FDO until (1) the Contractor's self-evaluation report has been received and considered, or (2) the Contractor has provided written notification that a self-evaluation report will not be submitted, or (3) the 10-day period provided for submission of the report has expired.

6. The PEB Chair will prepare the PEBR for the period and present the findings and recommendations to the FDO. The reports will include an adjective rating and a recommended performance score with supporting documentation. The Contractor will be notified of the PEB evaluation and recommended ratings and scores, and will be provided copies of the PEBR. The Contractor may provide additional information for consideration by the FDO by notifying the PEB Chair of its desire to do so. This is an opportunity for the Contractor to provide any information which the Contractor believes is relevant to its performance and which may affect the FDO's determination. Any additional information should be provided to the PEB Chair within five (5) calendar days of Contractor notification of the PEB recommended rating and score. This additional Contractor information will be provided to the FDO by the PEB Chair.

7. The FDO will consider the recommendations of the PEB, the PEBR, information provided by the Contractor, if any, and any other pertinent information in determining the Exhibit A and Exhibit D performance scores. The FDO's determination of the scores will be stated in a written Award Fee Determination.

8. The Award Fee Determination will be provided to the Contractor by the Contracting Officer. The Contractor may, after notification of the FDO's determination, request, through the Contracting Officer, a briefing by the FDO. This briefing should be conducted no later than 45 days following the conclusion of the award fee period. Award fee determinations made by the FDO may be appealed by the Contractor to the NASA Associate Administrator of Space Flight.

B. Final Exhibit A Performance Evaluation

After the final on-ground evaluation specified in Table V.B.1, the Contractor's performance for the Exhibit A on-ground effort (except for the FGB), will be evaluated to determine whether the Contractor's performance warrants the award of any remaining unearned fee dollars in Table V.B.1, in addition to the total amount previously earned as a result of the periodic evaluations. After the final on-ground evaluation specified in Table V.B.2, the Contractor's performance on the remaining Exhibit A on-ground effort will be evaluated to determine whether the Contractor's performance warrants the award of any remaining unearned fee dollars in Table V.B.2, in addition to the total amount previously earned as a result of periodic evaluations. These final evaluations will not result in the reduction in the amount of award fee previously earned. The process used to determine the final dollars earned for Exhibit A on-ground performance and the FY 2000 Forward Technical Performance and unearned Base Fee will be the same as that cited in paragraph A. above.

The Contractor's performance for FGB effort will be evaluated to coincide with the final acceptance of the FGB. The award fee determination for this effort will be final and not subject to potential "take back" from subsequent On-Orbit performance evaluations as provided for in this attachment, J-1 Award Fee Plan. Additionally, any fee not earned by the Contractor shall not be rolled forward to the final on-ground evaluation described above. Available dollars are set forth in Table V.B.1.

C. On-Orbit Performance

1. The on-orbit performance provisions of this plan have been established to recognize on-orbit performance of Contractor products. With discrete amounts of fee allocated to specific evaluation milestones, the Contractor will have the opportunity to retain 100% of the award fee dollars earned under the Exhibit A on-ground evaluation procedures (Table V.B.1). Earnings from Exhibit D, Exhibit A, FY 2000 Forward Technical and Cost pools, CY2004 Forward Performance Award Fee, and Base fee are excluded from the on-orbit performance evaluation take-back provisions. Nine evaluation milestones are established in the Addendum 1, On-Orbit Award Fee Plan, attached."

2. Areas of emphasis are established as stated in the Addendum 1, On-Orbit Award Fee Plan. These areas of emphasis do not necessarily cover the entire spectrum of milestone performance that will be evaluated in determining on-orbit performance fee retained. Other pertinent factors included under the contract, and general factors bearing upon overall milestone performance will be considered as the facts and circumstances may require.

3. In the event that a mutual agreement on areas of emphasis and milestone pool weightings cannot be reached, the Contracting Officer may resolve areas of disagreement by unilateral determination.

4. The maximum potential fee retained through on-orbit performance shall be equal to the total earned Exhibit A on-ground performance dollars in Table V.B.1, which excludes Exhibit D earnings, FY 2000 Forward Technical and Cost Performance, and Base Fee dollars as set forth in Tables V.B.2, V.B.3, V.B.4, and V.B.5. Each on-orbit performance incentive period evaluation shall be considered final. Award fee retained for the period will not be subject to "take back."

5. Promptly after the end of each on-orbit evaluation milestone, the super board shall meet to consider all the performance information it has obtained. The board will summarize its findings and recommendations in a Milestone Evaluation Report (MSER).

6. The Contractor may furnish a self-evaluation report within 10 calendar days of milestone completion. The board will not submit its recommendation to the PIDO until (1) the Contractor's self-evaluation report has been received and considered, or (2) the Contractor has provided written notification that a self-evaluation report will not be submitted, or (3) the 10-day period provided for submission of the report has expired.

7. The super board's Chair will prepare the MSER and present the findings and recommendations to the PIDO. The report will include an adjective rating and a recommended performance score with supporting documentation. The supporting documentation will reflect the rationale of the super board in arriving at their score. The Contractor will be notified of the board's performance evaluation and recommended rating and score. This notification will include the MSER with its supporting documentation. The Contractor may provide additional information for consideration by the PIDO by notifying the Chair of its desire to do so. This is an opportunity for the Contractor to provide any information which the Contractor believes is relevant to its performance and which may affect the PIDO's determination. Any additional information should be provided to the board Chair within five (5) calendar days of Contractor notification of the board's evaluation. This additional Contractor information will be provided to the PIDO by the super board Chair.

8. The PIDO will consider the recommendations of the super board, the information provided by the Contractor, if any, and any other pertinent information in determining the amount of performance incentive earned. The PIDO's determination will be stated in a written Performance Incentive Determination.

9. The Performance Incentive Determination will be provided to the Contractor by the Contracting Officer no later than 45 days after the end of the evaluation period. The Contractor may, after notification of the PIDO's determination, request, through the Contracting Officer, a briefing by the PIDO. This briefing should be conducted no later than 45 days following the conclusion of the milestone evaluation. PIDO determinations may be appealed by the Contractor to the NASA Administrator.

D. Provisional Payments

1. Provisional payments will be made to the Contractor on a monthly basis after receipt of the Contractor's first voucher, in accordance with contract provision G.1. The amount of award fee which may be provisionally billed each period is 80 percent of the maximum award fee available for that period (see tables V.B.1, V.B.2, V.B.3, V.B.4, and V.B.5). The amount of provisional fee which can be paid monthly in any evaluation period shall be prorated equally to the number of months in that period. The Contractor will submit a separate voucher for provisional fee payments and show Exhibit D fee separately.

2. All Exhibit A provisional award fee payments will be superseded by the Exhibit A performance evaluation and determinations at the conclusion of each performance period. All Exhibit D provisional award fee payments will be superseded by the performance evaluations and determinations at the conclusion of each performance period. The Government will then pay the Contractor, or the Contractor will refund to the Government, the difference between the final fee determination and the cumulative provisional fee payments. Any additional payment will be made via unilateral modification. The Contracting Officer will issue a unilateral modification to the contract that will recognize any provisional award fee payments. Payments will be made based upon the unilateral modification.

3. Provisional payments are discontinued during any period in which the Government determines that the total provisional payments made during that period will substantially exceed the amount which would be paid based upon the anticipated score for the period.

E. FY 2000 Forward Technical Performance Pool

For contract changes definitized after October 1, 1999 and before January 1, 2004, and contract changes authorized after October 1, 1999 and before January 1, 2004, the Contractor may earn award fee dollars for technical performance. The Contractor's Technical Performance will be evaluated during the periods as specified in Table V.B.2. Performance will be evaluated to determine whether the Contractor's performance warrants the award of dollars for accomplishment in Program Management and Technical Performance, including Schedule, Quality, and Safety. The final evaluation will not result in the reduction in amount of award fee previously earned. However, any unearned award fee during the stated evaluation periods will be carried forward and made available to the Contractor for a final "look-back" award fee evaluation in addition to the Final Exhibit A On-Ground performance evaluation as stated in paragraph III.B above.

F. FY 2000 Forward Cost Performance Pool

For contract changes definitized after October 1, 1999 and before January 1, 2004, and contract changes authorized after October 1, 1999 and before January 1, 2004, the Contractor may earn award fee dollars for cost performance. The Contractor's Cost Performance will be evaluated during periods as specified in Table V.B.3. The cost evaluation will focus only on the Contractor's estimate to complete the contract effective October 1, 1999 through December 31, 2003 for Exhibit A effort. The cost evaluation will take into consideration the contractor's ability to control, adjust, and accurately project contract costs.

G. Base Fee

The available base fee is set forth in Table V.B.4, entitled "Base Fee". The Contractor earns the entire available amount in each period if the overall award fee score is 61 or above. In the event the contractor fails to obtain an overall score of at least 61 in the applicable award fee period, the base fee for the instant period shall be available as part of the final on-ground look back as set forth in paragraph III.B above.

IV. Evaluation Factors and Weightings for Exhibit A On-Ground Performance

A. Weightings for Exhibit A Evaluation Factors

Weightings for each Exhibit A evaluation factor shall be established as set forth in paragraph III.A; however, the factors for the FGB procurement shall not be weighted so as to exceed the proportion of FGB award fee negotiated (b) (4) to the total available award fee for the evaluation period. Weightings for SDB performance shall never exceed 15 percent.

B. Exhibit A Performance

1. Program Management

This factor measures Contractor performance in the overall management of the program, including support to International Partners. Evaluation will be made of Contractor performance in providing a balanced, coordinated and motivated approach to management of technical and programmatic matters. Such evaluation will include an assessment of the Contractor performance in the development, analysis, and utilization of management data, total available resources, and program controls to effectively manage the project. This will involve assessment of contractor activities in planning and control, Government Furnished Property management, contract and subcontract management. Implementation of adjustments to the project baseline in an efficient manner will be measured and evaluated.

2. Technical Performance, including Schedule, Quality, and Safety

This factor will measure:

- a) The effectiveness and quality of the overall design, development, manufacturing, assembly, and test and checkout activities of the contract, including the overall program technical planning, integration, technical resource allocation, and accomplishment of contract requirements.
- a) Safety and mission assurance (S&MA) performance, taking into consideration quality control, safety, reliability, software product assurance, and maintainability, and the effectiveness with which the Contractor plans and assures that these are considered in engineering and design activities.
- c) Compliance to program schedules, particularly hardware and software delivery schedules and the response to schedule problems, including problems associated with International Partner products and Government Furnished Product.

3. SDB Performance

This factor will measure the efforts expended by the contractor in achieving the NASA/Contractor team goal of 8 percent SDB participation for total contract effort. The Contractor commits to expend its best efforts on this contract to achieve the NASA/Contractor team goal of 8 percent SDB participation for the total contract effort, including Exhibit D, through the period ending December 31, 2003. The contractor's participation in other types of supplier diversity efforts will also be taken into account when determining SDB performance (example Mentor Protégé' Program).

V. Evaluation Factors and Weightings for Exhibit D

A. The following factors and weightings will be used for Exhibit D:

EVALUATION CRITERIA	WEIGHT PERCENTAGE
I. TECHNICAL PERFORMANCE	40
a. Technical Performance	
-- Quality of Work	
-- Program Management	
-- Timeliness	
b. Efficiency of Performance of Technical Work	
-- Task Efficiency	
-- Productivity/Quantity of Work	
II. MANAGEMENT	20
a. Contract Administration	
b. Program/Project Control	
III. SDB PERFORMANCE	15
IV. COST PERFORMANCE	25

VI. On-Orbit Performance

On-Orbit performance milestone evaluations shall be conducted in accordance with the On-Orbit Award Fee Plan, Addendum 1 to this Plan. This plan is not applicable to Exhibit D.

VII. Evaluation Periods and Award Fee Calculation

A. Maximum Award Fee

The maximum available award fee for this contract is identified in contract clause B.1.

B. Evaluation Periods and Dollars Available

1. The maximum number of award fee dollars available by performance period is provided in Table V.B.1 for DDT&E as of Modification 1030:

TABLE V.B.1.
On-Ground Award Fee

<u>PERIOD NUMBER</u>	<u>START DATE</u>	<u>END DATE</u>	<u>MAXIMUM AVAILABLE MOD 1024</u>	<u>CHANGE</u>	<u>MAXIMUM AVAILABLE MOD 1030</u>	<u>DOLLARS EARNED</u>
1	4/1/96	9/30/96	(b)		(4)	
2	10/1/96	3/31/97				
3	4/1/97	9/30/97				
4	10/1/97	3/31/98				
5	4/1/98	9/30/98				
6	10/1/98	3/31/99				
7	4/1/99	9/30/99				
8	10/1/99	3/31/00				
9	4/1/00	9/30/00				
10	10/1/00	3/31/01				
11	4/1/01	9/30/01				
12	10/1/01	3/31/02				
13	4/1/02	9/30/02				
Totals						
Final	4/1/96	9/30/02				
FGB						
Total Dollars						
Earned						

*Unearned award fee through Period 13 available for final lookback. Will be updated after end of each period. In accordance with Section III.B of Attachment J-1, "The Award Fee Plan," FGB unearned shall not be rolled forward to the final on-ground evaluation.

2. The maximum number of award fee dollars available by performance period is provided in Table V.B.2 for FY 2000 Forward Technical Performance Award Fee:

TABLE V.B.2.
FY 2000 Forward Technical Performance Award Fee

<u>PERIOD NUMBER</u>	<u>START DATE</u>	<u>END DATE</u>	<u>MAXIMUM AVAILABLE MOD 1230</u>	<u>CHANGE</u>	<u>MAXIMUM AVAILABLE MOD 1303</u>	<u>DOLLARS EARNED</u>
8	10/1/99	3/31/00	(b)			(4)
9	4/1/00	9/30/00				
10	10/1/00	3/31/01				
11	4/1/01	9/30/01				
12	10/1/01	3/31/02				
13	4/1/02	9/30/02				
14	10/01/02	3/31/03				
15	4/1/03	12/31/03				
Totals						
Final Look-back Evaluation*		3/28/05				
Total Dollars Earned						

All dollars unearned will be subject to a final assessment in conjunction with the final Exhibit A on-ground performance evaluation. The final look-back shall be subject to an upward adjustment only.

*During the Final Look-back Evaluation, the contractor received a score of 94%. As a result, the total dollars earned for FY 2000 Forward Technical Performance Award Fee was increased by (b) (4) from (b) (4) to (b) (4)

3. The maximum number of award fee dollars available by performance period is provided in Table V.B.3 for FY 2000 Forward Cost Performance Award Fee:

TABLE V.B.3.
FY 2000 Forward Cost Performance Award Fee


<u>PERIOD NUMBER</u>	<u>START DATE</u>	<u>END DATE</u>	<u>MAXIMUM AVAILABLE MOD 1227</u>	<u>CHANGE</u>	<u>MAXIMUM AVAILABLE MOD 1230</u>	<u>DOLLARS EARNED</u>
8	10/1/99	3/31/00	(b)			(4)
9	4/1/00	9/30/00				
10	10/1/00	3/31/01				
11	4/1/01	9/30/01				
12	10/1/01	3/31/02				
13	4/1/02	9/30/02				
14	10/1/02	3/31/03				
15	4/1/03	12/31/03				
Totals						
Final Look-back Evaluation*		3/28/05				
Total Dollars Earned						

All dollars unearned will be subject to a final assessment in conjunction with the final Exhibit A on-ground performance evaluation. The final look-back shall be subject to an upward or downward adjustment.

*During the Final Look-back evaluation, the contractor received a score of 86%. As a result, the total dollars earned for FY2000 Forward Cost Performance Award Fee was increased by (b) (4) from (b) (4) to (b) (4)

4. The base fee dollars available by performance period is provided in Table V.B.4 for Base Fee:

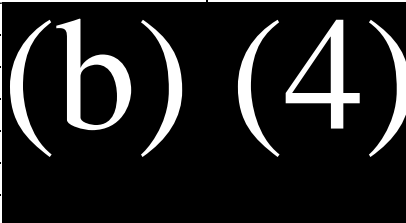
TABLE V.B.4.
Base Fee

PERIOD NUMBER	START DATE	END DATE	DOLLARS MOD 1227	CHANGE	DOLLARS MOD 1230	DOLLARS EARNED
8	10/1/99	3/31/00				
9	4/1/00	9/30/00				
10	10/1/00	3/31/01				
11	4/1/01	9/30/01				
12	10/1/01	3/31/02				
13	4/1/02	9/30/02				
14	10/1/02	3/31/03				
15	4/1/03	12/31/03				
Totals						
Total Dollars						
Earned						

All dollars unearned will be subject to a final assessment in conjunction with the final Exhibit A on-ground performance evaluation. The final look-back shall be subject to an upward adjustment only.

5. The maximum number of award fee dollars available by performance period is provided in Table V.B.5 for Exhibit D:

TABLE V.B.5
Exhibit D – LOE

Period Number	Start Date	End Date	Maximum \$ Available	Dollars Earned
1	10/1/98	3/31/99		
2	4/1/99	9/30/99		
3	10/1/99	3/31/00		
4	4/1/00	9/30/00		
5	10/1/00	3/31/01		
6	4/1/01	9/30/01		
Total				

The above estimated hours differ from target hours in Clause B.11, LOE due to the exclusion of the 212,978 actual hours worked in FY 98 under a fixed fee arrangement.

The maximum available award fee in the above table is based on the assumption that the hours worked will correspond with the hours in Table V.B.5. Should the hours worked represent a variation of +/- 20 percent from those in the table, then the table will be modified to re-phase the total hours and the available award fee to the appropriate award fee period. Neither the total hours nor the total maximum available award fee shall change as a result of re-phasing.

C. Dollars Earned

Upon evaluation of the Contractor's performance for each period, the graded score as a percentage will be applied to the dollars available per tables V.B.1, V.B.2, V.B.3, and V.B.5 to determine the dollars earned.

For example:

Period 1 = \$28.40M available dollars with a score of 85% assessed by the FDO:

$$\$28.40\text{M} \times 85\% = \$24.14\text{M earned.}$$

For base fee dollars per Table V.B.4, upon evaluation of the Contractor's performance for each period, the Contractor earns the total dollars available for each period if the award fee score is 61 or above.

D. Dollars Not Earned

1. All Exhibit A dollars in Tables V.B.1, V.B.2, V.B.3 and dollars in Table V.B.4 not earned will be subject to a final assessment at the final on-ground performance evaluation (reference paragraph III.B). This will be the numeric difference between the total dollars earned and the total award fee pool. Any unearned dollars may be available for the lookback. For the FY2000 Technical pool any unearned award fee shall be available for final upward lookback evaluation. In addition any unearned base fee not earned in accordance with Section III.G shall be earned if the average award fee score is greater than 60.

2. All Exhibit D dollars not earned will not be rolled forward and will not become available for future period assessments.

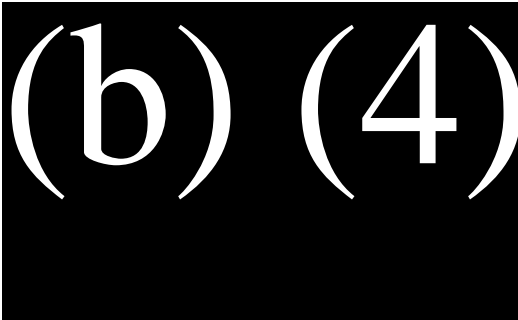
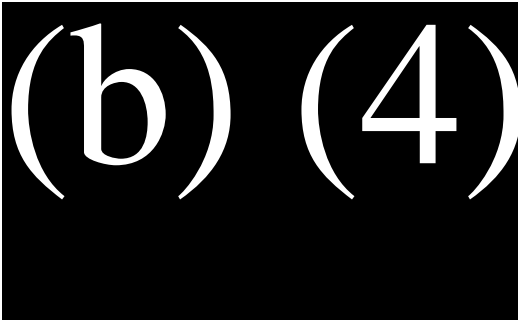
E. On-Orbit Performance

1. In each performance milestone evaluation, the PIDO will determine a numeric score based on assessment of on-orbit performance. That numeric score (expressed as a percentage) will be applied to the cumulative on-ground dollars earned (which excludes FY 2000 Forward Technical and Cost Performance pools, CY 2004 Forward Performance Award Fee, base fee, and Exhibit D) as of the end of the on-ground evaluation period immediately preceding the determination of such numeric score. The calculation of dollars shall always be expressed to the nearest one thousand.

For example: Milestone B provides 60% of the total award fee pool dollars available. Assume the cumulative Exhibit A on-ground performance dollars earned is \$97.045M (out of a total possible of \$120.0M) and the numeric score as determined by the PIDO is 80%.

$$\begin{aligned} \$97.045\text{M} \times 60\% &= \$58,227\text{M available to be retained for this milestone.} \\ \$58,227\text{M} \times .80 \text{ (grade)} &= \$46.582\text{M retained.} \end{aligned}$$

TABLE V.E
On-Orbit Award Fee

Milestone	Milestone (Date)	\$ Available for Retention	\$ Retained
A	March 2000		
B	October 2001		
C	October 2002		
D	October 2003		
E	October 2004		
F	June 2005		
G	September 2005		
H	ISS Flight 13A		
Final	ISS Flight 15A		
Total Dollars Retained			

* (b) (4) was immediately retained of Milestone D's (b) (4) "\$ available for retention" via Mod 1227; leaving (b) (4) subject to Milestone D's on-orbit evaluation.

** (b) (4) was immediately retained via Mod 1315.

*** (b) (4) was retained per NASA letter BG-05-226 dated November 22, 2005.

F. Award Fee

1. Once the determination has been made of the dollars retained, the resulting amounts will be recorded in Table V.E above.

2. All on-orbit dollars not retained from milestones A through F along with all remaining earned Exhibit A on-ground dollars which have yet to be made available, will be subject to a final assessment.

3. Once the determination of final dollars has been made for the final milestone, any fee to be refunded to the Government will be calculated by subtracting the total dollars retained on-orbit as stated in Table V.E from the total dollars earned on-ground as stated in Table V.B.1.

For example: \$147.071M - \$141.633M = \$5.438M

VIII. Evaluation Scale

A. Award Fee Curve

The award fee rating Table VI.B below includes adjectival ratings as well as a numerical scoring system of 0-100. For this plan, earned award fee dollars and dollars to be retained, as a result of on-orbit performance, are calculated by applying the total numerical score to available dollars. For example, a numerical score of 85 yields 85 percent of available award fee dollars. Notwithstanding the preceding, the contractor will not earn Exhibit A on-ground performance dollars (or retain any earned dollars through the on-orbit evaluation process for Exhibit A on-ground), FY 2000 Forward Technical and Cost Performance, Base fee, or Exhibit D award fee dollars for any evaluation period when the interim score is "poor/unsatisfactory" (less than 61). Further, any Exhibit A on-ground, FY 2000 Forward Technical and Cost Performance, or Exhibit D performance factor receiving a grade of "poor/unsatisfactory" (less than 61) will be assigned zero dollars for the period. On-orbit performance factors (assembly, operation, and science) will be scored on a scale of 0-100% in accordance with the on-orbit scoring guidelines described in Tables V.B.A, V.B.B, and V.B.C of the On-Orbit Award Fee Plan, Addendum 1 to Attachment J-1.

- B. Exhibit A On-Ground Dollars Scoring for Technical and Project Management, FY 2000 Forward Technical and Cost Performance Pools, and Exhibit D Dollars Scoring for Technical, Program Management, and Cost Performance:

TABLE VI.B
Exhibit A On-Ground Dollars Scoring

Adjective Rating	Range of Points	Description
Excellent	(100 - 91)	Of exceptional merit; exemplary performance in a timely, efficient manner; very minor (if any) deficiencies with no adverse effect on overall performance.
Very Good	(90 – 81)	Very effective performance, fully responsive to contract; contract requirements accomplished in a timely, efficient manner for the most part; only minor deficiencies.
Good	(80 – 71)	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.
Satisfactory	(70 – 61)	Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance.
Poor/Unsat.	(0 – 60)	Overall performance does not meet minimum acceptable standards; remedial action required in one or more areas; numerous deficiencies which adversely affect overall performance.

C. On-Orbit Performance Scoring

On-orbit scoring guidelines are contained in the On-Orbit Award Fee Plan Addendum 1, Tables V.B.A - V.B.C.

IX. Disputes

Award fee determinations made by the Government are subject to the Disputes clause.

Addendum 1

**On-Orbit Award Fee Plan
Updated October 2003**

Table of Contents

I.	Introduction	20
II.	Approach/Objectives	20
III.	Evaluation Procedures	20
IV.	Evaluation Milestones, Factors, and Weightings	21
V.	Evaluation Scale	22
VI.	Scoring Methodology and Fee Calculation	23
VII.	Contingency Provisions	24
VIII.	Changes	24
IX.	Precedence	24
X.	Reserved	24
XI	Performance During Sustaining Engineering	24

Exhibits -

Exhibit 1 -- Areas of Emphasis, Performance Evaluation - Period A

Exhibit 2 -- Areas of Emphasis, Performance Evaluation - Period B through Period C

Exhibit 3 -- Areas of Emphasis, Performance Evaluation - Period D through Final Evaluation

I. Introduction

A. The on-orbit incentive outlined in this plan has been established to motivate the Contractor to strive for excellence in all aspects of performance leading to successful on-orbit operations of the space station. This plan is intended to supplement and amplify the award fee provisions as stipulated in Attachment J-1, regarding on-orbit performance. In the event of a conflict, the provisions of the Attachment J-1, Award Fee Plan shall prevail.

B. This plan provides the identification of, the number of, the timing of, and the weighting of the evaluation milestones. It further defines the "Areas of Emphasis" that are associated with each of the evaluation periods.

II. Approach/Objectives

Achieving satisfactory on-orbit performance is absolutely essential. The approach used in this plan is to provide a simple and easy to understand set of Areas of Emphasis, which define the critical performance parameters at selected milestones, as well as the corresponding criteria by which the contractor's performance will be scored. The objective is to promote quality by clearly identifying the primary Program goals in a manner which may be easily understood by the contractor personnel charged with doing a quality job.

III. Evaluation Procedures

A. The methodology for on-orbit performance evaluation is per Attachment J-1, Paragraph III.C. Paragraph IV.B, below, further describes three areas of emphasis against which on-orbit performance will be evaluated. Within each of the three areas of emphasis, critical parameters and specific criteria have been identified to serve as the focus of attention and the basis for evaluating performance. The Exhibits provide the detailed listing of areas of emphasis, the relative importance of these three areas of emphasis, as well as the corresponding on-orbit performance criteria for each of the evaluation periods.

B. Award fee performance assessments of station systems and components are against planned station operation for each individual evaluation period. Station level specification requirements are not fully imposed until Assembly Complete.

C. The NASA evaluation process will be a qualitative assessment of how well the Contractor performed to the areas of emphasis, critical parameters and specific criteria for the period being evaluated. If the systems and components are found to be performing outside of specified requirements or planned operational capability, there is valid cause for adjusting the Contractor's score. Conversely, earned on-ground award fee shall not be subject to reduction in the on-orbit process if specified requirements or planned operational capabilities are met.

IV. Evaluation Milestones, Factors, and Weighting

A. Evaluation Milestones: (Reference Attachment J-1, paragraph III.C.1)

There will be nine evaluation milestones, including the Final evaluation, as delineated herein. Milestones are defined below:

<u>MILESTONE</u>	<u>DATE</u>
Milestone A (2R)	Mar 2000
Milestone B	October 31, 2001
Milestone C	October 31, 2002
Milestone D	October 31, 2003
Milestone E	October 31, 2004
Milestone F	June of 2005
Milestone G	September 30, 2005
Milestone H	ISS Flight 13A
Final Evaluation	ISS Flight 15A

Milestone completion for Milestone A is defined as “the docking event.” Milestone completion for Milestones B through G are defined by the date. Milestone completion for Milestones H and Final are defined by flight.

B. Evaluation Factors: (Reference Attachment J-1, paragraph IV.C)

The areas of emphasis that will form the basis for the critical parameters against which on-orbit performance will be judged are:

- Assembly configuration completed as planned, within mission limitations (Table V.B.A)
- Station systems and components operating according to design specification and according to planned stage capabilities (Table V.B.B)
- Science capabilities and timelines supported as specified/planned (Table V.B.C)

C. Evaluation Weighting: (Reference Attachment J-1, paragraph V. E)

For the nine milestones, the on-ground award fee dollars earned that are subject to on-orbit performance evaluation are:

Milestone A	(b) (4)
Milestone B	
Milestone C	
Milestone D	
Milestone E	
Milestone F	
Milestone G	
Milestone H	
Final	

Final On-Orbit Evaluation -- all remaining on-ground award fee dollars earned as set forth in Table V. B.1 of Attachment J-1, but not previously subjected to on-orbit performance evaluation, plus all remaining on-orbit performance fee dollars that were not retained, plus (b) (4)

V. Evaluation Scale

A. The award fee curve for on-orbit performance evaluations is specified in the Award Fee Plan, Section VI. Evaluation Scale, paragraph A. Award Fee Curve.

B. Scoring guidelines for each of the areas of emphasis are:

Table V.B.A

Assembly configuration completed as planned	Score
Stage/element assembly completed as planned, with only minor difficulties	91-100%
Stage/element assembly completed as planned, with some difficulties; unplanned crew intervention	71 - 90%
Stage/element assembly completed with significant difficulty; unplanned re-supply required	51 - 70%
Assembly operations severely impaired; next assembly sequence not precluded	1 - 50%
Stage/element lost, non-recoverable, or must be returned; next assembly sequence precluded	0%

Table V.B.B

Station systems operating to plan	Score
Full functionality, with only minor deficiencies; meets specification/ supports expectations	91-100%
Functionality limited, with some deficiencies; supports basic expectations	71 - 90%
Functionality limited; significant work-arounds required; supports minimal expectations	51 - 70%
Functionality severely limited; re-design required and/or highly constrained operations result	1 - 50%
Total system failure; i.e., it is unable to perform to any degree	0%

Table V.B.C

Science capabilities and timelines supported	Score
All significant science objectives supported successfully by vehicle performance	91 - 100%
Science objectives moderately degraded due to vehicle performance	71 - 90%
Significant science objectives partially supported by vehicle performance	51 - 70%
Science objectives severely degraded due to vehicle performance	1 - 50%
Science objectives not supported to any degree, due to vehicle performance	0%

C. The Scoring guidelines for each of the areas of emphasis for Milestones G and H and the Final Milestone are depicted in Table V.C below:

Table V.C

	Score
No failure that causes: 1) Return to ground of an element or ISS crew from orbit 2) Major loss (>50%) of planned science for six (6) months or more 3) Delay in the planned assembly of the station for six (6) months or more 4) Crew injury precluding continuation of planned ISS operations or loss of life 5) Loss of vehicle or element	100%
Failure that can be resolved via on-orbit repair but still causes: 1) Major lost (>50%) of planned science for 6 months or more 2) Delay in the planned assembly of the station for 6 months or more	81 - 99%
Failure that can be resolved via on-orbit repair but still causes: 1) Element to be returned to ground 2) ISS crew to be returned to ground until repair can be accomplished	71 - 80%
Failure resulting in a permanent loss of some functionality that cannot be resolved without element to ground for redesign	61 – 70%
Failure resulting in crew injury precluding continuation of ISS operations, loss of an element, or the inability to continue planned assembly of the ISS	1 – 60%
Failure resulting in loss of life or loss of vehicle	0%

To this end the parties agree that the earned fee subject to take-back under Milestones G and H and the Final Milestone shall be scored in light of failures in vehicle performance directly caused by acts or omissions of Boeing, and which occurred while operating the vehicle within the contractually required capabilities specified in SSP4100 System Specification for the International Space Station and the SSP41162 Segment Specification for the USOS. NASA and Boeing also agree that preventive maintenance and repair of failed ORU's is a normal and expected activity on-board ISS. Boeing shall not be penalized if extended disruptions in the flow of spares occur due to the grounding of a re-supply launch fleet even it this disruption ultimately cause a major failure.

VI. Scoring Methodology and Fee Calculation

A. The score for each milestone is calculated by multiplying the weighting for each area of emphasis (assembly, operation, or science) by its individual score (ranging from 0 - 100%), then adding the 3 results. The result of adding the 3 results together is the total score for that milestone. The score is then applied to the Award Fee Curve in Attachment J-1, Section VI.A.

The following example depicts the scoring method:

An Assembly weighting of 40% multiplied by a score of 78% ----- $.40 \times .78 = .31$

An Operation weighting of 50% multiplied by a score of 87% ----- $.50 \times .87 = .43$

A Science weighting of 10% multiplied by a score of 60% ----- $.10 \times .60 = .06$

Total Score = .80*

*This score is then applied to the Award Fee Curve.

VII. Contingency Provisions

- A. Failures/problems that would have been discovered prior to flight through more extensive environmental testing or interface testing that was eliminated or excluded because of Program cost/schedule constraints will be mitigating factors when evaluating scores. The unavailability of adequate spares will also be considered a mitigating factor when evaluating any resulting failures/problems. The Contractor's evaluation score will not be reduced for problems caused by the Government, International Partners, acts-of-God, or for problems where the Contractor is not the source of the problem.
- B. Exceedences, anomalies, discrepancies or failures induced by external interfaces, e.g. crew, shuttle, ground systems, or external communications operating outside of specified requirements, interface limits or related operational constraints shall not be cause for reduced evaluation scores, except in the case where an out-of-specification operation was necessitated by a prior failure of a contractor provided item.
- C. Evaluation scores shall not be reduced as a result of the failure of Government or International Partner hardware/software/services to perform as specified or intended. Hardware/software built and previously delivered by the Contractor under this contract shall be excluded from the definition of "Government hardware" for purposes of the Contractor's performance evaluation. Hardware/spares not built and delivered under this Prime contract shall be included in the definition of "Government hardware" for purposes of Contractor's performance. For spares that were qualified under the Prime contract but not purchased under the Prime contract, the Contractor will be responsible for deficiencies related to design, but not responsible for deficiencies related to materials or workmanship.
- D. If, prior to provisional DD250, during on-ground processing for launch, the Contractor has reason to believe that an item of hardware/software has failed or is not in a flight ready condition, then the Contractor shall give immediate notice to NASA. If NASA elects to continue, and degraded performance results from the identified condition, NASA shall not reduce the Contractor's on-orbit evaluation score for the subject hardware/software item.
- E. Failures beyond the reliability and maintainability limits of the system shall not be cause for lowered evaluation scores.

VIII. Changes

Any changes to this plan will be made via bilateral contract modification

IX. Precedence

This plan is intended to supplement and amplify the award fee provisions as stipulated in Attachment J-1. In the event of a conflict, the provisions of the Award Fee Plan shall prevail.

X. Reserved

XI. Performance During Sustaining Engineering

In the event that NASA fails to contract for sustaining engineering (for the period of performance that is the concurrent period of performance for the delivery of the ISS assembly complete plus 12 months) from the Contractor (reference the SE definition, below,) the Contractor's award fee earned on-ground but not retained through on-orbit evaluation will not be subject to further evaluation or take back after the date that sustaining engineering is ended.

For purposes of this clause, sustaining engineering applies to Contractor-provided hardware and software items and to the system analysis to facilitate anomaly isolation and system performance assessments which includes non-contractor provided hardware and software. Sustaining engineering is defined as the engineering responsibility for flight hardware and software after delivery to the launch site. This is limited to launch processing support; analysis of vehicle performance; maintenance of system analytical models; and development of software modifications.

On-Orbit Award Fee Plan

Exhibits

Exhibit 1 Areas of Emphasis, Performance Evaluation - Period A

MILESTONE COMPLETION: Element 2R delivered on-orbit

ESTIMATED COMPLETION DATE: March 2000

PERIOD WEIGHTING: 15%

PROJECTED ASSEMBLY SEQUENCE THIS PERIOD:

<u>Flight</u>	<u>Delivered Elements</u>
1A/R	FGB
2A	Node 1
2A.1	Spacehab Double Cargo Module
1R	Service Module
2A.2	Spacehab Double Cargo Module; Strela Components
3A	Z1Truss, CMGs, Ku-band, S-band Equipment
2R	Soyuz

AREAS OF EMPHASIS: (Reference Attachment J-1, paragraph IV. C)

The relative importance of the 3 top level areas of emphasis for this period are:

- Assembly configuration completed as planned, within mission limitations 70%
- Station systems and components operating according to design specification and according to planned stage capabilities 30%
- Science capabilities and timelines supported as specified/planned 0%

CRITICAL PARAMETERS/ SPECIFIC CRITERIA:

The critical parameters and specific criteria to serve as the focus of attention and the basis for judging performance areas follows:

- 1) The elements to be assembled on-orbit are listed in the first column in the table below. Emphasis is placed on the ability for each successive arriving launch package to be successfully mated and integrated with the previous stage. Each stage on-orbit is ready to accept the next assembly with respect to physical and functional configuration.
- 2) The systems/subsystems/components planned to operate are listed in the second column. Emphasis is placed on the ability for each stage to be successfully activated, with its systems operating as planned for this stage of assembly. Each stage on-orbit will operate and survive until the next launch package or re-supply mission is successfully integrated.

Exhibit 1: Areas of Emphasis, Performance Evaluation - Period A (Continued)

- 3) The science capabilities planned to be supported are listed in the third column. Emphasis is placed on the ability to provide power, data handling, and overall environment necessary to conduct science. The Contractor will not be judged for the success/failure of the science itself.

<u>Elements:</u>	<u>Capabilities:</u>	<u>Science Capabilities:</u>
1A/R -- FGB	Interface between U.S. and Russian elements using PMA-1	None
2A -- Node 1, PMA-1 & PMA-2	Shuttle docking location using PMA-2.	
2A.1 -- Spacehab Double Cargo Module	Re-boost & attitude control (SM & FGB)	
1R -- Service Module	Power generation (SM & FGB)	
2A.2 -- Spacehab Double Cargo Module; Strela Components	Progress refueling/resupply	
3A -- Z1 Truss, CMGs, Ku-band, S-band Equip., PMA3, EVAS	Life support for crew of 3 (SM)	
2R -- Soyuz	Crew transportation & Lifeboat (Soyuz)	
	Russian Orlan EVA Capability	

Exhibit 2 Areas of Emphasis, Performance Evaluation - Period B through Period C

AREAS OF EMPHASIS: The areas of emphasis for Period B through Period C are set forth herein.

The relative importance of the 3 top level areas of emphasis for this period are:

- Assembly configuration completed as planned, within mission limitations 40%
- Station systems and components operating according to design specification and according to planned stage capabilities 50%
- Science capabilities and timelines supported as specified/planned 10%

CRITICAL PARAMETERS/ SPECIFIC CRITERIA:

The critical parameters and specific criteria to serve as the focus of attention and the basis for judging performance are as follows:

- 1) The elements to be assembled on-orbit are listed in the first column in the table below. Emphasis is placed on the ability for each successive arriving launch package to be successfully mated and integrated with the previous stage. Each stage on-orbit is ready to accept the next assembly with respect to physical and functional configuration.
- 2) The systems/subsystems/components planned to operate are listed in the second column. Emphasis is placed on the ability for each stage to be successfully activated, with its systems operating as planned for this stage of assembly. Each stage on-orbit will operate and survive until the next launch package or re-supply mission is successfully integrated.
- 3) The science capabilities planned to be supported are listed in the third column. Emphasis is placed on the ability to provide power, data handling, and overall environment necessary to conduct science. The Contractor will not be judged for the success/failure of the science itself.

Exhibit 3 Areas of Emphasis, Performance Evaluation - Period D through Final Evaluation Period

AREAS OF EMPHASIS: The areas of emphasis for Period D and the Final Evaluation period are set forth herein.

The relative importance of the 3 top-level areas of emphasis for this period are:

• Assembly configuration completed as planned, within mission limitations	25%	
• Station systems and components operating according to design specification and according to planned stage capabilities	50%	
• Science capabilities and timelines supported as specified/planned	25%	

CRITICAL PARAMETERS/ SPECIFIC CRITERIA:

The critical parameters and specific criteria to serve as the focus of attention and the basis for judging performance areas follows:

- 1) The elements to be assembled on-orbit are listed in the first column in the table below. Emphasis is placed on the ability for each successive arriving launch package to be successfully mated and integrated with the previous stage. Each stage on-orbit is ready to accept the next assembly with respect to physical and functional configuration.
- 2) The systems/subsystems/components planned to operate are listed in the second column. Emphasis is placed on the ability for each stage to be successfully activated, with its systems operating as planned for this stage of assembly. Each stage on-orbit will operate and survive until the next launch package or re-supply mission is successfully integrated.
- 3) The science capabilities planned to be supported are listed in the third column. Emphasis is placed on the ability to provide power, data handling, and overall environment necessary to conduct science. The Contractor will not be judged for the success/failure of the science itself.

Mission Assembly Elements		Performance Capabilities	Science Capabilities
2P	Progress-M1	SM Outfitting, Refueling and Resupply	None
4A	P6 Truss, PV Module S4 and P6 Truss Radiators, and S-Band Equipment	US power generation and S-band (low rate)	
5A	U.S. Laboratory and PDGF	Active thermal control, US life support, on-board command and control, high rate S-band, non-propulsive attitude control, and interior audio	
3P	Progress-M	Refueling and Resupply	
5A.1	Lab System Racks, RSR, and RSPs	Interior Video	Initial Payload utilization and Ku-band operational to support early science capability
6A	Lab Payload Racks, RSRs, RSPs, UHF and SSRMS	Robotic capability and exterior communication via UHF	
2S	Soyuz-TM	Crew Lifeboat Exchange	
4P	Progress-M1	Refueling and Resupply	
7A	Joint Airlock and High Pressure Gas Tanks	Airlock operational to provide US based EVA and HP Gas to augment Russian gas re supply system	N2 for Science Payloads
7A.1	RSRs, RSPs, ISPRs, and Early Ammonia Servicer	Ammonia Resupply for Thermal Control and Crew Rotation	
5P	Progress-M	Refueling and Resupply	
4R	Docking Compartment 1 (Strela 2)	Transfer equipment and supplies to ISS and install Cargo Cranes RS Airlock, 3 rd RS Docking Port	
3S	Soyuz-TM	Crew Lifeboat Exchange	
6P	Progress-M1	Refueling and Resupply	
UF 1	RSRs, RSP-2, ISPRs, and ORUs	Transfer equipment and supplies to ISS and Crew Rotation	
7P	Progress-M1	Refueling and Resupply	

Mission Assembly Elements		Performance Capabilities	Science Capabilities
8A	S0 Truss, MT, GPS, Lab and Node 3 Umbilicals, and Airlock Spur	US GN&C attitude and state determination	Automated Procedure Processing
4S	Soyuz-TM	Crew Lifeboat Exchange	
UF 2	RSRs, RSP-2, ISPRs, MBS, PDGF, and SMDP	Mobile Robotics, and transfer equipment and supplies to ISS and Crew Rotation	
9A	S1 Truss, CETA Cart A, Starboard Central Radiator Panels and Boom, and S-band Equipment	S-Band redundancy, exterior video, and non-robotic translation	
11A	P1 Truss, CETA Cart B, Port Central Radiator Panels and Boom, and UHF	Expanded UHF coverage and non-robotic translation	
5S	Soyuz-TMA	Crew Rotation	
ULF 1	ISPRs and ESP-2 with ORUs	Crew Rotation	
6S	Soyuz-TMA	Crew Lifeboat Exchange	
12A	P3 Truss and PV Module P4 with UCLAS and Battery Sets, Radiator and Port Inboard SA 4A and 2A	Install truss segments, and deploy Solar Arrays/PV Radiator	Unpressurized payload utilization sites
12A.1	Space Hab Single Cargo Module, P5 Truss, ESP-2 ORU, and PVRGF OSE	Additional power (alpha tracking), flexibility (MBSU), and thermal control	
13A	S3 Truss and PV Module S4 with PAS and Battery Sets, and Starboard Inboard SA 3A and 1A	Additional power	Unpressurized payload utilization sites and increased power resources available for utilization
7S	Soyuz-TMA	Crew Lifeboat Exchange	
13A.1	Space Hab Single Cargo Module, S5 Truss, and PVRGF OSE	Additional Power (P6 relocation)	
15A	S6 Truss with Battery Sets and PV Module S6 Truss Radiator and Starboard Outboard SA 1B and 2B	Additional power (S6 and P6 relocation)	Increased power resources available for utilization
10A	Node 2 (DDCU Racks and Zero-g Stowage Racks) and PDGF	Additional power distribution, berthing docking ports	
8S	Soyuz-TMA	Crew Lifeboat Exchange	
ULF2	MPLM, ORU on Cross Bay Carrier	Transfer equipment and supplies to ISS	
ATV 1	Automated Transfer Vehicle	Alternate Logistics Carrier, Refueling and Resupply	
1E	Columbus Module Core with Integrated System Racks and ISPRs, external payloads	Transfer equipment and supplies to ISS and install Columbus Module Core and external payloads	Increased utilization volume provided by COF pressurized module
9S	Soyuz-TMA	Crew Lifeboat Exchange	
UF-3	RSPs, RSR, ISPRs, ORU on Cross Bay Carrier	Transfer equipment and supplies to ISS	First active MPLM to support utilization
UF-4	SPDM, MT/CETA Starboard Rails, ORU	Transfer equipment and supplies, assembly SPDM and rails	
UF-5	RSRs, RSPs, ISPRs, MELFI, MPLM (Active), Cross Bay Carrier	Transfer equipment and supplies	
UF-4.1	S3 Attach Payload, Cross Bay Carrier	Transfer equipment and supplies	
UF-6	RSRs, RSPs, ISPRs, Cross Bay Carriers	Transfer equipment and supplies	
1J/A	JEM ELM-PS Module Core with System Racks, Stowage Rack and ISPRs	Transfer equipment and supplies to ISS, install ELM-PS and deploy Solar Array	
1J	JEM PM Core, System Racks and RMS	Additional Robotics capability	International utilization volume provided by JEM pressurized module
ULF3	RSRs, RSPs, ISPRs, Cross Bay Carrier	Transfer equipment and supplies	USF3

Addendum 2

On-ground Award Fee Plan

Starting January 1, 2004 to September 30, 2006

I. Introduction

This addendum to the Award Fee Plan has been added to clarify how the on-ground Award Fee Process will be structured and executed during the extension period of the contract, which began January 1, 2004. The intent of this addendum is to clarify the established process in the Award Fee Plan as it applies to the extension period. This addendum only applies to Table V.B.6 (Section V of this addendum) and therefore does not apply to on-orbit or any lookback or takeback evaluations that may occur during the extension period. Much of the language in this addendum has been directly “lifted out” of the Award Fee Plan to provide consistency and continuity with past historical award fee plan provisions for on-ground evaluations.

This addendum applies to all contract changes authorized or definitized after January 1, 2004. All the award fee periods, award fee available, and award fee earned applicable to this addendum are specified in Table V.B.6.

III. Organizational Structure

A. Performance Evaluation Board

The PEB will evaluate the Contractor’s performance as related to the factors listed in Section IV of this addendum. At the end of each evaluation period (the schedule for the evaluation periods is identified in Table V.B.6 of this addendum), the PEB will prepare a written report of its evaluation which shall include recommendations as to the adjective rating and numerical score to be assigned to the Contractor’s performance during that evaluation period for Exhibit A.

B. Performance Monitors

1. NASA performance monitors shall monitor, evaluate and assess the Contractor’s performance in assigned areas and discuss the evaluation results with contractor counterparts as appropriate. Additionally, the performance monitors shall use, at their discretion, evaluations and assessments from NASA officials in preparing reports on assigned areas. The performance monitor will periodically prepare reports for the PEB.

2. The PEB Chair may change monitor assignments at any time without advance notice to the Contractor.

C. Fee Determination Official

1. All performance recommendations made by the PEB will be considered by the Fee Determination Official (FDO). The Deputy Associate Administrator for the International Space Station Program will serve as the FDO. The FDO, after considering available pertinent information and recommendations, shall make a determination in accordance with the provisions of this plan.

2. The FDO shall appoint the PEB Chair and Members.

III. Evaluation Procedures

A. CY 2004 Forward Performance Award Fee

All evaluations are final in nature and are not subject to on-orbit take back or look-back provisions. A determination of the dollars earned for each evaluation period will be made by the FDO within 45 days after the end of the period. Procedures to be followed in monitoring, assessing, and evaluating Contractor performance are as follows:

1. No later than 45 calendar days prior to the start of each evaluation period, the Contractor may submit to the Contracting Officer recommended areas of emphasis and weightings for the ensuing evaluation period that are within the general factors listed in Section IV of this addendum. Consideration will be given to the Contractor's recommendations; however, it is the Government's responsibility to establish the specific areas of emphasis and weightings for each evaluation period.

2. No later than 30 days prior to the start of each new evaluation period, the Contractor will be notified by the Contracting Officer of the selected areas of emphasis for that period. Emphasis will be directed at particular areas under the contract which appear to the Government to be deserving of special attention and will be used in judging the Contractor's performance. These areas of emphasis will not necessarily cover the entire spectrum of performance that will be evaluated in determining award fee dollars earned. Other pertinent factors included under the contract and general factors bearing upon overall performance will be considered as the facts and circumstances of each period may require.

3. The Contractor shall be provided a general assessment of its performance at the mid-point of the period, and at such other times as may be deemed appropriate. It shall be the purpose of this communication to discuss any specific areas where the Contractor has excelled, current areas of concern, and where future Contractor emphasis may be necessary.

4. Promptly after the end of each evaluation period, the PEB shall meet to consider all the performance information it has obtained. At the meeting, the PEB will summarize its preliminary findings and recommendations in the Performance Evaluation Board Report (PEBR).

5. The Contractor may furnish a separate self-evaluation report within 10 calendar days after the expiration of each evaluation period. These self-evaluation reports shall not exceed 20 pages in length. The PEB will not submit its recommendation to the FDO until (1) the Contractor's self-evaluation report has been received and considered, or (2) the Contractor has provided written notification that a self-evaluation report will not be submitted, or (3) the 10-day period provided for submission of the report has expired.

6. The PEB Chair will prepare the PEBR for the period and present the findings and recommendations to the FDO. The reports will include an adjective rating and a recommended performance score with supporting documentation. The Contractor will be notified of the PEB evaluation and recommended ratings and scores, and will be provided a copy of the PEBR. The Contractor may provide additional information for consideration by the FDO by notifying the PEB Chair of its desire to do so. This is an opportunity for the Contractor to provide any information which the Contractor believes is relevant to its performance and which may affect the FDO's determination. Any additional information should be provided to the PEB Chair within five (5) calendar days of Contractor notification of the PEB recommended rating and score. This additional Contractor information will be provided to the FDO by the PEB Chair.

7. The FDO will consider the recommendations of the PEB, the PEBR, information provided by the Contractor, if any, and any other pertinent information in determining contractor's performance score for the period. The FDO's determination of the scores will be stated in a written Award Fee Determination.

8. The Award Fee Determination will be provided to the Contractor by the Contracting Officer. The Contractor may, after notification of the FDO's determination, request, through the Contracting Officer, a briefing by the FDO. This briefing should be conducted no later than 45 days following the conclusion of the award fee period. Award fee determinations made by the FDO may be appealed by the Contractor to the NASA Associate Administrator of Space Flight.

B. Provisional Payments

1. Provisional payments will be made to the Contractor on a monthly basis after receipt of the Contractor's first voucher, in accordance with contract provision G.2. The amount of award fee which may be provisionally billed each period is 80 percent of the maximum award fee available for that period (see Table V.B.6). The amount of provisional fee which can be paid monthly in any evaluation period shall be prorated equally to the number of months in that period. The Contractor will submit a separate voucher for provisional fee payments. Vouchers for any other type of fee billed (i.e. base, fixed, fee associated with lookback or on-orbit evaluations, etc.) shall be issued separately and provide backup information for each type of fee billed.

2. All provisional award fee payments will be superseded by the performance evaluation and determinations at the conclusion of each performance period. The Government will then pay the Contractor, or the Contractor will refund to the Government, the difference between the final fee determination and the cumulative provisional fee payments. Any additional payment will be made via unilateral modification. Upon receipt of the FDO's determination, the Contracting Officer will issue a unilateral modification to the contract to update the Dollars Earned column of Table V.B.6 and authorize unilateral payment of any additional fee earned for the period over and above the amount provisionally billed.

3. Provisional payments may be discontinued during any period in which the Contracting Officer determines that the total provisional payments made during that period may substantially exceed the amount which would be paid based upon the anticipated score for the period.

IV. Evaluation Factors and Weightings

A. Evaluation Factors

Below are the evaluation factors that are the basis of how contractor performance will be evaluated. The intent of the descriptions below are to convey the meaning of each evaluation factor. There may be cases where specific items of contractor performance may be evaluated that fall within the general factors listed below, but are not specifically identified in the descriptions given in this section.

1. Management Performance

This factor measures Contractor performance in the overall management of the contract, including support to International Partners. Evaluation will be made of Contractor performance in providing a balanced, coordinated and motivated approach to management of technical and programmatic matters. Such evaluation will include an assessment of the Contractor performance in the development, analysis, and utilization of management data, total available resources, and program controls to effectively manage the contract. This assessment will include the contractor's ability to implement and manage an effective Earned Value Management System (EVMS) that reports reliable, accurate, and timely data. Implementation of adjustments to the contract baseline in an efficient manner will also be included in the evaluation of management performance. The contractor will also be evaluated on their performance in the area of contract administration, which includes but is not limited to, Government Furnished Property, contract and subcontract management.

2. Technical Performance

This factor will measure:

- a) The effectiveness and quality of the overall design, development, manufacturing, assembly, and test and checkout activities on the contract, including the overall program technical planning, integration, technical resource allocation, and accomplishment of contract requirements.
- b) Safety and mission assurance (S&MA) performance, taking into consideration quality control, safety, reliability, software product assurance, and maintainability, and the effectiveness with which the Contractor plans and assures that these are considered in engineering and design activities.
- c) Compliance to program schedules, particularly hardware and software delivery schedules and the response to schedule problems, including problems associated with International Partner products and Government Furnished Product.

3. Performance to Socio-economic Subcontracting Goals

This factor will measure the efforts expended by the contractor in achieving the achieving the subcontracting goal percentages as set forth in Clause G.17, Socio-economic Subcontracting Goals. The contractor's participation in other types of supplier diversity efforts will also be taken into consideration when determining SDB performance (example: Mentor Protégé' Program).

4. Cost Performance

This factor measures contractor cost performance in support of executing the budget and performance measurement baselines. For WBS elements 1.0 (DDT&E), 3.0 and 6.0 (OPD), 7.0 (SPARES) and 8.0 (MODIFICATIONS), cost performance will be assessed by evaluating the cost expended on work completed during the period being evaluated. For WBS elements 2.0 and 5.0 (INTEGRATION AND OPERATIONS), cost performance will be evaluated using metric status and plan versus actual during the period being evaluated. Other factors and circumstances that are pertinent to contractor performance may be taken into account as they apply to cost performance.

B. Evaluation Factor Weightings

The following matrix establishes the evaluation factor weightings as they apply to Table V.B.6. The Contracting Officer may unilaterally change these weightings. The Contractor can submit recommended areas of emphasis and weightings to the Contracting Officer for the ensuing evaluation period (see Section III of this addendum).

EVALUATION FACTORS	WEIGHT
I. MANAGEMENT & TECHNICAL PERFORMANCE	50%
a. Management Performance	
- Technical and Program Management	
- Program Control and Contract Administration	
b. Technical Performance	
- Quality of Work	
- Productivity and Task Efficiency	
- Schedule	
II. SAFETY AND MISSION ASSURANCE	10%
III. PERFORMANCE TO SMALL BUSINESS GOALS (Clause G.17)	15%
IV. COST PERFORMANCE	25%

V. Evaluation Periods and Award Fee Calculation

A. CY 2004 Forward Performance Award Fee

The maximum number of award fee dollars available by performance period is provided below in Table V.B.6 for CY 2004 Forward Performance Award Fee:

TABLE V.B.6
CY2004 Forward Performance Award Fee

FY2004 Forward Performance Award						
PERIOD NUMBER	START DATE	END DATE	MAXIMUM AVAILABLE MOD 2066	THIS CHANGE	MAXIMUM AVAILABLE MOD 2081	DOLLARS EARNED
16	1/1/2004	6/30/04	(b) (4)			
17	7/1/2004	12/31/2004				
18	1/1/2005	6/30/05				
19	7/1/2005	12/31/2005				
20	1/1/2006	9/30/06				
21	10/1/2006	3/31/2007				
22	4/1/2007	9/30/2007				
23	10/1/2007	3/31/2008				
24	4/1/2008	9/30/2008				
25	10/1/2008	3/31/2009				
26	4/1/2009	9/30/2009				
27	10/1/2009	3/31/2010				
28	4/1/2010	9/30/2010				
29	10/1/2010	3/31/2011				
30	4/1/2011	9/30/2011				
31	10/1/2011	3/31/2012				
32	4/1/2012	9/30/2012				
33	10/1/2012	3/31/2013				
34	4/1/2013	9/30/2013				
35	10/1/2013	3/31/2014				
36	4/1/2014	9/30/2014				
37	10/1/2014	3/31/2015				
38	4/1/2015	9/30/2015				
Totals	-	-				
Total Dollars Earned						

Note: * (b) (4) credit to Fee Dollars Earned for SSCN10773 (MCA firmware upgrade).

B. Dollars Earned

Upon evaluation of the Contractor's performance for each period, the final award fee score assessed by the FDO will be applied to the dollars available in Table V.B.6 determine the dollars earned.

For example:

If \$28.40M was available during an Award Fee Period and a score of 85% was assessed by the FDO, the following calculation would occur to determine the dollars earned for the period:

$$\$28.40\text{M} \times 85\% = \$24.14\text{M earned.}$$

VI. Evaluation Scale

A. CY 2004 Forward Award Fee Scoring

The following scale will be used to develop award fee scores applicable to this addendum:

TABLE VI.B
CY 2004 Forward Award Fee On-Ground Dollars Scoring

Adjective Rating	Range of Points	Description
Excellent	(100 - 91)	Of exceptional merit; exemplary performance in a timely, efficient manner; very minor (if any) deficiencies with no adverse effect on overall performance.
Very Good	(90 – 81)	Very effective performance, fully responsive to contract; contract requirements accomplished in a timely, efficient manner for the most part; only minor deficiencies.
Good	(80 – 71)	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.
Satisfactory	(70 – 61)	Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance.
Poor/Unsat.	(0 – 60)	Overall performance does not meet minimum acceptable standards; remedial action required in one or more areas; numerous deficiencies which adversely affect overall performance.

B. Poor/Unsatisfactory Ratings

Notwithstanding the preceding, the contractor will not earn award fee dollars when the score is "poor/unsatisfactory" (less than 61).

VII. Disputes

Award fee determinations made by the Government are subject to the Disputes clause.

ATTACHMENT J - 2

SECTION

TITLE

Section I	U. S. source Government Furnished Equipment
Section I	U. S. source Government Furnished Equipment KHRUNICHEV List
Section II	Government Furnished Material
Section III	T. T. A . Government Furnished Data
Section IV	U. S. Source Government Furnished Data

**INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENTAL FURNISHED EQUIPMENT (GFE)
KHRUNICHEV (KhSC) LIST - REVISION 2, S/A 718**

CHANGE NUMBER	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	ON DOCK DATE	REMARKS
CCM 038	405001	EFGF FLIGHT UNIT	1	EA	FLT	KHSC		
CCM 038	405002	FGB COMPUTER (MDM) FLIGHT SOFTWARE	1	EA	EIM	NASA/ PRM		
CCM 038	405003	FGB SIMULATION SOFTWARE (MATE COMPATIBLE)	1	EA	EET	NASA/ PRM		
CCM 038	405004	FGB COMPUTER (MDM) FLIGHT SOFTWARE	1	EA	EIM	NASA/ PRM		
CCM 038	405005	FBG SIMULATION SOFTWARE (MATE COMPATIBLE)	1	EA	SIM	NASA/ PRM		
CCM 038	405006	FGB COMPUTER (MDM) FLIGHT SOFTWARE	1	EA	FLT	NASA/ PRM		
CCM 038	405007	FBG SIMULATION SOFTWARE (MATE COMPATIBLE)	1	EA	SIM	NASA/P RM		
CCM 038	405008	ANTENNAS (1GHz - 18 GHz)	1	EA	TSE	KHSC		
CCM 038	405009	ANTENNAS (50MHz - 1 GHz)	1	EA	TSE	KHSC		
CCM 038	405014	ASSORTED COAX AND OTHER TEST LEADS AND ACCESSORIES	1	KT	TSE	KHSC		
CCM 038	405015	POWER CONVERTERS (220/120V, 50/60Hz)	2	EA	TSE	KHSC		
CCM 038	405016	SIGNAL GENERATOR (100KHz-1.2GHz)	1	EA	TSE	KHSC		
CCM 038	405017	SIGNAL GENERATOR (2GHz-18GHz)	1	EA	TSE	KHSC		
CCM 038	405018	AMPLIFIERS (14KHz-200MHz)	1	EA	TSE	KHSC		
CCM 038	405019	AMPLIFIERS (500MHz-1GHz)	1	EA	TSE	KHSC		
CCM 038	405020	AMPLIFIERS (1GHz-8GHZ)	1	EA	TSE	KHSC		
CCM 038	405021	AMPLIFIERS (8.6GHz-18GHz)	1	EA	TSE	KHSC		
CCM 038	405025	POWER METER	3	EA	TSE	KHSC		
CCM 038	405026	POWER METER SENSORS (10MHz-4.6GHz)	3	EA	TSE	KHSC		
CCM 038	405028	DUAL DIRECTIONAL COUPLER (50MHz-1GHz)	1	EA	TSE	KHSC		

CCM 038	405029	DIRECTIONAL COUPLERS (1GHz-10GHz)	1	EA	TSE	KHSC	
CCM 038	405032	50 OHM TERMINATOR	1	EA	TSE	KHSC	
CCM 038	405033	DIGITIZING OSCILLOSCOPE	1	EA	TSE	KHSC	
CCM 038	405034	SPECTRUM ANALYZER (9KHz-22GHz)	1	EA	TSE	KHSC	
CCM 038	405035	RETRO REFLECTOR	1	EA	FLT	KHSC	
CCM 512	405036	SHUTTLE VISION SYSTEM (SVS) DOCKING TARGETS	6	EA	FLT	KHSC	
CCM 038	405037	EFGF MOUNTING HARDWARE	3	SE	FLT	KHSC	
CCM 038	405038	HAND OPERATED END EFFECTOR 71499E100-1SN001	1	EA	FLT	KHSC	
CCM 038	405039	HOEE DIAL TORQUE WRENCH TEC3A SM3350	1	EA	FLT	KHSC	
CCM 038	405040	SAVER CABLE 51597A23-1	1	EA	FLT	KHSC	
CCM 038	405041	TEST CABLE ASSEMBLY	1	EA	FLT	KHSC	
CCM 038	405042	FLIGHT EQUIVALENT EFGF WIRE BUNDLE & P411 CONNECTOR	1	EA	FEU	KHSC	
CCM 038	405043	EFGF PAYLOAD I/F DRILLING TEMPLATE 71451F101-1	1	EA	FEU	KHSC	
CCM 038	405044	SIGNAL GENERATOR (800MHz-2400MHz)	1	EA	TSE	KHSC	
CCM 038	405045	ATTENUATORS (3 dB)	1	SE	TSE	KHSC	3 EA/SET
CCM 038	405046	ATTENUATORS (6 dB)	1	SE	TSE	KHSC	3 EA/SET
CCM 038	405047	ATTENUATORS (10 dB)	1	SE	TSE	KHSC	3 EA/SET
CCM 038	405048	KU BAND STANDARD GAIN HORN (24.7 dB)	1	EA	TSE	KHSC	
CCM 038	405049	COAXIAL TO WAVEGUIDE CONVERTER 00MHz)	1	EA	TSE	KHSC	
CCM 038	405050	CLAMP-ON CURRENT PROBES (10KHz-200MHz)	1	EA	TSE	KHSC	
CCM 038	405051	CLAMP-ON CURRENT PROBES (1MHz-1GHz)	1	EA	TSE	KHSC	

CCM 038	405052	SWITCH COAXIAL STDP, 20MHz-1GHz	1	EA	TSE	KHSC
CCM 512	405053	RETRO REFLECTOR	1	EA	FLT	KHSC
CCM 512	405054	CROSS-ON-STICK SHUTTLE DOCKING TARGETS	2	EA	FLT	KHSC

Attachment J-2/Section I
Government Furnished Equipment

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 563	CLUBB	LP/S-3	000021	PCS CSCI (INTERIM)		1	EA	DEV	PRIM			
CCM 563	CLUBB	LP/S-3	000022	PCS CSCI (5A/6A FQT)		1	EA	FQT	PRIM			
CCM 563	CLUBB	LP/S-3	000023	PCS CSCI (5A/6A TRR)		1	EA	DEV	PRIM			
	THORNTON	EVAS	000025	LARGE AVIONICS BOX ROBOTIC SIMULATOR		1	EA	MCK	PRIM			
	MCDONALD		000101	PATHS DATA SYSTEM SOFTWARE		1	EA	CSE	PRIM			
CCM 262	CLUBB	LP/S-2	000126	ESSMDM		1	EA	FEU	PRIM			
CCM 262	CLUBB	LP/S-2	000127	ESSMDM		1	EA	FEU	PRIM			
CCM 262	CLUBB	LP/S-2	000128	INCIRCUIT EMULATOR		1	EA	TSE	PRIM			
CCM 262	CLUBB	LP/S-2	000129	MATE-3		1	EA	TSE	PRIM			
CCM 262	CLUBB	LP/S-2	000130	MATE-3		1	EA	TSE	PRIM			
CCM 563	C&DH		000131	EPCS CSCI (2A FQT)		1	EA	FQT	PRIME/MBFH			
CCM 273	CDHS		000134	OIU S/W LOAD (FINAL)		1	EA	FINAL	PRIME/MBF			
CCM 273	CDHS		000136	TIMELINER ON-BOARD EXECUTOR		1	EA	FLT	PRIME/MBF			
CCM 273	CDHS		000137	TIMELINER COMPILER (GROUND)		1	EA	FLT	PRIME/MBF			
CCM 210B			000146	WORKSTATION HOST S/W (WHS) (CSCI)		1	EA	FLT	NASA/SPAR			
CCM 210B			000147	VIDEO GRAPHICS S/W (VGS) CSCI		1	EA	FLT	NASA/SPAR			
CCM 563			000152	EPCS CSCI (2A TRR)		1	EA	DEV	PRIME/MBFH			
CCM 563			000154	EPCS CSCI (3A FQT)		1	EA	FQT	PRIME/MBFH			
CCM 563			000155	EPCS CSCI (3A TRR)		1	EA	DEV	PRIME/MBFH			
CCM 563			000156	EPCS CSCI (4A FQT)		1	EA	FQT	PRIME/MBFH			
CCM 563			000157	EPCS CSCI (4A TRR)		1	EA	DEV	PRIME/MBFH			
CCM 563			000158	PCS CSCI (FQT) (5A) (EARLY PCS PRE 5A)		1	EA	FQT	PRIME/MBFH			
CCM 563			000159	PCS CSCI (TRR) (5A) (EARLY PCS PRE 5A)		1	EA	DEV	PRIME/MBFH			
CCM 399			000176	ECOMM CTP AND CTP GSE AND GSE CABLES		1	EA	DEV	PRIME/CDH			
CCM 399			000177	ECOMM CTP FIRMWARE		1	EA	DEV	PRIME/CDH			
CCM 399			000179	ECOMM CTP FIRMWARE		1	EA	FQT	PRIME/CDH			
CCM 781			000183	ORBITER INTERFACE UNIT		1	EA	FEU	PRIME/ISIL			
CCM 781			000184	OIS PC INTERFACE CARD		2	EA	SE	PRIME/ISIL			
CCM 781			000185	ORBITER INTERFACE UNIT		1	EA	FEU	PRIME/ISIL			
CCM 781			000187	PORTABLE COMPUTER SYSTEM		10	EA	FEU	PRIME/ISIL			
CCM 781			000191	PCS 120 VDC POWER SUPPLY, (WITH CABLES)		1	EA	PRO	PRIME/ISIL			
CCM 781			000200	OIS		1	EA	PC	PRIME/ISIL			
CCM 395			000202	HAND UPPER TORSO TMG		1	EA	TSE	PRIME			
CCM 395			000203	UPPER ARMS TMG		2	EA	TSE	PRIME			
CCM 395			000204	LOWER ARM TMG		2	EA	TSE	PRIME			
CCM 395			000205	WAIST TMG		1	EA	TSE	PRIME			
CCM 395			000206	BRIEF TMG		1	EA	TSE	PRIME			
CCM 395			000207	LTA LEG TMG		2	EA	TSE	PRIME			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 395			000208	BOOT TMG (LEFT AND RIGHT)		2	EA	TSE	PRIME			
CCM 395			000209	GLOVE TMG (LEFT AND RIGHT)		2	EA	TSE	PRIME			
CCM 395			000210	PORTABLE LIFE SUPPORT SYSTEM TMG		1	EA	TSE	PRIME			
CCM 395			000211	AIR-LOCK ASSEMBLY		1	EA	TSE	PRIME			
CCM 395			000212	EMU PATCH ANTENNA PROTOTYPE		1	EA	TSE	PRIME			
CCM 395			000213	BRUEL & KJAER MOUTH SIMULATOR		1	EA	TSE	PRIME			
CCM 395			000214	BRUEL & KJAER MICROPHONE PREAMP		1	EA	TSE	PRIME			
CCM 395			000215	BRUEL & KJAER MICROPHONE		1	EA	TSE	PRIME			
CCM 395			000216	ART PROGRAMMABLE EQUALIZER		1	EA	TSE	PRIME			
CCM 395			000217	YAMAHA AMPLIFIER		1	EA	TSE	PRIME			
CCM 395			000218	TASCAM PORTABLE DAT RECORDERS		2	EA	TSE	PRIME			
CCM 395			000219	MACKIER MIXER		1	EA	TSE	PRIME			
CCM 395			000220	KOSS HEADPHONES		2	EA	TSE	PRIME			
CCM 395			000221	EMU PATCH ANTENNA PROTOTYPE		1	EA	TSE	PRIME			
CCM 952; CCM 4199			000239	MCOR HARDWARE SUBASSEMBLY		1	EA	GSE	PRIME			
CCM 952; CCM 4199			000240	MCOR HARDWARE SUBASSEMBLY		1	EA	FLT	PRIME			
CCM 901			000241	EDO CARRIER PALLET		1	EA	FLT	JSC			
CCM 944			000269	TIMELINER ON-BOARD EXECUTOR		1	EA	FLT	BOE/HOU			
CCM 944			000270	TIMELINER COMPILER (GROUND)		1	EA	FLT	BOE/HOU			
CCM 1503			000284	EVA HANDRAIL		1	EA	FLT	BHSV-A90			
CCM 1503			000285	EVA HANDRAIL		2	EA	FLT	BHSV-A90			
CCM 1503			000286	EVA HANDRAIL		2	EA	FLT	BHSV-A90			
CCM 1503			000287	EVA HANDRAIL		1	EA	FLT	BHSV-A90			
CCM 1503			000288	DRILL PLATE		1	EA	GSE	BHSV-A90			
CCM 1503			000289	HIGH DATA RATE RECORDER JUNCTION BOX		2	EA	FLT	BHSV-A90			
CCM 1503			000290	CABLE MARKERS		3	SET	FLT	BHSV-A90			
CCM 1503			000291	FORGING		1	EA	FLT	MSFC			
CCM 1815			000298	JSS TOP-MOUNTED HANDRAIL		26	EA	FLT	SPPF			
CCM 1815			000300	PFCS EVA HANDRAIL		1	EA	FLT	BHSV			
CCM 1815			000301	PFCS EVA HANDRAIL		4	EA	FLT	BHSV			
CCM 1815: S/A 962 Corr.ID#			000303	COMMON STRUCTURAL INTERFACE		1	EA	FLT	BHSV			
CCM 1420			000309	CDRA MODEL		1	EA	FLT	BHOU			
CCM 1420			000310	OXYGEN GENERATION ASSY (OGA) BASIC BUS		1	EA	FLT	BHOU			
CCM 1420			000311	OXYGEN GENERATION ASSY (OGA) BASIC TELEMETRY AND COMMAND		1	EA	FLT	BHOU			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 1420			000312	OXYGEN GENERATION ASSY (OGA) ENGINEERING CYCLES		1	EA	FLT	BHOU			
CCM 1420			000313	OXYGEN GENERATION ASSY (OGA) FLIGHT CYCLE		1	EA	FLT	BHOU			
CCM 1420			000314	WATER PROCESSOR ASSY (WPA) BASIC BUS		1	EA	FLT	BHOU			
CCM 1420			000315	WATER PROCESOR ASSY (WPA) BASIC TELEMETRY AND COMMAND		1	EA	FLT	BHOU			
CCM 1420			000316	WATER PROCESSOR ASSY (WPA) ENGINEERING CYCLE		1	EA	FLT	BHOU			
CCM 1420			000317	WATER PROCESSOR ASSY (WPA) FLIGHT CYCLE		1	EA	FLT	BHOU			
CCM 1402			000318	URINE PROCESSOR ASSY (UPA) BASIC BUS		1	EA	FLT	BHOU			
CCM 1420			000319	URINE PROCESSOR ASSY (UPA) BASIC TELEMETRY AND COMMAND		1	EA	FLT	BHOU			
CCM 1420			000320	URINE PROCESSOR ASSY (UPA) ENGINEERING CYCLE		1	EA	FLT	BHOU			
CCM 1420			000321	URINE PROCESSOR ASSY (UPA) FLIGHT CYCLE		1	EA	FLT	BHOU			
CCM 2487			000323	CBCS HATCH WINDOW BERTHING TARGET (MPLM, USL, SPARE)		3	EA	FLT	BMSD			
CCM 2487			000324	PMA 2 CBCS BERTHING TARGET		1	EA	FLT	SCTF			
CCM 2487			000325	PMA 3 CBCS BERTHING TARGET		1	EA	FLT	SCTF			
CCM 2487			000326	PMA CBCS BERTHING TARGET		1	EA	DEV	SCTF			
CCM 2487			000327	3M SCOTCHLITE DIAMOND GRADE VIP 3992 RED SHEETING		1	EA	FLT	BMSD			
CCM 1503			000328	MICROCONICAL FITTING (CUSTOM 455 VERSION)		1	EA	FLT	SCTF			
CCM 2487			000329	P5 CONNECTOR		4	EA	FLT	SCTF			
CCM 1815 MOD			000331	ESP EVA HANDRAIL		8	EA	FLT	BHSV			
CCM 1815			000332	ESP EVA HANDRAIL		2	EA	FLT	BHSV			
CCM 1815			000333	MICROCONICALS		8	EA	FLT	BHSV			
CCM 1503			000334	aisle STOWAGE TILT PLATFORM ASSY		1	EA	GSE	BKSC			
CCM 2487			000335	SPARE CBCS BERTHING TARGET		1	EA	FLT	SCTF			
CCM 952; CCM 4199			000336	MCOR INTERNAL FLIGHT CABLE SET		1	EA	FLT	PRIME			
CCM 1503			000337	EVA HANDRAIL		1	EA	FLT	BHSV-A90			
CCM 1503			000338	EVA HANDRAIL		1	EA	FLT	BHSV-A90			
CCM 1503			000339	EVA HANDRAIL		2	EA	FLT	BHSV-A90			
CCM 1503			000340	EVA HANDRAIL		2	EA	FLT	BHSV-A90			
CCM 1503			000341	EVA HANDRAIL		1	EA	FLT	BHSV-A90			
CCM 1503			000342	EVA HANDRAIL		1	EA	FLT	BHSV-A90			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 2671			000464	FLIGHT ROBOTIC H-FIXTURE KIT		1	EA	FLT	BMSD			
CCM 2671			000465	MTC ROBOTIC TARGET		1	EA	FLT	BMSD			
CCM 2512			000468	TOP MOUNTED HANDRAIL ASSEMBLY		1	EA	FLT	BMSD			
CCM 2512			000469	EVA HANDRAIL		2	EA	FLT	BMSD			
CCM 2512			000470	EVA HANDRAIL PIN		2	EA	FLT	BMSD			
CCM 2512			000471	EVA HANDRAIL PIN		2	EA	FLT	BMSD			
CCM 2512			000472	FLIGHT ROBOTIC H-FIXTURE KIT		1	EA	FLT	BMSD			
CCM 2512			000473	MTC ROBOTIC TARGET		1	EA	FLT	BMSD			
CCM 2512			000474	TOP MOUNTED HANDRAIL ASSEMBLY		4	EA	FLT	BMSD			
CCM 2605			000477	TUBE GENERIC-HANDRAIL & GRIP		8	EA	FLT	HOU			
CCM 2605			000478	PIN, BRACKET		18	EA	FLT	HOU			
CCM 2605			000479	BRACKET PIN		18	EA	FLT	HOU			
CCM 2605			000480	BRACKET, ISS HANDRAIL		28	EA	FLT	HOU			
CCM 2605			000483	ISS TOP MOUNTED PASSIVE WIF ASSY		10	EA	FLT	HOU			
CCM 2605			000485	H-FIXTURE, FIXTURE KIT ASSEMBLY		7	EA	FLT	KSC			
CCM 2605			000486	TOP MOUNTED HANDRAIL ASSEMBLY		24	EA	FLT	KSC			
CCM 2605			000496	DDCU-COLDPLATE		1	EA	FLT	KSC			
CCM 2605			000497	DDCU-CP FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 2605			000498	MBSU-COLD PLATE		1	EA	FLT	KSC			
CCM 2605			000499	MBSU FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 2605			000500	UTILITY TRANSFER ASSEMBLY (UTA)		1	EA	FLT	KSC			
CCM 2605			000501	UTA FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 2605			000502	BATTERY CHARGE/DISCHARGE UNIT		1	EA	FLT	KSC			
CCM 2605			000503	BCDU FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 2605			000516	PUMP MODULE ASSEMBLY (PMA)		1	EA	FLT	KSC			
CCM 2605			000517	PMA FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 2605			000518	FLEX HOSE ROTARY COUPLER (FHR)		1	EA	FLT	KSC			
CCM 2605			000519	FHRC FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 4199			000520	MCOR H/W SUBASSEMBLY		1	EA	FLT	PRIME			
CCM 4199			000521	MCOR H/W SUBASSEMBLY		1	EA	FLT	PRIME			
CCM 4199			000522	EXTERNAL FAN		1	EA	FLT	PRIME			
CCM 2605			000523	FLIGHT RELEASABLE GRAPPLE FIXTURE		1	EA	FLT	KSC			
CCM 4375			000526	PCS CSCI (R2)		1	EA	FLT	MBF			
CCM 4375			000527	PCS CSCI (R3)		1	EA	FLT	MBF			
CCM 4375			000528	PCS CSCI (P4)		1	EA	FLT	MBF			
ccm 2605			000543	WIF EXTENSION ARM		2	EA	FLT	KSC			
CCM 2605			000544	FLIGHT RELEASABLE GRAPPLE FIXTURE		1	EA	FLT	KSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 2605			000547	VSSA STANTIONS		4	EA	FLT	KSC			
CCM 2605			000548	VSSA STANTIONS FLIGHT SUPPORT EQUIPMENT		1	EA	FLT	KSC			
CCM 4635			000551	TETHER HOOKS		6	EA	FLT	BHOU			
CCM 5110			000552	ENERGY ABSORBERS/CETA CART COUPLERS		1	EA	FLT	KSC			
CCM 5110			000553	ENERGY ABSORBERS/CETA CART COUPLERS		1	EA	FLT	KSC			
CCM 5778			000554	ENCRYPTION KEY DISC (VALIDATION KEY)		1	SET		PHX			
CCM 5778			000555	ENCRYPTION KET DISC (FLIGHT KEY)		1	SET		PHX			
CCM 4313			000556	HANDRAILS FEU VSSA		10	EA	FLT	BHOU			
CCM 4313			000557	ACTIVE FRAM ALIGNMENT FIXTURE		1	EA	FLT	BHOU			
CCM 4313			000558	PASSIVE FRAM DRILL TEMPLATE		1	EA	FLT	BHOU			
CCM 4313			000559	PASSIVE FRAM ALIGNMENT FIXTURE		1	EA	FLT	BHOU			
CCM 5778			000564	ACBSP		1	EA	FLT	ISIL			
CCM 5778			000565	ACBSP		1	EA	FLT	PHX			
CCM 5778			000566	ACBSP		1	EA	FLT	PHX			
CCM 5778			000567	TRANSPONDERS		1	EA	FLT	ISIL			
CCM 5778			000568	TRANSPONDERS		1	EA	FLT	PHX			
CCM 5778			000569	TRANSPONDERS		1	EA	FLT	PHX			
CCM 5942			000615	OOI WIF ADAPTER PLATE		1	EA	FLT	BHB			
S/A 1124 - CCM 5985			000616	SSU MLI BLANKET		2	EA	FLT	KSC			
S/A 1124 - CCM 5985			000617	ECU MLI BLANKET		2	EA	FLT	KSC			
CCM 6652			000620	PCS CSCI (R5)		1	EA	FQT	BHOU/MBF			
CCM 6652			000621	PCS CSCI (R6)		1	EA	FQT	BHOU/MBF			
CCM 6652			000622	PCS CSCI (R7)		1	EA	FQT	BHOU/MBF			
CCM 6652			000623	PCS CSCI (R8)		1	EA	FQT	BHOU/MBF			
CCM 6652			000624	PCS CSCI (R9)		1	EA	FQT	BHOU/MBF			
CCM 6652			000625	EPCS CSCI (R2)		1	EA	FQT	BHOU/MBF			
CCM 6815			000626	TOP MOUNT HANDHOLD 8.53"		1	EA	FLT	BHOU			
CCM 6815			000627	TOP MOUNT HANDHOLD W/EXTENSION - 8.53"		1	EA	FLT	BHOU			
CCM 6815			000628	EQUIPMENT HOOK		6	EA	FLT	BHOU			
CCM 6815			000629	D-RING		6	EA	FLT	BHOU			
CCM 6815			000630	CAM BUCKLE		16	EA	FLT	BHOU			
CCM 6954			000631	MEDIUM FRENCH HOOK		1	EA	FLT	BHOU			
CCM 6954			000632	MEDIUM FRENCH HOOK		1	EA	FLT	BHOU			
CCM 6998			000633	QUICK DISCONNECT		12	EA	FLT	MSFC			
CCM 6952			000688	UMBILICAL ASSEMBLY ELECTRICAL		2	EA	FLT	BHOU			
CCM 6952			000689	UMBILICAL ASSEMBLY ELECTRICAL		2	EA	FLT	BHOU			
CCM 6952			000690	ARIS GN2 SUPPLY		2	EA	FLT	BHOU			
CCM 6647			000691	CCA POWER SUPPLY		1	EA	FLT	BMSFC			
CCM 6647			000692	CCA CONTROLLER		1	EA	FLT	BMSFC			
CCM 6647			000693	CCA BACKPLANE		1	EA	FLT	BMSFC			
CCM 6647			000697	CCA-FET		1	EA	FLT	BMSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 6647			000695	CONNECTOR ASSEMBLY TYPE II		1	EA	FLT	BMSFC			
CCM 6647			000696	FLEX CABLE ASSEMBLY		1	EA	FLT	BMSFC			
CCM 6647			000697	STATUS INDICATOR		1	EA	FLT	BMSFC			
CCM 7651, 05- 0021			000698	NITROGEN TANK ASSEMBLY		1	EA	FLT	BHOU			
CCM 7651, 05- 0021			000699	PUMP MODULE ASSEMBLY		1	EA	FLT	BHOU			
CCM 7739			000709	ATV FTC FLIGHT SOFTWARE (LATEST VERSION)		1	EA	FLT	MBF			
CCM 7578			000710	CONNECTOR, PLUG ELECTRICAL, STRAIGHT, C		1	EA	FLT	HAM SUND			
CCM 7579			000711	CONNECTOR, PLUG ELECTRICAL, STRAIGHT		1	EA	FLT	HAM SUND			
CCM 7580			000712	CONNECTOR, PLUG ELECTRICAL		1	EA	FLT	HAM SUND			
CCM 7581			000713	COUPLING, QUICK DISCONNECT, FLUID		2	EA	FLT	HAM SUND			
CCM 7582			000714	CONTACT		50	EA	FLT	HAM SUND			
CCM 7583			000715	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000716	WAHSE FLAT		46	EA	FLT	HAM SUND			
CCM 7583			000717	WASHER FLAT		10	EA	FLT	HAM SUND			
CCM 7583			000718	CONNECTORS, PLUG ELECTRICAL, STRAIGHT, C		1	EA	FLT	HAM SUND			
CCM 7583			000719	CONNECTOR, RECEPTACLE		2	EA	FLT	HAM SUND			
CCM 7583			000720	CONTACT, SOCKET		165	EA	FLT	HAM SUND			
CCM 7583			000721	CABLE, RF, TWIN		25 FT	EA	FLT	HAM SUND			
CCM 7583			000722	BACKSHELL, CONNECTOR		2	EA	FLT	HAM SUND			
CCM 7583			000723	WASHERS, FLAT		3	EA	FLT	HAM SUND			
CCM 7583			000724	WIRE, SAFETY OR LOCK		20 FT	EA	FLT	HAM SUND			
CCM 7583			000725	PIN, COTTER		2	EA	FLT	HAM SUND			
CCM 7583			000726	PLUG, END SEAL, ELECTRICAL CONNECTOR		50	EA	FLT	HAM SUND			
CCM 7583			000727	PLUG, END SEAL		100	EA	FLT	HAM SUND			
CCM 7583			000728	CONTACTS, ELECTRICAL		36	EA	FLT	HAM SUND			
CCM 7583			000729	CONTACTS, ELECTRICAL		48	EA	FLT	HAM SUND			
CCM 7583			000730	CONTACTS, ELECTRICAL		37	EA	FLT	HAM SUND			
CCM 7583			000731	CONTACTS, ELECTRICAL		100	EA	FLT	HAM SUND			
CCM 7583			000732	CONTACTS, ELECTRICAL		125	EA	FLT	HAM SUND			
CCM 7583			000733	PIN		2	EA	FLT	HAM SUND			
CCM 7583			000734	SCREW, SELF LOCKING		2	EA	FLT	HAM SUND			
CCM 7583			000735	SCREW, FLAT HEAD		3	EA	FLT	HAM SUND			
CCM 7583			000736	NUT, SELF-LOCKING		8	EA	FLT	HAM SUND			
CCM 7583			000737	NUT, SELF-LOCKING		22	EA	FLT	HAM SUND			
CCM 7583			000738	SCREW, CAP SOC HD		27	EA	FLT	HAM SUND			
CCM 7583			000739	SCREW, CAP, SOCKET HEAD		14	EA	FLT	HAM SUND			
CCM 7583			000740	SCREW, CAP SOC HD		4	EA	FLT	HAM SUND			
CCM 7583			000741	SCREW, CAP, SOCKET HEAD		51	EA	FLT	HAM SUND			
CCM 7583			000742	SCREW, CAP, SOCKET HD		2	EA	FLT	HAM SUND			
CCM 7583			000743	WAHSE FLAT		42	EA	FLT	HAM SUND			
CCM 7583			000744	WASHER, FLAT - REDUCED OD		47	EA	FLT	HAM SUND			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 7583			000745	WASHER, FLAT - REDUCED OD		60	EA	FLT	HAM SUND			
CCM 7583			000746	WASHER, FLAT - REDUCED OD		33	EA	FLT	HAM SUND			
CCM 7583			000747	WASHER, FLAT - REDUCED OD		112	EA	FLT	HAM SUND			
CCM 7583			000748	PLATE, WARNING		1	EA	FLT	HAM SUND			
CCM 7583			000749	SEALING PLUG, GROMMET		30	EA	FLT	HAM SUND			
CCM 7583			000750	SEALING PLUG, GROMMET		50	EA	FLT	HAM SUND			
CCM 7583			000751	SEALING PLUG, GROMMET		25	EA	FLT	HAM SUND			
CCM 7583			000752	CONNECTOR, BACKSHELL		1	EA	FLT	HAM SUND			
CCM 7583			000753	PACKING, PREFORMED		4	EA	FLT	HAM SUND			
CCM 7583			000754	CLAMP, LOOP, CUSHION		6	EA	FLT	HAM SUND			
CCM 7583			000755	CLAMP, LOOP, CUSHION		2	EA	FLT	HAM SUND			
CCM 7583			000756	CLAMP, LOOP, CUSHION		4	EA	FLT	HAM SUND			
CCM 7583			000757	TAPE, LACING		AR	EA	FLT	HAM SUND			
CCM 7583			000758	CLAMP, CUSHION		8	EA	FLT	HAM SUND			
CCM 7583			000759	CLAMP, CUSHION		2	EA	FLT	HAM SUND			
CCM 7583			000760	CLAMP, CUSHION		3	EA	FLT	HAM SUND			
CCM 7583			000761	CLAMP, CUSHION		1	EA	FLT	HAM SUND			
CCM 7583			000762	CLAMP, CUSHION		3	EA	FLT	HAM SUND			
CCM 7583			000763	CLAMP, CUSHION		1	EA	FLT	HAM SUND			
CCM 7583			000764	CLAMP, CUSHION		1	EA	FLT	HAM SUND			
CCM 7583			000765	TAPE, PRESSURE, SENSITIVE		AR	EA	FLT	HAM SUND			
CCM 7583			000766	PLATE, IDENTIFICATION		1	EA	FLT	HAM SUND			
CCM 7583			000767	STRAP, CABLE		20	EA	FLT	HAM SUND			
CCM 7583			000768	STRAP, CABLE		240	EA	FLT	HAM SUND			
CCM 7583			000769	RING, WELD		4	EA	FLT	HAM SUND			
CCM 7583			000770	RING, WELD		18	EA	FLT	HAM SUND			
CCM 7583			000771	RING, WELD		4	EA	FLT	HAM SUND			
CCM 7583			000772	RING, WELD		20	EA	FLT	HAM SUND			
CCM 7583			000773	RING, WELD		14	EA	FLT	HAM SUND			
CCM 7583			000774	BAND, CLAMP		1	EA	FLT	HAM SUND			
CCM 7583			000775	BRACKET, PRESSOR SENSOR		2	EA	FLT	HAM SUND			
CCM 7583			000776	BRACKET, BEAM, SUPPORT		2	EA	FLT	HAM SUND			
CCM 7583			000777	INSERT		1	EA	FLT	HAM SUND			
CCM 7583			000778	BEAM		1	EA	FLT	HAM SUND			
CCM 7583			000779	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000780	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000781	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000782	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000783	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000784	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000785	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000786	BACKSHELL		1	EA	FLT	HAM SUND			
CCM 7583			000787	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000788	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000789	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000790	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000791	BACKSHELL, CONNECTOR		1	EA	FLT	HAM SUND			
CCM 7583			000792	CONNECTORS, PLUG ELECTRICAL		1	EA	FLT	HAM SUND			
CCM 7583			000793	CONNECTORS, PLUG ELECTRICAL		1	EA	FLT	HAM SUND			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 7583			000794	CONNECTOR, RECTANGULAR		1	EA	FLT	HAM SUND			
CCM 7583			000795	CONNECTOR, PLUG		2	EA	FLT	HAM SUND			
CCM 7583			000796	CONNECTOR, PLUG		1	EA	FLT	HAM SUND			
CCM 7583			000797	GROMMET		1	EA	FLT	HAM SUND			
CCM 7583			000798	CONNECTOR, RECTANGULAR		1	EA	FLT	HAM SUND			
CCM 7583			000799	CONNECTOR, BACKSHELL		1	EA	FLT	HAM SUND			
CCM 7583			000800	CONNECTOR, ELECTRICAL, CIRCULAR, MIL-C-3		2	EA	FLT	HAM SUND			
CCM 7583			000801	BACKSHELL, 90 DEGREE, RFI/EMI		3	EA	FLT	HAM SUND			
CCM 7583			000802	BACKSHELL, 90 DEGREE, SPLIT, LOW PROFILE		2	EA	FLT	HAM SUND			
CCM 7583			000803	BACKSHELL		1	EA	FLT	HAM SUND			
CCM 7583			000804	NUT, COUPLING		2	EA	FLT	HAM SUND			
CCM 7583			000805	NUT, COUPLING		1	EA	FLT	HAM SUND			
CCM 7583			000806	INSERT SCR THD		2	EA	FLT	HAM SUND			
CCM 7583			000807	RETAINER, SENSOR		2	EA	FLT	HAM SUND			
CCM 7583			000808	TUBE, OUTLET, SHORT		1	EA	FLT	HAM SUND			
CCM 7583			000809	TUBE, OUTLET, SHORT		1	EA	FLT	HAM SUND			
CCM 7583			000810	BRAZE SAMPLE		1	EA	FLT	HAM SUND			
CCM 7583			000811	BOLT, HEXAGON HEAD- CLOSE TOLERANCE		2	EA	FLT	HAM SUND			
CCM 7583			000812	BRACKET, FORWARD		1	EA	FLT	HAM SUND			
CCM 7583			000813	BRACKET, READ, TIGHT		1	EA	FLT	HAM SUND			
CCM 7583			000814	WASHER, FLAT		1	EA	FLT	HAM SUND			
CCM 7583			000815	BRACKET, REAR, LOOSE		2	EA	FLT	HAM SUND			
CCM 7583			000816	INSERT SCR THD		4	EA	FLT	HAM SUND			
CCM 7583			000817	TUBE, BENT, METALLIC		1	EA	FLT	HAM SUND			
CCM 7583			000818	TUBE, BENT, METALLIC		1	EA	FLT	HAM SUND			
CCM 7583			000819	TUBE, BENT, METALLIC		1	EA	FLT	HAM SUND			
CCM 7583			000820	TUBE, BENT, METALLIC		1	EA	FLT	HAM SUND			
CCM 7583			000821	SUPPORT TUBE		4	EA	FLT	HAM SUND			
CCM 7583			000822	CLAMP, BLOCK, SECTION, BOTTOM		4	EA	FLT	HAM SUND			
CCM 7583			000823	INSERT SCR THD		4	EA	FLT	HAM SUND			
CCM 7583			000824	CLAMP, BLOCK, SECTION, TOP		4	EA	FLT	HAM SUND			
CCM 7583			000825	FLANGE, COUPLING		1	EA	FLT	HAM SUND			
CCM 7583			000826	NUT, COUPLING		1	EA	FLT	HAM SUND			
CCM 7583			000827	RETAINER, PACKING		1	EA	FLT	HAM SUND			
CCM 7583			000828	SCREW, FLAT FILLISTER HEAD		12	EA	FLT	HAM SUND			
CCM 7583			000829	SCREW, FLAT FILLISTER HEAD		1	EA	FLT	HAM SUND			
CCM 7583			000830	SCREW, FLAT FILLISTER HEAD		3	EA	FLT	HAM SUND			
CCM 7583			000831	SCREW, FLAT FILLISTER HEAD		8	EA	FLT	HAM SUND			
CCM 7583			000832	SCREW, FLAT FILLISTER HEAD		2	EA	FLT	HAM SUND			
CCM 7583			000833	SCREW, FLAT FILLISTER HEAD		10	EA	FLT	HAM SUND			
CCM 7583			000834	SCREW, FLAT FILLISTER HEAD		4	EA	FLT	HAM SUND			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 7583			000835	SCREW, FLAT FILLISTER HEAD		8	EA	FLT	HAM SUND			
CCM 7583			000836	SCREW, FLAT FILLISTER HEAD		2	EA	FLT	HAM SUND			
CCM 7583			000837	SCREW, HEX HEAD		12	EA	FLT	HAM SUND			
CCM 7583			000838	SCREW, HEX HEAD		8	EA	FLT	HAM SUND			
CCM 7583			000839	SCREW, HEX HEAD		16	EA	FLT	HAM SUND			
CCM 7583			000840	SCREW, HEX HEAD		16	EA	FLT	HAM SUND			
CCM 7583			000841	SCREW, HEX HEAD		13	EA	FLT	HAM SUND			
CCM 7583			000842	SCREW, HEX HEAD		1	EA	FLT	HAM SUND			
CCM 7583			000843	SCREW, HEX HEAD		2	EA	FLT	HAM SUND			
CCM 7583			000844	SCREW, HEX HEAD		12	EA	FLT	HAM SUND			
CCM 7583			000845	SCREW, HEX HEAD		24	EA	FLT	HAM SUND			
CCM 7583			000846	CONTACT		18	EA	FLT	HAM SUND			
CCM 7583			000847	CONTACT		80	EA	FLT	HAM SUND			
CCM 7583			000848	MANIFOLD, FLUID		2	EA	FLT	HAM SUND			
CCM 7583			000849	INK, MARKING		AR	EA	FLT	HAM SUND			
CCM 7583			000850	INK, MARKING		AR	EA	FLT	HAM SUND			
CCM 7583			000851	PRIMER, CORROSION INHIBITING		AR	EA	FLT	HAM SUND			
CCM 7583			000852	EPOXY, COATING KIT		AR	EA	FLT	HAM SUND			
CCM 7583			000853	EPOXY, COATING KIT		AR	EA	FLT	HAM SUND			
CCM 7583			000854	SILICONE RUBBER		AR	EA	FLT	HAM SUND			
CCM 7583			000855	PACKING, PREFORMED		2	EA	FLT	HAM SUND			
CCM 7583			000856	RING, RETAINING		1	EA	FLT	HAM SUND			
CCM 7583			000857	RING, RETAINING		2	EA	FLT	HAM SUND			
CCM 7583			000858	SEAL RING, METAL		1	EA	FLT	HAM SUND			
CCM 7583			000859	CONTACT, SOCKET		145	EA	FLT	HAM SUND			
CCM 7583			000860	BASEPLATE ASSY		1	EA	FLT	HAM SUND			
CCM 7583			000861	PLUG, END SEAL, ELEC CONN		50	EA	FLT	HAM SUND			
CCM 7583			000862	SCREW, CAP, SOCKET HEAD		36	EA	FLT	HAM SUND			
CCM 7583			000863	PLATE, IDENTIFICATION, LOW OUTGASSING		1	EA	FLT	HAM SUND			
CCM 7583			000864	SEALING PLUG, GROMMET		50	EA	FLT	HAM SUND			
CCM 7583			000865	SIGNAL CONDITIONING ASSY		1	EA	FLT	HAM SUND			
CCM 7583			000866	MOTOR CONTROLLER ASSY		2	EA	FLT	HAM SUND			
CCM 7583			000867	ACCUMULATOR, AMMONIA		1	EA	FLT	HAM SUND			
CCM 7583			000868	TRANSDUCER, PRESSURE		2	EA	FLT	HAM SUND			
CCM 7583			000869	DIFFERENTIAL SENSOR, PRESSURE		1	EA	FLT	HAM SUND			
CCM 7583			000870	SENSOR, TEMPERATURE		4	EA	FLT	HAM SUND			
CCM 7583			000871	LOCAL DATA INTERFACE ASSY		1	EA	FLT	HAM SUND			
CCM 8206; 03- 487			000872	MAJOR CONSTITUENT ANALYZER (MCA)		1	EA	FLT	JSC/FPEC			
CCM 8216; S/A 1297			000873	LABEL, MAPPING, ORU, UPPER IEA-P4		1	EA	FLT	KSC			
CCM 8216; S/A 1297			000874	LABEL, MAPPING, ORU, LOWER IEA-P4		1	EA	FLT	KSC			
CCM 8216; S/A 1297			000875	LABEL, MAPPING, ORU, UPPER IEA-S4		1	EA	FLT	KSC			
CCM 8216; S/A 1297			000876	LABEL, MAPPING, ORU, LOWER IEA-S4		1	EA	FLT	KSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 8216; S/A 1297			000877	LABEL, MAPPING, ORU, UPPER IEA-S6		1	EA	FLT	KSC			
CCM 8216; S/A 1297			000878	LABEL, MAPPING, ORU, LOWER IEA-S6		1	EA	FLT	KSC			
S/A 1243; CCM 8194			000881	BOLTS, PVR FSE ICC		28	EA	FSE	B-MSFC			
S/A 1291; CCM 8248			000882	MLI - HEATER MAT ASSEMBLY - MBSU FSE		1	EA	FLT	KSC			
S/A 1291; CCM 8248			000883	MLI - ORU ENCLOSURE ASSEMBLY - MBSU FSE		1	EA	FLT	KSC			
S/A 1291; CCM 8248			000884	FHRC FSE INSTALLATION KIT		1	EA	FLT	B-MSFC			
S/A 1275; CCM 8277			000885	COUPLING, QUICK DISCONNECT, FLUID, SELF- SEALING, INTERNAL		10	EA	FLT	HI			
S/A 1275; CCM 8033			000886	TYPE D CONNECTOR, RECEPTACLE (MATES WITH P1)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000887	TYPE D CONNECTOR, RECEPTACLE (MATES WITH P9)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000888	TYPE D CONNECTOR, RECEPTACLE (MATES WITH P11)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000889	TYPE D CONNECTOR, RECEPTACLE (MATES WITH P12)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000890	CONTACT, SOCKET 12 AWG		30	EA	FLT	KSC			
S/A 1275; CCM 8033			000891	CONTACT, SOCKET 22 AWG		350	EA	FLT	KSC			
S/A 1275; CCM 8033			000892	CONTACT, PIN 22 AWG		278	EA	FLT	KSC			
S/A 1275; CCM 8033			000893	SEALING PLUG, 12 AWG		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000894	SEALING PLUG, 22 AWG		418	EA	FLT	KSC			
S/A 1275; CCM 8033			000895	TYPE C CONNECTOR, PLUG (MATES WITH J1)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000896	TYPE C CONNECTOR, PLUG (MATES WITH J4)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000897	TYPE C CONNECTOR, PLUG (MATES WITH J7)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000898	TYPE C CONNECTOR, PLUG (MATES WITH J9)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000899	TYPE C CONNECTOR, PLUG (MATES WITH J11)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000900	TYPE C CONNECTOR, PLUG (MATES WITH J12)		1	EA	FLT	KSC			
S/A 1275; CCM 8033			000901	CONTACT, PIN 12 AWG		63	EA	FLT	KSC			
S/A 1275; CCM 8033			000902	BACKSHELL (J1, J2, J7, J9, J11, J12)		20	EA	FLT	KSC			
S/A 1298; CCM 8324			000903	PVR TORQUE ARM ASSY KIT		1	EA	FLT	LMM&FC			
S/A 1298; CCM 8324			000904	PVR TORQUE PANEL ASSY KIT		1	EA	FLT	LMM&FC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
S/A 1298; CCM 8324			000905	PVR BASE STRUCTURAL KIT		1	EA	FLT	LMM&FC			
S/A 1298; CCM 8324			000906	PVR PANEL STACK KIT		1	EA	FLT	LMM&FC			
S/A 1298; CCM 8324			000907	PRV STRUCTURAL COMPONENT KIT		1	EA	FLT	LMM&FC			
S/A 1298; CCM 8324			000908	TRANSPORTATION DOLLY		1	EA	GSE	LMM&FC			
S/A 1298; CCM 8324			000909	TRANSFER TOOL		1	EA	GSE	LMM&FC			
CCM 8236			000910	ARIS GROUND STRAP LABEL		35	EA	FLT	BHOU			
S/A 1275; CCM 8033			000911	BACKSHELL		2	EA	FLT	KSC			
S/A 1275; CCM 8033			000914	#12 SEALING PLUG		43	EA	FLT	KSC			
S/A 1275; CCM 8033			000917	BACKSHELL (J4)		2	EA	FLT	KSC			
S/A 1275; CCM 8143			000918	LABLE, BAR CODE		2	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000919	CONNECTOR		2	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000920	CONNECTOR		2	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000921	CONNECTOR		2	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000922	CONNECTOR		4	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000923	CONNECTOR		2	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000924	CONNECTOR		2	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000925	CONTACT		38	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000926	CONTACT		28	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000927	CONTACT		16	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000928	CONTACT		4	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000929	CONTACT		8	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000931	SEALING PLUG		1032	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000932	SEALING PLUG		38	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000933	SEALING PLUG		28	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000934	SEALING PLUG		16	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000935	SEALING PLUG		4	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000936	SEALING PLUG		8	EA	FLT	B-MSFC			
S/A 1275; CCM 8143			000939	CONTACT		1032	EA	FLT	B-MSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 8275, S/A 1265			000944	CONNECTOR		1	EA	FLT	KSC			
CCM 8275, S/A 1265			000945	CONNECTOR		1	EA	FLT	KSC			
CCM 8275, S/A 1265			000946	BACKSHELL		2	EA	FLT	KSC			
CCM 8275, S/A 1265			000947	CONTACT		2	EA	FLT	KSC			
CCM 8275, S/A 1265			000948	CONTACT		2	EA	FLT	KSC			
CCM 8275, S/A 1265			000949	PROTECTIVE COVER		1	EA	FLT	KSC			
CCM 8275, S/A 1265			000950	SEALING PLUG		2	EA	FLT	KSC			
CCM 8275, S/A 1265			000951	WIRE		140'	FT	FLT	KSC			
CCM 8631, S/A 1339			000974	CABLE ASSY - IEA, W222 (P4)		1	EA	FLT	BHOU			
CCM 8631, S/A 1339			000975	CABLE ASSY - IEA, W222 (S4)		1	EA	FLT	BHOU			
CCM 8631, S/A 1339			000976	CABLE ASSY - IEA, W222 (S6)		1	EA	FLT	BHOU			
CCM 8631, S/A 1339			000977	IWIS REMOTE SENSOR UNIT (RSU)		2	EA	GSE	BHOU			
CCM 8631, S/A 1339			000978	IWIS NETWORK CONTROL UNIT (NCU)		1	EA	GSE	BHOU			
CCM 8631, S/A 1339			000979	DC POWER CABLE		2	EA	GSE	BHOU			
CCM 8631, S/A 1339			000980	IWIS PARALLEL CABLE		1	EA	GSE	BHOU			
CCM 8631, S/A 1339			000981	IWIS TRIAXIAL ACCELEROMETER UNIT		1	EA	GSE	BHOU			
CCM 8631, S/A 1339			000982	IWIS SOFTWARE VERSION 5.1.5		1	EA	FLT	BHOU			
CCM 8809, S/A 1310			000983	MULTIPLEXER/DEMULTIPLEX ER APPLICATION TEST ENVIRNONMENT (MATE) 3		1	EA	TSE	B-MSFC			
CCM 8809, S/A 1310			000984	FIELD EQUIVALENT UNIT (FEU)		1	EA	TSE	B-MSFC			
CCM 8631, S/A 1339			000985	ISIW SOFTWARE VERSION 5.1.5		1	EA	GSE	BHOU			
CCM 8631, S/A 1339			000986	IWIS ANTENNA		4	EA	GSE	BHOU			
CCM 8631, S/A 1339			000987	IWIS REMOTE SENSOR UNIT (RSU)		1	EA	QUAL	JSC			
CCM 8631, S/A 1339			000988	IWIS NETWORK CONTROL UNIT (NCU)		1	EA	QUAL	JSC			
CCM 8631, S/A 1339			000989	IWIS TRIAXIAL ACCELEROMETER UNIT		1	EA	QUAL	JSC			
S/A 1291; CCM 8248			000992	ESPAD - PASSIVE		1	EA	FLT	SPPF			
S/A 1291; CCM 8248			000993	ESPAD - ACTIVE		1	EA	FLT	SPPF			
S/A 1306; CCM 8644			000973	HATCH CBCS TARGET HATCH		3	EA	FLT	B-MSFC			
S/A 1298; CCM 8324			000997	HANDRAIL, TOP-MOUNTED		1	EA	FLT	KSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
S/A 1298; CCM 8324			000998	HANDRAIL, TOP-MOUNTED		7	EA	FLT	KSC			
S/A 1347, CCM 8883			001000	TOP MOUNTED HANDRAIL ASSEMBLY		4	EA	FLT	KSC			
S/A 1299; CCM 9162			001002	EVA CLAMP		1	EA	FLT	KSC			
S/A 1328; CCM 8846			001003	QUICK DISCONNECT ASSY, ECLSS, PBA, PEP		1	EA	FLT	B-MSFC			
S/A 1347, CCM 8883			001005	BAYONET PROBE		4	EA	FLT	KSC			
S/A 1298; CCM 8324			001016	SCREW, CAP, SOCKET		32	EA	FLT	KSC			
S/A 1298; CCM 8324			001017	SCREW, CAP, SOCKET		32	EA	FLT	KSC			
S/A 1298; CCM 8324			001018	WASHER, REDUCED O.D.		28	EA	FLT	KSC			
S/A 1298; CCM 8324			001019	NUT, COUPLING		24	EA	FLT	KSC			
S/A 1298; CCM 8324			001020	LABEL, PVR MAPPING		1	EA	FLT	KSC			
S/A 1298; CCM 8324			001021	LABEL, SHROUD ASSEMBLY		2	EA	FLT	KSC			
S/A 1309; CCM 8911			001023	TEST LEAD CABLE ASSY, MECT		1	EA	GSE	KSC			
S/A 1298; CCM 8324			001022	LABEL, PVR DEDICATION		1	EA	FLT	KSC			
S/A 1328; CCM 8644			001029	METEROID DEBRIS COVER, CENTER SECTION ASSEMBLY		4	EA	FLT	B-MSFC			
CCM 9326, S/A 1338			001030	EVA HANDRAIL		1	EA	FLT	BHOU			
CCM 9760, S/A 1346			001036	RATE GYRO ASSEMBLY		1	EA	DEV	SCTF			
CCM 9760, S/A 1346			001037	PROTOCOL TRANSLATOR		1	EA	STE	SCTF			
CCM 9760, S/A 1346			001038	C&C MATE		1	EA	STE	SCTF			
CCM 9760, S/A 1346			001039	C&C MDM		1	EA	FEU	SCTF			
CCM 9760, S/A 1346			001040	GN&C MATE		1	EA	STE	SCTF			
CCM 9760, S/A 1346			001041	GN&C MDM		1	EA	FEU	SCTF			
CCM 9760, S/A 1346			001042	IN-CIRCUIT EMULATOR		1	EA	STE	SCTF			
CCM 9760, S/A 1346			001043	PORTABLE COMPUTER SYSTEM		1	EA	FEU	SCTF			
CCM 9760, S/A 1346			001044	SIGI		1	EA	DEV	SCTF			
CCM 9760, S/A 1346			001045	RATE TABLE		1	EA	TSE	SCTF			
CCM 9918, S/A 1405			001049	ISOLATION BASE PLATE ASSY		1	EA	FLT	BHOU			
CCM 9918, S/A 1405			001050	RACK HANDLING ADAPTER - UPPER STRUCTURE		1	EA	GSE	BHOU			
CCM 9918, S/A 1405			001051	SSPF BASE		1	EA	GSE	BHOU			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10499, S/A 1457			001151	LOCAL DATA INTERFACE		1	EA	JSC	BHOU			
CCM 10499, S/A 1457			001152	PUMP & CONTROL VALVE PACKAGE		1	EA	QUAL	BHOU			
CCM 10318, S/A 1507			001153	UMBILICAL ASSEMBLY, MAIN POWER, JI		2	EA	FLT	BHOU			
CCM 10318, S/A 1507			001154	UMBILICAL ASSEMBLY, TCS SUPPLY, MOD TEMP		2	EA	FLT	BHOU			
CCM 10318, S/A 1507			001155	UMBILICAL ASSEMBLY, TCS RETURN, MOD TEMP		2	EA	FLT	BHOU			
CCM 10680, S/A 1498			001157	LAPTOP COMPUTER		11	EA	CSE	BHOU			
CCM 10680, S/A 1498			001158	LAPTOP COMPUTER		8	EA	CSE	BHOU			
CCM 10680, S/A 1498			001159	LAPTOP COMPUTER		10	EA	CSE	BHOU			
CCM 10680, S/A 1498			001160	LAPTOP COMPUTER		4	EA	CSE	BHOU			
CCM 10710, S/A 1557			001161	SGANT PROTOFLIGHT		1	EA	QUAL	MDA			
PIO 93, S/A 1481	KSC		001162	SHIPPING CONTAINER		1	EA	Non-FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001163	HANDLING SET		1	EA	GSE	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001164	CONNECTOR,ELECTRICAL,R E CTA		10	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001165	CONNECTOR,ELECTRICAL,R E CTA		14	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001166	CONNECTOR,ELECTRICAL,R E CTA		5	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001167	CONNECTOR,ELECTRICAL,R E CTA		9	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001168	CONNECTOR,ELECTRICAL,R E CTA		7	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001169	CONNECTOR,ELECTRICAL,R E CTA		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL/KSC		001170	CAPACITOR,FXD,CERAMIC,! 20P		8	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL/KSC		001171	CAPACITOR		8	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001172	MICROCIRCUIT		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001173	MICROCIRCUIT,LINEAR,TRA NSD		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001174	INDUCTOR		41	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001175	TRANSFORMER		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001176	TRANSISTOR, PWR		6	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001177	ADJUSTMENT BOLT (REFERENCE)		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001178	POWER SUPPLY CCA, A1		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001179	CHASSIS, ELEC EQPT		1	EA	FLT	SSL			Added on Mod 1481

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 93, S/A 1481	KSC		001180	CURRENT MONITOR CCA, A1		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001181	PRINTED WIRING BOARD,EMI FILTER		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001182	CHASSIS, ELEC EQPT, PVCE		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001183	COVER, CHASSIS, PVCE		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001184	PVCA #1 CCA, A1		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001185	PVCA #2 CCA, A2		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001186	LOGIC CCA, A2		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001187	CHASSIS, ELEC EQPT RAMP GENERATOR		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001188	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001189	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001190	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001191	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001192	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001193	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001194	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001195	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001196	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001197	8 STRING ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001198	RAMP GENERATOR CCA, A1		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001199	RAMP GENERATOR CCA, A1		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	KSC		001200	DC/DC CONVERTER ECA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001201	PRINTED WIRING BOARD,CAPACITOR		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001202	PRINTED WIRING BOARD- CAPACITOR		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001203	MICROCIRCUIT,HYBRID,QUA D HEXFET W/DRIVERS		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001204	MULTICHIP MODULE QUAD DIODE RECTIFIER		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001205	MICROCIRCUIT,HYBRID,QUA D LEVEL DETECTOR		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001206	CAPACITOR,CERAMIC,X7R,HI GH		71	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001207	CAPACITOR,CERAMIC,X7R,H IGH		5	EA	FLT	SSL			Added on Mod 1481

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 93, S/A 1481	SSL		001208	CAPACITOR,CERAMIC,X7R.H IGH		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001209	INTERFACE ASSY,LOCAL DATA		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001210	CAPACITOR,FXD,CERAMIC,0 .12		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001211	RESISTOR,FXD,FILM,2.15K OHM		3	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001212	CONNECTOR PLUG		1	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001213	CONNECTOR,RCPT,ELEC		2	EA	FLT	SSL			Added on Mod 1481
PIO 93, S/A 1481	SSL		001214	CONNECTOR PLUG		1	EA	FLT	SSL			Added on Mod 1481
SSCN 10829, S/A 1481	SpaceX		001216	Simulation (for Joint Test 2)		1	EA	SIM SW	SDIL			Added on Mod 1563
SSCN 10829, S/A 1481	SpaceX		001217	COTS Simulation (for Stage Testing Received)		1	EA	SIM SW	SDIL			Added on Mod 1563
CCM 10625, S/A 1522			001218	PRIMARY STANCHION POST - BATTERY		1	EA	FLT	KSC			
CCM 10625, S/A 1522			001219	PRIMARY STANCHION POST - DDCU-E		1	EA	FLT	KSC			
CCM 10625, S/A 1522			001220	RETAINER PLATE, SECONDARY TIE-DOWN - DDCU-E		1	EA	FLT	KSC			
CCM 10625, S/A 1522			001221	BUSHING, SECONDARY TIE- DOWN - BATTE		2	EA	FLT	KSC			
CCM 10625, S/A 1522			001222	STANCHION POST ATTACHMENT BOLTS		8	EA	FLT	KSC			
CCM 10625, S/A 1522			001223	STANCHION POST ATTACHMENT NUTS		4	EA	FLT	KSC			
CCM 10625, S/A 1522			001224	STANCHION POST ATTACHMENT NUTS		6	EA	FLT	KSC			
CCM 10625, S/A 1522			001225	SECONDARY STANCHION POST - BATTERY COMMON		1	EA	NON - FLT	KSC			
CCM 10625, S/A 1522			001226	RETAINER PLATE, SECONDARY TIE-DOWN - COMMON		1	EA	NON - FLT	KSC			
CCM 10625, S/A 1522			001227	BUSHING, SECONDARY TIE- DOWN - COMMON		2	EA	NON - FLT	KSC			
CCM 10711 SA 1529			001228	BOLT, RETRACTABLE - EVA		2	EA	FLT	BHOU			
CCM 10711 SA 1529			001229	BARREL NUT ASSY		3	EA	FLT	BHOU			
CCM 10711 SA 1529			001230	CONNECTOR, SMA		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001231	INSERT		25	EA	FLT	BHOU			
CCM 10711 SA 1529			001232	PIN, DOWEL, 0.250 x 0.75 LG		12	EA	FLT	BHOU			
CCM 10711 SA 1529			001233	BOLT, CSK, 0.250 x 0.69		21	EA	FLT	BHOU			
CCM 10711 SA 1529			001234	WASHER, PLAIN, 0.250		26	EA	FLT	BHOU			
CCM 10711 SA 1529			001235	WASHER, CSK, 0.250		60	EA	FLT	BHOU			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10711 SA 1529			001236	BOLT, BLIND, 0.250 x 0.88 GRIP		137	EA	FLT	BHOU			
CCM 10711 SA 1529			001237	NUTPLATE		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001238	NUT, SELF- LOCKING, 0.250- 28		21	EA	FLT	BHOU			
CCM 10711 SA 1529			001239	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001240	PROTECTIVE CAP		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001241	EVA CLAMPS		21	EA	FLT	BHOU			
CCM 10711 SA 1529			001242	BUS COUPLER		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001243	CABLE, TSP		280	FT	FLT	BHOU			
CCM 10711 SA 1529			000124	BUS TERMINATOR		3	EA	FLT	BHOU			
CCM 10711 SA 1529			001244	BUS TERMINATOR		3	EA	FLT	BHOU			
CCM 10711 SA 1529			001245	WIRE		110	FT	FLT	BHOU			
CCM 10711 SA 1529			001246	WIRE		25	FT	FLT	BHOU			
CCM 10711 SA 1529			001247	CABLE		12	FT	FLT	BHOU			
CCM 10711 SA 1529			001248	WIRE		95	FT	FLT	BHOU			
CCM 10711 SA 1529			001249	WIRE		25	FT	FLT	BHOU			
CCM 10711 SA 1529			001259	WIRE		25	FT	FLT	BHOU			
CCM 10711 SA 1529			001250	CABLE, COAX		260	FT	FLT	BHOU			
CCM 10711 SA 1529			001251	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001252	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001253	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001254	PLUG, WAVEGUIDE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001255	BACKSHELL ADAPTER		2	EA	FLT	BHOU			
CCM 10711 SA 1529			001256	MOUNTING PLATE PLUG		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001257	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001258	CONTACT, SOCKET		10	EA	FLT	BHOU			
CCM 10711 SA 1529			001259	CONTACT, SOCKET		50	EA	FLT	BHOU			
CCM 10711 SA 1529			001260	CONTACT, SOCKET		20	EA	FLT	BHOU			
CCM 10711 SA 1529			001261	SEALING PLUG		4	EA	FLT	BHOU			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10711 SA 1529			001262	SEALING PLUG		8	EA	FLT	BHOU			
CCM 10711 SA 1529			001263	SEALING PLUG		34	EA	FLT	BHOU			
CCM 10711 SA 1529			001264	COAX CONTACT		5	EA	FLT	BHOU			
CCM 10711 SA 1529			001265	BACKSHELL		5	EA	FLT	BHOU			
CCM 10711 SA 1529			001266	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001267	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001268	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001269	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001270	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001271	BACKSHELL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001272	CONTACT, SOCKET		10	EA	FLT	BHOU			
CCM 10711 SA 1529			001273	CONTACT, PIN		10	EA	FLT	BHOU			
CCM 10711 SA 1529			001274	CONTACT, SOCKET		10	EA	FLT	BHOU			
CCM 10711 SA 1529			001275	CONTACT, PIN		10	EA	FLT	BHOU			
CCM 10711 SA 1529			001276	CONTACT, SOCKET		15	EA	FLT	BHOU			
CCM 10711 SA 1529			001277	CONTACT, SOCKET		45	EA	FLT	BHOU			
CCM 10711 SA 1529			001278	CONTACT, SOCKET		15	EA	FLT	BHOU			
CCM 10711 SA 1529			001279	CONTACT, PIN		15	EA	FLT	BHOU			
CCM 10711 SA 1529			001280	CONTACT		25	EA	FLT	BHOU			
CCM 10711 SA 1529			001281	ADAPTER, CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001282	ADAPTER, CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001283	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001284	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001285	CONNECTOR		2	EA	FLT	BHOU			
CCM 10711 SA 1529			001286	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001287	CONNECTOR, PLUG		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001288	CONNECTOR, PLUG		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001289	CONNECTOR		1	EA	FLT	BHOU			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10711 SA 1529			001290	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001291	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001292	CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001293	CONNECTOR, PLUG		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001294	CONNECTOR, CAP		2	EA	FLT	BHOU			
CCM 10711 SA 1529			001295	PROTECTIVE CAP CONNECTOR		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001296	PROTECTIVE CAP		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001297	PROTECTIVE CAP, RECEPTACLE		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001298	PROTECTIVE CAP, RECEPTACLE		2	EA	FLT	BHOU			
CCM 10711 SA 1529			001299	SEALING PLUG		10	EA	FLT	BHOU			
CCM 10711 SA 1529			001300	SEALING PLUG		17	EA	FLT	BHOU			
CCM 10711 SA 1529			001301	SEALING PLUG		20	EA	FLT	BHOU			
CCM 10711 SA 1529			001302	SEALING PLUG		22	EA	FLT	BHOU			
CCM 10711 SA 1529			001303	SEALING PLUG		13	EA	FLT	BHOU			
CCM 10711 SA 1529			001304	MICRO-HANDLE ASSY		3	EA	FLT	BHOU			
CCM 10711 SA 1529			001305	BOLT, HEX HEAD, 0.250-28 x 0.50 GRIP		24	EA	FLT	BHOU			
CCM 10711 SA 1529			001306	INSERT		25	EA	FLT	BHOU			
CCM 10711 SA 1529			001307	INSERT, KEY-LOCKED, LOCKING, 0.250-20		2	EA	FLT	BHOU			
CCM 10711 SA 1529			001308	INSERT		25	EA	FLT	BHOU			
CCM 10711 SA 1529			001309	BACKSHELL		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001310	EMI BAND		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001311	CONNECTOR, CAP		4	EA	FLT	BHOU			
CCM 10711 SA 1529			001312	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001313	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001314	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001315	CONNECTOR, RECEPTACLE		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001316	HANDRAIL		1	EA	FLT	BHOU			
CCM 10711 SA 1529			001317	HANDRAIL		1	EA	FLT	BHOU			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10711 SA 1529			001318	MICROCONICAL		1	EA	FLT	BHOU			
CCM 10625, S/A 1522			001323	BUSHING, SECONDARY TIE - DOWN -COMMON		2	EA	FLT	KSC			
CCM 10625, S/A 1522			001324	BUSHING, SECONDARY TIE- DOWN-DDCU-E		2	EA	FLT	KSC			
CCM 9457, S/A 1512			001325	CLAMP		1	EA	FLT	KSC			
CCM 9457, S/A 1512			001326	CLAMP		1	EA	FLT	KSC			
CCM 9457, S/A 1512			001327	PIN		1	EA	FLT	KSC			
CCM 9457, S/A 1512			001328	PIN		1	EA	FLT	KSC			
CCM 9457, S/A 1512			001329	SCREW, CAP		1	EA	FLT	KSC			
CCM 9457, S/A 1512			001330	ROD, CONT THRD		1	EA	FLT	KSC			
CCM 10625, S/A 1522			001331	PRIMARY STANCHION POST - BATTERY		1	EA	NON - FLT	KSC			
SSCM 10990, S/A 1557	KSC		001332	APS		2	EA	FLT	KSC			Added by Mod 1557
SSCN 11109, S/A 1570	JSC		001342	Solar Alpha Rotary Joint (SARJ) Qualification Drive/Lock Assembly (SDLA)		1	EA	QUAL	KSC			Added by Mod 1570
SSCM 10990, S/A 1557	KSC		001344	APS		2	EA	FLT	KSC			Added by Mod 1557
CCM 11214, S/A 1548			001345	RPCM TYPE III		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001346	RPCM TYPE III		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001347	RPCM TYPE V		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001348	RPCM TYPE V		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001349	RPCM TYPE V		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001350	RPCM TYPE V		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001351	RPCM TYPE V		1	EA	FLT	NSSD			
CCM 11214, S/A 1548			001352	RPCM TYPE VI		1	EA	FLT	NSSD			
SSCN 11372, Mod 1595			001353	COMMON VIDEO INTERFACE UNTI (CVIU)	3000028-301	1	EA	ENG	BHOU	8/14/2009	8/14/2009	Added by Mod 1595
SSCN 11311			001356	MRM1 Interfacing Testing Drawings and Cable Set (pigtaills)		1	EA	ENG	JSC		6/1/2009	Added by Mod 1583
SSCN 11311			001357	Modified CHT-50 Box (for primary test)		1	EA	ENG	JSC		6/1/2009	Added by Mod 1583
SSCN 11311			001358	Modified CHT-50 Interfacing Cable Set (for primary testing in Houston)		1	EA	ENG	JSC		6/1/2009	Added by Mod 1583
PIO 97, S/A 1570			001359	FASTENER, OUTER		4	EA	FLT	L3			Added by Mod 1570

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 97, S/A 1570			001360	MOCROCONICAL FITTING		2	EA	FLT	L3			Added by Mod 1570
PIO 97, S/A 1570			001361	RING, ALIGNMENT, EXTERN		2	EA	FLT	L3			Added by Mod 1570
PIO 97, S/A 1570			001362	MICROCIRCUIT		3	EA	FLT	L3			Added by Mod 1570
PIO 97, S/A 1570			001363	VSW/VBSP TYPE III POWER SUPPLY		1	EA	FLT	L3			Added by Mod 1570
SSCN 10560			001364	D-RING		18	EA	FLT				Added via letter 09-0301
SSCN 10560			001365	HOOKE ASSY		4	EA	FLT				Added via letter 09-0301
SSCN 10560			001366	BUCKLE		8	EA	FLT				Added via letter 09-0301
SSCN 10560			001367	HANDRAIL BACKPLATE		4	EA	FLT				Added via letter 09-0301
SSCN 10560			001368	TOP MOUNTED HANDRAIL ASSEMBLY		2	EA	FLT				Added via letter 09-0301
SSCN 10560			001369	D-RING		18	EA	FLT				Added via letter 09-0301
SSCN 10560			001370	HOOKE ASSY		2	EA	FLT				Added via letter 09-0301
SSCN 10560			001371	BUCKLE		4	EA	FLT				Added via letter 09-0301
SSCN 10560			001372	HANDRAIL BACKPLATE		2	EA	FLT				Added via letter 09-0301
SSCN 10560			001373	TOP MOUNTED HANDRAIL ASSEMBLY		1	EA	FLT				Added via letter 09-0301
SSCN 11372, Mod 1595			001403	TRIPLE DATA ENCRYPTION STANDARD (TDES) UNIT (TDU)	678650	2	EA	ENG	BHOU	4/30/2009	4/30/2009	Added by Mod 1595
SSCN 11431			001404	Orbital Science Corporation (OSC) Simulator		1	EA	GSE	JSC		9/7/2010	Added by Mod 1599
SSCN 11670			001405	RPCM Type V		4	EA	FLT	HSR		7/15/2009	Added by Mod 1577
SSCN 11670			001406	RPCM Type V		1	EA	FLT	HSR		5/7/2009	Added by Mod 1577
SSCN 11670			001407	RPCM Type V		2	EA	FLT	HSR		8/12/2009	Added by Mod 1577
SSCN 11670			001408	RPCM Type V		1	EA	FLT	HSR		4/30/2009	Added by Mod 1577
SSCN 11670			001409	RPCM Power Supply CCA		3	EA	FLT	B-EP		5/12/2009	Added by Mod 1577
SSCN 11670			001410	RPCM Power Supply CCA		1	EA	FLT	HSR		5/12/2009	Added by Mod 1577
SSCN 11670			001411	RPCM Controller CCA		2	EA	FLT	B-EP		4/30/2009	Added by Mod 1577
SSCN 11670			001412	RPCM Controller CCA		1	EA	FLT	B-EP		5/12/2009	Added by Mod 1577
SSCN 11670			001413	RPCM Controller CCA		1	EA	FLT	HSR		4/30/2009	Added by Mod 1577
SSCN 11670			001414	Target Assembly		7	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001415	Target Assembly		1	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001416	Course Alignment Guide Assembly		7	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001417	Course Alignment Guide Assembly		1	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001418	Thrust Plate, External		7	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001419	Thrust Plate, External		1	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001420	Thrust Plate, External		7	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001421	Thrust Plate, External		1	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001422	Grapple Assembly		7	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001423	Grapple Assembly		1	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11670			001424	Drive Screw		3	EA	FLT	HSR		8/14/2009	Added by Mod 1577
SSCN 11670			001425	Drive Screw		1	EA	FLT	HSR		8/14/2009	Added by Mod 1577
SSCN 11670			001426	ID Plate		7	EA	FLT	HSR		7/17/2009	Added by Mod 1577

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 11670			001427	ID Plate		1	EA	FLT	HSR		7/17/2009	Added by Mod 1577
SSCN 11348			001430	Terminated 1553 Data Bus Cable - Channel A		1	EA	FLT	Moscow	12/14/2009	12/14/2009	Added by Mod 1589.
SSCN 11348			001431	Russian Test Cable - Pigtail 1553 Data Bus Cable - Channel A		1	EA	STE	Moscow	12/14/2009	12/14/2009	Added by Mod 1589
SSCN 11348			001432	Terminated 1553 Data Bus Cable - Channel B		1	EA	FLT	Moscow	12/14/2009	12/14/2009	Added by Mod 1589
SSCN 11348			001433	Russian Test Cable - Pigtail 1553 Data Bus Cable - Channel B		1	EA	STE	Moscow	12/14/2009	12/14/2009	Added by Mod 1589
SSCN 11348			001434	Russian EVA Connector - (50 pin data, Mating Pair)		2	EA	FLT	Moscow	12/14/2009	12/14/2009	Added by Mod 1589
SSCN 11745			001435	Cam Buckle Assembly		2	EA	FLT	BHOU		9/30/2009	Added by Mod 1590.
SSCN 11404; Mod 1609			001437	Intra Vehicular - Tissue Equivalent Proportional Counter		1	EA	FLT	SDIL	2/1/2010	2/1/2010	Added by Mod 1609
SSCN 11553			001439	Handrail	SEG33107730-301	4	EA	FLT	BHOU		8/15/2010	Added per revised directive signed 07/30/2010
SSCN 11553			001440	"D" Ring	SEG33114891-801	101	EA	FLT	BHOU		8/15/2010	Added per revised directive signed 07/30/2010
SSCN 11553			001441	Equipment Hook	SEG33108365-302	75	EA	FLT	BHOU		7/1/2011	Added per revised directive signed 07/30/2010
SSCN 11553			001442	Gap Spanner Buckle	SDG33109824-001	150	EA	FLT	BHOU		3/1/2011	Added per revised directive signed 07/30/2010
SSCN 11372, Mod 1595			001443	COMMON VIDEO INTERFACE UNTI (CVIU)	3000028-301	1	EA	ENG	BHOU	3/31/2010	3/31/2010	Added by Mod 1595
SSCN 11848; S/A 1594			001444	SASA Simulator	1F80536-501	1	EA	SIM	JSC	7/31/2009	7/31/2009	Added by Mod 1594.
SSCN 11809; Mod 1598			001445	Switchgear Control Assembly (SCA)	R072526-51	2	EA	FLT	BEP	9/14/2009	9/14/2009	Added by Mod 1598
SSCN 11809; Mod 1598			001446	Plate-Ident	RD171-1056-001	2	EA	FLT	BEP	9/14/2009	9/14/2009	Added by Mod 1598
SSCN 11809; Mod 1598			001447	Screw PNH No. 4 x .32 LG	MS51957-14	28	EA	FLT	BEP	9/14/2009	9/14/2009	Added by Mod 1598
SSCN 11809; Mod 1598			001448	Washer, Lock No. 4	MS35338-135	28	EA	FLT	BEP	9/14/2009	9/14/2009	Added by Mod 1598
SSCN 11809; Mod 1598			001449	Washer, Flat No. 4	AN960C4	28	EA	FLT	BEP	9/14/2009	9/14/2009	Added by Mod 1598
SSCN 11812; Mod 1610			001452	T61 Laptop Assembly w/internal DVD Drive	6457-HUI	1	EA	CSE	SDIL	2/1/2010	2/1/2010	Added by Mod 1610
SSCN 11812; Mod 1610			001453	T61 Laptop Power Adapter	93P5026	1	EA	CSE	SDIL	2/1/2010	2/1/2010	Added by Mod 1610
SSCN 11812; Mod 1610			001454	T61 Laptop 160GB Hard Drive w/rubber shock rails	41N5737	2	EA	CSE	SDIL	2/1/2010	2/1/2010	Added by Mod 1610
SSCN 11812; Mod 1610			001455	T61 Ultra Bay Adapter	26R9247	1	EA	CSE	SDIL	2/1/2010	2/1/2010	Added by Mod 1610
SSCN 11908; Mod 1609			001456	Handle, Micro	R076707-11	2	EA	FLT	BEP	11/25/2009	11/25/2009	Added by Mod 1609
SSCN 11553			001458	Fitting, Microconical, Flanged	SDG33113005-002	9	EA	FLT	BHOU		8/15/2010	Added per revised directive signed 07/30/2010
SSCN 11947; S/A 1658			001459	760XD Power Brick	SEG39129272	1	EA	FLT	SDIL	4/9/2010	4/9/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001460	Brick to UOP Power Cable	SEZ39129260-309	1	EA	FLT	SDIL	4/9/2010	4/9/2010	Added per S/A 1658
SSCN 11885; Mod 1637			001461	Forging (of the passive LIDS pressure ring)	SDH29101460-001	2	EA	EEM	BHOU	1/20/2010	1/20/2010	Added by Mod 1637

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 11947; S/A 1658			001462	Brick to WAP Power Cable Part 1	1F15985-1	1	EA	FLT	SDIL	4/9/2010	4/9/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001463	Brick to WAP Power Cable Part 2	1F15985-501	1	EA	FLT	SDIL	4/9/2010	4/9/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001464	NetGear WAP	1F15938-1	1	EA	FLT	SDIL	4/9/2010	4/9/2010	Added per S/A 1658
SSCN 12140; Mod 1624			001465	Coupling, Quick Disconnect	683-16348-181	1	EA	FLT	KSC	1/25/2010	1/25/2010	Added by Mod 1624
SSCN 12140; Mod 1624			001466	Coupling, Quick Disconnect	683-16348-182	1	EA	FLT	KSC	1/25/2010	1/25/2010	Added by Mod 1624
SSCN 12140; Mod 1624			001467	Integrated Hose Assembly	683-56836-402	1	EA	FLT	KSC	1/25/2010	1/25/2010	Added by Mod 1624
SSCN 12140; Mod 1624			001468	Label, Hose	SDG32107719-001	1	EA	FLT	KSC	1/25/2010	1/27/2010	Added by Mod 1624
SSCN 12140; Mod 1624			001469	Label, IMS	SDG32105719-004	1	EA	FLT	KSC	1/25/2010	1/27/2010	Added by Mod 1624
SSCN 12085; Mod 1633			001470	MDM, PVCU	8260525-909	1	EA	FLT	KSC	6/7/2010	4/23/2010	Added by Mod 1633
SSCN 11885; Mod 1637			001472	Rotation Adaptor	VK7819-5075	1	EA	EEM	BHB	5/6/2010	4/30/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001473	Trolley Stand	VK7809-1424	1	EA	EEM	BHB	5/10/2010	4/30/2010	Added by Mod 1637
SSCN 11801; CCO 1636			001474	Connector, Plug	NZGL06G2121N41 PN	1	EA	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001475	Connector, Receptacle	NZGL07T2121N41 SN	1	EA	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001476	Backshell, Grounding, LP	NZGA-LG-21-N- 28Z	1	EA	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001477	Backshell, Grounding, Str	NZGA-SG-21-N- 16Z	1	EA	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001478	Cap, Connector, Plug	NZGL-PPC-N-21-R	1	EA	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001479	Cap, Connector, Recpt	NZGL-RPC-N-21- 09	1	EA	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001480	Cable, TP, 20 Gauge	NGPC-TFE-20-2U	30	FT	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 11801; CCO 1636			001481	Wire, 20 Gauge	NGPW-TFE-20	30	FT	FLT	BHOU	4/16/2010	4/16/2010	Added by CCO 1636
SSCN 12159; S/A 1641			001482	Connector Cap	NATC-PPC-N-13- 09	30	EA	FLT	BHOU		6/2/2010	Added by Mod 1641
SSCN 11885; Mod 1637			001483	APDA, Passive ICM Docking Mechanism	MC621-0087-8002	1	EA	EEM	BHOU	2/20/2010	2/20/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001484	Master Drill Jig	BK738-02341.00	1	EA	EEM	BHOU	2/20/2010	2/20/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001485	APDA, Active MIR Docking Mechanism	MC621-0087-3002	1	EA	EEM	BHB	4/15/2010	4/15/2010	Added by Mod 1637
PIO 98; S/A 1790			001486	Connector, Receptacle, Elect	J094474001-1 or NZGL06G1511N99 SN	4	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001487	Contact, 20/22 Socket	NZGC-C-2022SB	140	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001488	Contact, #20 Socket	NZGC-C-20SB	23	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001489	Contact, 16/20 Socket	NZGC-C-1620SB	9	EA	FLT	L3		2/1/2012	Added by S/A 1790

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 98; S/A 1790			001490	Plug, #20 Sealing	NZGSP-20	115	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001491	Termination Band	NZGA-B	9	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001492	Connector, Plug, Elect	J094474002-1 or NZGL07T1511N99 PN	3	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001493	Pin	NZGC-C-20PB	150	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001494	Pin	NZGC-C-1620PB	9	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001495	Pin	NZGC-C-2022PB	14	EA	FLT	L3		2/1/2012	Added by S/A 1790
PIO 98; S/A 1790			001500	Backshell, Cable Support	NZGA-LG-11-N- 16Z	6	EA	FLT	L3		2/1/2012	Added by S/A 1790
SSCN 11885; Mod 1637			001501	Low Pressure Dome, Passive (Berthing Assy)	SLIYU374211.001	1	EA	EEM	BHB	5/26/2010	4/30/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001502	High Pressure Dome, Active	33Y.9921.002-06	1	EA	EEM	BHB	No longer needed	4/30/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001503	Low Pressure Dome, Active	VK887-05986A	1	EA	EEM	BHB	5/26/2010	4/30/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001504	Russian Test Console	33U.9175.005	1	EA	EEM	BHOU	6/7/2010	4/30/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001505	Russian Test Console	33U.9175.006	1	EA	EEM	BHOU	6/7/2010	4/30/2010	Added by Mod 1637
SSCN 11885; Mod 1637			001506	Russian Test Console	33U.9175.007	1	EA	EEM	BHOU	6/7/2010	4/30/2010	Added by Mod 1637
SSCN 11947; S/A 1658			001507	Connector Plug	NATC06G13N35S B	2	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001508	Protective Cap	NATC-PPC-N-13-0	2	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001509	Straight Backshell	NZGA-SG-13-N-20	1	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001510	90° Backshell	NZGA-JG-13-N-20	1	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001511	Contact Socket	NZGC-C-22DSB	40	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001512	Socket Sealing Plugs	NZGSP-22DS	4	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001513	Male RJ45 Plug	CS10001	10	EA	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 11947; S/A 1658			001514	Tensolite Ethernet Cable	23450/04090X- 4(LD)	250	FT	FLT	BHOU		8/19/2010	Added per S/A 1658
SSCN 12270; S/A 1641			001516	Connector	NATC07T25LN7PE	1	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001517	Connector, Receptacle	NATC07T25LN3SN	1	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001518	Backshell	NZGA-SG-25-N-24	2	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001519	Cap, Connector, Plug	NATC-RPC-N-25L- R	2	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001520	Contact, Pin	NZGC-C-8PB	10	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001521	Contact, Socket	NZGC-C-4SB	10	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12270; S/A 1641			001522	Sealing Plug	NZGSP-8	6	EA	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001523	Wire, electrical, silicone insulation 8 Gauge	NSFW-SIL-8	50	FT	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12270; S/A 1641			001524	Wire, electrical. General purpose	NGPW-TFE-12	50	FT	FLT	KSC	4/16/2010	4/16/2010	Added by Mod 1641
SSCN 12062			001532	Plate	1F81602-1	2	EA	FLT	BHOU	3/26/2010	3/26/2010	Added per revised directive signed 05/20/2010
SSCN 12062			001533	Support Assembly, Video Stanchion	1F80537-1	1	EA	FLT	BHOU	3/26/2010	3/26/2010	Added per revised directive signed 05/20/2010
SSCN 12275; S/A 1648			001534	Plastazote MP15FR Foam Test Coupon 0.5" thick x 3.5" dia	SDG38120493	4	EA	STE	JSC	7/9/2010	6/25/2010	Added per S/A 1648
SSCN 12275; S/A 1648			001535	Plastazote MP15FR Foam Test Coupon 1.0" thick x 3.5" dia	SDG38120493	4	EA	STE	JSC	7/9/2010	6/25/2010	Added per S/A 1648
SSCN 12275; S/A 1648			001536	Plastazote MP15FR Foam Test Coupon 2.0" thick x 3.5" dia	SDG38120493	4	EA	STE	JSC	7/9/2010	6/25/2010	Added per S/A 1648
SSCN 12455; S/A 1701			001542	Connector	NZGL06G2525LN3 PB	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001543	Connector	NZGL06G2525LN3 PN	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001545	Connector	NZGL07T2525LN3 PA	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001546	Connector	NZGL07T2525LN3 PN	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001547	Connector	NZGL07T2525LN7 PB	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001552	Contacts	NZGC-C-4PB	102	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001553	Contacts	NZGC-C-8PB	49	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001554	Seal Plugs	NZGSP-8	60	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001556	Caps	NZGL-RPC-N-25-0- LP	5	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001558	Wire/Cable	NSFW-SIL-8VB	800'	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001559	Lacing Tape	AA52083-D-4	6 RO	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001562	Marker	HTCM-SCE-1/2-4H- 9	80	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001563	Marker	HT-SCE-3/8-2.0-9	80	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001565	Heat Shrink Tubing	M23053/13-003	6'	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001566	Heat Shrink Tubing	M23053/13-004	6'	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001568	Marker Tape	WRCM-717-637W	6 RO	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12446; S/A 1742			001569	Snubber Assy, Lower (right side)	1F16183-1	1	EA	Non-Flt	BHOU	11/5/2010	11/5/2010	Added per S/A 1742
SSCN 12446; S/A 1742			001570	Snubber Assy, Lower (left side)	1F16183-2	1	EA	Non-Flt	BHOU	11/5/2010	11/5/2010	Added per S/A 1742
SSCN 12446; S/A 1742			001571	Snubber Assy, Upper (left)	1F16190-2	1	EA	Non-Flt	BHOU	11/5/2010	11/5/2010	Added per S/A 1742

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12446; S/A 1742			001573	Standoff Arm Assy, Lower (right)	1F16199-1	1	EA	Non-Flt	BHOU	3/4/2011	3/4/2011	Added per S/A 1742
SSCN 12446; S/A 1742			001574	Standoff Arm Assy, Lower (left)	1F16199-2	1	EA	Non-Flt	BHOU	3/4/2011	3/4/2011	Added per S/A 1742
SSCN 12446; S/A 1742			001575	Standoff Arm Attach Assy, Upper (left)	1F16223-2	1	EA	Non-Flt	BHOU	11/5/2010	11/5/2010	Added per S/A 1742
SSCN 12446; S/A 1742			001576	Standoff Arm Assy, upper (left)	1F16172-2	1	EA	Non-Flt	BHOU	3/4/2011	3/4/2011	Added per S/A 1742
SSCN 12202; S/A 1792			001603	Battery ORU Fin Protection Fixture	7RG027136-1	4	EA	ST	HSR		9/14/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001604	Battery ORU Transportation Container	7RG027180-91	4	EA	ST	HSR		9/14/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001605	Fixture, Lifting, ORU	T5420539-008	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001607	Box, Plt White Plastic	T5423262-000	1	EA	ST	HSR		5/11/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001608	Box, Plt White Plastic	T5423262-002	1	EA	ST	HSR		5/11/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001609	Box, Plt White Plastic	T5423262-003	1	EA	ST	HSR		5/11/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001612	Set, Handling, 3x2x.5FT	T5850032-004	1	EA	ST	HSR		5/22/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001613	Handling Set, ORU	T5850135-005	1	EA	ST	HSR		5/22/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001614	Stand, Battery	T5420539-006	1	EA	ST	HSR		5/22/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001615	Stand, Battery	T5420539-000	1	EA	ST	HSR		5/22/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001616	Stand, Battery	T5420539-002	1	EA	ST	HSR		5/22/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001624	Interface (T.I.), Thermal, Battery, Type 19	JO033906	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001625	Plate, Cold, Battery	SO148109	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001626	Interface (T.I.), Thermal, Battery, Type 19	JO033907	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001627	Plate, Cold, Battery	SO148110	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001628	Interface (T.I.), Thermal, Battery, Type 19	JO034288	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001629	Plate, Cold, Battery	SO148112	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001630	Interface (T.I.), Thermal, Battery, Type 19	JO034289	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001631	Plate, Cold, Battery	SO148115	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001632	Fixture, Vibration	JO700231	1	EA	STE	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001640	Tool, Banding	T5422725-002	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001642	Tool, Holding, NATC Plug	T5423278-000	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001644	Tool, Holding, NATC Plug	T5423278-003	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001645	Tool, Holding, NATC Plug	T5423278-004	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12202; S/A 1792			001646	Wrench, Torque, Bench Mount for Backshell	T5423279-000	1	EA	ST	HSR		5/11/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001647	Fixture, Lifting Beam, Battery, ORU	T5423295-000	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001648	Wrench, Torque, Digital	T5423301-000	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001649	Tool, Contract Retention	T5423375-000	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001650	Tool, Contract Retention	T5423376-000	1	EA	ST	HPSC		5/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001651	Tool, Alignment, Battery	T5850096-000	1	EA	ST	HSR		5/11/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001652	Gauge, Check, ACME Tool, Inside R072283 and R072438, 2 Part Set	T5850360-006	1	EA	ST	HSR		5/11/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001653	Assembly Fixture, Battery Enclosure	63507100-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001654	Master Drill Jig, Top Panel	63507110-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001655	Master Drill Jig, Bottom Panel	63507111-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001656	Bond Fixture	63507120-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001657	Caul Sheet	63507120-05	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001658	Rout Fixture, Lower Cover Skin	63507121-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001659	Rout Fixture, Cover Panel	63507122-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001660	Drill Jig, Lower Cover	63507123-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001661	Core Template	63507125-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001662	Template	63507125-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001663	Drill Jig	63507127-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001664	Drill Fixture-Cover, Lower	63507128-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001665	Template	63507129-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001666	Template	63507129-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001667	Velcro Template	63507130-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001668	Bond Fixture	63507140-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001669	Drill/Rout Fixture, Face Sheet	63507141-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001670	Template, Core	63507143-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001671	Drill Jig, Front Panel	63507144-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001672	Drill Jig, Front Panel	63507145-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001673	Template	63507146-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12202; S/A 1792			001674	Template, Core	63507146-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001675	Drill Jig, Closeout	63507147-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001676	Drill/Rout Fixture, Face Sheet	63507151-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001677	Template, Core	63507153-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001678	Drill Jig, Rear Panel	63507154-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001679	Template	63507155-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001680	Template	63507155-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001681	Drill Jig, Rear Closeout	63507156-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001682	Bond Fixture	63507160-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001683	Drill/Rout Fixture, Side Panel	63507161-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001684	Template, Core	63507163-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001685	Drill Jig, Side Panel	63507164-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001686	Drill Jig, Side Panel	63507164-02	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001687	Template	63507166-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001688	Template	63507166-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001689	Drill Jig, Side Closeout	63507167-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001690	Drill Jig, Connector Cover	63507170-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001691	Drill Jig, Front Molding	63507171-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001692	Drill Jig, Rear Molding	63507172-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001693	Bond Fixture	63507180-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001694	Drill Jig, Front Panel	63507189-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001695	Drill Jig, Front Panel	63507189-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001696	Drill Jig, Rear Panel	63507189-05	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001697	Drill Jig, Side Panel	63507189-07	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001698	Drill Jig, Exterior Molding, Front	63507192-01	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001699	Drill Jig, Exterior Molding, Rear	63507192-03	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001700	Drill Jig, Interior Molding	63507192-05	1	EA	ST	Vendor		12/15/2011	Added per S/A 1792
SSCN 12202; S/A 1792			001707	Thermal Vacuum and Cycling System 4 (TVAC-4)	JO034140	1	EA	STE	HSR		11/1/2012	Added per S/A 1792

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12202; S/A 1792			001708	Lift Fixture	T5850032-009	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001709	Lift Fixture	T5850032-002	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001710	Lift Fixture	T5850032-003	1	EA	ST	HSR		11/1/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001722	ORU Dolly	T5850073-000	1	EA	ST	HSR		5/22/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001723	Bemco Environmental Chamber	JO700446	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001724	Bemco Environmental Chamber	JO700447	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001726	Current Amplifier / Current Probe	SO143424	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001727	Current Amplifier / Current Probe	SO143427	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001728	Solar 9238-10-TS-50-BNC	SO148181	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001729	TWTA Model ASE 200X/KU; 200W (8-18GHz)	SO148208	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001730	TWTA Model ASE 200S; 200W (2-4GHz)	SO148209	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001731	Ridged Horn Antenna ARA DRG-2020/A	SO148963	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001732	TWTA Model ASE 200L; 200W (1-2GHz)	SO148964	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001733	TWTA Model ASE 200C; 200W (4-8GHz)	SO148965	1	EA	STE	HSR		1/9/2012	Added per S/A 1792
SSCN 12202; S/A 1792			001735	Oscilloscope	SO184378	1	EA	STE	HSR		1/19/2012	Added per S/A 1792
SSCN 12202; S/A 1792, Letter 12- 005961			001742	Battery ORU Fin Protection Fixture	7RG027136-1	6	EA	ST	HSR		10/15/2014	Changed qty and need date per letter 12-005961. Added per S/A 1792
SSCN 12202; S/A 1792, Letter 12- 005961			001743	Battery ORU Transportation Container	7RG027180-91	6	EA	ST	HSR		10/15/2014	Changed qty and need date per letter 12-005961. Added per S/A 1792
SSCN 12202; Letter 12- 005961			001744	Battery ORU Fin Protection Fixture	7RG027136-1	6	EA	ST	HSR		6/15/2015	Added per letter 12-005961
SSCN 12202; Letter 12- 005961			001745	Battery ORU Fin Protection Fixture	7RG027136-1	6	EA	ST	HSR		6/15/2016	Added per letter 12-005961
SSCN 12202; Letter 12- 005961			001746	Battery ORU Fin Protection Fixture	7RG027136-1	6	EA	ST	HSR		6/15/2017	Added per letter 12-005961
SSCN 12202; Letter 12- 005961			001747	Battery ORU Fin Protection Fixture	7RG027136-1	6	EA	ST	HSR		1/15/2018	Added per letter 12-005961
SSCN 12202; Letter 12- 005961			001748	Battery ORU Transportation Container	7RG027180-91	6	EA	ST	HSR		6/15/2015	Added per letter 12-005961
SSCN 12202; Letter 12- 005961			001749	Battery ORU Transportation Container	7RG027180-91	6	EA	ST	HSR		6/15/2016	Added per letter 12-005961

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12202; Letter 12- 005961			001750	Battery ORU Transportation Container	7RG027180-91	6	EA	ST	HSR		6/15/2017	Added per letter 12-005961
SSCN 12202; Letter 12- 005961			001751	Battery ORU Transportation Container	7RG027180-91	6	EA	ST	HSR		1/15/2018	Added per letter 12-005961
PIO 99; S/A 1694			001802	VIDEO TEST SET RACK	1360AE9001	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001803	VIDEO TEST SET RACK	1360AE9002	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001804	OSCILLOSCOPE	2247A	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001805	VIDEO MEAS. SET (VMS)	VM700A	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001806	SIGNAL GENERATOR	TSG170A	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001807	SIGNAL GENERATOR, MOD.	1410R	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001808	MODEL 21 WAVEFORM GENERATOR	1360AE9067	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001809	MONITOR, 19 INCH	PVM1944Q	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001810	VIDEO DELAY LINE	VP2025	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001811	LIGHT METER MAINFRAME	HP81531	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001812	LIGHT METER SENSOR MODULE	HP81531A	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001813	POWER SUPPLY, 150VDC	TCR150S7DOV	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001814	PC-486 UPGRADE	1360AE9064	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001815	PC-MONITOR	7CM321-9541	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001816	KEYBOARD, RACK	6531-KBD/C	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001817	INSERTER, CCA	1360AE9008	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001818	STRIPPER, CCA	1360AE9009	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001819	1553 INTERFACE CCA	BT1553PC-1	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001820	SCU SIMULATOR PANEL	1360AE9014	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001821	COMPUTER INT. PANEL	1360AE9011	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001822	VFOT/VFOR PANEL	1360AE9060	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001823	VFOT/VFOR CHASSIS	1360AE9061	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001824	VFOT CCA	3000011-101	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001825	VFOR CCA	3000012-101	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001826	HP PRINTER ASSEMBLY	LASERJET 5M	1		STE	BAE		3/31/2011	Added per S/A 1694

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 99; S/A 1694			001827	VECTORSCOPE	1780R	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001828	MONITOR, 13 INCH	PVM1354Q	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001829	MONITOR, 13 INCH	PVM1354Q	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001830	QUAL (-) UNIT-TEST BED	1360AE7010-202	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001831	EMULATOR PC	P5-120	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001832	PC-MONITOR	CPD-15F23	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001833	IN CIRCUIT EMULATOR	ICE-51FX/PC	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001834	PORTABLE NEC. COMPUTER	APC-H702XB	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001835	SCU VIBRATION APPARATUS	13058	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001836	SCU/ESS COLD PLATE	13059	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001837	SCU INPUT DELAY CIRCUIT	13062	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001838	1360AE7503 CCA TESTER	13063	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001839	1360AE7505 CCA TESTER	13064	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001840	1360AE7003 CCA TESTER	13065	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001841	EXTERNAL CCA	13065-1	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001842	1360AE7504 CCA TESTER	13066	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001843	EXTERNAL CCA	13066-1	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001844	EXTERNAL CCA	13066-2	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001845	VIDEO DEGRADER	13067	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001846	1360AE7529 CCA TESTER	13075	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001847	1360AE7004,7534 PS TESTER	13076	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001848	BLOWERS	13077	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001849	1360AE7002 PROM CCA TESTER	13104	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001850	ATP CABLE MOD'D	1360CA9024-1	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001851	ESS CABLE	1360CA9024-2	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001852	ATP POWER CABLE	1360CA9021-1	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001853	ESS POWER CABLE MOD'D	1360CA9021-2	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001854	FIBER OPTICS T. CABLE (EDM)	1360CA9075	2		STE	BAE		3/31/2011	Added per S/A 1694

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 99; S/A 1694			001855	QUAL (-) F/O CONN. SAVER	1360CA9044	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001856	FLIGHT F/O CONN. SAVER	1360CA9044-1	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001857	POWER CONNECTOR SAVER	1360CA9051	3		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001858	1553/EMI CONNECTOR SAVER	1360CA9052	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001859	SCU 1553 Address Tester	1360AE9080	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001860	MICROPHONE	4165	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001861	PREAMP	2669B	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001862	CALIBRATOR	4231	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001863	TEST CCA - ANALOG	1360AE7003	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001864	TEST CCA - BADC	1360AE7503	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001865	TEST CCA - DSP	1360AE7504	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001866	TEST CCA - ADAC	1360AE7505	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001867	TEST CCA - MICRO	1360AE7529	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001868	LIGHTWAVE ATTENUATOR	A438	2		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001869	LIGHT SOURCE	S770A-238	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001870	LIGHT SOURCE	S770A-238	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001871	FIBER OPTICS TEST CABLE	1360CA9076	1		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001872	EXTENDER CARD	1360AE7509	3		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001873	EXTENDER CARD	1360AE7516	6		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001874	EXTENDER CARD	1360AE7521	4		STE	BAE		3/31/2011	Added per S/A 1694
PIO 99; S/A 1694			001875	SCU CHASSIS	1360DA7001	1		STE	BAE		3/31/2011	Added per S/A 1694
SSCN 12521; S/A 1679			001601	Quick Disconnect, 1/4" Female (w/Lanyard Cap)	502040-3302	1	EA	FLT	HSSSI	10/1/2010	10/1/2010	Added per S/A 1679
SSCN 12521; S/A 1679			001602	Quick Disconnect, 1/4" Male (w/Lanyard Cap)	502040-1301	1	EA	FLT	HSSSI	10/1/2010	10/1/2010	Added per S/A 1679
SSCN 12443; S/A 1771			001796	OI Post Assy, Front	SEG33114917-301	2	EA	FLT	BHOU	12/7/2010	12/7/2010	Added per S/A 1771
SSCN 12443; S/A 1771			001797	OI Post Assy , Rear	SEG33114917-303	2	EA	FLT	BHOU	12/7/2010	12/7/2010	Added per S/A 1771
SSCN 12455; S/A 1701			001798	Connector	NZGL07T2525LN7 PC	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001799	Backshell	NZGA-SG-25-N- 40Z	10	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12455; S/A 1701			001800	Backshell	NZGA-JG-25-N- 40Z	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12455; S/A 1701			001801	Cap	NZGL-PPC-N-25L-R	2	EA	FLT	BHOU	11/5/2010	11/5/2010	Added per S/A 1701
SSCN 12556; S/A 1713			001876	Color Television Camera (CTVC)	3278890-508	1	EA	FLT	KSC		3/3/2011	Added per S/A 1713
SSCN 12358; S/A 1797			001904	6-DOF 3X Pin & Socket Test (C3)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001905	iLIDS JR-3 (CIII) 2 Sets	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001906	SCS Handling Fixture (CIII) 2 Units	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001907	Cable Extensions (GSE/C3)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001908	iLIDS Active Handling Fixture (Includes Lift Hdw) (CIII 2 Units)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001909	Seal Surface Protective Covers 2 Sets Upper and Lower (GSE)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001910	iLIDS EDU/Qual Lift Hardware 2 sets (1-CIII, 1-GSE)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001911	iLIDS EDU Crate (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001912	Elec Box VIB Plate BB6 (Class III)	N/A	1	EA	TSE	BHOU		10/31/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001913	Elec Box Stand (Class III)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001914	iLIDS Passive Overhead Holding Fixture & Lift Hdw (CIII 2 Units)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001915	Lift Hdw iLIDS Active Flight and Qual Units (GSE - 2 Sets)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001916	iLIDS Vibration Plate & Lift HDW (GSE)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001917	iLIDS EDU Drill Template and Lift Hdw (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001918	iLIDS EDU Drill Template Crate (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001919	EEMS/Passive Static Struc Actuator Interface & Lift HDW (GSE)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001920	Static Struc Actuator Interface Crate (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001921	iLIDS Active B13 Floor Interface & Lift Hdw (GSE)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001922	iLIDS B13 Floor Interface Crate (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001923	Static Structure Test Cantilever Framework (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001924	Bell Jars (GSE)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001925	Weight and c.g. Fixture (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001926	EMI Stand (CIII)	N/A	1	EA	TSE	BHOU		3/14/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001932	EDU Communication Board	N/A	1	EA	ENG	BHOU	1/6/2012	1/6/2012	Added per S/A 1797

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12358; S/A 1797			001933	EDU Power EMI Filter Board (Control & Motor)	N/A	1	EA	ENG	BHOU		1/20/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001934	EDU Power Module Board (Control & Motor)	N/A	1	EA	ENG	BHOU		1/20/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001935	EDU Motor Controller Board (update required if CE impl. current limiting)	N/A	1	EA	ENG	BHOU	1/6/2012	1/6/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001936	EDU Motor Bridge Board	N/A	1	EA	ENG	BHOU	1/6/2012	1/6/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001937	EDU Heater Controller Board	N/A	1	EA	ENG	BHOU		1/20/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001938	EDU Resolver Board	N/A	1	EA	ENG	BHOU		1/20/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001939	EDU Load Cell Board	N/A	1	EA	ENG	BHOU	1/6/2012	1/6/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001940	EDU Analog Board	N/A	1	EA	ENG	BHOU	1/6/2012	1/6/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001941	EDU Processor Board (CCTC testing depends on S/W version)	N/A	1	EA	ENG	BHOU	1/6/2012	1/6/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001942	HE/LE Software Delivery R1- (including VDD/SUM)	N/A	1	EA	ENG	BHOU		3/16/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001943	HE/LE Software Delivery R2- (including VDD/SUM)	N/A	1	EA	ENG	BHOU		6/8/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001944	HE/LE Software Delivery R3- (including VDD/SUM)	N/A	1	EA	EIM	BHOU		7/27/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001945	Complex Electronics (CE) Delivery R1- (including All SW Product deliver, VDD/SUM) (for Gold Unit)	N/A	1	EA	ENG	BHOU		6/5/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001946	Control System Software Delivery R1 - (including All SW Product deliver, VDD/SUM)	N/A	1	EA	ENG	BHOU		1/13/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001947	Control System Software Delivery R2 - (including All SW Product deliver, VDD/SUM)	N/A	1	EA	ENG	BHOU		6/1/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001948	Control System Software Delivery R3 - (including All SW Product deliver, VDD/SUM)	N/A	1	EA	FLT	BHOU		6/1/2013	Added per S/A 1797
SSCN 12358; S/A 1797			001949	Complex Electronics (CE) Delivery R2- (including All SW Product deliver, VDD/SUM) (for Qual Unit)	N/A	1	EA	FLT	BHOU		7/12/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001960	Captive Fastener for Guide Petal	FTD7158-12-8- 13DL	200	EA	FLT	BHOU		3/30/2012	Added per S/A 1797
SSCN 12358; S/A 1797			001961	Retaining Ring for Guide Petal	CA2210A-4R	400	EA	FLT	BHOU		3/30/2012	Added per S/A 1797
SSCN 12443; S/A 1771			001964	OI Post Assy, Front	SEG33114917-301	1	EA	FLT	BHOU	3/28/2011	3/28/2011	Added per S/A 1771
SSCN 12443; S/A 1771			001965	OI Post Assy , Rear	SEG33114917-303	1	EA	FLT	BHOU	3/28/2011	3/28/2011	Added per S/A 1771
SSCN 10395; S/A 1769			001966	Connector	NZGL07T2525LN3 PC	1	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 10395; S/A 1769			001967	Connector	NZGL03G2525LN3 PA-1	1	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001967	Connector	NZGL03A2525LN3 PSA	1	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001969	Connector	NZGL07T2525LN3 SN	2	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001970	Connector	NZGL06G2525LN3 PN	2	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001791	Connector	NZGL07T2525LN3 SA	1	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001972	Connector	NZGL06G2525LN3 PA	1	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001973	Backshell	NZGA-SG-25-N- 36Z	8	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001974	Backshell	NZGA-SG-25-N- 40Z	4	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001975	Connector	NZGL06G2525LN7 SD	2	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001976	Connector	NZGL07T2525LN7 PD	2	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001977	Connector	NZGL06G2525LN7 SE	2	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001978	Connector	NZGL07T2525LN7 PE	2	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001979	Backshell	NZGA-SX-25-N- 36Z	8	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001981	Cap	NZGL-RPC-N-25-0- MS	6	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001982	Cap	NZGL-PPC-N-25L- R	4	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001983	Pin	NZGC-C-4PB	40	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001984	Pin	NZGC-C-8PB	56	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001985	Socket	NZGC-C-4SB	40	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001986	Socket	NZGC-C-8SB	56	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001987	Seal Plug	NZGSP-8	50	EA	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 10395; S/A 1769			001988	Wire	NSFW-SIL-4VB	700	FT	FLT	BHOU	5/20/2011	5/20/2011	Added per S/A 1769
SSCN 12441; S/A 1802			002041	Handrail Assy, 8" Top Mounted	SEG33106347-303	3	EA	FLT	BHOU		3/16/2012	Added per S/A 1802
SSCN 12441; S/A 1802			002042	ECOM Socket	SDG33107100-001	3	EA	FLT	BHOU		3/16/2012	Added per S/A 1802
S/A 12422; S/A 1785			002043	Cable	NDBC-TFE-22-2SJ- 75	85	FT	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002044	Wire	NSFW-SIL-0VB	220	FT	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002045	Backshell	NZGA-SG-11-N- 16Z	4	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002046	Backshell	NZGA-SX33N28Z	2	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002047	Backshell	NZGA-SX33N32Z	2	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
S/A 12422; S/A 1785			002048	Backshell	NZGA-SX37N44Z	6	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002049	Contact	NZGC-C-0PB	8	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002050	Contact	NZGC-C-0SB	12	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002051	Contact	NZGC-C-22DSB	16	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002052	Connector	NZGL06G3333N3S A	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002053	Connector	NZGL06G3333N3S N	2	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002054	Connector	NZGL07T1511N35 SA	2	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002055	Connector	NZGL07T1511N35 SN	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002056	Connector	NZGL07T1511N35 SN	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002057	Connector	NZGL07T3737N5P N	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002058	Connector	NZGL07T3737N5P A	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002059	Connector	NZGL07T3737N5P C	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002060	Connector	NZGL07T3737N5S A	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002061	Connector	NZGL07T3737N5S C	1	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002062	Connector	NZGL07T3737N5S B	2	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002063	Protective Cap	NZGL-PPC-N-33-R	4	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002064	Protective Cap	NZGL-RPC-N-15-R	3	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002065	Protective Cap	NZGL-RPC-N-37-R	8	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002066	Sealing Plug	NZGSP-0	12	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002067	Sealing Plug	NZGSP-22DS	36	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
S/A 12422; S/A 1785			002068	Sealing Plug	NZGSP-4	4	EA	FLT	BHOU	1/10/2012	1/10/2012	Added per S/A 1785
SSCN 12721; S/A 1717			002039	1553/Memory CCA	360020-006	1	EA	FLT	HSSSI	3/8/2011	3/8/2011	Added per S/A 1717
SSCN 12721; S/A 1717			002040	EDP CCA	360330-003	1	EA	FLT	HSSSI	3/8/2011	3/8/2011	Added per S/A 1717
SSCN 12753; S/A 1720			002073	Pip Pin	TBD	9	EA	FLT	BHOU		4/29/2011	Added per S/A 1720
SSCN 12719; S/A 1728			002074	Latchable Grapple Fixture (LGF)		1	EA	FLT	KSC		11/1/2011	Added per S/A 1728
SSCN 12283; S/A 1794			002076	Komplast Panel/Container Assembly	77KM-7905-0	1	EA	FLT	KhSC	6/1/2011	6/1/2011	Added per S/A 1794
SSCN 12778; S/A 1733			002078	Strap	8257548-111	16	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002079	Screw, .190-32X.625	4041583-106	36	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12778; S/A 1733			002080	Screw, .138-32X.500	4041583-065	36	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002081	Screw, .112-40X.500	8257551-219	15	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002082	Screw, .138-32X.500	8257551-224	28	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002083	Terminal	092-002	4	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002084	Socket	CF8260540-202	75	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002085	Screw, .112-40X.250	8257551-217	9	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002086	Screw, .112-40X.375	8257551-218	22	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002087	Screw, .112-40X.250	8261906-304	18	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002088	Screw, .112-40X.250	8261906-304	4	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002089	Backshell	CF8260540-502	1	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002090	Backshell	CF8260540-503	1	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002091	Seal Plug	CF8260540-401	16	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002092	Connector, Receptacle	CF8260540-003	1	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002093	Signal Ring Assembly	8259154-901	1	EA	FLT	HIG	3/28/2011	3/28/2011	Added per S/A 1733
PIO 101; S/A 1816			002094	Connector Caps, Protective	NZGL-RPC-N-21-0- MS	4	EA	FLT	L3		7/31/2012	Added per S/A 1816
SSCN 12778; S/A 1733			002098	Shim, Preload, Signal Mod	8259364-005	21	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002099	Shim, Preload, Signal Mod	8259364-006	21	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002100	Shim, Preload, Signal Mod	8259364-007	21	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002101	Shim, Preload, Signal Mod	8259364-008	21	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002102	Bearing	8260642-001	1	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002103	Shim, Signal Module	8259386-001	15	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002104	Shim, Signal Module	8259386-002	15	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002105	Shim, Signal Module	8259386-003	15	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002106	Shim, Signal Module	8259386-004	15	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002107	Lug, Terminal	8264919-001	4	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002108	Screw, Captive	8259388	3	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002109	EMI Ground Band	CF8260540-601	6	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002110	Flexure, Plated	8259280-002	70	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12778; S/A 1733			002111	Ring (inner)	8261684-002	3	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002112	Ring (outer)	8261684-001	2	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002113	Cap, Module	8259367	2	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002114	Backshell	CF8260540-502	2	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12778; S/A 1733			002115	Socket	CF8260540-203	100	EA	FLT	HIG	4/8/2011	4/8/2011	Added per S/A 1733
SSCN 12693; S/A 1736			002116	Protective Cap	NATC-RPC-N-15-0	4	EA	FLT	KSC	7/31/2011	7/31/2011	Added per S/A 1736
SSCN 12693; S/A 1736			002117	Protective Cap	NATC-PPC-N-15-0	4	EA	FLT	KSC	7/31/2011	7/31/2011	Added per S/A 1736
SSCN 12693; S/A 1736			002118	Protective Cap	NATC-RPC-N-11-0	8	EA	FLT	KSC	7/31/2011	7/31/2011	Added per S/A 1736
SSCN 12693; S/A 1736			002119	Protective Cap	NATC-PPC-N-11-0	8	EA	FLT	KSC	7/31/2011	7/31/2011	Added per S/A 1736
SSCN 12693; S/A 1736			002120	Protective Cap	NATC-RPC-N-13-0	24	EA	FLT	KSC	7/31/2011	7/31/2011	Added per S/A 1736
SSCN 12693; S/A 1736			002121	Protective Cap	NATC-PPC-N-13-0	24	EA	FLT	KSC	7/31/2011	7/31/2011	Added per S/A 1736
SSCN 12810; S/A 1743			002326	Sheet Insulation	APS12043	2	EA	FLT	BHOU		9/2/2011	Added per S/A 1743
SSCN 12810; S/A 1743			002327	Sheet Insulation	APS10043	2	EA	FLT	BHOU		9/2/2011	Added per S/A 1743
SSCN 12810; S/A 1743			002328	Tube Insulation	APT03410	10'	EA	FLT	BHOU		9/2/2011	Added per S/A 1743
SSCN 12810; S/A 1743			002329	Tube Insulation	APT01212	20'	EA	FLT	BHOU		9/2/2011	Added per S/A 1743
SSCN 12784; S/A 1761			002330	Element Assy, Bacteria Filter	SV810010-1	7	EA	FLT	HSSSI	4/12/2004	4/12/2004	Added per S/A 1761
SSCN 12816; S/A 1808			002331	Non-Mirrored connector	NZGL06G2121N35 PN	1	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002332	Straight Backshell	NZGA-SG-21N-36Z	1	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002333	Connector, Receptacle	NZGL00T2121N35 SN	4	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002334	Straight Backshell	NZGA-SG-21N-36Z	4	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002335	Contact Socket	NZGC-C-22DSB	40	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002336	Socket Sealing Plug	NZGSP-22DS	39	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002337	Contact Pin	NZGC-C-22DPB	48	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002338	Pin Sealing Plug	NZGSP-22DP	31	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12816; S/A 1808			002339	RJ45 Plug Connector	CS10001	2	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 12831; S/A 1834			002340	Protective Cap	NATC-PPC-N-33-0	5	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002341	Protective Cap, Tethered	NATC-RPC-N-25L- 9	6	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002342	Connector	NATC06G25LN3P A	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12831; S/A 1834			002343	Connector	NATC06G25LN3P N	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002344	Connector	NATC06G25LN3S A	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002345	Connector	NATC06G25LN3S N	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002346	Connector	NATC06G33N3SN	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002347	Connector	NATC06G33N6SN	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002348	Connector	NATC07T25LN3PA	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002349	Connector	NATC07T25LN3PN	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002350	Connector	NATC07T25LN3SB	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002351	Connector	NATC07T25LN3SN	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002352	Connector	NATC07T33N6PN	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002353	Backshell	NZGA-JX-25-N-28	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002354	Backshell	NZGA-SG-33-N-44	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002355	Contact	NZGC-C-0PB	14	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002356	Contact	NZGC-C-0SB	12	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002357	Contact	NZGC-C-4PB	34	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002358	Contact	NZGC-C-4SB	34	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002359	Contact	NZGC-C-8PB	15	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002360	Contact	NZGC-C-8SB	15	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002361	Seal Plug	NZGSP-4	21	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002362	Seal Plug	NZGSP-8	18	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002363	Wire, 1/0 AWG	NSFW-SIL-0	27	FT	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002364	Wire, 4 AWG	NSFW-SIL-4	56	FT	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002365	Wire, 8 AWG	NSFW-SIL-8	58	FT	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002366	Sleeving, Heat Shrink	M23053/13-005-0	14	FT	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002367	Marker, Tie-On	HTCM-SCE-1/2-4H- 9	101	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002368	Lacing Tape	AA52083-D-4	1	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12852; S/A 1752			002369	BF-4 Impregnated Mesh	N/A	1	EA	Non-Flt	BHOU	12/15/2010	12/15/2010	Added per S/A 1752
SSCN 12852; S/A 1752			002370	AK-512 Paint	N/A	1	EA	Non-Flt	BHOU	12/15/2010	12/15/2010	Added per S/A 1752

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12852; S/A 1752			002371	ZK1 MMOD Shielding	N/A	1	EA	Non-Flt	BHOU	12/15/2010	12/15/2010	Added per S/A 1752
SSCN 12852; S/A 1752			002372	Par-ML Cable	N/A	1	EA	Non-Flt	BHOU	12/15/2010	12/15/2010	Added per S/A 1752
SSCN 12852; S/A 1752			002373	56313 Cloth	N/A	1	EA	Non-Flt	BHOU	12/15/2010	12/15/2010	Added per S/A 1752
SSCN 12852; S/A 1752			002374	Material X (Russian designation pending)	N/A	1	EA	Non-Flt	BHOU	12/15/2010	12/15/2010	Added per S/A 1752
SSCN 12443; S/A 1771			002418	OI Post Assy, Front	SEG33114917-301	1	EA	FLT	BHOU		10/3/2011	Added per S/A 1771
SSCN 12443; S/A 1771			002419	OI Post Assy , Rear	SEG33114917-303	1	EA	FLT	BHOU		10/3/2011	Added per S/A 1771
SSCN 12831; S/A 1834			002420	Protective Cap, Tethered	NATC-PPC-N-25L- 09	5	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002421	Protective Cap, Tethered	NATC-PPC-N-33-9	4	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002422	Backshell	NZGA-JG-25-N-32	2	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002423	Backshell	NZGA-SG-25-N-28	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002424	Backshell	NZGA-SG-25-N-32	4	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002425	Backshell	NZGA-SX-33-N-40	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
PIO 98; S/A 1790			002426	Microcircuit	M38510/11201SCA	200	EA	FLT	L3		2/1/2012	Added per S/A 1790
PIO 98; S/A 1790			002427	Capacitor, Fixed	M123A02BXC473K C	200	EA	FLT	L3		2/1/2012	Added per S/A 1790
PIO 98; S/A 1790			002428	Microcircuit, Digital, CMOS, FPGA, 8K, RH	K10046050	6	EA	FLT	L3		2/1/2012	Added per S/A 1790
SSCN 12854; S/A 1786			002429	Inserts ACY (kit)	A8-9060-400	30	EA	FLT	KSC	9/30/2011	9/30/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002430	Wipes (kit)	A8A-9060-750	30	EA	FLT	KSC	9/30/2011	9/30/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002431	Solid Waste Container Lid	11Φ615.8720A55- 10	30	EA	FLT	KSC	9/30/2011	9/30/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002432	Solid Waste Container Body	11Φ615.8720A55- 20	30	EA	FLT	KSC	9/30/2011	9/30/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002433	Urine Receptacle	A8-9060-800-04	12	EA	FLT	KSC	9/30/2011	9/30/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002434	Insert Filter	10182.5514.000	12	EA	FLT	KSC	9/30/2011	9/30/2011	Added per S/A 1786
SSCN 12209; S/A 1825, 1932			002435	Fluid Connector	683-15179-34	1		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002436	Pressure Plug	683-15179-61	3		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002437	V-band Clamp	AS5355/2-21R	2		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002438	V-band Clamp	5132A5M-638-Z	2		GSE	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002439	Connector, Plug, Power, K, M	NATC06G15N4SN	1		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12209; S/A 1825, 1932			002440	Connector, Receptacle, Jam Nut, Power	NATC07T15N4PN	1		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002441	Protective Cover for Connector K, M	NATC-PPC-N-15-12	10		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002442	Protective Cover for Connector L	NATC-RPC-N-15-0	5		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002443	Protective Cover w/Tether	NATC-RPC-N-15-6	5		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002444	Backshell, 90 deg for Connector K	NZGA-JG-15-N-12	3		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002445	Backshell for Connector L, M	NZGA-SG-15-N-12	8		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002446	Pins for Connector	NZGC-C-12PB	300		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002447	Sockets for Connector K, M	NZGC-C-12SB	250		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			002448	Seal Plugs	NZGSP-12	75		FLT	BHOU	10/10/2011	10/10/2011	Added per S/A 1825
SSCN 12639; S/A 1999			002456	C2V2 Comm Unit - Engineering Unit	TBD	1		ENG	BHOU		1/2/2014	Added per S/A 1999
SSCN 12639; S/A 1999			002457	MSS AV Training Rack	00091-1-70-1-11	1		TNG	B-MSFC	4/2/2012	4/2/2012	
SSCN 12639; S/A 1999			002459	Labels for Mod Kit Hardware	684-TBD-0001	1		FLT	BHOU		12/16/2013	
SSCN 12358; S/A 1797			002461	Pyrobolt, Inert	SEG26152313-301	40		ENG	BHOU		2/14/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002462	Pyrobolt, 100% Charge	SEG26152302-301	6		ENG	BHOU		5/30/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002464	Pyrobolt, 100% Charge	SEG26152302-301	159		ENG	BHOU		8/1/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002465	Pyrobolt, 100% Charge	SEG26152302-301	156		ENG	BHOU		1/3/2013	Added per S/A 1797
SSCN 12358; S/A 1797			002466	Inert NASA Standard Initiator	SEB26100001-150	4		ENG	BHOU		2/29/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002467	NASA Standard Initiator	SEB26100001-256	24		ENG	BHOU		8/1/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002468	NASA Standard Initiator	SEB26100001-257	39		ENG	BHOU		8/1/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002469	NASA Standard Initiator	SEB26100001-258	24		ENG	BHOU		8/1/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002470	NASA Standard Initiator	SEB26100001-259	24		ENG	BHOU		8/1/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002471	Limit Switch (for DSA, EDU HA)	SLZ29101632-001	49		FLT	BHOU		1/19/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002472	Potentiometer (for DSA)	SLZ29101645-301	4		FLT	BHOU		1/19/2012	Added per S/A 1797
SSCN 12358; S/A 1797			002473	Limit Switches, Ready to Hook Assy	SDZ29102112-301	3		FLT	BHOU		2/28/2012	Added per S/A 1797

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12358; S/A 1797			002474	NDS Controller Box	N/A	2		TSE	BHOU		1/20/2012	Added per S/A 1797
SSCN 12854; S/A 1786			002475	Fan	A8-9060-1500	2	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002476	Pump Separator	H50.2.428.01.000	2	EA	FLT	KSC		4/15/2013	Added per S/A 1786
SSCN 12854; S/A 1786			002477	Air Filter	A8-9060-250-01	10	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002478	Electronic Unit of Pre-treat Indicator СПП-2М	5B2.390.934-01	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002479	Control Panel	A8-9060-1800-01	2	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002480	Pump-Separator Blocker (MHP- BK) and Cables	H50.2.584.00.000	10	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002481	ACU-СПК-Y Control Panel and Cables	10361.6269.00.000	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002482	Filter (kit)	10463.6610.000	30	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002483	Liquid Indicator	A8A-9060-900	10	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002484	Solid Waste Receptacle	A8-9060-3600	30	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002485	Hose	A8A-9060-1470	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002486	Hose	A8A-9060-1480	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002487	Hose	A8A-9060-1490	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002488	Hose	A8-9060-3400- 23.10	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002489	T-Adapter	A8A-9060-180	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002490	Corner Fitting	A8-9060-220	5	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002491	Piping	10166.5182.000-03	20	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002492	Urine and Water EDV	11Φ615.8711- 0A15-1	30	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12854; S/A 1786			002493	Wring Collector	11Φ615.8711-0A15- 3	30	EA	FLT	KSC		12/9/2011	Added per S/A 1786
SSCN 12870; S/A 1829			002496	MASK, DUST	1501	1	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002497	Webbing,1 1/2 " Wide Natural	2095	31	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002498	TAPE, BLACK, 1/4" WIDE	2501	1	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002499	TAPE, YELLOW, 1/4" WIDE	2511	1	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002500	Microphone, Element	3104	7	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002501	HOOK AND LOOP ADJUSTABLE WRISTBAND	9060	5	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002502	PERRY STERILE SURGEON'S GLOVES,POWDERED SIZE 6 1/2	11102	2	EA	PSE	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002503	PERRY STERILE SURGEON'S GLOVES, POWDERED, SIZE 7	11103	2	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002504	Stiffener	12937	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002505	GLASSES, SAFETY, CLEAR POLYCARBONATE	23722	14	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002506	ESD PROTECTIVE BOTTLE, 8 OZ YELLOW DISSIPATIVE	35367	2	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002507	Pressure Gauge, PBA	36015	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002508	COVER, SHOE, DISPOSABLE, XL	48088	6	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002509	Tether, PVC, For LUER Cap	65601	1021	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002510	Adapter, Double Ended	65802	997	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002511	TOWELS, SCOTT SHOP	75190	6	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002512	Sleeve	412505	39	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002513	Silicone Spacer, QDMA	415392	50	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002514	Locking Block, QDMA	419628	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002515	Seal, Silicone, Nose Piece	437276	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002516	Kit, Visor, QDMA	446268	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002517	Oxygen Hose, Quick Donn Mask	446329	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002518	Cap Assembly	767860	13	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002519	Plug, Filler Valve Cap Assy	767862	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002520	Lanyard Assembly	9320166	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002521	Holder	0750-065-012-9999	85	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002522	Hose Assy, Personal Hygiene Station (PHS)	10108-10047-03	7	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002523	CWC Hose Assy	10108-10089-02	7	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002524	1301 Blue/Blue (B/B) Assy	10108-20043-01	11	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002525	3142 Red/Red Assy	10108-20044-02	8	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002526	Hose, IFM O2 Contingency R/R	10108-20044-03	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002527	3102 Yellow/Yellow Assy	10108-20045-04	11	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002528	Coupling 1301 Assy	10108-20046-01	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002529	Coupling 3142 Assy	10108-20053-01	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002530	Coupling 3102 Assy	10108-20054-01	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002531	Coupling 3102 Assy	10108-20054-02	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002532	3102 Yel/3142 Red Adapter Assy	10108-20175-01	13	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002533	Contingency Water Collect Bag Assy	10132-10032-03	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002534	Fitting, 3/8" Tube CWC Bag	10132-20001-02	27	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002535	Fitting, 3/8" Tube CWC Bag Assy	10132-20001-03	45	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002536	Nut, 3/8" AN	10132-20002-01	13	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002537	TIP BRITE TIP TINNER	1102-0016	5	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002538	Connector	2000166-105	9	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002539	Strain Relief	2000166-110	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002540	Filter Element	20666-6-250	89	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002541	Button, White	22C-(9)	75	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002542	SWAB, MICROTIP FOAM 1.925MM	237PR502	6	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002543	Cable, Test	3006-7095-1-3	639	FT	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002544	Microphone	3104-0	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002545	Tubing, 316 SS	316F10500X020SL	50	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002546	Hwx Nut 1/4-20UNC X .12 Thk	3626-.125-D-2	42	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002547	O-Ring, Viton, .468"ID X .078"W	3-906V747-75	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002548	ANTISTATIC UTILITY TAPE PRINTED 1" X 72 YARDS	40PR	6	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002549	DESOLDERING TOOL, DRI- WICK .050" (SOLDER WICK)	484-2	6	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002550	DESOLDERING TOOL, DRI- WICK .075" (SOLDER WICK)	484-3	6	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002551	QD Male w/Flange & Lanyard	502040-1141	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002552	Quick Disconnect (QD)	502040-1301	24	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002553	Fluid Quick Disconnect Cover	502040-20	52	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002554	Symetrics QD	502040-3202	23	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002555	Lanyard Assy	502040-45	57	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002556	Quick Disconnect (QD)	502040-5141	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002557	Coupling Half-Male, 3/8TS	502060-1191	79	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002558	Plug, Pressure 3/8"	502060-25	9	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002559	Connector, Female Coupling, 3/8"	502060-3102	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002560	Coupling Half-Female, 3/8TS	502060-3404	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002561	QD, Female, Symetric 3/8 X 3/8 M AN	502060-7102	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002562	3/8", H2O Quick Disconnect	502060-9191	6	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002563	Test Adapter, Quick Don Mask Assembly	528-20661-1	0	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002564	EOS Bleed Down Fixture Assy	528-20715-1	4	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002565	Hose Assy, 1/4 Female-3/8 Female	528-20870-1	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002566	Hose Assy, MIR Water 3/8" Male Coupler	528-20870-2	16	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002567	Adapter, MIR Water Transfer	528-20870-23	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002568	Hose, 3/8 Male-Open	528-20870-4	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002569	Hose Assy, MIR Water (US/RSA-A)	528-20870-5	9	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002570	Hose Assy, MIR Water (US/RSA-A)	528-20870-6	9	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002571	Hose Assy, MIR Water (US/RSA-B), Tee End	528-20870-8	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002572	Microbial Filter Assy	528-20986-1	7	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002573	Assy, Microbial Removal Filter	528-20986-2	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002574	Hose Assy, Iodine Removal	528-21022-1	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002575	Hose Assy, Shuttle Water Supply	528-21023-1	8	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002576	Hose Assy, Actex	528-21026-1	6	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002577	Decal, QDMA Earphone Transducer Housing, CEE	528-21168-21	8	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002578	Test Hose Assy, EOS Fill Valve	528-21215-1	6	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002579	Fixture, QDMA Particulate Sampling	528-21370-1	1	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002580	Break-Out Box, LEMO EGG. 1B.307.CYM	528-21486-1	2	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002581	BREAKOUT BOX, HHM (SSP)- AMPHENOL	528-21487-1	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002582	BREAKOUT BOX, HHM (ISS)- LEMO	528-21488-1	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002583	PBA Test Panel	528-21497-1	2	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002584	PBA Test Panel Flex Hose Assembly	528-21501-1	2	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002585	GSE, Adapter Box QDMA	528-21534-1	2	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002586	GSE, Adapter Cable, QDMA	528-21535-1	2	EA	GSE	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002587	Flight, Pen Sharpie Black, Fine	528-40674-1	24	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002588	Flight, Pen Sharpie Black, Extra, Fine	528-40674-4	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002589	Flight, Pen Sharpie Black, Ultra Fine	528-40674-7	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002590	Fastening Tape, Hook, 1", Med Blue, PS, Nylon	528-40819-9	200	IN	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002591	Connector, Female Coupling 3/8	528-40929-1	17	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002592	Connector, Female Coupling Half (Universal)	528-40929-5	11	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002593	Connector Half, Male	528-40930-2	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002594	Dynatube	528-41039-3	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002595	Fitting, 3/8 Dynatube Female to 1/4 AN Female	528-41039-4	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002596	Dynatube Fitting [Female to Female]	528-41039-5	14	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002597	TAPE, KAPTON, W/ADHESIVE, 1"W X 36 YD RL, 2.7 MIL	528-41353-1	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002598	BAG, STATIC DISSIPATIVE, ZIPLOCK, 4"X6"X1/4"	528-43072-6	60	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002599	BAG, STATIC DISSIPATIVE, ZIPPER LOCK, 6"X8"X1/4"	528-43072-7	50	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002600	ANTISTATIC PE, 15" X 500' TUBING, 6 MIL THK	528-43110-5	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002601	Windscreen, Foam	528-43122-1	20	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002602	ZIPLOCK/ZIP-LIP BAG 4"X4"X .004"THK	528-50000-1	1099	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002603	ZIP-LIP BAG, 13"X18"X.004" THK	528-50000-6	1165	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002604	Terminal, PWB, Feed Through, Insulated, Turreted	571-4179-01-05-19	369	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002605	Cap, Male LUER End, White, Without Tether	65600WHITE	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002606	Transistor Mounting Pad	7717-46DAP	29	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002607	Fill Valve Assy, EOS	9120097-23	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002608	Thermometer, 3" Dial, 0-100 Deg. F, Stainless Stl.	A-(0/100F)-4"- 1/2"NPT	6	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002609	Union, Double Swivel Nut	AA67082-4K	18	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002610	Tee, Swivel Nut, Triple	AA67095-4KL	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002611	MS Boss Fitting, 1/4 AN TO 3/8 MS Str Thd Female	AA67104-6-4K	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002612	Swivel Nut, Union 1/4" Male	AA67109-4-4K	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002613	1/4"Female AN to 1/4" Female NPT, Union	AA67110-4-4K	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002614	Union, Swivel Nut	AA67110-4K	192	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002615	Bar, Aluminum, 1" X 2", 6061-T651	ALB6061-T651-1-00	107	IN	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002616	Washer, Flat	AN960-10	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002617	Washer, Flat, #4 X .032 Thk , SS	AN960C4	100	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002618	Washer, Flat, #8 X .032 Thk, SS	AN960C8	100	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002619	WIPES, 15X17, LINT GUARD POLY, KIM WIPES	B0168	41	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002620	DEPRESSOR, TONGUE	B0256	7	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002621	BRUSH, ACID	B0267	50	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002622	CONTAINER, SPECIMAN 8 OZ.	B0269	27	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002623	BEAKER, TRI-POUR, 250ML	B0272	20	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002624	BEAKER, TRI-POUR, 50ML	B0278	115	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002625	APPLICATORS, COTTON TIPPED	B0302	2	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002626	TAPE,ELECTRICAL,YELLOW, 1/2"	B0341	7	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002627	TAPE, YELLOW VINYL, 1"	B0388	8	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002628	TAPE, WHITE VINYL, 1"	B0389	20	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002629	LEAK TEC	B0402	2	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002630	SWABS, POLYURETHANE, TX 712A, 4" HANDLE	B0573	38	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002631	SWABS, FOAM WTC120 100PC BAGS	B0575	12	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002632	BOTTLE, TRIGGER SPRAY, 16 OZ.	B0606	10	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002633	SEAT, PBA REDUCER ASSEMBLY	B40680-1	14	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002634	Pressure Gauge, PBA	B40688-1	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002635	Ring, Pull	B40858-1	7	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002636	Tubing, Silicone 1/4" I.D.,.570+/- .02 O.D.	C2901016	180	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002637	Clamo, Hose, 9/16 ID	C3122-10-1E	107	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002638	Oxygen Cylinder, PBA	C4285-1	50	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002639	Retaining Ring	CA2210A-10R	2	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002640	Screw	CA2290-10-3-7	2	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002641	Smoke and Prebreathe Mask	EMF10-51-01IB	28	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002642	Mask, Prebreathe	EMLD20-001	1	EA	FLT	BHOU		4/2/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002643	Pressure Reducer, PBA	F226-1861-2	18	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002644	Manifold, EOS QD Body 1/4" AN	F361-1971-1	22	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002645	Dust Cap	F361-2463-12	7	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002646	Fitting, QD Stem, O2 Manifold 1/8 NPT	F388-1199-1	12	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002647	Fitting, QD Stem 1/4 AN	F388-1319-1	14	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002648	Relief Valve	F46400-17	6	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002649	Diaphragm, PBA Reducer Assembly	F6400033-1	9	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002650	Male Quick Disconnect, Adapter Assembly	F664220170-1	21	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002651	Connector	FGG.1B.307.CLAD 52Z	10	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002652	LEMO Connector, PBA QDMA	FGG.1B.307.LLAD 52Y	10	EA	FLT	BHOU		4/2/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002653	CONNECTOR, PLUG, LEMO SIZE 2B, 14 PINS	FGG.2B.314.CLAD 82Z	68	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002654	Connector, LEMO	FGG.2B.314.LLAD 82L	23	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002655	O-Ring, PBA Reducer Assembly	FS5701-014	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002656	Backshell, Connector	G62676-10	389	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002657	Strain Relief	GMA.1B.040.RN	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002658	STRAIN RELIEF	GMA.1B.040.RN	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002659	NOMEX TIE CORD	HT-30-LOC-B	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002660	Marker, Cable	HT-SCE-3/4-2-9	168	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002661	Gland Nut	KLSK270110-002	577	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002662	Hose Barb Adapter Russian	KLSK270110-003	36	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002663	BAG, TEFLON 2 MIL, 2" X 2" AMINE FREE FEP	LB602:0202	13	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002664	BAG, TEFLON, 2 MIL, 2" X 4", AMINE-FREE FEP	LB602:0204	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002665	FILTER, MITEX, 10 MICRON, 47MM DIA, WITH GRID	LCWG04700	3	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002666	DIAL ANTIBACTERIAL, LIQUID HAND SOAP	LD-05-02666-01	6	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002667	Tubing, Shrink, FEP, .045/.039 ID, CL1, CL	M23053/11-103-C	240	IN	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002668	Tubing, Shrink, FEP, .092/.072 ID, CL1, CL	M23053/11-106-C	3279	FT	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002669	Tubing, Shrink, FEP, .115/.089 ID, CL1, CL	M23053/11-107-C	679	FT	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002670	Tubing, Shrink, KYNAR, .125/.062 ID, Clear	M23053/8-004-C	394	IN	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002671	TUBING, SHRINK, KYNAR, .125/.062 ID, CLEAR	M23053/8-004-C	473	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002672	Dust Cap	M5501/7-F17	17	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002673	O-Ring	M83248/1-008	243	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002674	O-Ring	M83248/2-012	182	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002675	Seal, Preformed	M83248/2-903	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002676	Earbuds, Sony	MDR-ED21LP	95	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002677	Transformer, Audio	MET-41	19	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002678	Switch, P.B., SPDT	MPS-103F	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002679	O-Ring	MS28778-6	17	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002680	Elbow, Male, 1/4AN X 1/8MNPT SS	MS51504B4S	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002681	Screw Machine, Pan HD, #10- 32 UNF-2A X 3/4", SS	MS51958-65	28	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002682	Pneumatic Harness, Quick Donn Mask	MXH31	78	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002683	Face Mask Piece, Quick Donn Mask	MXM43	40	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002684	Mask Holder, PBA QDMA	MXP405	520	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002685	Cable	N13-44T-368-RO1	256	FT	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002686	Screw Cap, Socket Head	NAS1352-04-6	37	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002687	Screw, 100 Deg, Flat HD, 1- 64UNC-2A X .125L	NAS662C1-2	89	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002688	Screw, Flat HD 100 Deg	NAS662C2R3	84	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002689	Novus Plastic Polish 1	PC-10	1	BT	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002690	CASE, PBA QDMA	QDMA CASE-1	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002691	Oxygen Hose-Nomex Cover	REDAR-A11366-01	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002692	Amplifier, Dual Operational	RH1013MJ8	65	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002693	Resistor, 2.7K, 1/8W, 2%	RLR05C2701GP	82	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002694	Resistor, 51.1 OHM, 1/8W, 5%	RLR05C51R1FS	92	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002695	Resistor, Fixed 6.81K, 1/8W, 1%	RLR05C6811FS	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002696	Resistor	RLR20C1101GS	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002697	Regulator, Quick Donn Mask	RMC1051	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002698	HHM Bottom Enclosure	SDD16101311-023	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002699	HHM Switch Plate	SDD16101311-025	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002700	HHM Lid, MIC AMP Housing	SDD16101311-027	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002701	HHM Top Enclosure Assembly	SDD16101311-717	13	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002702	Printed Wiring Master, HHM	SDD16101313-701	42	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002703	Housing, Earphone Transducer, QDMA	SDD16102406-001	16	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002704	Cover, Earphone Transducer, QDMA	SDD16102406-003	36	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002705	Manifold, Earphone Transducer, QDMA	SDD16102406-005	14	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002706	Microphone Housing, Top	SDD16102408-001	24	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002707	Adapter, QDMA	SDD16102408-005	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002708	Mount, QDMA	SDD16102408-007	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002709	Orifice Fitting	SDD36117403-001	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002710	Orifice Fitting	SDD36117403-002	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002711	Reducer Assy Test Adapter	SDD38118843-001	7	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002712	Needle Adapter	SDD48101606-001	7	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002713	Needle Adapter	SDD48101606-002	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002714	Adapter	SDD48101608-001	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002715	Needle Adapter, Contingency Water Dispenser	SDD48101842-002	84	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002716	Decal, QDMA	SDG33105008-001	18	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002717	Fitting, Elbow	SDG33105027-001	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002718	Housing	SDG33105029-001	6	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002719	Cover	SDG33105029-003	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002720	Manifold, Tee Assy, PBA	SDG33105310-001	14	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002721	Adapter, Bulkhead	SDG33105313-001	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002722	Eye Goggles, Quick Don Mask	SDG33123250-803	955	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002723	Cable, 2-Cond	SEC229U-UY	1	FT	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002724	Purge Device	SED11100288-001	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002725	Supply Water Dump Line Purge Assy	SED11100288-304	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002726	Handheld Microphone Assy	SED16101310-311	27	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002727	Microphone Boom Assembly	SED16101310-701	31	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002728	CABLE, HAND HELD MICROPHONE	SED16101310-703	19	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002729	Cable, Handheld Microphone (ISS)	SED16101310-705	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002730	Printed Wiring Assy, Handheld Microphone	SED16101312-307	45	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002731	Eartip Assembly, QDMA	SED16102404-705	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002732	Earphone Cable Assembly, QDMA	SED16102405-301	31	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002733	Microphone Housing Assembly, QDMA	SED16102405-303	18	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002734	Cable Assembly, QDMA	SED16102407-301	41	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002735	Microphone Cable Assembly, QDMA	SED16102407-303	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002736	MICROPHONE ADAPTER ASSEMBLY, QDMA	SED16102407-701	16	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002737	LON PBA Restraint Assembly	SED33119860-301	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002738	Fixture, Leak Test Assy	SED38117627-301	7	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002739	Adapter, 5/8 Hex X 1.375L	SED39121808-005	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002740	Wire Cloth, CRES 100 X 100 Mesh	SED39121808-006	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002741	Filter Assy Flexible Wand	SED39121808-302	6	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002742	Contingency Waste Water Dump Filter	SED39123946-301	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002743	Orifice	SED39129523-301	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002744	Contingency Water Dispenser	SED48101607-302	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002745	Contingency Water Dispenser	SED48101607-306	6	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002746	Contingency Water Dispenser	SED48101607-307	8	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002747	PBA Hose/Tee Pouch	SEG33104996-301	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002748	Pouch Assy, Extension Hose/Tee Kit	SEG33104996-303	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002749	PBA Hose/Tee Pouch	SEG33104996-305	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002750	Reducer/Cylinder Assy	SEG33105010-301	23	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002751	Cylinder Assembly, PBA	SEG33105011-301	24	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002752	Reducer Assembly, PBA	SEG33105014-301	23	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002753	QDMA, PBA	SEG33105020-301	41	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002754	QDMA, PBA	SEG33105020-303	9	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002755	Earphone Cable Assembly, PBA	SEG33105022-301	71	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002756	Harness Assy, PBA	SEG33105031-301	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002757	Mounting PBA Bracket	SEG33105050-301	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002758	PBA Mounting Bracket	SEG33105050-303	24	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002759	Hook, Extension Hose Assy, PBA	SEG33105101-001	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002760	Plate, Extension Hose Assy, PBA	SEG33105101-002	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002761	TEE ASSY, OXYGEN, PBA, PEP	SEG33105309-303	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002762	Quick Disconnect	SEG33105312-301	3	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002763	Mask Holder, PBA QDM	SEG33105316-301	8	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002764	Mask Holder Assy, PBA	SEG33105316-303	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002765	Tee Assy, PHA	SEG33112233-301	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002766	Extension Hose, 30FT, PHA	SEG33112744-301	4	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002767	WIPE, SPONGE-TECH 2000 FOAM; 12"X12"	SG-1212.100	3	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002768	ORANGE STICK	SH-83	26	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002769	Extension Hose /Tee Kit, PBA	SJG33104995-301	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002770	Extension Hose /Tee Kit	SJG33104995-305	31	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002771	Holder, HHM Acceptance Thermal Test	SK528-60426-1	2000	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002772	TAPE, THREAD, TEFLON, 1/2" WIDE, B/L APPROVED	SLD38109001-001	1	RO	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002773	Tape, Thread, Teflon, 1/4" Wide, B/L Approved	SLD38109001-002	45	RO	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002774	SYRINGE, 5CC USED W/ 512 OPP-B	SS-05L	100	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002775	Toggle Valve	SS1GF4	2	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002776	Disconnect, LUER	SSDV7010S-3499	11	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002777	Cord, Kevlar Size B-275	ST14K963-01	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002778	PAPER, LINT FREE, ABSORBENT	ST17P286-01	2000	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002779	Connector, 1/4 NPT Male to 1/4 JIC Flare	ST20C1535-01	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002780	Swaglok to "AN" Adaptor SS- 400-A 4ANF	ST20M1040-03	17	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002781	Union, Tube Fitting, 1/4	ST20M1040-04	12	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002782	Ferrule, Front, Nylon	ST20M1040-05	67	EA	FLT	BHOU		3/30/2012	Added per S/A 1829

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12870; S/A 1829			002783	Ferrule, Back, Nylon	ST20M1040-06	64	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002784	Connector, Male Tube Fitting	ST20M1040-07	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002785	Nut, 1/4 Tube	ST20M1040-08	10	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002786	Elbow, Swivel Nut	ST20N1536-01	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002787	SHARPIE PEN, BLACK (EXTRA FINE)	ST20P674-04	15	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002788	Dust Cap	SV772006-2	5	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002789	HAND HELD MIC TEST SOFTWARE	SWID6	7	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002790	TIP, DISPENSING, 16AWG	TT16-DHUV-1000	1	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002791	TIP, DISPENSING, 18AWG	TT18-DHUV-1000	1	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002792	BLADE, XACTO #11	XAC11	5	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002793	SWAB, MICROTIP FOAM	CM502	1	EA	PSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002794	ESD BUBBLE WRAP, SECOVAC 142, 4" X 50'	CP3SF004050FT-88	10	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002795	DFA Water Filter	DFA4201NAEY	1	EA	FLT	BHOU		3/30/2012	Added per S/A 1829
SSCN 12870; S/A 1829			002796	Orifice, .016" Dia, 1/4" NPT Hex Nipple, 303 SST	E-16SS	3	EA	GSE	BHOU		3/30/2012	Added per S/A 1829
SSCN 13070; S/A 1786			002851	USB Scope	TBD	2	EA	FLT	BHOU		12/16/2011	Added per S/A 1786
SSCN 13070; S/A 1786			002852	USB Scope Cable	TBD	2	EA	FLT	BHOU		12/16/2011	Added per S/A 1786
SSCN 13070; S/A 1786			002853	Micro-grabber Probes	TBD	4	EA	FLT	BHOU		12/16/2011	Added per S/A 1786
SSCN 13070; S/A 1786			002854	Power Cables to BOB (Pair)	TBD	3	EA	FLT	BHOU		12/16/2011	Added per S/A 1786
SSCN 13070; S/A 1786			002855	Edge Connector (EPIC)	8260187-053	2	EA	FLT	BHOU	11/10/2011	11/10/2011	Added per S/A 1786
SSCN 13057; S/A 1822			002860	Engineering Test Article	TBD	3	EA	ENG	JSC	9/26/2012		Added per S/A 1822
PIO 98; S/A 1790			002866	TV Camera Interface Converter Assy (TVCIC)	10033211-501	1	EA	FLT	L3		2/1/2014	Added per S/A 1790
PIO 98; S/A 1790			002867	Color Television Camera	3278890-507 or 3278890-508	1	EA	FLT	L3		2/1/2014	Added per S/A 1790
SSCN 12831; S/A 1834			002868	Backshell	NZGA-SG-33-N-32	3	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002869	Backshell	NZGA-SG-33-N-32Z	5	EA	FLT	BHOU	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 13231; S/A 2016			002871	Handrail EVA Removable	SEG33106351-305	8	EA	FLT	BHOU		2/28/2014	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			002872	'D' Ring	SEG33114891-801	48	EA	FLT	BHOU		10/16/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			002873	Equipment Hook	SEG33108365-302	14	EA	FLT	BHOU		10/16/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			002874	Gap Spanner Buckle	SDG33109824-001	28	EA	FLT	BHOU		10/16/2013	Added per definitization of SSCN 13231 on S/A 2016.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13047; S/A 1943			002881	H-fixture Kits	TBD	2	EA	Flt	BHOU	4/30/2012	4/30/2012	Added per SSCN 13047 definitized on S/A 1943
SSCN 13047; S/A 1943			002882	OTCM Umbilical Connector Kits	TBD	2	EA	Flt	BHOU	4/30/2012	4/30/2012	Added per SSCN 13047 definitized on S/A 1943
SSCN 12831; S/A 1834			002885	Quick Disconnect	683-16348-811	8	EA	FLT	B-MSFC	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 12831; S/A 1834			002886	Quick Disconnect	683-16348-807	2	EA	FLT	B-MSFC	1/16/2012	1/16/2012	Added per S/A 1834
SSCN 13123; S/A 1809			002887	LwAPA	683-96104-013	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002888	SCREW	NAS1102E06-6	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002889	BACKSHELL, EMI CONNECTOR	SSQ22680-10-004	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002890	EPOXY PRIMER, CHROMATED	515-X-349/910-X- 533	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002891	CONNECTOR	NATC07T19N68SN	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002892	BACKSHELL	NZGA-SX-19-N-20	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002893	CONTACT	NZGC-C-16SB	18	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002894	CONNECTOR, BLINDMATE, PLUG	SSQ22680-021	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002895	PLUG, SEALING, 12 AWG	SSQ22680-050-12	28	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002896	PLUG, SEALING	SSQ22680-050-20	40	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002897	CONTACT	SSQ22680-20-12- 16P	12	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002898	CONTACT, PIN, 20 AWG	SSQ22680-20-20- 20P	2	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002899	SPLICE	D-436-83	2	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002900	SPLICE	D-436-84	2	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002901	TAPE, GLASS	P-213	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002902	ADHESIVE	2216 B/A Gray	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002903	LOCTITE	242	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002904	LACING TAPE	256H	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002905	LUG	322733	3	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002906	TERMINAL LUG	50836-1	3	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002907	TUBING, HEAT SHRINK	M23053/8-003C	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002908	TUBING, SHRINK	M23053/11-204C (M23053/11-204-C)	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002909	CABLE, TP, 16 AWG	NGPC-ETF-16-2U	30	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002910	CABLE	NGPC-ETF-20-2U	10	EA	FLT	KSC		2/14/2012	Added per S/A 1809

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13123; S/A 1809			002911	WIRE (16 AWG)	NGPW-ETF-16	6	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002912	PLUG, SEALING, 8 AWG	SSQ22680-050-8P	4	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002913	CONTACT, PIN, 8 AWG	SSQ22680-20-8-8P	2	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002914	WIRE, 8 AWG	NSFW-SIL-8VB	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002915	CHROMATED EPOXY PRIMER	515 X 349/910 X 533 (0515-700XXSOS12K)	As Required		FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002916	RAYCHEM MARKER	HT-TMS-CM-1/2-6H-9	4	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002917	RAYCHEM MARKER	HT-TMS-3/32-1.50-9	8	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002918	RAYCHEM MARKER	HT-TMS-3/16-1.50-9	14	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 13123; S/A 1809			002919	RAYCHEM MARKER	HT-TMS-3/8-1.50-9	1	EA	FLT	KSC		2/14/2012	Added per S/A 1809
SSCN 12816; S/A 1808			002920	Connector, Cover	NZGL-RPC-N-21-0-LP	1	EA	FLT	BHOU		2/29/2012	Added per S/A 1808
SSCN 13096; S/A 1839			002926	Protective Connector Cap	NATC-PPC-N-11-09	4		FLT	HSSSI		7/1/2012	Added per S/A 1839
SSCN 13184; S/A 1824			002927	EVA Handrail	SEG33106347-819	1	EA	FLT	KSC		6/13/2012	Added per S/A 1824
SSCN 13184; S/A 1824			002928	MLI-Heater Mat Assembly MBSU FSE	1F15305-001	1	EA	FLT	KSC		6/13/2012	Added per S/A 1824
PIO 101; S/A 1816			002929	Handle, EVA Handrail, 11.50 in	SDD33104402 or SDG33109653	5	EA	FLT	HPSC		10/1/2012	Added per S/A 1816
PIO 101; S/A 1816			002930	Handle, EVA Handrail, 12.00 in	SDD33104402 or SDG33109653	3	EA	FLT	HPSC		10/1/2012	Added per S/A 1816
PIO 101; S/A 1816			002931	Handle, EVA Handrail, 8.50 in	SDD33104402 or SDG33109653	3	EA	FLT	HPSC		10/1/2012	Added per S/A 1816
SSCN 13149; S/A 1984			002932	External High Definition Video (EHDV) Camera Assembly (CA) Qualification Unit	TBD	1	EA	FLT	BHOU		2/14/2014	Added per definitization of SSCN 13149 on S/A 1984.
SSCN 13149; S/A 1984			002934	Internal Power Test Cable (from PS to EHDV CA)	TBD	1	EA	ENG	BHOU		2/14/2014	Added per definitization of SSCN 13149 on S/A 1984.
SSCN 13149; S/A 1984			002935	Power Supply for Camera Assembly and Luminaire	TBD	1	EA	ENG	BHOU		2/14/2014	Added per definitization of SSCN 13149 on S/A 1984.
SSCN 13149; S/A 1984			002936	SSC Client Application Software	TBD	1	EA	FEU	BHOU		2/14/2014	Added per definitization of SSCN 13149 on S/A 1984.
SSCN 12860; S/A 1827			002940	Fuse	314.75	39	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002941	Foot Bumper/Self Locking	717	10	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002942	Standoff	2120	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002943	Braid, Copper	2138	200	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002944	Braid Shield, 1/8"	2166	10	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002945	Mica Insulator	4651	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			002946	Insulator, Plate	4657	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002947	Terminal Lug	52273	39	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002948	Fuse 2A	274002	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002949	Fuse Holder	282001	65	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002950	Fuse	314002	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002951	Terminal, Ring, #4	322363	199	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002952	Terminal Ring #6	323199	30	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002953	Fuse Holder	342024	45	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002954	Linear Ferrite Bead	2673000801	281	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002955	Braided Shield	100-003A125	20	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002956	Braided Shield	100-003A203	30	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002957	Braided Shield	100-003A375	150	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002958	Braided Shield	100-003A500	25	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002959	T-05 Heat Sink	1130B	240	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002960	Captive Screws	114054PP.5SSG-12	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002961	AMP Connector	1375189-1	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002962	Modular Jack with Dust Cover	1375190-2	18	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002963	Jack Modular	1375191-2	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002964	Linear Ferrite Bead	21-210-B	200	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002965	Turret Terminal	2301-2-00-44-00-00-07-0	41	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002966	Solder Terminal Turret	2303-2-01-44-00-00-07-0	454	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002967	Terminal Lug	2-36149-3	1029	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002968	Terminal Lug	2-36149-4	34	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002969	Turret Terminal	2805-2-00-44-00-00-07-0	776	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002970	Power Mosfet	2N7389JANSR	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002971	Resistor 100K ½ Watt	30BJ500-100K	5	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002972	Resistor 1K	30BJ500-1K/REEL	3990	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002973	Y Transition	382A023-12-0	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			002974	Fan / Blowers	4184N/2XH	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002975	Backshell 45 Deg.	440HH030M0932	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002976	Backshell 45 Degree	440HH030M1104	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002977	Backshell 45 Deg.	440HH030M1105	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002978	Backshell 45 Deg.	440HH030M1304-4	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002979	Backshell 45 Deg.	440HH030M1505	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002980	Backshell Straight	440HS030M0903-4	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002981	Backshell Straight	440HS030M0932-4	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002982	Backshell Straight	440HS030M1105-4	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002983	Backshell Straight	440HS030M1304-4	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002984	Backshell Straight	440HS030M1334-4	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002985	Backshell Straight	440HS030M1505-4	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002986	Backshell Straight	440HS030M1534-4	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002987	Backshell Straight	440HS030M1705-4	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002988	Backshell Straight	440HS030M1905-4	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002989	Standoff	4534-440-SS-20	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002990	Ziplock Bag, 36" x 36"	528-50000-19	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002991	Ziplock/Zip-Lip Bag 6" X 6" X .004 Thick	528-50000-2	28	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002992	Toggle Switch	54-319	6	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002993	DC-DC Converter 120V, 100W	5962-0255501HUA	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002994	PWM Controller	5962-8670406VPA	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002995	Comparator	5962-9673801VXA	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002996	Banana Jack Black	6384-0	24	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002997	Banana Jack Red	6384-2	10	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002998	Banana Jack Black	6387-ST-T-0	10	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			002999	Banana Jack Red	6387-ST-T-2	8	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003000	Banana Jack (Green)	6387-ST-T-5	95	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003001	Cover, Protective	660-023M09N	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003002	Cover, Protective	660-023M09N-186	24	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003003	Cover, Protective	660-023M11N	14	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003004	Cover, Protective	660-023M15N	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003005	Cover, Protective	660-023M17N-186	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003006	Cover, Protective	660-023M19N-186	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003007	Cover, Protective	660-024M09N	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003008	Cover, Protective	660-024M09N-186	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003009	Plug Cover	660-024M13N	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003010	Cover, Protective	660-024M13N-186	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003011	Cover, Protective	660-024M15N	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003012	Cover, Protective	660-024Z115H5-09	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003013	Rack Power Switch	683-50370-3	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003014	Rack Power Switch	683-50370-3	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003015	Toggle Switch	7203TPZBE	17	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003016	Toggle Switch	7320K13	15	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003017	EMI Shielding Vent	8001-3302-0001	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003018	Diode	95-7126	27	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003019	EMI Filter 270V 3A	98026-01HUA	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003020	Reticulated Foam, Nominal 10 Pores Per	B10 Charcoal	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003021	Stud, Turnlock Fastener	CA2021-4	13	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003022	Stud, Turnlock Fastener	CA2021-7	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003023	Stud, Turnlock Fastener	CA2024-2	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003024	Shim	CA2077	45	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003025	HEX MALE/FEMALE STANDOF .250"X .500", 4-40 THREAD	2088	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003026	Braid, Copper	2138	200	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003027	BANANA PLUG	4513	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003028	MC-21 CORD	4651	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003029	FUSE	27401.5	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003030	SHARPIE PEN	37001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003031	FUSE HOLDER	282001	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003032	TERMINAL RING 22-16 AWG	323199	37	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003033	Hose Assembly, PTFE, 114" Long	04RFPTFE04FJIC04FJICSSFS-114	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003034	ROUND, HANDLE	10150-SS-0632-6B	18	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003035	Screw Assembly	114054PP 625SS G12A	51	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003036	PHILLIPS PNH CAPTIVE PANEL SCREW ASSY.	114054PP.625SSG 12A	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003037	CAPTIVE SOCKET HEAD CAP SCREW	114118.438-SS-G-12	38	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003038	Captive Socket Head Cap Screw Assy	114120-500SSGM03	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003039	SOLDER TERMINAL TURRET	2303-2-01-44-00-00-07-0	53	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003040	Backshell, Electrical Connector	440HS030M1304-4	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003041	BACKSHELL STRAIGHT	440HS030M1506-4	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003042	Bag	528-50000-19	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003043	Strip, Magnetic	5769K31	146	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003044	DC-DC CONVERTER 120V/100W	5962-025501HUA	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003045	Plug, Cover	660-024M11N	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003046	TOGGLE SWITCH	7203TPZBE	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003047	TOGGLE SWITCH	7205TPZBE	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003048	TOGGLE SWITCH	7320K13	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003049	Foam	B 30 CHARCOAL	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003050	Foam	B10 CHARCOAL	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003051	NUT, STUD PROTRUDING HEAD	CA2021-2	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003052	NUT, STUD PROTRUDING HEAD	CA2021-3	13	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003053	RETAINING RING WIRE FORM	CA2035	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003054	Insertor, Screw Thread Insert	CA2069-T10	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003055	Capacitor, .001UF/100V	CDR03BP102BJU R	80	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003056	Capacitor Chip .068UF/50V	CDR03BX683AKU S	1726	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003057	Capacitor, .22UF/50V	CDR05BX224AKU S	87	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003058	Capacitor, .47 UF	CDR06BX474AKU S	162	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003059	CAPACITOR, SMD 10PF	CDR31BP100BJU S	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003060	Ceramic Cap 1000 PF 100V 10%	CDR31BX102BKU R	34	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003061	Capacitor, .0033UF	CDR31BX332BKU S	33	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003062	Capacitor, SMD, .01UF	CDR32BX103BKU R	569	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003063	Capacitor, SMD	CDR33BP202BFU R	489	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003064	Capacitor, .047 UF	CDR33BX473AKU R	108	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003065	Capacitor, .047UF/50V	CDR33BX473AKU S	200	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003066	Capacitor, .15 UF	CDR35BX154BKU S	126	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003067	Capacitor Tantalum 2.2 UF 15V	CWR06HC225KB	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003068	Capacitor Chip, 6.8UF/35V	CWR06MC685KCA	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003069	Capacitor Chip, 4.7UF/50V	CWR06NB475KCA	18	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003070	Capacitor, 6.8UF/35V	CWR09MC685KB	99	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003071	Connector	D38999/24FA35PN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003072	Connector	D38999/24FA35SN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003073	Connector	D38999/24FA98PN	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003074	Connector	D38999/24FB35PN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003075	Connector	D38999/24FB35SA	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003076	Connector	D38999/24FB35SN	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003077	Connector	D38999/24FB98PN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003078	Connector	D38999/24FC35PA	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003079	Connector	D38999/24FC35PB	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003080	Connector	D38999/24FC35SA	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003081	Connector	D38999/24FC35SB	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003082	Connector	D38999/24FC98PN	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003083	Connector	D38999/24FD18PA	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003084	Connector	D38999/24FD18PN	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003085	Connector	D38999/24FD18SA	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003086	Connector	D38999/24FD18SN	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003087	Connector	D38999/24FD97SA	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003088	Connector	D38999/24FD97SN	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003089	Connector	D38999/24FF32SN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003090	Connector	D38999/26FA35PA	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003091	Connector	D38999/26FA35PN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003092	Connector	D38999/26FA35SN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003093	Connector	D38999/26FA98SN	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003094	Connector	D38999/26FB35PA	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003095	Connector	D38999/26FB35PB	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003096	Connector	D38999/26FB35PN	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003097	Connector	D38999/26FB35SN	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003098	Connector	D38999/26FC35PN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003099	Connector	D38999/26FD18PA	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003100	Connector	D38999/26FD18PN	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003101	Connector	D38999/26FD18SA	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003102	Connector	D38999/26FD18SN	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003103	Connector Plug	D38999/26FD35PN	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003104	Connector	D38999/26FD97PA	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003105	Connector	D38999/26FF32PN	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003106	CRIMP CONNECTOR	D-436-36	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003107	Resistor Chip, 100 OHM	D55342K07B100D R	116	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003108	Resistor Chip, 100K	D55342K07B100E R	242	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003109	Resistor Chip, 10 OHM	D55342K07B10D0 R	29	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003110	RESISTOR	D55342K07B10E0 R	72	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003111	Resistor Chip, 10.2K	D55342K07B10E2 R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003112	Resistor Chip, 10.7K	D55342K07B10E7 R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003113	Resistor Chip, 110K	D55342K07B110E R	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003114	Resistor Chip, 113K	D55342K07B113E R	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003115	Resistor Chip, 115K	D55342K07B115E R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003116	Resistor Chip, 118K	D55342K07B118E R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003117	Resistor Chip, 11K	D55342K07B11E0 R	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003118	RESISTOR CHIP, 130K	D55342K07B130E R	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003119	Resistor Chip, 150K	D55342K07B150E R	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003120	Resistor Chip 1% 15 OHM	D55342K07B15D0 R	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003121	RESISTOR, 160K	D55342K07B160 BR	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003122	ResistorChip ¼ WATT 1% 160K	D55342K07B160B R	85	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003123	Resistor Chip, 162K	D55342K07B162E R	35	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003124	Resistor Chip, 165 OHM	D55342K07B165D R	70	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003125	Resistor Chip, 165K	D55342K07B165E R	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003126	Resistor Chip, 169K	D55342K07B169E R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003127	Resistor Chip, 174K	D55342K07B174E R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003128	Resistor Chip 1K	D55342K07B1E00 R	200	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003129	RESISTOR	D55342K07B1E00 R	47	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003130	Resistor Chip, 1.24K	D55342K07B1E24 R	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003131	Resistor Chip, 1.3K	D55342K07B1E30 R	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003132	Resistor Chip, 1.62K	D55342K07B1E62 R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003133	Resistor Chip 1.82K 1/4W	D55342K07B1E82 R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003134	Resistor Chip 1.1 M OHM 1%	D55342K07B1F10 R	95	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003135	RESISTOR 24.3K 1/4W	D55342K07B2.4E3 R	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003136	RESISTOR	D55342K07B20E0 R	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003137	RESISTOR CHIP	D55342K07B237D R	18	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003138	¼ WATT Resistor Chip, 1%, 243 OHM	D55342K07B243D R	525	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003139	RESISTOR, FILM,CHIPMRM1206,2.21KM 1%,250MW,100PPM,ER LV	D55342K07B2E21 R	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003140	Resistor Chip 2.61K OHM	D55342K07B2E61 R	45	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003141	RESISTOR, 2.61K, 1/4W	D55342K07B2E61 R	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003142	Resistor Chip, 2.87K	D55342K07B2E87 R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003143	Resistor Chip, 301K	D55342K07B301E R	59	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003144	Resistor Chip, 316K	D55342K07B316E R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003145	¼ WATT Resistor Chip 1% 332K	D55342K07B332E R	14	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003146	1/3 WATT Resistor Chip 1% 432 OHM	D55342K07B432D R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003147	¼ WATT Resistor Chip 1% 49.9K	D55342K07B49E9 R	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003148	RESISTOR	D55342K07B49E9 R	24	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003149	¼ WATT Resistor Chip 1% 511K	D55342K07B511E R	124	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003150	¼ WATT Resistor Chip 1% 51.1K	D55342K07B51E1 R	102	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003151	Resistor Chip, 576 OHM	D55342K07B576D R	47	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003152	Resistor Chip, 619 OHM/1/4W	D55342K07B619D R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003153	Resistor Chip, 6.81K	D55342K07B6E81 R	89	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003154	RESISTOR	D55342K07B715D R	23	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003155	RESISTOR, CHIP, 8.2.5K, 1/4W	D55342K07B8E25 R	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003156	RESISTOR 576 1/4W	D55342K07BS76D R	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003157	CONNECTION CIRCULAR	EEG.2B.314.CYM	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003158	Lemo Connector	EGG.0B.303.CYM	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003159	Connector	EGG.0B.660.CYM	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003160	Contacts	EGG.0B.660.ZZM	262	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003161	LEMO Female 2K Insert Pins	EGG.2B.655.ZZM	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003162	Contacts Female	FC6020D-50-1202- 1	450	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003163	Connector	FGG.0B.303.CYCD 42Z	14	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003164	NOTCHED NUT	GEG.2S.240.LC	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003165	Strain Relief	GMA.0B.035.DG	23	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003166	Bend Relief	GMA.0B.035.DN	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003167	Hammermill Fore MP Paper	HAM103267	1	CT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003168	N-MOS Transistor	JANSR2N7497T2	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003169	Rectifier Diode 150V	JANTX1N5806US	80	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003170	YELLOW LED	JANTXM19500/520	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003171	Green LED	JANTXM19500/521	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003172	DIODE	JANTXV1N5419	19	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003173	DIODE	JANTXV1N5806US	14	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003174	DIODE	JANTXV1N5819UR-1	122	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003175	SCHOTTKY	JANTXV1N5822US	26	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003176	TVS Diode	JANTXV1N6052A	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003177	TVS Diode	JANTXV1N6106AUS	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003178	Zener Diode	JANTXV1N6318	48	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003179	Switching Diode	JANTXV1N6638	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003180	DIODE	JANTXV1N6638US	131	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003181	ZENERDIODE	JANTXV1N751A-1	76	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003182	Transistor	JANTXV2N2222A	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003183	P-MOS	JANTXV2N6849	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003184	Diode, SCHOTTSKY, Rectifier, 1A	JANTXVIN5819UR-1	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003185	Schottky Rectifier Diode, 3A	JANTXVIN5822US	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003186	DIODE, ZENER, 5.6V	JANTXVIN6318	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003187	Op-Amp	JM38510/11006BZA	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003188	LINEAR REGULATOR	JM38510/11703BXA	18	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003189	Microcircuit, Linear	JM38510/11704BYA	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003190	VOLTAGE REGULATOR	JM38510/11704BYA	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003191	NOR-GATE	JM38510/65101BCA	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003192	OR-GATE	JM38510/65201BCA	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003193	AND-GATE	JM38510/65203BCA	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003194	Inverter	JM38510/65701BCA	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003195	Counter	JM38510/66302BEA	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003196	Temperature Sensor	LM35AH	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003197	PRECISION CENTGRADE TEMPERATURE SENSOR	LM35DM	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003198	20 AWG Wire	M22759/11-20-9	8062	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003199	VITON SHRINK TUBING 3/16"	M23053/13-001-0	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003200	SLEEING HEAT SHRINK	M23053/5-103-0	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003201	INDUCTOR, 250	M27/356-52	29	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003202	Cable, White	M27500-16RE3N09	1875	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003203	CABLE MULTICONDUCTOR	M27500-20RE3N09	310	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003204	CABLE	M27500-22RC2S09	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003205	3 Conductor Shield Cable	M27500-22RC3S09	63	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003206	4 Conductor Shield Cable	M27500-22RC4S09	120	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003207	Cable, Multi Conductor	M27500-22RE2N09	1000	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003208	Cable	M27500-22RE3N09	1280	FT	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003209	15V Solid Tantalum Axial +/- 10% 150MF	M39003/09-3031	21	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003210	25V Non-Solid Tantalum Axial +/- 10% 100UF	M39006/22-0531	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003211	Capacitor, Axial 180MF/25V	M39006/22-0538	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003212	Capacitor 3.6 UF	M39006/22-0644	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003213	Capacitor, 9 UF/125V	M39006/22-0648	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003214	Capacitor, Fixed, Electrolytic	M39006/22-0648	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003215	50V Non-Solid Tantalum Axial +/- 10% 47UF	M39006/30-0571	35	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003216	CAPACITOR	M39014/01-1553	22	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003217	Capacitor, Fixed, Ceramic Dielectric	M39014/22-0832	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003218	Contact, Male	M39029/58-360	80	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003219	CONTACT, #20 PIN	M39029/58-363	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003220	Resistor Chip, 100K	M55342K09B100E R	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003221	Resistor Chip, 10 OHM	M55342K09B10D0 R	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003222	Resistor Chip, 12.1K	M55342K09B12E1 R	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003223	Resistor Chip, 3.48K	M55342K09B3E48 R	70	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003224	Resistor Chip, 499 OHM	M55342K09B499D R	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003225	Resistor Chip, 511K	M55342K09B511E R	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003226	Resistor Chip, 619 OHM	M55342K09B619D R	85	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003227	Resistor Chip, 7.5 OHM	M55342K09B7E50 R	80	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003228	Resistor	M55342K10B1E00 R	48	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003229	In-Line Splice	M81824/1-1	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003230	GROUNDING WIRE WITH LUGS	M83413/8-C016GG	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003231	Capacitor, Axial	M83421/01-1270R	14	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003232	CONTACTS MALE	MC6020D-50	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003233	Pin, Straight	MS16555-608	17	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003234	Rivet, Solid	MS20426E2-4	124	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003235	Rivet, Solid	MS20426E2-5	134	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003236	Rivet, Solid	MS20426E2-7	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003237	Rivet, Solid	MS20426E3-12A	44	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003238	Rivet, Solid	MS20426E3-5	313	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003239	Rivet, Solid	MS20426E3-5-5	296	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003240	Rivet, Solid	MS20426E3-7	173	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003241	Rivet, Solid	MS20426E3-7-5	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003242	Rivet, Solid	MS20426E4-6	137	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003243	Rivet, Solid	MS20426E4-6-5	19	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003244	Rivet, Solid	MS20426E4-8	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003245	Rivet, Solid	MS20470E3-4	74	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003246	Rivet, Solid	MS20470E3-5	350	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003247	Rivet, Solid	MS20470E3-7	65	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003248	Rivet, Solid	MS20470E4-5	111	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003249	Rivet, Solid	MS20470E4-6	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003250	Rivet, Solid	MS20470E4-7	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003251	Wire	MS20995C32	1	RO	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003252	SAFETY WIRE	MS20995C32	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003253	SELF-LOCKING NUT	MS21043-04	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003254	8-32 UNJC-3B Nut , Self-Lock	MS21043-08	89	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003255	Nut, Self-Locking, Plate	MS21060L3	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003256	190-32 UNJF-3B Nut, Self-Lock, Plate	MS21062L3	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003257	Nut, Self-Locking, Plate	MS21072-4	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003258	Nut, Self-Lock Plate	MS21076-04N	130	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003259	Nut, Self-Locking, Plate	MS21076-06N	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003260	Insert, Screw Thread	MS21209F4-15	116	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003261	Grommet, Nonmetallic	MS21266-3T	22	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003262	TIE CABLE	MS3367-1-9	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003263	Grommet, Nonmetallic	MS35489-33	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003264	Insert, Screw Thread Key Locked	MS51830CA102L	19	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003265	Insert, Screw Thread	MS51830CA201L	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003266	SCREWS	MS51957-13	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003267	Screw, Machine, Pan Head	MS51958-14	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003268	Audio Amplifier	MSK106KRHG	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003269	Screw, Machine	NA0070-030010	54	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003270	Washer, Flat	NAS1057T1-025	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003271	Screw, Machine	NAS1101E04-4	95	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003272	Screw, Machine	NAS1101E04-5	42	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003273	SCREWS	NAS1101E04-6	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003274	Screw, Machine	NAS1101E06-12	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003275	SCREW	NAS1101E06-4	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003276	Screw	NAS1101E06-6	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003277	Screw, Machine	NAS1101E06-7	64	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003278	Screw, Machine	NAS1101E06-8	374	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003279	Screw	NAS1101E08-10	48	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003280	Filister Screw, Machine Flat	NAS1101E08-12	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003281	Screw Machine	NAS1101E3-10	34	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003282	Screw, Machine	NAS1101E3-12	123	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003283	Screw, Machine	NAS1101E3-7	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003284	Screw, Machine	NAS1101E3-8	70	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003085	Screw, Machine	NAS1101E4-8	98	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003286	Screw, Machine	NAS1102E04-5	33	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003287	SCREW	NAS1102E04-5	45	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003288	Screw Fit, HD 100 Deg 4-40 X .375 lg	NAS1102E04-6	97	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003289	Screw, Machine	NAS1102E04-7	34	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003290	Screw Fit, HD 100 Deg	NAS1102E06-5	13	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003291	Screw, Machine	NAS1102E06-6	62	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003292	Screw, Machine	NAS1102E06-6	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003293	Screw, Machine	NAS1102E08-6	193	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003294	Screw, Machine	NAS1102E08-8	26	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003295	Screw, Machine	NAS1102E3-10	81	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003296	Screw, Machine	NAS1102E3-12	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003297	Screw Fit, HD 100 Deg 10-32 X 1.00 LG	NAS1102E3-16	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003298	Screw Fit, HD 100 Deg 10-32 X .438 LG	NAS1102E3-7	64	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003299	Screw Machine Flat 100 Deg Head, Full Thread	NAS1102E4-10	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003300	Screw, Machine	NAS1102E5-32	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003301	Screw, Machine	NAS1102E5-34	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003302	Screw, Close Tolerance	NAS1131E1	51	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003303	Screw, Machine	NAS1131E12	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003304	Screw, Close Tolerance	NAS1133E12	28	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003305	Washer, Flat	NAS1149C0432R	119	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003306	Washer, Flat	NAS1149C0632R	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003307	Washer, Flat	NAS1149E0416R (NAS1149EN416R)	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003308	Washer	NAS1149EN832R	54	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003309	SCREW, SELF LOCKING	NAS1161EIL	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003310	Screw, Machine	NAS1189E02P4L	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003311	Screw, Cap, Socket Head	NAS1189E06P5L	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003312	Screw, Cap, Socket Head	NAS1189E06P6L	50	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003313	LOCKING NUT	NAS1291C04M	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003314	Nut, Self-Locking	NAS1291C06M	73	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003315	NUT	NAS1291C08M	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003316	Nut, Self-Lock .250-28 UNJF-3B	NAS1291C4M	150	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003317	Nut, Self-Lock .1380-32	NAS1291C6M	17	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003318	Screw, S/H Cap 10-32 X .625 lg	NAS1351C3-10	47	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003319	Screw, S/HD Cap 10-32 X .750 lg	NAS1351N3-12	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003320	SOCKET SCREW	NAS1351N3-14	10	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003321	Screw, Cap, Socket Head	NAS1351N3-8	84	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003322	Screw, Cap, Socket Head	NAS1351N3LB16	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003323	SCREW	NAS1352C04-4	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003324	Screw Cap Socket Head 6-32 X .500	NAS1352N06-8	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003325	Screw, Cap, Socket Head	NAS1352N06LB8	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003326	Screw, Cap, Socket Head	NAS1352N06LL6	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003327	Screw Cap Socket Head 8-32 X 5/8	NAS1352N08-10	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003328	Screw, Cap, Socket Head	NAS1352N08LB4	16	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003329	Rivet, Solid	NAS1399C4A5	48	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003330	Washer, Flat	NAS1587-4	24	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003331	Washer, Recessed	NAS1587A3C	115	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003332	Nut,Self-Locking, Plate	NAS1779C4M	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003333	Nut,Self-Locking, Plate	NAS1789C4M	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003334	Screw, Machine	NAS1802-6-18	19	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003335	Washer	NAS620C6	75	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003336	NUT, SMALL #4	NAS671C4	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003337	SCREW, PAN HEAD	NAS8100LU5	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003338	SCREW #6-20	NAS8101LU5	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003339	SCREW	NAS8101U5	19	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003340	Screw, Machine	NAS8101U8	9	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003341	Screw, Machine	NAS8102LU16	48	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003342	Screw, Machine	NAS8103U11	27	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003343	Screw, Machine	NAS8103U8	497	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003344	CONNECTOR	NATC06G11N35P N	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003345	Connector, Plug, Electrical	NATC06G11N98S N	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003346	Connector	NATC06G13N35P N	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003347	CONNECTOR	NATC06G13N35P N	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003348	Connector	NATC06G13N35S B	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003349	Connector, Plug, Electrical	NATC06G13N98S N	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003350	Cap, Protective	NATC-PPC-N-11-0	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003351	Cap, Protective	NATC-PPC-N-13-0	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003352	Cap, Protective	NATC-PPC-N-13-0	20	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003353	MULTICONDUCTOR CABLE, 22 AWG	NF22Q100	53	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003354	White LED	NSPW310BS	46	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003355	WHITE LED	NSPW310BS	30	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003356	Yellow LED	NSPY500S	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003357	Speaker, Loud	NSW2-326-8A	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003358	CABLE TIE, GREEN	PLT1.5I-C5	300	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003359	CABLE TIE	PLT1.5I-C	500	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003360	Inductor, 100UH	RL1324-3-100	36	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003361	RESISTOR, THRU HOLE 2.021K	RNC55H2021BR	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003362	Resistor Wirewound 10 OHM 1 WATT	RWR81S10R0FS	85	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003363	Resistor, 1 OHM	RWR81S1R00FR	39	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003364	Resistor Power Axial 1% 1.4 OHM	RWR81S1R40FS	78	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003365	Resistor, 1.5 OHM	RWR81S1R50FS	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003366	Resistor Power Axial 1% 0.619 OHM	RWR81SR619FS	100	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003367	Resistor, .665 OHM	RWR81SR649FS	25	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003368	Resistor 130 OHM 1%	RWR89S1300FR	89	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003369	Resistor 3.01K 1%	RWR89S3011FS	60	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003370	Fuse 13.2V 0.75AMP	RXE075	67	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003371	Connector	SDD15F100E2G	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003372	Connector	SDD15F100E6G	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003373	Sub-D High Density Connector	SDD15M100T2G	13	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003374	Connector	SDD15M100T6G	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003375	Connector	SDD26F100E2G	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003376	Connector	SDD26F100T2G	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003377	Connector	SDD26M100E2G	11	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003378	CONNECTOR	SDD26M100E2G	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003379	Connector D-Subminiature	SDD26M100T2G	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003380	Connector	SDD44F100E2G	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003381	Connector	SDD44M100T26	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003382	Connector	SDD44M100T2G	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003383	Top Attach Fitting, Left Rack	SDG32109411-303	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003384	Top Attach Fitting, Right Rack	SDG32109411-304	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003385	Plug, Top Attach Fitting	SDG32109422-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003386	Screw, Locking	SDG32109423-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003387	Shim. Stock Altered Item Drawing	SDG32109458-801	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003388	Washer Grounding, Composite	SDG32109461-001	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003389	Frame	SDG32109471-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003390	Floor Panel Frame	SDG32109476-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003391	Alignment Plate, Septum Abatement, Exhaust Assembly	SDG32109502-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003392	Frame Assembly	SDG32109703-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003393	Blade, Diffuser	SDG32109704-801	52	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003394	Blade, Diffuser	SDG32109705-801	12	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003395	Panel, Didduser Area Panel Assy, Diffuser	SDG32109706-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003396	Panel, Didduser Area Panel Assy, Diffuser	SDG32109706-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003397	Frame, Fan, ORU	SDG32109795-001	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003398	Frame, Fan, ORU Inlet	SDG32109795-302	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003399	Face Plate Assy Fan Mount, Port	SDG32109796-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003400	Fastener Tape	SDG32109819-007	44	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003401	Fastener Tape	SDG32109819-008	22	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003402	Fastener Tape	SDG32109819-010	7	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003403	Pin, Top Attach Fitting	SDG32109850-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003404	Pinion, Upper Attachment	SDG32109851-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003405	Plate	SDG32109852-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003406	Plate	SDG32109852-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003407	Pin	SDG32109853-301	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003408	Cap, Actuator Upper Attachment	SDG32109854-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003409	Bushing, Gear, Rear Top Attach Fitting	SDG32109855-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003410	Bushing	SDG32109856-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003411	Bushing, Upper Pin Top Attach Fitting	SDG32109857-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003412	Bushing, Lower Pin Top Attach Fitting	SDG32109858-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003413	Spacer, Upper Attachment	SDG32109859-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003414	PRINTED WIRING BOARD, AIR FLOW SENSOR	SDG32110089-001	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003415	Standoff	SDG32110124-001	13	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003416	Mount	SDG32110165-001	40	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003417	Support, Blade-Diffuser Assy	SDG32110166-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003418	Frame Assembly, Bottom- Diffuser Assy	SDG32110167-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003419	Rod, Control, -Diffuser Assy	SDG32110168-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003420	Mount, Blade, Driver Assy- Diffuser Assy	SDG32110169-301	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003421	Wheel, Control-Diffuser Assy	SDG32110170-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003422	Vane 1, Guide, STBD	SDG32110181-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003423	Vane 2, Guide, STBD	SDG32110182-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003424	Vane 3, Guide, STBD	SDG32110183-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003425	Vane 4, Guide, STBD	SDG32110184-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003426	Bracket, Vane Front, Guide Assy	SDG32110186-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003427	Bracket, Vane Front, Guide Assy	SDG32110186-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003428	Bracket Assy, Diffuser Panel Bumpout Structure	SDG32110187-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003429	Bracket Assembly	SDG32110187-302	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003430	Hinge Socket1, Lower Door	SDG32110202-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003431	Plunger Housing 1, Plunger 1	SDG32110204-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003432	Plunger	SDG32110205-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003433	Base, Tension Catch	SDG32110206-801	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003434	Plunger	SDG32110206-802	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003435	Hing Socket 2, Lower Door	SDG32110212-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003436	Plunger Housing 2, Plunger 2	SDG32110214-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003437	Retainer,Upper Hinge	SDG32110215-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003438	Base 1, Upper Hinge	SDG32110217-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003439	Base 1, Upper Hinge	SDG32110217-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003440	Upper Hinge Pin 1	SDG32110218-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003441	Lower Hinge Pin 1, Bump Out	SDG32110220-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003442	Base 2, Upper Hinge	SDG32110222-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003443	Upper Hinge Pin 2	SDG32110223-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003444	Lower Hinge Pin 2 Bump Out	SDG32110225-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003445	PWB, Signal Conditioner	SDG32110311-001	24	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003446	Housing Signal Cond.	SDG32110313-301	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003447	Panel, Signal Conditioner, Top	SDG32110316-002	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003448	Cover Assy, Electrical Panel	SDG32110318-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003449	Signal Conditioner Cover, Electrical panel	SDG32110319-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003450	Port Node 2 Cable Cover Assy, Electrical Panel	SDG32110320-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003451	Port Node 2 Cable Cover Assy, Electrical Panel	SDG32110321-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003452	Port Node 2 Cable Cover Assy, Electrical Panel	SDG32110321-303	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003453	Port Node 2 Cable Cover Assy, Electrical Panel	SDG32110321-305	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003454	Bracket, Support, Electrical Panel	SDG32110322-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003455	Bracket Node 2 Connector, Electrical Panel	SDG32110323-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003456	Enclosure, Battery, Electrical Panel, Port	SDG32110326-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003457	PWB, CQ Power Supply	SDG32110337-001	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003458	Base Plate, Power Supply	SDG32110339-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003459	Front Wall, Power Supply	SDG32110340-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003460	Back Wall, Power Supply	SDG32110341-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003461	Side Wall, Power Supply	SDG32110342-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003462	Heat Sink, Power Supply Alt Item DWG	SDG32110343-801	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003463	Cover, Power Supply	SDG32110344-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003464	Bracket, Power Supply	SDG32110345-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003465	PWB Test Panel	SDG32110352-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003466	Cover , Test Panel	SDG32110354-002	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003467	Enclosure, Test Panel	SDG32110354-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003468	Spacer, LED Power Supply	SDG32110358-001	15	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003469	Spacer , Flow Sensor IC	SDG32110359-001	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003470	BACK PLATE, LED, ELECTRICAL PANEL	SDG32110360-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003471	Enclosure, Speaker Altered Item DWG	SDG32110364-801	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003472	Grill, Speaker	SDG32110365-001	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003473	Bracket, Speaker, Audio Annunciation Device	SDG32110366-001	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003474	PWB, Egress Light	SDG32110384-001	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003475	Housing, Egress Light	SDG32110386-302	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003476	Cove, Egress Light	SDG32110387-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003477	Gasket. Egress Light	SDG32110388-001	5	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003478	PWB, Air Flow Sensor	SDG32110397-001	6	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003479	Seat Track	SDG32110406-002	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003480	Seat Track	SDG32110406-003	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003481	Seat Track	SDG32110406-004	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003482	Seat Track	SDG32110406-005	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003483	Seat Track	SDG32110406-006	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003484	ATU Loud Speaker, PWB	SDG32110410-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003485	Housing, ATU Speaker Altered Item DWG	SDG32110412-801	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003486	Bracket, ATU Loud Speaker	SDG32110414-001	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003487	PWB, 120V DC Terminal Buss	SDG32110420-001	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003488	Handrail Film Plug	SDG33121991-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003489	Plug, Sight	SDG33121991-001	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003490	Plate Assembly	SDG38120423-701	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003491	Panel Assembly	SEG32109443-701	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003492	Grounding Strap Assembly	SEG32109462-701	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003493	Shim	SEG32109731-005	3	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003494	Rigid Edge Flow Channel Assembly, Port	SEG32109786-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003495	Rigid Edge Flow Channel Assembly, STBD	SEG32109786-302	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003496	Mount Assembly	SEG32109792-302	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003497	Protector Assembly, Pinch	SEG32109863-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003498	Ring Assembly	SEG32109867-701	29	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003499	BUMP-OUT PWR CABLE	SEG32110110-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003500	BUMP-OUT PWR CABLE	SEG32110110-302	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003501	BUMP-OUT PWR CABLE	SEG32110111-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003502	BUMP-OUT LIGHT CABLE	SEG32110112-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003503	GLA POWER CABLE	SEG32110113-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003504	TEST PANEL CABLE	SEG32110114-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003505	BUMP-OUT PWR CABLE	SEG32110116-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003506	BUMP-OUT PWR CABLE	SEG32110116-302	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003507	FAN POWER/DATA/SWITCH CABLE	SEG32110117-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003508	Cable Assembly	SEG32110118-302	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003509	BUMP-OUT LIGHT CABLE	SEG32110119-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003510	SPEAKER PWR DATA CABLE	SEG32110120-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003511	FAN POWER/ DATA CABLE ASSY	SEG32110121-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003512	Pull Tab Assembly	SEG32110208-301	14	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003513	Pull Tab Assembly	SEG32110208-302	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003514	Bracket, Signal Conditioner	SEG32110315-301	19	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003515	TEST PANEL	SEG32110349-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003516	AUDIO ANNUNCIATION DEVICE	SEG32110362-301	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003517	EGRESS LIGHT ASSEMBLY	SEG32110381-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003518	Sensor Assembly, Intake Air Flow	SEG32110394-301	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003519	Liner Assembly	SEG33120906-701	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003520	Ziplock Bag, Air Filter	SEG33121992-301	8	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003521	ASSEMBLY CABLE, POWER, LAPTOP	SEG38120080-301	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003522	ASSEMBLY, CABLE, UTILITY, PRIMARY POWER, 120VDC	SEG38120083-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003523	ASSEMBLY, CABLE, UTILITY, REDUNDANT POWER, 120VDC	SEG38120084-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003524	MDM CABLE ASSY	SEG38120086-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003525	AUDIO UTILITY CABLY ASSY	SEG38120088-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003526	DATA SWITCH	SEG38120089-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003527	DATA FAN PWR CABLE ASSY	SEG38120090-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003528	Thermistor	SL0850002	37	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003529	Connector	SND9F10M0G	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003530	Connector	SND9M100T6G	28	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003531	Clip, 3MM LED	SSH-LX3050	480	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003532	TY-WRAP MOUNTING BASE	TC105	500	EA	FLT	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003533	Integrated Circuit Device	TMP12FS	250	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003534	AIR FLOW (TEMPERATURE SENSOR)	TMP12FS	29	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003535	BATTERY, LITHIUM	U9VL-J	4	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003536	Ring	WSM-25-S316-PA	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003537	Connector	D38999/26FD18SA	4	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003538	Connector, Plug	D38999/26FD97PN	4	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003539	Swivel Nut Female Connector	JS8FC	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003540	Wire, Black 20 AWG	M22759/11-20-0	277	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003541	Wire, Silver Coated, 20 AWG	M22759/11-20-9	20	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003542	Wire	M22759/11-22-0	688	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003543	3-Conductor Shielded Cable	M27500-20RC3S06	650	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003544	4-Conductor Shielded Cable	M27500-20RC4S06	150	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003545	14 Conductor Shielded Cable	M27500- 22RC14S06	375	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003546	20 Conductor Shielded Cable	M27500- 22RC20S06	225	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003547	6 Conductor Shielded Wire	M27500-22RC6S06	200	RO	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003548	8-Conductor Shielded Cable	M27500-22RC8S06	12	FT	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003549	Backshell	M85049/38S11N	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003550	Backshell, Size 13	M85049/38S13N	10	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003551	Backshell	M85049/38S15N	8	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003552	Nut Plain Hexagon, #6-32 Cres	MS35649-264	32	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003553	Screw, Machine, Pan Head #6- 32 x .63" CRES	MS51957-31	32	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003554	Transfer Beam RH	SDG38120067-001	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003555	Transfer Beam LH	SDG38120067-002	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003556	Back Plate	SDG38120068-001	4	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003557	Enclosure Cover Altered Item Drawing	SDG38120094-802	1	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003558	Clamp, Exhaust	SDG38120425-001	10	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003559	Spacer Assembly	SDG38120426-301	5	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003560	Clamp Assembly	SDG38120428-301	10	EA	GSE	BHOU		9/30/2012	Added per S/A 1827

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12860; S/A 1827			003561	Spacer	SDG38120429-001	5	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003562	Spacer	SDG38120431-001	5	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003563	Clamp	SDG38120432-001	5	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003564	Spacer	SDG38120433-301	5	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003565	Rack Transfer Beam	SDG38120612-301	1	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003566	Bump-Out Assembly Construction JIG	SEG38120044-301	1	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003567	Laptop Cable Assembly Power	SEG38120080-301	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003568	Primary Power 120V DC Cable Assy	SEG38120083-301	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003569	120VDC Cable Assy Redundant Power	SEG38120084-301	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003570	OPS, Lan Cable Assy	SEG38120085-301	4	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003571	MDM Cable Assembly	SEG38120086-301	3	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003572	ASSEMBLY, CABLE, UTILITY, C&DH REDUNDANT, GSE	SEG38120087-301	4	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003573	Audio, Utility Cable Assembly	SEG38120088-301	3	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003574	GSE, Data Switch, Fan Power Cable Assembly	SEG38120089-301	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003575	GSE, Data, Fan Power Cable Assembly	SEG38120090-301	2	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003576	Bump Out, Power Supply Cable Assy	SEG38120091-301	3	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003577	Bump Out, Power Supply Cable Assy	SEG38120091-302	3	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003578	GSE Box, Test, Functional, Assy	SEG38120092-301	3	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003579	Rack Assembly Fixture	SEG38120095-301	1	EA	GSE	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003580	FAN POWER/DATA/SWITCH CABLE	SEG32110117-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003581	Cable Assembly	SEG32110118-302	2	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 12860; S/A 1827			003582	BUMP-OUT LIGHT CABLE	SEG32110119-301	1	EA	FLT	BHOU		9/30/2012	Added per S/A 1827
SSCN 13149; S/A 1984			003586	T61P Laptop Assembly (for SSC SW hosting)	TBD	1	EA	FEU	BHOU		2/14/2014	Added per definitization of SSCN 13149 on S/A 1984.
SSCN 13121; S/A 1959			003587	ISS Common IMV Valve for Node 3 - Aft	42920-2	2	EA	FLT	BHOU		5/13/2014	Added per SSCN 13121 definitized on S/A 1959. Added part number per SSCN 13121 definitized on S/A 1991.
SSCN 13121; S/A 1959			003588	ISS Common IMV Valve Caps for Node 3 - Aft	683-15016-6	2	EA	FLT	BHOU		5/13/2014	Added per SSCN 13121 definitized on S/A 1959. Added part number per SSCN 13121 definitized on S/A 1991.
SSCN 13243; S/A 1842			003593	Bus Terminator	NDST-77-TA	7	EA	FLT	BHOU	4/20/2012	4/20/2012	Added per S/A 1842

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13243; S/A 1842			003594	Sealing Plug, Socket	NZGSP-22DS	416	EA	FLT	BHOU	4/20/2012	4/20/2012	Added per S/A 1842
SSCN 13243; S/A 1842			003595	Backshell	NZGA-HG-25-N-32	4	EA	FLT	BHOU	4/20/2012	4/20/2012	Added per S/A 1842
SSCN 13243; S/A 1842			003596	Backshell	NZGA-HG-25-N-24	2	EA	FLT	BHOU	4/20/2012	4/20/2012	Added per S/A 1842
SSCN 13097; S/A 1865			003597	OGA Power Supply Module	96M11700-1	1	EA	FLT	KSC		10/15/2012	Added per S/A 1865
SSCN 13245; S/A 1841			003601	Connector	NATC07T17N8SA	1	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003602	Connector	NATC06G17N8PA	1	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003603	Backshell	NZGA-SX-17-N-20	4	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003604	Contact	NZGC-F-16SB	12	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003605	Contact	NZGC-F-16PB	12	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003606	Sealing Plug	NZGSP-16	8	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003607	Receptacle Protective Cap	NATC-RPC-N-17-R	2	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003608	Protective Cap	NATC-PPC-N-17-0	2	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003609	Fiber Optic Cable	NFOC-2FFF-1GRP-1	70	FT	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003610	Cable	NRFC-50-COAX-3	60	FT	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003611	Connector	NATC07T17N8SB	1	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003612	Connector	NATC06G17N8PB	1	EA	FLT	KSC	4/20/2012	4/20/2012	Added per S/A 1841
SSCN 13245; S/A 1841			003613	Fiber Optic Cable	NFOC-2FFF-1GRP-1	70	FT	FLT	KSC		12/1/2012	Added per S/A 1841
PIO 103; S/A 1952			003621	Microconical Fitting	0006055-002	2	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003622	Sensor, RTD	1F08040-1	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003623	Sensor, Temperature	1F08041-1	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003624	Inrush Current Limiter	1F97575-1	5	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003625	Heater, Strip	1F97602-1	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003626	Electronic Control Unit (ECU)	1F98802-501	5	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003627	Splice	34130	42	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003628	Nut, Self-Locking	61170-820	37	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003629	Washer, Flat	AN960C10	68	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003630	HI-LOK	HL48-6-4	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 103; S/A 1952			003631	Pin, HI-LOK	HL48-6-5	20	EA	FLT	BHOU		6/3/2013	Updated delivery date and quantity per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003632	Nut, Self-Locking, EX	MS21043-3	1200	EA	FLT	BHOU		6/3/2013	Updated delivery date and quantity per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003633	Nut, Self-Locking	MS21043-4	102	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003634	Nut Plate	MS21076-3	227	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003635	Nut, Self-Locking, PL	MS21076-4	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003636	Bolt, Machine	NAS1003-5A	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003637	Screw	NAS1101E06-8	22	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003638	Screw	NAS1101E3-12	12	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003639	Screw, Machine	NAS1101E3-7	6	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003640	Screw	NAS1101E4-10	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003641	Nut	NAS1291C3M	173	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003642	Nut	NAS1291C4M	27	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003643	Screw, Cap	NAS1351N3-12	53	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003644	Bolt	NAS1580C3T6	34	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003645	Washer	NAS1587-4C	61	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003646	Washer, Recessed	NAS1587A3C	42	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003647	Clamp	NAS1715C10KW	6	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003648	Clamp, Loop	NAS1715C4K	51	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003649	Clamp	NAS1715C5K	12	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003650	Clamp	NAS1715C6KW	8	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003651	Clamp	NAS1715C7KW	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003652	Clamp	NAS1715C8KW	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003653	Clamp	NAS1715C9KW	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003654	Bolt	NAS1953C4	6	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003655	Bolt	NAS1953C5	38	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003656	Bolt, Shear	NAS1953C6	77	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 103; S/A 1952			003657	Bolt, Shear	NAS1953C7	73	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003658	Bolt	NAS1953C8	41	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003659	Bolt	NAS1954C4	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003660	Bolt, Shear	NAS1954C8	18	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003661	Bolt	NAS1954C9	24	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003662	Washer, Flat	NAS620C10	48	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003663	Washer, Flat	NAS620C10L	43	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003664	Washer, Flat	NAS620C416L	21	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003665	Washer, Flat	NAS620C6	34	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003667	Connector	NATC06G11N35P B	12	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003668	Connector	NATC06G11N35S N	20	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003669	Connector Plug	NATC06G11N98S N	10	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003670	Connector	NATC07T11N35PN	8	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003671	Cable	NGPC-ETF-20-2U	20	FT	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003672	Cable	NGPC-ETF-22-2SJ	45	FT	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003673	Wire	NGPC-ETF-22-2U	175	FT	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003674	Wire	NGPC-ETF-22-4SJ	50	FT	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003675	Wire	NGPW-ETF-20	10	FT	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003676	Backshell	NZGA-JX11-N-08	8	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003677	Backshell	NZGA-LG-11-N-12	6	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003678	Backshell	NZGA-SG-11-N-08Z	6	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003679	Backshell, Connector	NZGA-SG-17-N-20Z	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003680	Backshell	NZGA-SX-11-N-08	5	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003681	Contact, Electrical	NZGC-C-2022PB	49	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003682	Contact, Socket	NZGC-C-2022SB	41	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003683	Contact, Pin	NZGC-C-20PB	43	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003684	Contact, Pin	NZGC-C-22DPB	198	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003685	Contact, Socket	NZGC-C-22DSB	359	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 103; S/A 1952			003686	Connector	NZGL07T1717N35 SN	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003687	Plug, Sealing	NZGSP-20	79	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003688	Washer	ST116-3	1124	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003689	Washer	ST116-3C	227	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003690	Washer	ST116-4	98	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003691	Washer	ST116-4C	40	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003692	Nut	ST146-3	10	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003693	Lug, Terminal	ST231-20-10	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
SSCN 13204; S/A 1887			003694	SpaceX Dragon Trunk Video System for JSL Integration Testing	TBD	1	EA	FLT	bhou		1/31/2013	Added per SSCN 13204 definitized on S/A 1887
SSCN 13241; S/A 2015			003695	Handrail Assembly	SEG33106347-815	10	EA	FLT	BHOU		4/4/2014	Added per definitization of SSCN 13241 on S/A 2015.
SSCN 13241; S/A 1974			003696	Passive FRAM Installation Kit	1J00520-009	2	EA	FLT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974.
SSCN 13241; S/A 1974			003697	H-Fixture	51624-2103-1	1	EA	FLT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974.
SSCN 13241; S/A 1974			003698	MTC Target	SKG33110782-602	1	EA	FLT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974.
SSCN 13241; S/A 1974			003699	Micro Conical Fitting. 3/4" Hole	SEG33113003-0002	1	EA	FLT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974. Updated per S/A 2015.
SSCN 13241; S/A 1974			003700	FRGF Drilling Template	71450F101-1	1	EA	MFT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974. Updated per S/A 2015.
SSCN 13241; S/A 1974			003701	Connector Alignment Tooling Kit	683-97340--001	1	EA	MFT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974.
SSCN 13241; S/A 1974			003702	Alignment Fixture Assy PFRAM	683-97110-001	1	EA	MFT	BHOU		4/4/2014	Added per SSCN 13241 definitized on S/A 1974.
SSCN 13241; S/A 1974			003703	Passive FRAM Drill Template	1J00517-003	1	EA	MFT	BHOU		12/13/2013	Added per SSCN 13241 definitized on S/A 1974.
PIO 103; S/A 1952			003704	Valve, Isolation	1F39991-507	4	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003705	Clamp	NAS1715C3K	1	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003706	Washer	NAS620C2	1	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003707	Washer	NAS620C4	2	EA	FLT	BHOU		3/29/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; S/A 1952			003708	Connector	NATC09Y11P35PN	12	EA	FLT	HIT	2/20/2013	2/20/2013	Added per PIO 103 definitized on S/A 1952.
PIO 103; Letter 13-006139			003709	Transducer, Pressure (Absolute)	1F08004-1	1	EA	FLT	BHOU		6/3/2013	Added per Letter 13-006139 concurrence dated 04/23/2013.
PIO 103; Letter 13-006139			003710	Transducer, Pressure, Differential	1F08008-1	1	EA	FLT	BHOU		6/3/2013	Added per Letter 13-006139 concurrence dated 04/23/2013.
SSCN 13276; S/A 1852			003728	Passive FRAM Installation Kit	1J00520-005	2	EA	FLT	KSC		6/8/2012	Added per S/A 1852

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13276; S/A 1852			003729	Passive FRAM Installation Kit	1J00520-011	1	EA	FLT	KSC		6/8/2012	Added per S/A 1852
SSCN 13190; S/A 1856			003730	PFE- Portable Fire Extinguisher S/N 0019	E4482	1	EA	DEV	KSC		6/29/2012	Added per S/A 1856
SSCN 13190; S/A 1856			003731	PFE- Portable Fire Extinguisher S/N 0001	E4482	1	EA	DEV	KSC		6/20/2012	Added per S/A 1856
SSCN 13190; S/A 1856			003732	Test Rack	TBD	1	EA	TSE	KSC		7/27/2012	Added per S/A 1856
SSCN 13190; S/A 1856			003732	Test Rack	TBD	1	EA	TSE	KSC		7/27/2012	Added per S/A 1856
SSCN 13190; S/A 1856			003732	Test Rack	TBD	1	EA	TSE	KSC		7/27/2012	Added per S/A 1856
SSCN 13190; S/A 1856			003732	Test Rack	TBD	1	EA	TSE	KSC		7/27/2012	Added per S/A 1856
SSCN 13190; S/A 1856			003732	Test Rack	TBD	1	EA	TSE	KSC		7/27/2012	Added per S/A 1856
SSCN 13047; S/A 1943			003735	SPDM Umbilical Connector Inserts	PS239557-09	2	EA	Flt	BHOU	4/30/2012	4/30/2012	Added per SSCN 13047 definitized on S/A 1943
SSCN 13047; S/A 1943			003736	SPDM Umbilical Connector Protective covers	51624-2010-553	2	EA	Flt	BHOU	4/30/2012	4/30/2012	Added per SSCN 13047 definitized on S/A 1943
SSCN 13047; S/A 1943			003737	SPDM Umbilical Connector Backshells (straight)	PS239558-03	2	EA	Flt	BHOU	4/30/2012	4/30/2012	Added per SSCN 13047 definitized on S/A 1943
SSCN 13047; S/A 1943			003738	SPDM Umbilical Connector Pins	PS239556-02	25	EA	Flt	BHOU	4/30/2012	4/30/2012	Added per SSCN 13047 definitized on S/A 1943
SSCN 12837; S/A 1944				Development, Test, and Production Environments on ISS IT servers (including installation, maintenance, and licensing of the following software through FY15):								Added per SSCN 12837 definitized on S/A 1944
SSCN 12837; S/A 1944			003743	Teamquest Performance/Capacity Planning	SDG33113005-002	1	EA	GSS	JSC	9/7/2012	9/7/2012	Added per SSCN 12837 definitized on S/A 1944
SSCN 12837; S/A 1944			003744	ColdFusion Adobe Enterprise 9	SEG33107730-301	1	EA	GSS	JSC	9/7/2012	9/7/2012	Added per SSCN 12837 definitized on S/A 1944
SSCN 12837; S/A 1944			003745	VM Ware Vsphere Enterprise Kit	SEG33114891-801	1	EA	GSS	JSC	9/7/2012	9/7/2012	Added per SSCN 12837 definitized on S/A 1944
SSCN 12837; S/A 1944			003746	Liferay Portal EE 6.0	N/A	1	EA	GSS	JSC	1/20/2013	9/7/2012	Added per SSCN 12837 definitized on S/A 1944
SSCN 12837; S/A 1944			003747	BizTalk Enterprise	SDG33109824-001	1	EA	GSS	JSC	9/7/2012	9/7/2012	Added per SSCN 12837 definitized on S/A 1944
SSCN 12837; S/A 1944			003748	SQL Server	SDG33113005-002	1	EA	GSS	JSC	9/7/2012	9/7/2012	Added per SSCN 12837 definitized on S/A 1944
SSCN 13209; S/A 1878			003750	MSO-19 Oscilloscope	TBD	1	EA	TSE	Moscow	4/27/2012	4/27/2012	Added per S/A 1878
SSCN 13209; S/A 1878			003751	IR Camera Kit with Memory Card, Power Cable, Video Cable, and Software	TBD	1	EA	TSE	Moscow		10/1/2012	Added per S/A 1878
PIO 106; S/A 1922			003752	Bushing - T2-VIS	1F16184-1	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003753	Pin, Attachment – T2-VIS	1F16198-1	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003754	Screw, Fitting	683-61663-19	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003755	Screw, Arm	683-61663-21	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003756	Pin	683-61711-20	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003757	Bushing, Flange	BACB28X6E043	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 106; S/A 1922			003758	Ring, Retaining	BACR10AM4A	12	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003759	Ring, Retaining	BACR10AM6A	12	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003760	Washer	BACW10BP3ACU	89	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003761	Washer, Recessed	BACW10BP4ACU	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003762	Washer	BACW10BP6ACU	10	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003763	Screw, Captive	CA2261-4-10-14	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003764	Screw	CA2295-10-10-12	9	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003765	Screw	CA2295-10-10-15	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003766	Insert	MS51831CA201L	8	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003767	Insert, Screw Thread	MS51831CA202L	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003768	Swaging Sleeve, Wire	MS51844-62	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003769	Retaining Ring	MS90707-5050	3	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003770	Pin	MS9390-420	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003771	Pin	MS9390-440	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003772	Dowel Pin	MS9390-730	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003773	Washer	MS9768-09	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003774	Bolt	NAS1003-4A	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003775	Screw	NAS1102E06-8	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003776	Screw, Machine	NAS1102E3-12	8	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003777	Screw, Flat Head	NAS1102E3-8	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003778	Washer, Flat #1	NAS1149C0316R	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003779	Washer, Flat	NAS1149C0332R	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003780	Nut	NAS1423C18	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003781	Nut, Plain, Hexagon	NAS1423C8	8	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003782	Washer	NAS1515H8	18	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003783	Washer, Flat	NAS1587-18	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003784	Washer, Plain	NAS1587-8	8	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003785	Nut	NAS1805-3	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 106; S/A 1922			003786	Pin	NAS561S4-20	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003787	Pip Pin	RE6266-16	2	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003788	Decal, IMS	SDG32105720-022	3	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003789	Spring Plunger	SSM-54N	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003790	Retaining Ring	WSM-43-PA-S02	4	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
PIO 106; S/A 1922			003791	External Retaining Ring	WSM-43-S02	6	EA	FLT	BHOU		2/4/2013	Added per definitization of PIO 106 on S/A 1922
SSCN 13312; S/A 1900			003792	Screw, Pan Head	NAS1190E08P8	50	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003793	Washer, Flat #8 (0.164)	NAS620C8L	50	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003794	Cable Clamp	AN742D10	10	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003795	Screw, SOC HD 0.164 – 32 X 0.375	NAS1352N08-6	5	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003796	Washer, Flat #8 (0.188)	MS15795-841	5	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003797	Cushion	RE3210-02	25	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003798	SHCS (#10) Self-Locking	NAS1351N3LE10	6	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003799	Washer	NAS620C10L	6	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003800	Screw, SOC HD 0.250 -28 X 0.875	NAS1351N4-14	6	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003801	Washer, Flat #1/4 (0.250)	NAS620C416L	12	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003802	Washer, Lock Spring # 1/4	MS35338 - 139	12	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003803	Cable	NGPC-TFE-16-2U	20	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003804	Wire	NGPW-TFE-22	5	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003805	Connector - MBSU Mating (C3)	SSQ22680-012	1	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003806	Connector, Plug (P4 & C2)	NATC06G15N97P N	2	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003808	Backshell	NZGA-SG-15-N-24	3	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003809	Connector Cap	NATC-RPC-N-15-R	1	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003810	Connector Cap	NATC-PPC-N-15-R	2	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003811	ESD Connector Cap - MBSU P1, P2, P4, P5	SSQ22680-30-011	4	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003812	ESD Connector Cap - Adapter C3	SSQ22680-30-014	1	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003813	Sealing Plug	NZGSP-16	10	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003814	Sealing Plug	NZGSP-20	15	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13312; S/A 1900			003815	Contact	NZGC-C-16PB	10	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003816	Contact	NZGC-C-16SB	10	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003817	Contact	NZGC-C-2022PB	15	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003818	Contact	NZGC-C-2022SB	15	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003819	CCA Card	R077448-11	2	EA	FLT	BHOU		12/14/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003820	PCMCIA Card (1553)	BU-65551M2-300	1	EA	FLT	BHOU		11/4/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13312; S/A 1900			003821	Cable, PCMCIA (1553)	DDC-58708-1	1	EA	FLT	BHOU		11/4/2012	Added per definitization of SSCN 13312 on S/A 1900
SSCN 13267; S/A 1925			003821	Non-Intrusive Flow Meter Kit	SJG33117585	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003822	Coolant Quality Monitoring Kit (CQMK)	SEG46118274-30X	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003823	Potable Water Reservoirs (PWR)	SEG46117689-301	3	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003824	Silver Biocide Syringe Kit	SED46111879-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003826	Purge Bags	KLSJ320189-301	2	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003827	20 - Micron Filter	SEG33117584-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003829	WPA H2O Common Transfer Hose	SEG33119491-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003830	WPA H2O Common Transfer Hose	SEG33119491-302	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003831	Actex Adapter	SEG33119492-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003832	Pre-treated Urine Transfer Hose	SEG33121250-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003833	Pre-treated Urine T-Valve	SEG33121260-304	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003834	Hygiene Water Dispenser	SEG33121270-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003835	Water "Y" Hose	SEG33121280-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003836	Portable Fire Extinguisher Cover Assembly	SEG33112741-301, -302	7	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003837	LiOH Cartridge Cover	V070-613593-001	35	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003841	Electronic Commutator	ЕПЖА468347.044	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003842	Ambient Temperature Catalytic Oxidizer	SV774230-1	2	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003843	STS Hydrazine Canister	MC621-0008-0060 or SV791197	4	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003844	STS ARS (LiOH) Canister	MC621-0008-0409 or SV755510-4	205	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003845	OGA Conductivity Meter	SEG33122633-301, -302	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003846	IMV Cone Screen	SEG11101191-301	2	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13267; S/A 1925			003847	A/L IMV Panel Screen	SEG11101193-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003848	A/L IMV Jumper Duct Screen	SEG11101192-301	1	EA	FLT	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003849	CQ Hygiene Liner	SEG33120906-301	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003850	CQ Hygiene Liner	SEG33120906-701	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003851	CQ Blanket Covers	SEG32112288-301	4	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003852	CQ Blanket Covers	SEG32112289-301	4	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003853	CQ Blanket Covers	SEG32112290-301	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003854	CQ Blanket Covers	SEG32112290-302	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003855	CQ Blanket Covers	SEG32112291-301	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003856	CQ Blanket Covers	SEG32112291-302	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003857	CQ Blanket Covers	SEG32112292-301	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003858	CQ Blanket Covers	SEG32112292-302	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003859	CQ Blanket Covers	SEG32112293-301	4	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003860	CQ Blanket Covers	SEG32112294-301	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003861	CQ Blanket Covers	SEG32112294-302	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003862	CQ Blanket Covers	SEG32112294-303	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003863	CQ Blanket Covers	SEG32112294-304	2	EA	FLT	BHOU	9/10/2012	9/10/2012	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003864	Hardware Mating Quick Disconnects	502060-1191.	2	EA	GSE	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003865	Hardware Mating Quick Disconnects	502060-3102U	1	EA	GSE	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003866	Hardware Mating Quick Disconnects	502040-1301	2	EA	GSE	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003867	Russian Hardware Ground Support Equipment	TBD	1	SET	GSE	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003868	Russian Hydroconnector	UF08019-012A	2	EA	GSE	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 13267; S/A 1925			003869	Russian Hydroconnector	UF08036-005	2	EA	GSE	NSSD		4/19/2013	Added per definitization of SSCN 13267 on S/A 1925
SSCN 12639; S/A 1999			003871	C2V2 Comm Unit Assembly FEU #1	TBD	1	EA	FEU	BHOU		6/27/2014	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			003872	C2V2 Comm Unit Assembly FEU #2	TBD	1	EA	FEU	BHOU		7/28/2014	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 13231; S/A 2016			003893	Handrail 8.53", Gold Anodized	SEG33106347-807	14	EA	FLT	BHOU		10/16/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003894	Handrail 6.15", Gold Anodized	SEG33106347-813	5	EA	FLT	BHOU		10/16/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003895	Handrail 8.53", Clear Anodized	SEG33107730-301	3	EA	FLT	BHOU		10/16/2013	Added per definitization of SSCN 13231 on S/A 2016.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13231; S/A 2016			003896	Pyrobolt, Inert	SEG26152313-301	24	EA	ENG	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003897	Inert NASA Standard Initiator	SEB26100001-150	4	EA	ENG	BHOU	3/1/2013	3/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003898	NASA Standard Initiator	SEB26100001-256	6	EA	FLT	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003899	NASA Standard Initiator	SEB26100001-257	31	EA	FLT	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003900	NASA Standard Initiator	SEB26100001-258	6	EA	FLT	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003901	NASA Standard Initiator	SEB26100001-259	6	EA	FLT	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
PIO 105; S/A 1961			003905	Punch	T789334	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003906	Ring	T789334-1	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003907	Coining Ring	T789334-2	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003908	Punch	T789335	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003909	Ring	T789335-1	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003910	Coining Ring	T789335-2	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003911	B.P. Weld Locator	T797252	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003912	Assy Weld Fixture	T789336	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003913	Grind Fixture Alt	T789342	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003914	P.T. Fixture	T789877	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003915	Probe Spot Loc. Fixture	T789878	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003916	Braze Fixture	T791185	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003917	P.T Fixture	T797001	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003918	Holding Fixture	T797213	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003919	Holding Fixture	T797217	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003920	Water Bench	STE9959325	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 105; S/A 1961			003921	Fitting, Threaded	683-16347-701/703 or NFA14107-35-54 or NFA14104-35-54	1	EA	FLT	HIT		8/1/2013	Added per PIO 105 definitized on S/A 1961
PIO 109; S/A 1981			003922	Universal POL Test Tool	18640-009	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981
PIO 105; S/A 1961			003923	Top, Filter, Power Supply, FLT	960130TSPM	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981
PIO 105; S/A 1961			003924	Bottom, Converter 1, Power Supply	960330BSPM	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981
PIO 105; S/A 1961			003925	Converter 1, Power Supply, FLT	960330TSPM	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 105; S/A 1961			003926	Bottom, Control, Power Mezz, FLT	960340BSPM	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981
PIO 105; S/A 1961			003927	Top, Control, Power Mezz, FLT	960340TSPM	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981
PIO 105; S/A 1961			003928	Assy-Cable, Power Breakout, Test	964920-026-01	1	EA	FLT	SEAKR		6/14/2013	Added per PIO 109 definitized on S/A 1981
SSCN 13231; S/A 2016			003932	iLIDS Engineering Development Unit (EDU) (Hard Captured System – “as is” configuration)	SEZ29101970 (incomplete)	1		ENG	BHOU	2/1/2013	2/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003934	Ready to Hook Limit Switch Assemblies (installed on item 3932)	SEZ29102112	3		TSE	BHOU	1/31/2013	1/31/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003937	Spring Test, Instron Coupler	SDZ36153404	1		STE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003938	Spring Cap Washer	SDZ36153405	1	EA	STE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003939	Sleeve Plunger	SDZ36153407	1	EA	STE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003940	RTH Sensor Spring Housing	SDZ36153333	1	EA	STE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003941	RTH Sensor Spring Plunger	SDZ3615334	1	EA	STE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003942	Undocking Complete Torsion Spring Fixture	SEZ36155080	1	EA	STE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003948	Flex Drive Life Cycle Test Support Equipment	N/A	1	EA	TSE	BHOU	2/4/2013	2/4/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003949	Flex Drive Running Torque and Stiffness Hold-down Fixture	N/A	1	EA	TSE	BHOU	2/4/2013	2/4/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003950	Hook Latching Torque Test Fixture	SEZ36153890	1	EA	TSE	BHOU	2/15/2013	2/15/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003951	Flex Cable Vibration Test Fixture	SEZ36153868	1	EA	TSE	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003953	Rotary Metal Finishing Fixture	SEZ36155151	1	EA	TSE	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003954	EDU Dynamics Seals	N/A	2	EA	TSE	BHOU	4/1/2013	4/1/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003959	EDU Umbilicals	63127156-1RES	1	EA	TBD	BHOU	1/31/2013	1/31/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003960	EDU Umbilicals	63127156-2RES	1	EA	TBD	BHOU	1/31/2013	1/31/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003961	EDU Separation EMA	63127150-1RES	1	EA	TBD	BHOU	1/31/2013	1/31/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003962	EDU Linear EMA	63127142-1RES	1	EA	TBD	BHOU	1/31/2013	1/31/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13231; S/A 2016			003963	EDU Linear EMA	63127142-2RES	1	EA	TBD	BHOU	1/31/2013	1/31/2013	Added per definitization of SSCN 13231 on S/A 2016.
PIO 107; S/A 2026			003964	Video Measurement Set	VM700T	1	EA	STE	L-3		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003965	FIM CCA	A3391199	1	EA	STE	L-3		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003966	FIM Test Fixture	TX16421	1	EA	STE	L-3		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003967	Power Distribution Box	TX16445	1	EA	STE	L-3		11/1/2013	Added per definitization of PIO 107 on S/A 2026.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 107; S/A 2026			003968	Audio/Video Interface Card (Eng Dev Model)	K10053726-502	1	EA	ENG	L-3		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003969	DDR1, SRAM	K10053913-1	16	EA	FLT	L-3		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003970	IXIA Chassis	941-0003-06	1	EA	STE	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003971	Up-Screened,TLK1221RHA GigE Transceiver, Grade 2	500-0223-02	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003972	Up-Screened,XCF32PV048C Xilinx FPGA PROM	500-0224-02	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003973	Up-Screened,LT3414MPFE Linear Regulator, Grade 2	500-0225-02	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003974	FPGA, Network Card,S752-00 Flight, Antifuse, Programmed	500-0226-01	5	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003975	Up-Screened,DP83865BVH	500-0230-02	25	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003976	Up-Screened,DP83865DVH	500-0230-03	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003977	Ferrite Bead Chip, BLM18SG260TN1D, w/SnPb Pre-tinning Process	500-0253-01	12	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003978	Conn, Type B,19 Column, 2mm,R/A Fem, Press Fit	800-0723-01	4	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003979	Conn, MicroD-Sub, 9pos, Recpt, R/A, Space Qual, PCMT	800-0780-01	5	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003980	Conn, Male, R/A,8W8,w/Fixed Fem Jack Screws, Space Qual, PCMT	800-0781-01	5	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003981	Res,100 Ohm,50mW,1%,M55342 Level R,0402	810-0117-05	65	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003982	Res,2K Ohm, 70mW, 1%, M55342, Level R, 0603	810-0125-05	145	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003983	Res,12.4K Ohm, 100mW, 0.1%, M55342, 0603	810-0502-01	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003984	Res,75 Ohm, 100mW, 1%, M55342, 0603	810-0558-01	95	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003985	Res,18.2 Ohm, 100mW, M55342, 1%, Level R, 0805	810-0777-05	35	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003986	Res,48.7 Ohm, 70mW, M55342, 1%, Level R, 0603	810-0779-05	20	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003987	Res,294K Ohm, 50mW, M55342, 1%, Level R,0402	810-0782-05	66	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003988	Res,49.9 Ohm, 50mW, M55342, 1%, Level R,0402	810-0784-05	263	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003989	Res,21.5K Ohm, 1/16W, .1%, M55342,0402	810-0786-02	14	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003990	Res,10K Ohm, 40mW, .1%, M55342,0402	810-0787-02	11	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003991	Res,332 Ohm, 100mW, 1%, M55342, Level P,0603	810-0886-01	40	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003992	Res,9.762K Ohm, 100mW, 0.1%, M55342,Level R,0603	810-0933-01	35	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003993	Res,0 Ohm, 40mw, M32159 Level M,0402	810-0952-01	7	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 107; S/A 2026			003994	Res,31.2K Ohm, 50mW, .1%, M55342,0402	810-1050-01	5	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003995	Cap,Tant,10uF,10V,20%,Surge Tested, A Size	830-0319-02	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003996	Cap,Cer,1.0uF,50V,X7R,10%, Level C Group A 55681,1206	830-0320-02	110	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003997	Cap,Cer,1.0uF,10V,X7R,10%, Level C Group A 55681,0805	830-0321-02	600	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003998	Cap,Cer,.01uF, 50V,X7R, 10%, Level C Group A 55681,0402	830-0322-02	1835	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			003999	Cap,Cer,0.1uF,50V,X7R,10%,L evel C Group A 55681,0805	830-0323-02	925	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			004000	Cap,Tant,22uF,10V,10%, Surge Tested, B Case	830-0324-02	54	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			004001	Cap,Tant,33uF,10V,10%,MIL- PRF-55365/8, D Case	830-0409-01	37	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			004002	Cap,Cer,1000pF,1000V,10%,M 49467, Radial A Case	830-0410-01	18	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			004003	Inductor,Chip,8.2nH,2%,AE23 5RAA8N2,0402	840-0158-01	10	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			004004	Transformer,10/100/1000 Base-T, 1000B-5006XB,SMT	840-0164-02	13	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
PIO 107; S/A 2026			004005	IC,Osc,125.000MHz, 50 PPM, 5X7 SMT	890-0671-01	2	EA	FLT	Aitech		11/1/2013	Added per definitization of PIO 107 on S/A 2026.
SSCN 13641; S/A 1975			004006	Chassis Assembly ESS Ext		1	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13641; S/A 1975			004007	5V Power Supply CCA		1	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13641; S/A 1975			004008	Supt Volt Power Supply CCA		1	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13641; S/A 1975			004009	EPIC ECA		1	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13641; S/A 1975			004010	SPD 1553 CCA		5	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13641; S/A 1975			004011	HRDL Load Board		1	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13641; S/A 1975			004012	MSD Load Board		2	EA	FLT	HI	4/1/2013	4/1/2013	Added per SSCN 13641 definitized on S/A 1975
SSCN 13528; S/A 1963			004017	IBM Embedded Data Processor (EDP) Circuit Card Assembly (CCA)	184A641-1, S/N 00001	1	EA	FEU	HSP		4/15/2013	Added per SSCN 13528 definitized on S/A 1963.
SSCN 13528; S/A 1963			004018	IBM Embedded Data Processor (EDP) Circuit Card Assembly (CCA)	155A420-1, S/N 00010	1	EA	FEU	HSP		4/15/2013	Added per SSCN 13528 definitized on S/A 1963.
SSCN 13528; S/A 1963			004019	IBM Embedded Data Processor (EDP) Circuit Card Assembly (CCA)	155A420	1	EA	FEU	HSP		4/15/2013	Added per SSCN 13528 definitized on S/A 1963.
SSCN 13528; S/A 1963			004020	IBM Embedded Data Processor (EDP) Circuit Card Assembly (CCA)	155A422-1	1	EA	FEU	HSP		4/15/2013	Added per SSCN 13528 definitized on S/A 1963.
SSCN 13231; S/A 2016			004021	EDU Linear EMA	63127142-1RES	2	EA	ENG	BHOU	2/21/2013	2/21/2013	Added per definitization of SSCN 13231 on S/A 2016.

**INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112**

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECD. DATE(AF)	NEED DATE	Comments
SSCN 13231; S/A 2016			004022	EDU Linear EMA	63127142-2RES	2	EA	ENG	BHOU	1/21/2013	1/21/2013	Added per definitization of SSCN 13231 on S/A 2016.
SSCN 13305; S/A 2047			004023	Connector Receptacle SSQ21635 – MDM Cover	NZGL00T1511N35 PN	9	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004024	Protective Caps SSQ21635 – MDM Connector Receptacle	NZGL-RPC-N-15-0- MS	11	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004025	Low Profile Backshell – MDM Ethernet Cable Connector	NZGA-LG-11-N- 16Z	2	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004026	Connector Plug SSQ21635 – Flight Cable (MLM W5946 J3 Mate) – Spare 1553	NZGL06G1511N35 PN-1	1	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004027	Connector Plug SSQ21635 – Flight Cable (MLM W5946 J4 Mate) –Ethernet	NZGL06G1515N35 PC-1	1	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004028	Straight Backshell SSQ21635 –Flight Cable; Test Cable	NZGA-SG-15-N- 16Z	5	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004029	Protective Cap SSQ21635 – Flight Cable	NZGL-PPC-N-15-R	7	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004030	Socket Contacts SSQ21635 – MDM Ethernet Receptacle	NZGC-C-22DSB	48	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004031	Socket Sealing Plugs SSQ21635 –Flight Cable; Test Cable	NZGSP-22DS	80	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004032	Pin Contacts SSQ21635 - Flight Cable; Test Cable	NZGC-C-22DPB	32	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004033	Pin Sealing Plugs SSQ21635 – MDM Cover; Flight Cable; Test Cable	NZGSP-22DP	112	EA	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004034	Pin Contacts 22-to-26 Gauge, SSQ21635 – MDM Cover	NZGC-C-22D26PB	36	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004035	Connector Plug SSQ21635 – Flight Cable	NZGL06G1511N35 SN-1	5	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004036	Connector Receptacle SSQ21635 – Flight Cable	NZGL07T1511N35 SA	1	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004037	Connector Receptacle SSQ21635 – Flight Cable	NZGL07T1511N35 SN	1	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			004038	Straight Backshell SSQ21635 – Flight Cable; Test Cable	NZGA-SG-15-N- 28Z	2	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
PIO 116; S/A 2012			004056	Blocking Fixture	T765974	1	EA	Manufactu ring tooling (MFT)	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004057	Skewed Stacking Fixture	T785697	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004058	Grind Fixture	T785698	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004059	Press Fixture	T790086	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004060	Bonding Fixture	T790088	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004061	Alignment Tool	T790518	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

**INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112**

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004062	Installation Fixture	T790611	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004063	Shaft Extension	T790618	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004064	Holding Fixture	T790675	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004065	Holding Fixture	T790676	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004066	Connector Alignment Tool	T790680	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004067	Rotary Actuator Test Stand	STE803008	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004068	MDM Simulator Test Fixture	STE959253	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004069	Reliability Acceptance Test Consoles	STE959270	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004070	Motor Test Stand	STE959285	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004071	Motor Controller Hybrid Tester	STE959353	1	EA	STE	HI-Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004072	EMI/Inrush CCA Test Fixture	STE959357	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004073	Power Supply Test Fixture	STE959357	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004074	Controller CCA Test Fixture	STE959357	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004075	Sensor CCA Test Fixture	STE959357	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004076	Isolator 'A' CCA Test Fixture	STE959357	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004077	Isolator 'B' CCA Test Fixture	STE959357	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004078	EMI/Inrush Limiter Circuit Tester & Cable Breakout Box	STE959391	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004079	Leak Test Pressure Chamber	ST7422185	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004080	Spline Adapter	ST7422190	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004081	Shaft Alignment Tool	ST7422194	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004082	Space Valve J1 Power Test Cable	ST7422195	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004083	Space Valve J2 Power Test Cable	ST7423851	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004084	Space Valve Generic 'Y' Test Cable	ST7423855	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004085	Leakage Test Line	ST7423867	1	EA	MFT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004086	Actuator Command Console	STE7402796	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004087	Port Adapter	STE7422186	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004088	Space Valve CDRA Cycle Controller	STE7422193	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004089	Leak Detector	STE7423853A	1	EA	STE	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004123	Nut Assy	2352577-2	20	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004124	Retainer Assy	2352578-2	20	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004125	Insert	3797504-1	72	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004126	Insert	3797504-5	48	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004127	Ball, Selector	3797415-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004128	Cover	3797417-1	6	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004129	Spring, Wave, Bearing	3797558-1	4	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004130	Housing Assy	2357350-4	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004131	Insert	2357409-101	13	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004132	Insert	2357409-103	58	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004133	Insert	2357409-105	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004134	Insert	2366148-705	43	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004135	Cover Assy	2357872-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004136	Insert	2366164-103	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004137	Mounting Pad	2371746-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004138	Printed Wiring	2371403-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004139	Semiconductor	2370940-102	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004140	Semiconductor	2370940-105	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004141	Semiconductor	JANS1N4104-1	4	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004142	Semiconductor	JANS1N4108D-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004143	Semiconductor	2370940-124	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004144	Semiconductor	DZ931018C	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004145	Semiconductor	2370940-120	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004146	Semiconductor	2370944-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004147	Semiconductor	2371515-106	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004148	Semiconductor	2370940-108	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004149	Semiconductor	JANS1N4108-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004150	Semiconductor	JANS2N5416	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004151	Capacitor	2354670-103	4	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004152	Capacitor	2354670-105	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004153	Inductor	2354900-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004154	Capacitor	2354916-102	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004155	Semiconductor	JANS1N4150-1	16	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004156	Semiconductor	JANS1N6640	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004157	Semiconductor	JANS1N4467	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004158	Semiconductor	JANS1N5621	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004159	Transistor	JANS2N2222A	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004160	Wire, Solid	QQ-W-343S22S1A	100	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004161	Mounting Pad	2351693-2043	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004162	Mounting Pad	2351692-3005	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004163	Capacitor	M39003/10-3027S	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004164	Solder, J-STD-006	SN63PB37	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004165	Resistor, 430,000 OHMS +/- 2PCT .125 W .01PCT FR Case RLR05	RLR05C4303GR	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004166	Resistor	RLR07C1005GR	43	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004167	Capacitor	SSQ21113-107	28	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004168	Microcircuit	JANS4N49	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004169	Microcircuit	683-29427-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004170	Transistor	683-29375-2	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004171	Transistor	683-29378-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004172	Transistor	2371151-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004173	Mounting Pad	2372372-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004174	Mounting Pad	2372372-2	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004175	Shielding Beads	84127-14	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004176	Semiconductor	2370940-116	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004177	Mounting Pad	2370797-16	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004178	Transistor	JANS2N2907A	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

**INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112**

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004179	Semiconductor	2370940-103	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004180	Resistor	RWR80S56R2FS	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004181	Capacitor, 3.3UF, 10PCT, 20V	M39003/10-3530S	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004182	Filter	2371927-101	18	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004183	Filter	2355452-101	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004184	Connector	2354620-102	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004185	Connector	2354620-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004186	Lid EMI	2357865-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004187	Wire, Electrical	2370508-220	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004188	Wire, Electrical	2370508-221	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004189	Wire, Electrical	2370508-222	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004190	Wire, Electrical	2370508-223	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004191	Wire, Electrical	2370508-224	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004192	Wire, Electrical	2370508-225	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004193	Wire, Electrical	2370508-227	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004194	Wire	2370508-228	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004195	Wire, Insulated	2370508-229	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004196	Wire	2370508-2290	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004197	Wire	2370508-2291	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004198	Wire, Electrical	2370508-2292	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004199	Wire	2370508-2294	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004200	Wire, Electrical	2370508-2295	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004201	Wire, Electrical	2370508-2296	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004202	Wire, Electrical	2370508-2297	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004203	Tape, Lacing (MIL-T-43435, Type III, Finish C, Size 4)	2365485-2	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004204	Washer, Flat	2366149-105	43	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004205	Solder	SN95SB05	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004206	Solder, J-STD-006	SN63PB37	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004207	Printed Wiring	2354367-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004208	Rivet, CSK HD	2366146-116	43	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004209	Rivet	2366146-124	43	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004210	Semiconductor	2370940-116	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004211	Semiconductor	683-29425-1	36	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004212	Capacitor	2354670-105	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004213	Contact	2354672-103	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004214	Transformer/Ind	2371507-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004215	Inductor	2354873-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004216	Guide Pin	2354878-1	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004217	Capacitor	2354911-104	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004218	Capacitor	2354911-107	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004219	Capacitor	2354911-108	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004220	Capacitor	2354915-103	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004221	Capacitor	2354915-105	36	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004222	Capacitor	2354916-102	36	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004223	Capacitor	2354915-109	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004224	Semiconductor	JANS1N4150-1	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004225	Semiconductor	JANS1N6640	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004226	Semiconductor	JANS1N5806	72	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004227	Wire, Solid	QQ-W-343S22S1A	100	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004228	Microcircuit	M38510/11201SCA	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004229	Microcircuit	683-29428-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004230	Mounting Pad	2351693-2043	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004231	Capacitor	M39003/02-3030-NU	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004232	Capacitor	M39003/02-3042-NU	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004233	Capacitor	M39003/02-3046-NU	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004234	Capacitor	M39003/10-3024S	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004235	Capacitor	M39003/09-4079	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004236	Capacitor	M39003/10-3531S	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004237	Solder, J-STD-006	SN63PB37	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004238	Resistor	2371519-105	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004239	Microcircuit	SSQ22582-01SVA	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004240	Microcircuit (use 5962R9475402VLA)	2371205-101	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004241	Microcircuit	5962R9475402VLA	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004242	Mounting Pad	2370797-16	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004243	XSTR	683-29375-3	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004244	CKT Card Assy, Controller	2354371-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004245	Printed Wiring	2354373-1	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004246	Rivet, CSK HD	2366146-116	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004247	Rivet	2366146-124	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004248	Semiconductor	2370940-102	10	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004249	Microcircuit	2370957-101	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004250	Contact	2354672-103	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004251	Guide	2354877-2	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004252	Capacitor	2354911-106	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004253	Capacitor	2354911-108	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004254	Capacitor	2354915-101	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004255	Capacitor	2354915-102	65	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004256	Capacitor	2354915-103	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004257	Capacitor	2354915-104	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004258	Capacitor	2354915-105	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004259	Capacitor	2354915-106	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004260	Semiconductor	JANS1N4150-1	62	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004261	Semiconductor	JANS1N6640	86	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004262	Microcircuit, LM111	M38510/10304SPA	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004263	Microcircuit	M38510/11001SCA	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004264	Capacitor, 3.3UF, 10PCT, 20V	M39003/10-3530S	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004265	Solder, J-STD-006	SN63PB37	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004266	Resistor, 1,000,000 OHMS +/- 2PCT .125 W .01PCT FR Case RLR05	RLR05C1004GR	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004267	Resistor	RWR81S3R40FS	16	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004268	Resistor	2371519-101	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004269	Resistor	2371519-102	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004270	Resistor	2371519-103	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004271	Resistor	2371519-104	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004272	Microcircuit	SSQ22569-01SEA	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004273	Microcircuit	5962R9674201VE C	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004274	Microcircuit	5962F9674202VEC	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004275	Printed Wiring Board	2371573-1	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004276	Microcircuit	2371158-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004277	Capacitor	M123A04BXC102K W	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004278	Capacitor	M39003/02-3030-NU	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004279	Solder QQ-S-571	SN63PB37WRMAP 3	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004280	Microcircuit	2371158-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004281	Capacitor	M123A04BXC102K W	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004282	Capacitor	M39003/02-3030-NU	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004283	Solder QQ-S-571	SN63PB37WRMAP 3	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004284	Printed Wiring Board	2372426-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004285	Cable, Flex	2371137-12	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004286	Stator	2354700-2	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004287	Solder QQ-S-571	SN05PB95WRMAP 3	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004288	Tube, Evacuation	2354706-2	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004289	Disk, Closure	2357400-1	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004290	Header, Hermetic	2354686-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004291	Plug, Cap	2354853-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004292	Insulation	MPS3600002-11	25	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004293	Wire, Electrical	2370508-220	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004294	Wire, Electrical	2370508-222	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004295	Wire, Electrical	2370508-225	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004296	Wire, Electrical	2370508-226	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004297	Wire, Electrical	2370508-227	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004298	Wire, Electrical	2370508-2292	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004299	Wire, Electrical	2370508-2295	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004300	Wire, Electrical	2370508-2296	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004301	Wire, Electrical	2370508-2297	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004302	Spacer	2354294-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004303	Spacer	2371630-1	10	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004304	Wire, Electrical	2370508-221	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004305	Wire, Electrical	2370508-223	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004306	Wire, Electrical	2370508-224	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004307	Wire, Electrical	2370508-2293	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004308	Terminal, Lug	2370796-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004309	Screw	2366171-108	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004310	Screw	2366171-209	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004311	Tape, Lacing (MIL-T-43435, Type III, Finish C, Size 4)	2365485-2	4	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004312	Washer	2366149-101	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004313	Washer	2366149-104	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004314	Screw, Cap	2352754-110	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004315	Lubricant	MPS1500004	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004316	Solder, J-STD-006	SN63PB37	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004317	Wire, Solid	QQ-W-343S22S1A	100	FT	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004318	Magnet	2354692-1	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004319	Shaft	2354694-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004320	Spacer, Magnet	2354704-1	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004321	Spacer, Shaft	2354696-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004322	Carrier, Magnet	2354697-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004323	Sleeve	2354693-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004324	End Bell	2357401-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004325	Switch, Optical	2351095-101	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004326	Disc, Closure	2357400-2	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004327	Washer	2357417-13	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004328	Washer	2357417-15	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004329	Bearing	2354705-1	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004330	Washer, Spring	2355489-110	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004331	Washer	2357417-16	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004332	Screw, Pan Head	2366171-105	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004333	Packing	2351303-024	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004334	Rivet	2357404-1	24	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004335	Shim, Bearing	2357357-1	60	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004336	Shim, Bearing	2357357-2	60	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004337	Shim, Bearing	2357357-3	60	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004338	Trigger	2357363-1	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004339	Cover	2357364-1	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004340	Gear, Planet	2357365-1	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004341	Gear, Planet	2357366-1	43	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004342	Washer, Thrust	2357368-1	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004343	Stop	2357370-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004344	Gear, Bull	2357375-1	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004345	Carrier Assy, Output	2357376-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004346	Carrier Assy, Intermediate	2357371-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004347	Shaft, Output	2357378-1	5	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004348	Carrier Assy, Input	2357382-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004349	Covere, Bearing	2357384-1	3	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004350	Bearing, Ball	2357386-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004351	Bearing, Ball	2357387-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004352	Bearing, Ball	2357388-1	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004353	Seal, Shaft	2357391-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004354	Washer	2357417-1	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004355	Washer	2357417-2	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004356	Washer	2357417-3	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004357	Washer	2357417-7	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004358	Washer	2357417-8	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004359	Washer	2357417-9	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004360	Washer	2357417-10	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004361	Washer	2357417-11	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004362	Washer	2357417-12	50	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004363	Washer	2357417-16	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004364	Lubricant	MPS1500004	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004365	Packing	2351303-037	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004366	Bearing	2372001-1	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004367	Washer, Flat	2366149-105	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004368	Washer, Reduced	2366149-112	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004369	Ring, Retaining	2357379-4037	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004370	Screw, Machine	2372006-5	14	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004371	Screw, Cap	2352753-308	29	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004372	Ring, Retainer	3797488-2	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004373	Shim, Bearing	3797013-1	60	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004374	Packing, Preformed	4173830-15	4	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
PIO 116; S/A 2012			004375	Nut, Self-Locking	3797086-1	10	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004376	Screw	3796849-1	11	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004377	Spring, Wave, Seal	3797564-1	10	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004378	Spring, Wave, Retainer	3797568-1	19	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004379	Packing, Preformed	3796890-23	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004380	Packing, Preformed	3796890-26	3	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004381	Spacer, Spring	3797567-1	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004382	Ring, Retainer	3797488-5	7	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004383	Ring, Retainer	3797488-3	10	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004384	Packing, Preformed	3796890-28	10	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004385	Washer	3797486-31	60	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004386	Washer	3797486-32	60	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004387	Packing, Preformed	4173830-16	4	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004388	Packing	2351303-222	22	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004389	Lubricant	MPS1500004	1	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004390	Resistor (for Modification of P/N 2354371-4 to P/N 2354371-1)	RWR81S5R23FS	8	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004391	Circuit Card Assembly, Controller	2354371-4	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
PIO 116; S/A 2012			004392	Circuit Card Assembly, Controller	2354371-5	2	EA	FLT	HI- Glendale		9/6/2013	Added per definitization of PIO 116 on S/A 2012
SSCN 13763; S/A 1995			004573	Spectrophotometer, Photo Research PR670 (and associated accessories)	6670-0001-00	1	EA	TSE	Bionetics Corporation		6/20/13 thru 10/01/13	Added per SSCN 13763 definitized on S/A 1995.
SSCN 13763; S/A 1995			004574	Imaging Colorimeter, Radiant Zemax (and associated accessories)	PM-1433F	1	EA	TSE	Bionetics Corporation		6/20/13 thru 10/01/13	Added per SSCN 13763 definitized on S/A 1995.
SSCN 13773; S/A 1994			004575	CCAA Heat Exchanger Foam	SEG33122063-302	2	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 13773 on S/A 1994.
SSCN 13773; S/A 1994			004576	CCAA Heat Exchanger Foam	SEG33122063-303	2	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 13773 on S/A 1994.
SSCN 12639; S/A 1999			004577	Cord Lock	200343	6	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004578	Fabric, Betaglass PTFE-Coated Single Side AL	DPM11044	1	RO	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004579	Fabric MESH/Polyester	DPM11114	1	RO	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004580	Thread, Glass	DPM11118	1	RO	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004581	Film, Polyimide, Aluminized	DPM11120	1	RO	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12639; S/A 1999			004582	Cord, Glass	DPM1833	1	RO	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004583	Tape Fastener, Hook vacuum Baked	DPM4918-5/1	1	RO	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004584	.063 Dia Cres Cable	MIL-W-83420 Type I Comp B	20	FT	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004585	Sleeve	MS51844-62	6	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004586	Washer	NAS1149CO332R	144	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004587	Washer	NAS1149CO232R	6	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004588	Screw	NAS1351C3-10	72	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004589	IMS Barcode Label	SDG32108583-xxx	4	EA	FLT	KSC		8/1/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004590	Gap Spanner Buckle	SDG33109824-001	4	EA	FLT	KSC		9/30/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004591	8" Handrail	SEG33106347-815	4	EA	FLT	KSC		9/30/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004592	Equipment Hooks	SEG33108365-302	4	EA	FLT	KSC		9/30/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004593	Wire Tie Caddy	SEG33111586	4	EA	FLT	KSC		9/30/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004594	D Ring	SEG33114891-801	4	EA	FLT	KSC		9/30/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004595	EVA ORU Transfer Bag	SEG33114494	1	EA	FLT	KSC		7/15/2014	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004596	Connector	NZGL06G2121N75 SN	2	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004597	Backshell	NZGA-SX-21-N-12Z	4	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004598	Protective Cap	NZGL-PPC-N-21-R	4	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004599	Connector	NZGL06G2525N8S N	1	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004600	Backshell	NZGA-SX25N20Z	1	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004601	Protective Cap	NZGL-PPC-N-25-R	1	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004602	Connector	NZGL07T2525N8P N	1	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004603	Backshell	NZGA-JX25N28Z	1	EA	FLT	KSC		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004604	Protective Cap	NZGL-RPC-N-25-0-MS	1	EA	FLT	BHOU		9/5/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004605	Comm Unit Assembly EDU - Ground Support Equipment	TBD	1	EA	GSE	BHOU		1/2/2014	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004606	Comm Unit Assembly FEU #1 - Ground Support Equipment	TBD	1	EA	GSE	BHOU		6/27/2014	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			004607	Comm Unit Assembly FEU #2 - Ground Support Equipment	TBD	1	EA	GSE	BHOU		7/28/2014	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 13789; S/A 2003			004623	MDM Application Development Environment	TBD	1	EA	TSE	BHOU		7/16/2013	Added per definitization of SSCN 13789 on S/A 2003.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13789; S/A 2003			004624	C2V2 CAA cables	TBD	5	EA	FLT	BHOU		3/10/2014	Added per definitization of SSCN 13789 on S/A 2003.
SSCN 13763; S/A 1995			004630	Spectrophotometer, Photo Research PR670 (and associated accessories)	6670-0001-00	1	EA	TSE	Bionetics Corporation		12/02/13 thru 5/12/14	Added per SSCN 13763 definitized on S/A 1995.
SSCN 13763; S/A 1995			004631	Imaging Colorimeter, Radiant Zemax (and associated accessories)	PM-1433F	1	EA	TSE	Bionetics Corporation		12/02/13 thru 5/12/14	Added per SSCN 13763 definitized on S/A 1995.
SSCN 13763; S/A 1995			004632	Spectrophotometer, Photo Research PR670 (and associated accessories)	6670-0001-00	1	EA	TSE	Bionetics Corporation		4/15/15 thru 5/06/16	Added per SSCN 13763 definitized on S/A 1995.
SSCN 13763; S/A 1995			004633	Imaging Colorimeter, Radiant Zemax (and associated accessories)	PM-1433F	1	EA	TSE	Bionetics Corporation		4/15/15 thru 5/06/16	Added per SSCN 13763 definitized on S/A 1995.
SSCN 13859; S/A 2008			004702	Passive FRAM Installation Kit	1J00520-005	1	EA	FLT	JPL		8/15/2013	Added per definitization of SSCN 13859 on S/A 2008.
SSCN 13805; S/A 2045			004703	Connector, Receptacle	SSQ22681-004	1	EA	GSE	IPL		11/8/2013	Added per definitization of SSCN 13805 on S/A 2045.
SSCN 13805; S/A 2045			004704	Connector, Plug	SSQ22681-003-X	1	EA	GSE	IPL		11/8/2013	Added per definitization of SSCN 13805 on S/A 2045.
SSCN 13305; S/A 2047			005004	Straight Backshell SSQ21635 – Flight Cable	NZGA-SG-11-N-12Z	2	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			005005	Connector Receptacle SSQ21635 – Test Cable	NZGL07T1515N35 SC	1	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			005006	Connector Receptacle SSQ21635 – Test Cable	NZGL07T1511N35 PN	1	EA	FLT	BHOU	8/30/2013	8/30/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			005007	Ethernet Cable	22460/03213X-4(LD)	400	FT	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13305; S/A 2047			005008	1553 Cable	NDBC-TFE-22-2SJ-75	200	FT	FLT	BHOU	4/10/2013	4/10/2013	Added per definitization of SSCN 13305 on S/A 2047.
SSCN 13641; Letter 13-013115			005013	Cover, ESSMDM, EPIC	TBD	1	EA	FLT	BHOU		6/10/2014	Added per letter 13-013115 concurrence dated 08/27/2013.
SSCN 13799; S/A 2051			005014	SSC Server Load	TBD	1	EA	GSS	BHOU		12/5/2013	Added per definitization of SSCN 13799 on S/A 2051.
SSCN 13799; S/A 2051			005015	SSC T61P Laptop	TBD	1	EA	FEU	BHOU		12/5/2013	Added per definitization of SSCN 13799 on S/A 2051.
SSCN 13799; S/A 2051			005016	MCC ION DTN Nodes	TBD	2	EA	FEU	BHOU		6/1/2014	Added per definitization of SSCN 13799 on S/A 2051.
CCM 552			030537	PRESSURE PANE ASSEMBLY		1	EA	QUAL	JSC			
CCM 552			030538	TEST FIXTURE		1	EA	TSE	JSC			
	GLORIOSO	LP/S-5	105030	AOS FRONT-END SYSTEM, PHASE 2, SGS TEST SET		1	EA	TSE	MDAC/HunB			
	GLORIOSO	LP/S-5	105031	AOS FRONT-END SYSTEM, PHASE 2, SGS TEST SET		1	EA	TSE	MDAC/HunB			
	GLORIOSO	LP/S-5	105032	AOS FRONT-END SYSTEM, PHASE 1, ACS TEST SET		1	EA	TSE	MDAC/HunB			
	GLORIOSO	LP/S-5	105033	AOS FRONT-END SYSTEM, PHASE 1, ACS TEST SET		1	EA	TSE	MDAC/HunB			
	GLORIOSO	LP/S-4	105034	FM ACS DES KEYS		2	EA	DEV	MDAC/HunB			
CCM 290	GRIFFIN	LP/S-2	105067	FLIGHT RELEASABLE GRAPPLE FIXTURE (CUPOLA)		1	EA	FLT	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	TITTERTON	LP/S-2	105127	REMOTE POWER CONTROLLER-MODULE(RPC- M),(12A),EMULATOR		4	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105128	REMOTE POWER CONTROLLER-MODULE(RPC- M),(12A),EMULATOR		4	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105129	REMOTE POWER CONTROLLER-MODULE(RPC- M),(25A),EMULATOR		1	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105130	REMOTE POWER CONTROLLER-MODULE(RPC- M),(25A),EMULATOR		1	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105131	REMOTE POWER CONTROLLER-MODULE(RPC- M),(25A),EMULATOR		2	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105132	REMOTE POWER CONTROLLER-MODULE(RPC- M),(3.5A),EMULATOR		6	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105133	REMOTE POWER CONTROLLER-MODULE(RPC- M),(3.5A),EMULATOR		6	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-2	105134	REMOTE POWER CONTROLLER-MODULE(RPC- M),(50A),EMULATOR		2	EA	DEV	MDAC/HunB			
	TITTERTON	LP/S-4	105135	REMOTE POWER CONTROLLER-MODULE(RPC- M),(65A),EMULATOR		2	EA	DEV	MDAC/HunB			
	GRIFFIN	LP/S-2	105146	FLIGHT RELEASABLE GRAPPLE FIXTURE (NODE 2)		1	EA	FLT	MDAC/HunB			
	TITTERTON	LP/S-2	105149	COMMON MOUNTED WORKSTATION TASK LIGHTING		1	EA	MCK	MDAC/HunB			
	ZIPAY		105150	HATCHES AND MECHANISMS, AXIAL		1	SE	MCK	MDAC/HunB			
	ZIPAY		105151	HATCHES AND MECHANISMS, RADIAL		1	SE	MCK	MDAC/HunB			
	GALLOWAY	LP/S-2	105152	STANDARD RACK FOR C&C WORKSTATION		1	EA	MCK	MDAC/HunB			
	GRIFFIN	LP/S-2	105158	FLIGHT RELEASABLE GRAPPLE FIXTURE (PMA2)		2	EA	FLT	MDAC/HunB			
	GRIFFIN	LP/S-2	105162	FLIGHT RELEASABLE GRAPPLE FIXTURE (PMA3)		2	EA	FLT	MDAC/HunB			
CCM 287	CHAMBLISS	LP/S-4	105168	NASA STANDARD INITIATORS (P1)		22	EA	FLT	KSC/SSPF			
CCM 287	CHAMBLISS	LP/S-4	105169	NASA STANDARD INITIATORS (S1)		22	EA	FLT	KSC/SSPF			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	GRIFFIN	LP/S-4	105175	FLIGHT RELEASABLE GRAPPLE FIXTURE (P1)		2	EA	FLT	MDAC/HunB			
	GRIFFIN	LP/S-4	105179	FLIGHT RELEASABLE GRAPPLE FIXTURE (P3)		2	EA	FLT	MDAC/HunB			
	GLORIOSO	LP/S-4	105180	GPS ANTENNA ASSEMBLY		4	EA	FLT	MDAC/HunB			
	GRIFFIN	LP/S-4	105183	FLIGHT RELEASABLE GRAPPLE FIXTURE (S0)		1	EA	FLT	MDAC/HunB			
CCM 263	GLORIOSO	LP/S-3	105184	GPS RECEIVER PROCESSOR (LAB)		1	EA	FEU	MDAC/HunB	01/00/00		
	GRIFFIN	LP/S-4	105186	FLIGHT RELEASABLE GRAPPLE FIXTURE (S1)		1	EA	FLT	MDAC/HunB			
	GRIFFIN	LP/S-4	105189	FLIGHT RELEASABLE GRAPPLE FIXTURE (S3)		2	EA	FLT	MDAC/HunB			
CCM 263	GLORIOSO	LP/S-3	105208	GPS TEST SET		1	EA	TSE	MDAC/HunB	01/00/00		
CCM 287	CHAMBLISS	LP/S-4	105260	NASA STANDARD INITIATORS		54	EA	FLT	JSC			
CCM 287	GLORIOSO	LP/S-4	105261	UHF ANTENNA (P1)		2	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-2	105273	OIWIF SOCKET ASSY		6	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105274	OIWIF SOCKET ASSY		10	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-2	105275	TOP MOUNTED PASSIVE WIF ASSY		5	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	0	105276	TOP MOUNTED PASSIVE WIF ASSY		9	EA	FLT	MDAC/HunB	01/00/00		
CCM 805	THORNTON	LP/S-4	105280	TOP MOUNTED PASSIVE WIF ASSY		35	EA	FLT	MDAC/HunB			
	JUE/OG		105300	IBM/PS2 WORK STATION		2	EA	CSE	MDAC/HunB			
	JUE/OG		105301	LASER PRINTER		2	EA	CSE	MDAC/HunB			
	JUE/OG		105302			2	EA	CSE	MDAC/HunB			
	JUE/OG		105321	SILICON GRAPHICS 30 VGX WORKSTATION		1	EA	CSE	MDAC/HunB			
	CHAMBLISS	LP/S-4	105322	NASA STANDARD INITIATORS		24	EA	FLT	MDAC/HunB			
	JUE/OG		105324	COLOR THERMAL PRINTER 'TEKTRONIX' MODEL 4693DX		1	EA	CSE	MDAC/HunB			
	JUE/OG		105325	COLOR MONITOR 'HP/APOLLO' MODEL 010700-005		1	EA	CSE	MDAC/HunB			
	JUE/OG		105326	WORKSTATION 'HP/APOLLO' MODEL DN10000		1	EA	CSE	MDAC/HunB			
	JUE/OG		105327	COLOR MONITOR 'HP/APOLLO' MODEL 010700-005		1	EA	CSE	MDAC/HunB			
	JUE/OG		105328	WORKSTATION 'HP/APOLLO' MODEL DN10000		1	EA	CSE	MDAC/HunB			
	JUE/OG		105329	COLOR MONITOR 'HP APOLLO' MODEL 010700-005		1	EA	CSE	MDAC/HunB			
	JUE/OG		105330	WORKSTATION 'HP/APOLLO' MODEL DN10000		1	EA	CSE	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	JUE/OG		105331	COLOR MONITOR 'HP APOLLO' MODEL 010700-005		1	EA	CSE	MDAC/HunB			
	JUE/OG		105332	WORKSTATION 'HP/APOLLO' MODEL DN10000		1	EA	CSE	MDAC/HunB			
	JUE/OG		105333	MAGNETIC TAPE DRIVE 'HP/APOLLO' MODEL AD1000		1	EA	CSE	MDAC/HunB			
	JUE/OG		105334	WORKSTATION 'HP/APOLLO' MODEL DN10000		1	EA	CSE	MDAC/HunB			
	JUE/OG		105335	COLOR MONITOR 'HP/APOLLO' MODEL 010700- 005		1	EA	CSE	MDAC/HunB			
	JUE/OG		105336	WORKSTATION 'HP/APOLLO' MODEL A2286A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105337	MONOCHROME MONITOR 'HP/APOLLO' MODEL 700/96		1	EA	CSE	MDAC/HunB			
	JUE/OG		105338	EXTERNAL TAPE DRIVE 'HP/APOLLO' MODEL C1520B		1	EA	CSE	MDAC/HunB			
	JUE/OG		105339	EXTERNAL CDROM DRIVE 'HP/APOLLO' MODEL 0950- 2142		1	EA	CSE	MDAC/HunB			
	JUE/OG		105340	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2482A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105341	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2482A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105342	WORKSTATION 'HP/APOLLO' MODEL DN10000		1	EA	CSE	MDAC/HunB			
	JUE/OG		105343	MONOCHROME MONITOR 'HP/APOLLO' MODEL C2482A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105344	EXTERNAL TAPE DRIVE 'HP/APOLLO' MODEL C1520B		1	EA	CSE	MDAC/HunB			
	JUE/OG		105345	EXTERNAL CDROM DRIVE 'HP/APOLLO' MODEL 0950- 2142		1	EA	CSE	MDAC/HunB			
	JUE/OG		105346	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2217T		1	EA	CSE	MDAC/HunB			
	JUE/OG		105347	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2482A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105348	WORKSTATION 'HP/APOLLO' MODEL A2286A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105349	MONOCHROME MONITOR 'HP/APOLLO' MODEL 700/96		1	EA	CSE	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	JUE/OG		105350	EXTERNAL TAPE DRIVE 'HP/APOLLO' MODEL C1520B		1	EA	CSE	MDAC/HunB			
	JUE/OG		105351	EXTERNAL CDROM DRIVE 'HP/APOLLO' MODEL TXM3301A1		1	EA	CSE	MDAC/HunB			
	JUE/OG		105352	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2217T		1	EA	CSE	MDAC/HunB			
	JUE/OG		105353	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2482A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105354	WORKSTATION 'HP/APOLLO' MODEL A2286A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105355	MONOCHROME MONITOR 'HP/APOLLO' MODEL 700/96		1	EA	CSE	MDAC/HunB			
	JUE/OG		105356	EXTERNAL TAPE DRIVE 'HP/APOLLO' MODEL C1520B		1	EA	CSE	MDAC/HunB			
	JUE/OG		105357	EXTERNAL CDROM DRIVE 'HP/APOLLO' MODEL TXM3301A1		1	EA	CSE	MDAC/HunB			
	JUE/OG		105358	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2217T		1	EA	CSE	MDAC/HunB			
	JUE/OG		105359	EXTERNAL DISK DRIVE 'HP/APOLLO' MODEL C2482A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105360	LASER PRINTER 'QMS' MODEL LPP130		1	EA	CSE	MDAC/HunB			
	JUE/OG		105361	LASER PRINTER 'HP' MODEL IIP		1	EA	CSE	MDAC/HunB			
	JUE/OG		105362	COLOR MONITOR 'DELL' MODEL VC3		1	EA	CSE	MDAC/HunB			
	JUE/OG		105363	PC WORKSTATION 'DELL' MODEL 325D		1	EA	CSE	MDAC/HunB			
	JUE/OG		105364	LASER PRINTER 'HP' MODEL 268A		1	EA	CSE	MDAC/HunB			
	JUE/OG		105365	COLOR MONITOR 'NEC' MODEL JC1402HMA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105366	PC WORKSTATION 'COMPAQ' MODEL 2530V		1	EA	CSE	MDAC/HunB			
	JUE/OG		105367	MODEM 'COMPUTER PERIPHERALS' MODEL VIVA24		1	EA	CSE	MDAC/HunB			
	JUE/OG		105368	PLOTTER 'HP' MODEL 7596B		1	EA	CSE	MDAC/HunB			
	JUE/OG		105369	MODEM 'MITEK' MODEL 2400D		1	EA	CSE	MDAC/HunB			
	JUE/OG		105370	MODEM 'U.S. ROBOTICS' MODEL SPORTSTER		1	EA	CSE	MDAC/HunB			
	JUE/OG		105371	NETWORK ROUTER 'CISCO SYSTEMS' MODEL AGS		1	EA	CSE	MDAC/HunB			
	JUE/OG		105372	7160 YMP CPU HOURS 'JSC/ECF CRAY' MODEL YMP- 90		1	EA	CSE	JSC/ECF			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	JUE/OG		105373	825 GIGABYTES DISK SPACE		1	EA	CSE	JSC/ECF			
	JUE/OG		105374	NASTRAN V67 'MSC' (OR LATEST) FEA SOFTWARE		1	EA	CSE	JSC/ECF			
	JUE/OG		105375	HIGH SPEED NETWORK BETWEEN JSC AND MDA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105376	4-CPU SERVER 'SUN' 150MB TAPE DRIVE, CDROM 630MP		1	EA	CSE	MDAC/HunB			
	JUE/OG		105377	8-GIGABYTES DISK SPACE 'SUN' 2-8 MM TAPE DRIVES		1	EA	CSE	MDAC/HunB			
	JUE/OG		105378	7-GIGABYTES DISK SPACE 'SUN' 1-8 MM TAPE DRIVE		1	EA	CSE	MDAC/HunB			
	JUE/OG		105379	RDBMS V7 'ORACLE' (OR LATEST)		1	EA	CSE	MDAC/HunB			
	JUE/OG		105380	SQL NET 'ORACLE' SOFTWARE (OR LATEST)		1	EA	CSE	MDAC/HunB			
	JUE/OG		105381	RS/6000 'IBM' MONITOR, MODEL 6091-19		1	EA	CSE	MDAC/HunB			
	JUE/OG		105382	RS/6000 'IBM' WORKSTATION, MODEL 7012		1	EA	CSE	MDAC/HunB			
	JUE/OG		105383	RS/6000 'IBM' CD-ROM		1	EA	CSE	MDAC/HunB			
	JUE/OG		105384	RS/6000 'IBM' WORKSTATION, MODEL 7012		1	EA	CSE	MDAC/HunB			
	JUE/OG		105385	RS/6000 'IBM' 5mm TAPE DRIVE		1	EA	CSE	MDAC/HunB			
	JUE/OG		105386	RS/6000 'IBM' MONITOR, MODEL 6091-19		1	EA	CSE	MDAC/HunB			
	JUE/OG		105387	COLORMASTER 'CALCOMP' PLUS PRINTER, MODEL 6603PS		1	EA	CSE	MDAC/HunB			
	JUE/OG		105388	XL GRAPHICS 'MSC' SOFTWARE (2 LICENSES - LATEST)		1	EA	CSE	MDAC/HunB			
	JUE/OG		105389	LPS20 'DEC' TURBO PRINTER, MODEL LPS20C2		1	EA	CSE	MDAC/HunB			
	JUE/OG		105390	LPS20 'DEC' PRINTER, MODEL LPS20A2		1	EA	CSE	MDAC/HunB			
	JUE/OG		105391	CONCENTRATOR 'ODS' MODEL 261E		1	EA	CSE	MDAC/HunB			
	JUE/OG		105392	CONCENTRATOR 'ODS' MODEL 261E		1	EA	CSE	MDAC/HunB			
	JUE/OG		105393	1.2 GIGABYTE 'DEC' DISK DRIVE, MODEL RA90NA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105394	1.2 GIGABYTE 'DEC' DISK DRIVE, MODEL RA90NA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105395	1.2 GIGABYTE 'DEC' DISK DRIVE, MODEL RA90NA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105396	1.2 GIGABYTE 'DEC' DISK DRIVE, MODEL RA90NA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105397	DISK DATA CHANNEL 'DEC' MODEL HSC5XDA		1	EA	CSE	MDAC/HunB			
	JUE/OG		105398	2.3 GIGABYTE 'MTI' DISK DRIVE		1	EA	CSE	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	JUE/OG		105399	2.3 GIGABYTE 'MTI' DISK DRIVE		1	EA	CSE	MDAC/HunB			
	JUE/OG		105400	RDD - 100 LICENSES		3	EA	CSE	MDAC/HunB			
	JUE/OG		105401	RDD - 100 SOFTWARE MAINTENANCE CONTRACT		3	EA	CSE	MDAC/HunB			
	JUE/OG		105402	SUN SPARC 10 MODEL 41 WORKSTATION		3	EA	CSE	MDAC/HunB			
	JUE/OG		105403	96 MEG SYSTEM MEMORY UPGRADE		3	EA	CSE	MDAC/HunB			
	JUE/OG		105404	SUN OPERATING SYSTEM SOFTWARE		3	EA	CSE	MDAC/HunB			
	JUE/OG		105405	SUN ON LINE DOCUMENTATION		3	EA	CSE	MDAC/HunB			
	JUE/OG		105406	CD-ROM LOADER		1	EA	CSE	MDAC/HunB			
	JUE/OG		105407	RTM LICENSES		24	EA	CSE	MDAC/HunB			
	JUE/OG		105408	HOST MDA RTM ON DSS VAX AT JSC		24	EA	CSE	MDAC/HunB			
	JUE/OG		105409	RTM TRAINING		0	EA	CSE	MDAC/HunB			
	JUE/OG		105410	TRASYS (LATEST VERSION)		1	EA	CSE	MDAC/HunB			
	JUE/OG		105411	SOMDA/FLUINT (LATEST VERSION)		1	EA	CSE	MDAC/HunB			
	JUE/OG		105412	TSS (LATEST VERSION)		1	EA	CSE	MDAC/HunB			
	JUE/OG		105413	NEXT DAY HARDWARE MAINTENANCE FOR ALL GFE EQUIPMENT		1	EA	CSE	MDAC/HunB			
	JUE/OG		105414	SOFTWARE UPGRADES MAINTENANCE FOR HP 720 WORKSTATIONS		1	EA	CSE	MDAC/HunB			
	JUE/OG		105415	DIRECT SOFTWARE RESPONSE LINE MAINTENANCE FOR ALL CSE		1	EA	CSE	MDAC/HunB			
	JUE/OG		105416	NEXT DAY HARDWARE MAINTENANCE FOR ALL GFE EQUIPMENT		1	EA	CSE	MDAC/HunB			
	JUE/OG		105417	DIRECT SOFTWARE RESPONSE LINE MAINTENANCE FOR ALL CSE		1	EA	CSE	MDAC/HunB			
	GLORIOSO	LP/S-5	105418	AOS FRONT END SYS. PHASE 2 SGS TEST SET UPGRADE		1	EA	TSE	MDAC/HunB			
CCM 287	GIGLIO	LP/S-4	105421	EV CHARGED PARTICLE DIRECTIONAL SPECTROMETER		1	KT	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-2	105424	TOP MOUNTED PASSIVE WIF ASSY		5	EA	FLT	MDAC/HunB			
CCM 263	JONES	LP/S-2	105429	PORTABLE BREATHING APARATUS WITH 30-FT HOSE (NODE 2) (WITH QUICK DISCONNECT)		1	EA	FLT	MDAC/HunB	01/00/00		
	HOWARD/OC (WAT	SON)	105431	HELIUM GAS TRAILER		1	EA	GSE	MDAC/HunB			
CCM 287	ROMIG	LP/S-2	105432	ORBITER DOCKING SYSTEM SIMULATOR (WITH SIM)		1	EA	GSE	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 379	THORNTON	LP/S-4	105451	CREW AND EQUIPMENT TRANSLATION AID (CETA) CART		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-4	105452	CREW AND EQUIPMENT TRANSLATION AID (CETA) CART		1	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105459	FLIGHT ROBOTIC H-FIXTURE KITS		5	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105462	FLIGHT ROBOTIC H-FIXTURE KITS		6	EA	FLT	MDAC/HunB	EA		
CCM 805	THORNTON	EVAS	105463	FLIGHT ROBOTIC H-FIXTURE KITS		6	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105464	FLIGHT ROBOTIC H-FIXTURE KITS		3	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105465	FLIGHT ROBOTIC H-FIXTURE KITS		3	EA	FLT	MDAC/HunB			
CCM 263	THORNTON	0	105475	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		13	EA	FLT	MDAC/HunB	01/00/00		
CCM 263	THORNTON	0	105476	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		13	EA	FLT	MDAC/HunB	01/00/00		
CCM 379	THORNTON	LP/S-2	105477	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		13	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105478	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		35	EA	FLT	MDAC/HunB			
CCM 263	THORNTON	LP/S-4	105479	HANDHOLD, TOP-MOUNTED (MT)		6	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105480	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		8	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105481	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		8	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105482	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.53")		35	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	0	105483	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		35	EA	FLT	MDAC/HunB	01/00/00		
CCM 805	THORNTON	0	105484	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (25.53")		1	EA	FLT	MDAC/HunB	01/00/00		
CCM 805	THORNTON	0	105485	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (25.53")		3	EA	FLT	MDAC/HunB	01/00/00		
CCM 805	THORNTON	LP/S-2	105486	HANDRAIL ASSEMBLY, TOP MOUNTED ISS 25.53"		3	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105487	HANDRAIL ASSEMBLY, TOP MOUNTED-ISS (25.53")		24	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105488	HANDRAIL ASSEMBLY, TOP MOUNTED-ISS (25.53")		12	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105489	HANDRAIL ASSEMBLY, TOP MOUNTED-ISS (25.53")		12	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-4	105490	HANDRAIL ASSEMBLY, TOP MOUNTED-ISS (25.53")		8	EA	FLT	MDAC/HunB			
CCM 263	THORNTON	0	105491	HANDRAIL ASSEMBLY, TOP- MOUNTED-ISS (25.53")		8	EA	FLT	MDAC/HunB	01/00/00		
CCM 379	THORNTON		105492	MICROCONICALS FITTING (3/4 INCH HOLE)		8	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105493	MICROCONICALS FITTING (3/4 INCH HOLE)		26	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105494	MICROCONICALS FITTING (3/4 INCH HOLE)		2	EA	FLT	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 379	THORNTON		105495	MICROCONICALS FITTING (3/4 INCH HOLE)		8	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105496	MICROCONICALS FITTING (3/4 INCH HOLE)		8	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105497	MICROCONICALS FITTING (FLANGED)		2	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105498	MICROCONICALS FITTING (FLANGED)		2	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105499	MICROCONICALS FITTING (FLANGED)		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105500	MICROCONICALS FITTING (FLANGED)		3	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105501	MICROCONICALS FITTING (FLANGED)		4	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105502	MICROCONICALS FITTING (3/4 INCH HOLE)		16	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105503	MICROCONICALS FITTING (3/4 INCH HOLE)		4	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105504	MICROCONICALS FITTING (FLANGED)		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105505	MICROCONICALS FITTING (3/4 INCH HOLE)		16	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105506	MICROCONICALS FITTING (3/4 INCH HOLE)		6	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105507	MICROCONICALS FITTING (3/4 INCH HOLE)		28	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105508	MICROCONICALS FITTING (FLANGED)		5	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105509	MICROCONICALS FITTING (FLANGED)		4	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105510	MICROCONICALS FITTING (3/4 INCH HOLE)		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105511	MICROCONICALS FITTING (3/4 INCH HOLE)		5	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105512	MICROCONICALS FITTING (3/4 INCH HOLE)		4	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105513	MICROCONICALS FITTING (FLANGED)		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105514	MICROCONICALS FITTING (FLANGED)		4	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	0	105517	APFR ASSY		1	EA	FLT	MDAC/HunB	01/00/00		
CCM 805	THORNTON	0	105518	PORTABLE FOOT RESTRAINT WORKSTATION STANCHION (PFRWS)		1	EA	FLT	MDAC/HunB	01/00/00		
CCM 805	THORNTON	0	105527	TEMPORARY EQUIPMENT RESTRAINT AID (TERA)		1	EA	FLT	MDAC/HunB	01/00/00		
CCM 287	CLUBB	LP/S-1	105540	DEC SA900 RA72 DISK DRIVE ASSEMBLY		1	EA	GDU	MDAC/MBF			
CCM 273	CLUBB	LP/S-2	105546	OIU (INCLUDES ENGINEERING SOFTWARE) (OLD #000072)		1	EA	FEU	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105587	HANDHOLD ASSY, SIDE MOUNTED SHORT-ISS (8.53")		27	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105588	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53)		15	EA	FLT	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 805	THORNTON	LP/S-4	105589	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53)		30	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105591	HANDHOLD ASSY, SIDE MOUNTED, SHORT -ISS (8.53")		2	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105592	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53)		30	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105593	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53)		19	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105594	HANDHOLD ASSY, SIDE MOUNTED, SHORT -ISS (8.53")		2	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105595	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53)		19	EA	FLT	MDAC/HunB			
CCM 263	THORNTON	EVAS	105596	HANDRAIL ASSY, SIDE MOUNTED, TALL-ISS (25.53")		5	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105597	HANDRAIL ASSY, SIDE MOUNTED, SHORT -ISS (25.53")		1	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105598	HANDRAIL ASSY, SIDE MOUNTED, SHORT -ISS (25.53")		7	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105599	HANDRAIL ASSY, SIDE MOUNTED, TALL-ISS (25.53")		30	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105600	HANDRAIL ASSY, SIDE MOUNTED, TALL-ISS (25.53")		19	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105603	HANDRAIL ASSY, SIDE MOUNTED, SHORT -ISS (25.53")		1	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105604	HANDRAIL ASSY, SIDE MOUNTED, TALL-ISS (25.53")		30	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-4	105605	HANDRAIL ASSY, SIDE MOUNTED, TALL -ISS (25.53")		5	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105606	MICROCONICAL FITTINGS (FLANGED)		22	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105607	MICROCONICAL FITTINGS (3/4 INCH HOLE)		20	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105608	MICROCONICAL FITTINGS (3/4 INCH HOLE)		1	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105609	MICROCONICAL FITTINGS (3/4 INCH HOLE)		1	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105610	MICROCONICAL FITTINGS (3/4 INCH HOLE)		4	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105611	MICROCONICAL FITTINGS (3/4 INCH HOLE)		4	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105612	MICROCONICAL FITTINGS (FLANGED)		5	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105613	MICROCONICAL FITTINGS (3/4 INCH HOLE)		8	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105614	MICROCONICAL FITTINGS (3/4 INCH HOLE)		2	EA	QUL	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 379	THORNTON		105615	MICROCONICAL FITTINGS (FLANGED)		1	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105616	MICROCONICAL FITTINGS (3/4 INCH HOLE)		28	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105617	MICROCONICAL FITTINGS (FLANGED)		3	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105618	MICROCONICAL FITTINGS (3/4 INCH HOLE)		5	EA	QUL	MDAC/HunB			
CCM 379	THORNTON		105619	MICROCONICAL FITTINGS (3/4 INCH HOLE)		20	EA	QUL	MDAC/HunB			
CCM 805			105623	SIDE MOUNTED PASSIVE WIF ASSY		3	EA	FLT	BOE/HUNB			
CCM 805	THORNTON	LP/S-4	105624	SIDE MOUNTED PASSIVE WIF ASSY		17	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105625	TOP MOUNTED PASSIVE WIF ASSY		31	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105626	TOP MOUNTED PASSIVE WIF ASSY		23	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105627	SIDE MOUNTED PASSIVE WIF ASSY		36	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105628	TOP MOUNTED PASSIVE WIF ASSY		23	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	EVAS	105629	SIDE MOUNTED PASSIVE WIF ASSY		17	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105630	TOP MOUNTED PASSIVE WIF ASSY		31	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-4	105631	SIDE MOUNTED PASSIVE WIF ASSY		3	EA	FLT	MDAC/HunB			
CCM 287	GRIFFIN	LP/S-4	105633	FLT RELEASEABLE GRAPPLE FIXTURE, AMMONIA TANK		2	EA	FLT	MDAC/HUN			
CCM 287	GRIFFIN	LP/S-4	105634	FLT RELEASEABLE GRAPPLE FIXTURE, RADIATOR ORU		2	EA	FLT	MDAC/HUN			
CCM 379	THORNTON	LP/S-2	105635	SLDIE WIRE ASSEMBLY-ON ORBIT INSTALLED (156")		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-2	105636	SLIDE WIRE ASSEMBLY-ON ORBIT INSTALLED (156")		1	EA	FLT	MDAC/HunB			
CCM 563	CLUBB	LP/S-2	105638	PCS LAPTOP, MIL-STD 1553B CARD ASSEMBLY, ETHERNET CARD AND ACCESSORY KIT		1	EA	FLT	MDAC/HunB			
CCM 805	THORNTON	LP/S-2	105645	HANDRAIL ASSEMBLY - OIH (24.00")		41	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-2	105646	HANDRAIL, ASSEMBLY - OIH (24.00")		44	EA	FLT	MDAC/HunB			
	GLORIOSO	LP/S-5	105647	100 KBYTE PACKET S/W UPGRADE		1	EA	GSE	MDAC/HunB			
CCM 263	THORNTON	LP/S-2	105665	GO-NO GO GAUGES		1	SE	GSE	MDAC/HunB			
CCM 805			105668	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")		2	EA	FLT	MDAC/HUNB			
	JONES	LP/S-2	105675	PBA BRACKET		1	EA	FLT	MDAC/HunB			
	JONES	LP/S-2	105676	PHYSICAL CHECK MOCKUP		1	EA	MCK	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
	JONES	LP/S-2	105677	PBA BRACKET		1	EA	FLT	MDAC/HunB			
CCM 805			105679	MICROCONICAL FITTING (FLANGED)		2	EA	FLT	BHB			
CCM 805			105680	MICROCONICAL FITTING (FLANGED)		1	EA	QUL	BHB			
CCM 263	GLORIOSO	LP/S-3	105684	GPS TEST SET		1	EA	TSE	MDAC/HunB	01/00/00		
CCM 563			105688	PCS CSCI (5A/6A ENG 1)		1	EA	EE	MDAC/SVF			
CCM 210			105689	RWS (CEU & CEU/RACK HARNESS ONLY)		1	KT	FEU	NASA/SPAR			
	CLUBB	LP/S-2	105691	OIU PC I/F CARD (OLD #000102)		1	EA	GDU	MDAC/HunB	8/15/1995		
CCM 563	CLUBB	LP/S-3	105692	PCS LAPTOP W/CABLE SET (FEU) (115 VAC)		1	EA	GDU	MDAC/HunB			
CCM 379	THORNTON	LP/S-3	105702	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		2	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-5	105704	MICROCONICAL FITTING (3/4 INCH HOLE)		2	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-5	105705	MICROCONICAL FITTING (3/4 INCH HOLE)		2	EA	FLT	MDAC/HunB			
CCM 805			105706	MICROCONICAL FITTING (3/4 INCH HOLE)		3	EA	FLT	BHB			
CCM 805			105707	MICROCONICAL FITTING (3/4 INCH HOLE)		15	EA	FLT	BHB			
CCM 805			105708	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	QUL	BHB			
CCM 805			105709	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	QUL	BHB			
CCM 805			105710	MICROCONICAL FITTING (3/4 INCH HOLE)		12	EA	QUL	BHB			
CCM 805			105711	MICROCONICAL FITTING (3/4 INCH HOLE)		36	EA	FLT	BHB			
CCM 805			105712	MICROCONICAL FITTING (3/4 INCH HOLE)		36	EA	FLT	BHB			
CCM 805			105713	MICROCONICAL FITTING (3/4 INCH HOLE)		2	EA	FLT	BHB			
CCM 805			105714	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	QUL	BHB			
CCM 805	THORNTON		105738	HANDRAIL ASSEMBLY - OIH (12.00")		2	EA	FLT	MDAC/HunB			
CCM 379	THORNTON		105739	HANDRAIL ASSEMBLY - OIH (12.00")		3	EA	FLT	MDAC/HunB			
CCM 263	ROMIG	LP/S-2	105745	HEMISPHERICAL TCS RETROFLECTOR		1	EA	FLT	MDAC/HunB			
CCM 132	ROMIG	LP/S-2	105746	HEMISPHERICAL TCS RETROFLECTOR		1	EA	FLT	MDAC/HunB			
CCM 287			105747	FRGF DRILL TEMPLATE		1	EA	DEV	MDAC/HunB			
CCM 379	THORNTON	LP/S-3	105748	HANDRAIL ASSEMBLY, TOP- MOUNTED -ISS (8.53")		1	EA	QUL	MDAC/HunB			
CCM 263	THORNTON	LP/S-3	105749	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		1	EA	FLT	MDAC/HunB			
CCM 379	THORNTON	LP/S-4	105750	HANDRAIL ASSEMBLY, TOP- MOUNTED -ISS (8.53")		1	EA	FLT	MDAC/HunB			
CCM 081	GLORIOSO	LP/S-3	105751	UHF ANTENNA EXTERNAL (LAB)		2	EA	FLT	MDAC/HunB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 147	JONES	LP/S-2	105752	PBA I/F QUICK DISCONNECT (ELEMENT SIDE) (NODE 1)		2	EA	FLT	MDAC/HunB			
CCM 147	JONES	LP/S-2	105753	PBA I/F QUICK DISCONNECT (ELEMENT SIDE) (NODE 2)		2	EA	FLT	MDAC/HunB			
			105754	PAYLOAD GENERAL SUPPORT COMP		1	EA	TSE	BHSVE			
CCM 064	THORNTON		105756	HANDHOLD, TOP MOUNTED PMA2		1	EA	FLT	MDAC/HunB			
CCM 263			105757	ACS MODING INDICATOR UNITS		8	EA	FLT	MDAC/HUNB			
CCM 379	THORNTON	LP/S-5	105758	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		1	EA	FLT	MDAC/HUNB			
CCM 287			105759	HANDHOLD TOP MOUNTED		2	EA	FLT	MDAC/HunB			
CCM 805			105760	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	FLT	MDAC			
CCM 064	THORNTON		105762	HANDHOLD, TOP MOUNTED PMA3		1	EA	FLT	MDAC/HunB			
CCM 287			105764	OIU FEU AND SOFTWARE		1	EA	FEU	MDAC/HunB			
CCM 1270			105775	SVF TO CONTROL CENTER COMPLEX COMMUNICATIONS LINK		1	EA	TSE	MDAC/SFVH			
CCM 287			105778	ACTIVE COUPLER-MOBILE TRANSPORTER		1	EA	FLT	MDAC/HUNB			
CCM 287			105779	PASSIVE COUPLER		1	EA	FLT	MDAC/HUNB			
CCM 805			105780	HANDRAIL ASSY, TOP- MOUNTED-ISS (15.441")		2	EA	FLT	BHB			
CCM 805			105781	HANDHOLD ASSY, SIDE MOUNTED, SHORT-ISS (8.53")		2	EA	FLT	BHB			
CCM 805			105782	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")		9	EA	FLT	BHB			
CCM 805			105783	HANDRAIL ASSY, TOP- MOUNTED - ISS (15.441")		2	EA	FLT	BHB			
CCM 805			105784	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")		2	EA	FLT	BHB			
CCM 805			105785	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")		9	EA	FLT	BHB			
CCM 805			105786	HANDRAIL ASSY, TOP- MOUNTED - ISS (8.53")		35	EA	FLT	BHB			
CCM 805			105790	HANDRAIL ASSY, TOP- MOUNTED - ISS (25.53")		8	EA	FLT	BHB			
CCM 805			105791	HANDRAIL ASSY, TOP- MOUNTED - ISS (8.53")		8	EA	FLT	BHB			
CCM 805			105792	HANDHOLD ASSY, SIDE MOUNTED , SHORT - ISS (8.53")		4	EA	FLT	BHB			
CCM 805			105793	HANDRAIL ASSY, TOP- MOUNTED - ISS (22.625")		4	EA	FLT	BHB			
CCM 805			105804	HANDRAIL ASSY, TOP- MOUNTED - ISS (22.625")		4	EA	FLT	BHB			
CCM 805			105805	MICROCONICAL FITTING (3/4 INCH HOLE)		4	EA	FLT	BHB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECD. DATE(AF)	NEED DATE	Comments
CCM 805			105851	HANDRAIL ASSY, TOP-MOUNTED - ISS (8.53")		2	EA	QUL	BHB			
CCM 805			105852	HANDRAIL ASSY, TOP-MOUNTED - ISS (6.15")		1	EA	QUL	BHB			
CCM 805			105853	HANDRAIL ASSY, TOP-MOUNTED - ISS (8.53")		14	EA	FLT	BHB			
CCM 805			105854	HANDRAIL ASSY, TOP-MOUNTED -ISS (8.53")		14	EA	FLT	BHB			
CCM 287	CLUBB	LP/S-2	105900	MULTI-SSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105901	MULTI-SSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105902	MULTI-SSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105903	ESSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105904	ESSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105905	ESSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105906	ESSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105907	ESSMDM		1	EA	FEU	MDAC/HunB			
CCM 287	CLUBB	LP/S-2	105908	ESSMDM		1	EA	FEU	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105909	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105910	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105911	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105912	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105913	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105914	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 262	CLUBB	LP/S-2	105915	MATES RTIOP		1	EA	TSE	MDAC/HunB			
CCM 263			105918	PORTABLE BREATHING APPARATUS WITH 30-FT HOSE (NODE 1) (WITH QUICK DISCONNECT)		1	EA	PRO	MDAC/HSV			
CCM 287			105919	CGS VERSION 3.1.3 - QUALIFIED		1	EA	GSE	MDAC/SVF			
CCM 287			105920	CGS VERSION 3.2 - UNQUALIFIED		1	EA	GSE	MDAC/SVF			
CCM 302			105930	ISS DIGITAL ENCRYPTION STANDARD (DES) KEYS		1	SET	FLT	MDAC/HUNB			
CCM 210			105924	RWS SPECIAL TEST EQUIPMENT (STE)		1	KIT	TSE	NASA/SPAR			
CCM 262	CLUBB	LP/S-2	105925	OIS PC INTERFACE CARD		1	EA	TSE	MDAC/HunB			
CCM 563			105931	EPCS LAPTOP W/CABLE SET (FEU) (115 VAC)		2	EA	FEU	MDAC/SVFH			
CCM 563			105932	EPCS CSCI (2A INTERIM)		1	EA	DEV	MDAC/SVFH			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 563			105933	EPCS CSCI (2A EARLY ENG)		1	EA	DEV	MDAC/SV FH			
CCM 303			105934	1553 SILVER COATED 24- GAGE TSP CABLE, 14 METERS LONG, ASSY WITH FEMALE CONNECTOR, TYPE "OCPC4ATB", ON ONE END		1	EA	FLT	MDA			
CCM 303			105935	1553 SILVER COATED 24- GAGE TSP CALBE, 14 METERS LONG, ASSY WITH MALE CONNECTOR, TYPE "OCPC4ATB", ON ONE END		1	EA	FLT	MDA			
CCM 172			105936	OIU SOFTWARE (TRR)		1	EA	DEV	MDAC/SV FH			
CCM 1270			105937	GROUND SUPPORT RECONFIGURABLE APPLICATION		1	EA	TSE	MDAC/SV FH			
CCM 830			105970	FEU STANDARD MDM POWER SUPPLY		2	EA	DEV	HI/GLENN			
CCM 830			105971	FEU ENHANCED MDM POWER SUPPLY		2	EA	DEV	HI/GLENN			
CCM 830			105972	FEU STANDARD MDM IOCU		2	EA	DEV	HI/GLENN			
CCM 830			105973	FEU STANDARD MDM IOSU		2	EA	DEV	HI/GLENN			
CCM 830			105974	FEU ENHANCED MDM IOCU		2	EA	DEV	HI/GLENN			
CCM 830			105975	FEU STANDARD SPD1553		3	EA	DEV	HI/GLENN			
CCM 218			105976	FEU ENHANCED SPD 1553		3	EA	DEV	MDAC/HUNB			
CCM 830			105977	FEU STANDARD DIO CCA		1	EA	DEV	RSA/HUNB			
CCM 830			105978	IN-CIRCUIT EMULATOR		1	EA	DEV	HI/GLENN			
CCM 830			105979	PROTOTYPE STANDARD MDM POWER SUPPLY		1	EA	DEV	RSA/HUNB			
CCM 830			105980	PROTOTYPE STANDARD MDM IOCU		1	EA	DEV	RSA/BHB			
CCM 830			105981	PROTOTYPE STANDARD MDM DIO CCA		1	EA	DEV	RSA/BHB			
CCM 830			105982	PROTOTYPE STANDARD MDM SPD1553		1	EA	DEV	RSA/BHB			
CCM 830			105983	MATE LORAL STANDARD 1553 CARD		1	EA	DEV	HI/GLENN			
CCM 218			105984	MATE LORAL AUTOINDEXING 1553 CARD		1	EA	DEV	MDAC/HUNB			
CCM 830			105985	MATE SPDSU CARD		1	EA	DEV	MDAC/HUNB			
CCM 830			105986	MATE REFLECTIVE MEMORY CARD		1	EA	DEV	HI/GLENN			
CCM 830			105987	MATE NITRO CARD		3	EA	DEV	HI/GLENN			
CCM 830			105988	MATE TIME FREQUENCY PRODUCTS		3	EA	DEV	HI/GLENN			
CCM 830			105989	MATE DISCRETE CCA		2	EA	DEV	HI/GLENN			
CCM 830			105990	MATE TERMINAL SERVER		2	EA	DEV	HI/GLENN			
CCM 830			105992	MATE UTILITIES PLATFORM		1	EA	DEV	RSA/BHB			
CCM 830			105993	MATE JUNCTION BOX		1	EA	DEV	HI/GLENN			
CCM 830			105994	MATE DIFFERENTIAL CABLE SET		1	EA	DEV	HI/GLENN			
CCM 830			105995	MATE TRANSCEIVER		1	EA	DEV	HI/GLENN			
CCM 830			105996	MATE CONVERTER		1	EA	DEV	HI/GLENN			
CCM 830			105997	MATE POWER SUPPLY		1	EA	DEV	HI/GLENN			
CCM 830			105998	MATE BAJA CARD		2	EA	DEV	HI/GLENN			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 805			105999	HANDRAIL ASSEMBLY TOP-MOUNTED CUSTOM (15.441+6")		2	EA	FLT	MDAC/HunB			
CCM 287			106000	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (15.441")		1	EA	FLT	MDAC/HunB			
CCM 287			106001	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (15.441")		1	EA	FLT	MDAC/HunB			
CCM 805			106002	SIDE MOUNTED PASSIVE WIF ASSY		1	EA	FLT	MDAC/HunB			
CCM 218			106003	FEU MULTI IOSU		1	EA	DEV	MDAC/HUNB			
CCM 805			106005	MTC ROBOTIC TARGET		7	EA	FLT	MDAC/HunB			
CCM 805			106006	MTC ROBOTIC TARGET		4	EA	FLT	MDAC/HunB			
CCM 805			106007	MTC ROBOTIC TARGET		4	EA	FLT	MDAC/HUNB			
CCM 805			106008	MTC ROBOTIC TARGET		5	EA	FLT	MDAC/HUNB			
CCM 805			106009	MTC ROBOTIC TARGET		5	EA	FLT	MDAC/HUNB			
CCM 830			106014	POWER DISTRIBUTION UNIT		1	EA	DEV	HI/GLENN			
CCM 218			106015	OIR FEU		1	EA	FEU	MDAC/SVF			
CCM 218			106016	PORTABLE TELEMETRY BOARD (PTB)		1	EA	FEU	MDAC/SVF			
CCM 218			106017	OIU FEU SOFTWARE HIS 2b BETA		1	EA	DEV	MDAC/SVF			
CCM 218			106018	OIU FEU SOFTARE HIS 2b		1	EA	DEV	MDAC/SVF			
CCM 218			106019	OIU FEU SOFTWARE HIS 2		1	EA	DEV	MDAC/SVF			
CCM 805			106024	PWP DEVELOPMENT UNIT		1	EA	DEV	MDAC/HUN			
CCM 435			106025	DMSREMDM (TYPE 2)		1	EA	PRO	MDA/SVF			
CCM 435			106026	DMSREMDM (TYPE 2)		1	EA	PRO	MDA/SVF			
CCM 435			106027	DMSREMDM (TYPE 2)		2	EA	PRO	MDA/SVF			
CCM 435			106028	DMSREMDM (TYPE 2)		1	EA	PRO	MDA/SVF			
CCM 287			106029	CGS VERSION 4.0 - QUALIFIED		1	EA	GSE	MDAC/HUN			
CCM 287			106030	ESSMDM		1	EA	FEU	MDAC/SDIL			
CCM 805			106036	ACTIVE COUPLER - MOBILE TRANSPORT		1	EA	FLT	BHB			
CCM 805			106037	PASSIVE COUPLER		1	EA	FLT	BHB			
CCM 210 B			106038	WORKSTATION HOST S/W (WHS) (LEVEL-I)		1	EA	TSE	MDAC/SV FH			
CCM 210 B			106039	VIDEO GRAPHICS S/W (VGS) (LEVEL-I)		1	EA	TSE	MDAC/SV FH			
CCM 210 B			106043	AVU GSU, GSE WITH SOFTWARE		1	EA	GSE	MDAC/SV FH			
CCM 805			106044	MICROCONICAL FITTING (FLANGED)		6	EA	FLT	BHB			
CCM 805			106045	HANDRAIL ASSY, TOP-MOUNTED - ISS (8.53")		1	EA	FLT	BHB			
CCM 805			106046	MICROCONICAL FITTING (3/4 INCH HOLE)		5	EA	FLT	BHB			
CCM 805			106047	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	FLT	BHB			
CCM 805			106048	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	FLT	BHB			
CCM 805			106049	MICROCONICAL FITTING (3/4 INCH HOLE)		4	EA	FLT	BHB			
CCM 805			106050	EQUIPMENT TETHER HOOKS		9	EA	FLT	BHB			
CCM 805			106051	PROBE, LAUNCH-TERA		1	EA	FLT	BHB			
CCM 805			106052	MTC ROBOTIC TARGET - 6B		22	EA	FLT	BHB			
CCM 805			106053	MTC ROBOTIC TARGET - 6B		27	EA	FLT	BHB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 805			106054	MTC ROBOTIC TARGET - 6B		27	EA	FLT	BHB			
CCM 805			106055	MTC ROBOTIC TARGET - 6B		6	EA	FLT	BHB			
CCM 805			106056	MTC ROBOTIC TARGET - 6B		6	EA	FLT	BHB			
CCM 805			106057	H-HANDLES MASTER TOOL		1	EA	GSE	BHB			
CCM 805			106058	MICRO FIXTURE NTCT MOUNTING FIXTURE		1	EA	GSE	BHB			
CCM 805			106059	MICROCONICAL FITTING MTCT MOUNTING FIXTURE		1	EA	GSE	BHB			
CCM 805			106060	H HANDLE MTCT MOUNTING FIXTURE		1	EA	GSE	BHB			
CCM 805			106061	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")		11	EA	FLT	BHB			
CCM 830			106062	FEU ENHANCED MDM IOCU		1	EA	DEV	RSA/BHB			
CCM 830			106063	FEU STANDARD SPD1553		1	EA	DEV	RSA/BHB			
CCM 830			106064	PROTOTYPE STANDARD MDM DIO CCA		1	EA	DEV	RSA/BHB			
CCM 731			106065	MATE SPDSU CCA		3	EA	DEV	BHB/SVF			
CCM 731			106066	MATE JUNCTION BOX		1	EA	DEV	BHB/SVF			
CCM 731			106067	MATE SIM AND I/O PROC (BAJA) CARD		6	EA	DEV	BHB/SVF			
CCM 731			106068	MATE 1553 CCA (ENHANCED)		1	EA	DEV	BHB/SVF			
CCM 731			106069	FEU MDM EIOCU CCA		2	EA	FEU	BHB/SVF			
CCM 731			106070	FEU STD IOCU CCA		1	EA	FEU	BHB/KSC			
CCM 731			106071	FEU ESS IOCU CCA		1	EA	FEU	BHB/KSC			
CCM 731			106072	FEU STD IOSU CCA		1	EA	FEU	BHB/KSC			
CCM 731			106073	FEU STD 1553 ECA		2	EA	FEU	BHB/KSC			
CCM 731			106074	FEU ESS 1553 ECA		2	EA	FEU	BHB/KSC			
CCM 731			106075	FEU HRDL I/O ECA		1	EA	FEU	BHB/KSC			
CCM 731			106076	FEU HRDL PROC ECA		1	EA	FEU	BHB/KSC			
CCM 731			106077	FEU ESS MSD CCA		1	EA	FEU	BHB/KSC			
CCM 731			106078	FEU LLA ECA		1	EA	FEU	BHB/KSC			
CCM 731			106079	FEU HLA ECA		1	EA	FEU	BHB/KSC			
CCM 731			106080	FEU AIO ECA		1	EA	FEU	BHB/KSC			
CCM 731			106081	FEU DIO ECA		1	EA	FEU	BHB/KSC			
CCM 731			106082	MATE 1553 CCA (ENHANCED)		1	EA	DEV	BHB/KSC			
CCM 731			106083	MATE 1553 CCA (ENHANCED)		1	EA	DEV	BHB/KSC			
CCM 731			106084	MATE TIME FREQ PROC IRIG CCA		1	EA	DEV	BHB/KSC			
CCM 731			106085	MATE SPDSU CCA		1	EA	DEV	BHB/KSC			
CCM 731			106086	MATE SCSI DL-I/O PROC CCA (NITRO)		1	EA	DEV	BHB/KSC			
CCM 731			106087	MATE BAJA SIM PROC		1	EA	DEV	BHB/KSC			
CCM 731			106088	MATE 1553 CCA (ENHANCED - KIT)		1	EA	DEV	BHB/JSC			
CCM 731			106089	MATE 1553 CCA (ENHANCED - KIT)		1	EA	DEV	BHB/JSC			
CCM 731			106090	FEU M-IOCU CCA		2	EA	FEU	BHB/SVF			
CCM 731			106091	MATE SPDSU CCA		2	EA	DEV	BHB/SVF			
CCM 731			106092	MATE SPDSU CCA		1	EA	DEV	BHB/SVF			
CCM 896			106093	AMMONIA SERVICER OSE		1	EA	OSE	BHB			
CCM 879			106094	ZERO - G SOFT RACK SHELL		2	EA	FLT	BHB/KSC			
CCM 805			106095	MICROCONICAL (FLANGED)		3	EA	FLT	BHB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 805			106096	MICROCONICAL (3/4 INCH HOLE)		4	EA	FLT	BHB			
CCM 935			106097	BIT SYNC UNIY		2	EA	TSE	BHB/JSC			
CCM 935			106098	ETHERNET BOARDS COMBO (10BASE2/T)		2	EA	TSE	BHB/JSC			
CCM 935			106099	CTP SIMULATOR S/W		1	EA	TSE	BHB/JSC			
CCM 911			106100	CLASS H BONDING STRAPS		2	EA	FLT	BHB/KSC			
CCM 591			106101	SPACE INTEGRATED GPS/INS (SIGI)		1	EA	FEU	BHB			
CCM 993			106102	INTERNAL DRAG THROUGH 1553 CABLE ASSY, PART #1F74151-1		1	EA	FLT	BHB			
CCM 993			106103	INTERNAL DRAG THROUGH 1553 CABLE ASSY, PART #1F74153-1		1	EA	FLT	BHB			
CCM 993			106104	MATING HALF 1553 CONNECTOR W/PIGTAIL FOR LAB/NODE1 SIDE OF INTERNAL DRAG THROUGH PART #1F74157-1		1	EA	TSE	BHB			
CCM 993			106105	MATING HALF 1553 CONNECTOR W/PIGTAIL FOR LAB/NODE1 SIDE OF INTERNAL DRAG THROUGH PART #1F74155-1		1	EA	TSE	BHB			
CCM 993			106106	RUSSIAN SIDE CONNECTOR SAVER		1	EA	TSE	BHB			
CCM 993			106107	RUSSIAN SIDE CONNECTOR SAVER		1	EA	TSE	BHB			
CCM 640			106109	MICROCONICAL FITTING (FLANGED)		7	EA	FLT	BHB			
CCM 986			106110	CIRCUIT INTERRUPT DEVICE		2	EA	FLT	BHB/KSC			
CCM 986			106111	CIRCUIT INTERRUPT DEVICE		1	EA	EM	BOE/HUN			
CCM 2138			106117	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941)		1	EA	FLT	BHB			
CCM 2138			106118	HANDRAIL ASSY, TOP MOUNTED - ISS (22.625")		3	EA	FLT	BHB			
CCM 2138			106119	HANDRAIL ASSY, TOP MOUNTED - ISS (22.625")		20	EA	FLT	BHB			
CCM 2138			106120	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")		26	EA	FLT	BHB			
CCM 2138			106121	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")		8	EA	FLT	BHB			
CCM 2138			106122	HANDRAIL ASSY, TOP MOUNTED - ISS (15.441")		18	EA	FLT	BHB			
CCM 2138			106123	HANDRAIL ASSY, TOP MOUNTED - ISS (15.441")		4	EA	FLT	BHB			
CCM 2138			106124	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (8.53")		20	EA	FLT	BHB			
CCM 2138			106125	HANDRAIL ASSY - OIH (24.00")		4	EA	FLT	BHB			
CCM 2138			106126	HANDRAIL ASSY - OIH (12.00")		2	EA	FLT	BHB			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 2138			106127	MICROCONICAL FITTING (FLANGED)		5	EA	FLT	BHB			
CCM 1383			106128	SSMDM - 10E		1	EA	FLT	BHB			
CCM 1383			106129	SSMDM - 10E (SPARE)		1	EA	FLT	BHB			
CCM 1383			106130	SSMDM - 10E		1	EA	FLT	BHB			
CCM 1383			106131	SSMDM - 10I		1	EA	FLT	BHB			
CCM 1383			106132	SSMDM - 10I (SPARE)		1	EA	FLT	BHB			
CCM 1383			106133	SSMDM - 10I		1	EA	FLT	BHB			
CCM 1703			106136	SSMDM - 4E TYPE 8 (PIO 17- 04, PIO 54)		1	EA	FLT	JSC			
CCM 1703			106137	SSMDM - 4 E COVER (PIO 17- 15)		1	EA	FLT	JSC			
CCM 1703			106138	SSMD M - 4E CHASSIS (PIO 17-17)		1	EA	FLT	JSC			
CCM 2200			106139	APCU (FLIGHT)		1	EA	FLT	KSC			
CCM 2200			106140	APCU (FLIGHT)		1	EA	FLT	KSC			
CCM 2200			106141	APCU (CITE)		1	EA	FLT	KSC			
CCM 2200			106142	APCU (CITE)		1	EA	FLT	KSC			
CCM 1966			106143	NODE 3-1 SSMDM (16I TYPE 4)		1	EA	FLT	BHB			
CCM 1966			106144	NODE 3-2 SSMDM (16I TYPE 4)		1	EA	FLT	BHB			
CCM 2241			106145	VIDEO CAMERA SUPPORT ASSEMBLY KIT		1	EA	FLT	BHB			
CCM 2241			106146	W8200 CABLE KIT		1	EA	FLT	BHB			
CCM 2283			106147	MICROCONICAL		1	EA	FLT	BHB			
CCM 2283			106148	MTC ROBOTIC TARGET KIT 6B		2	EA	FLT	BHB			
CCM 2283			106149	FLIGHT ROBOTIC H-FIXTURE KIT		1	EA	FLT	BHB			
CCM 3186			106160	MT/CETA ENERGY ABSORBER, PORT		1	SE	FLT	KSC			
CCM 3186			106161	MT/CETA ENERGY ABSORBER, STARBOARD		1	SE	FLT	KSC			
CCM 3728			106163	HANDRAIL (TUS REELS)		4	EA	FLT	KSC			
CCM 3728			106165	HANDRAIL (ATCS: N2 TANKS)		8	EA	FLT	KSC			
CCM 3728			106166	HANDRAIL (S3 & P1 SEGMENT)		7	EA	FLT	KSC			
CCM 3728			106168	HANDRAIL (S0 SEGMENT)		1	EA	FLT	KSC			
CCM 3728			106169	HANDRAIL (S0 SEGMENT)		1	EA	FLT	KSC			
CCM 3728			106170	HANDRAIL (S0 SEGMENT)		1	EA	FLT	KSC			
CCM 3728			106171	WIF, TOP-MOUNTED, PASSIVE		1	EA	FLT	KSC			
CCM 3728			106172	WIF, SIDE-MOUNTED, PASSIVE		1	EA	FLT	KSC			
CCM 3728			106173	HANDRAIL (ATCS)		2	EA	FLT	KSC			
CCM 3728			106174	HANDRAIL (ATCS)		2	EA	FLT	KSC			
CCM 3728			106175	MICROCONICAL (SEGMENT P1)		20	EA	FLT	KSC			
CCM 3728			106176	MICROCONICAL (S0 SEGMENT)		6	EA	FLT	KSC			
CCM 3728			106177	TARGET (S1 SEGMENT)		4	EA	FLT	KSC			
CCM 3728			106178	TARGET (P1 VIDEO STANCHION ASSY)		27	EA	FLT	KSC			
CCM 3728			106179	TARGET (P1 SEGMENT)		6	EA	FLT	KSC			
CCM 3728			106180	TARGET (S3 SEGMENT)		6	EA	FLT	KSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 3728			106181	FLIGHT ROBOTIC H-FIXTURE KIT		3	EA	FLT	KSC			
CCM 3728			106183	FIXTURE PART (WASHER)		6	EA	FLT	KSC			
CCM 3728			106184	FIXTURE PART (WASHER)		6	EA	FLT	KSC			
CCM 3728			106185	FIXTURE PART (BUSHING)		6	EA	FLT	KSC			
CCM 3728			106164	HANDRAIL (ATCS: PUMP MOD ASSY)		10	EA	FLT	KSC			
CCM 3728			106187	HANDRAIL (ATCS: PUMP MOD ASSY)		6	EA	FLT	KSC			
CCM 3728			106188	HANDRAIL (ATCS: PUMP MOD ASSY)		4	EA	FLT	KSC			
CCM 3728			106189	HANDRAIL (ATCS: PUMP MOD ASSY)		4	EA	FLT	KSC			
CCM 3728			106191	MICROCONICAL (S0 SEGMENT)		5	EA	FLT	JSC			
CCM 4886			106192	EVA KICK-LOAD WARNING LABEL		4	EA	FLT	MDAC			
CCM 4886			106193	EVA KICK-LOAD WARNING LABEL		8	EA	FLT	MDAC			
CCM 4886			106194	EVA KICK-LOAD WARNING LABEL		4	EA	FLT	MDAC			
CCM 4886			106195	EVA KICK-LOAD WARNING LABEL		2	EA	FLT	MDAC			
CCM 5110			106196	ENERGY ABSORBERS/CETA CART COUPLERS		2	EA	FLT	BHB			
			205209	DMS PROTOTYPE KIT		1	EA	FEU	RDYN/CAPK			
			205210	DMS PROTOTYPE KIT		1	KT	PRO	RYDN/CAPK			
	CLUBB		205211	DMS PROTOTYPE KIT		1	KT	FEU	RYDN/CAPK			
	CLUBB		205212	DMS REL. R-2		1	EA	TSE	RYDN/CAPK			
CCM 056	GRIFFIN	LP/S-5	205213	FLIGHT RELEASABLE GRAPPLE FIXTURE (S5)		2	EA	FLT	RDYN/KSCX			
CCM 056	GRIFFIN	LP/S-5	205214	FLIGHT RELEASABLE GRAPPLE FIXTURE (S6)		3	EA	FLT	RDYN/KSCX			
	CLUBB		205215	MDM REL. R-1		1	EA	TSE	RDYN/KSCX			
CCM 056	TITTERTON	LP/S-5	205221	SOLAR ARRAY SIMULATOR		1	EA	TSE	RYDN/CAPK			
CCM 056	TITTERTON	LP/S-5	205222	SOLAR ARRAY SIMULATOR		1	EA	TSE	RYDN/CAPK			
CCM 056	SUGGS	LP/S-5	205263	PLASMA CATHODE UNIT (PCU)		1	EA	ENG	RYDN/CAPK			
CCM 056	SUGGS	LP/S-5	205264	POWER ELECTRONICS UNIT(PEU)		1	EA	BRB	RYDN/CAPK			
CCM 287	GRIFFIN	LP/S-5	205265	FLIGHT RELEASABLE GRAPPLE FIXTURE (OSE)		2	EA	FLT	RDYN/KSCX			
CCM 379	THORNTON	EVAS	205671	TOP MOUNTED PASSIVE WIF ASSY		22	EA	FLT	RDYN/TULSA	01/00/00		
CCM 379	THORNTON	EVAS	205672	SIDE MOUNTED PASSIVE WIF ASSY		5	EA	FLT	RDYN/TULSA	01/00/00		
CCM 379	THORNTON	EVAS	205676	SIDE MOUNTED PASSIVE WIF ASSY		5	EA	FLT	RDYN/TULSA	01/00/00		
CCM 379	THORNTON	EVAS	205677	TOP MOUNTED PASSIVE WIF ASSY		22	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	EVAS	205678	SIDE MOUNTED PASSIVE WIF ASSY		7	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	EVAS	205679	TOP MOUNTED PASSIVE WIF ASSY		33	EA	FLT	RDYN/TULSA	01/00/00		

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 287	THORNTON	LP/S-5	205680	TOP MOUNTED PASSIVE WIF ASSY		8	EA	FLT	RDYN/KSCX			
CCM 287	GRIFFIN	LP/S-5	205684	FLIGHT RELEASABLE GRAPPLE FIXTURE (P6)		4	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	EVAS	205685	SIDE MOUNTED PASSIVE WIF ASSY		8	EA	FLT	RDYN/TULSA	01/00/00		
CCM 287	GRIFFIN	LP/S-5	205688	FLIGHT RELEASABLE GRAPPLE FIXTURE (P5)		2	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205689	TOP MOUNTED PASSIVE WIF ASSY		8	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	EVAS	205695	TOP MOUNTED PASSIVE WIF ASSY		33	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	LP/S-5	205697	TOP MOUNTED PASSIVE WIF ASSY		18	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	LP/S-5	205699	HANDRAIL ASSEMBLY, TOP MOUNTED -ISS (25.53")		20	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	EVAS	205701	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		23	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	EVAS	205702	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS(25.53")		31	EA	FLT	RDYN/TULSA	01/00/00		
CCM 287	THORNTON	LP/S-5	205705	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.625")		12	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205706	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (22.625")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205708	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")		4	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	EVAS	205709	HANDRAIL ASSEMBLY, TO PMOUNTED ISS (8.53")		16	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	EVAS	205710	HANDRAIL ASSEMBLY, TOP - MOUNTED - ISS (25.53")		23	EA	FLT	RDYN/TULSA	01/00/00		
CCM 287	THORNTON	LP/S-5	205713	HANDRAIL ASSEMBLY, TOP MOUNTED, ISS (8.625")		12	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205714	HANDRAIL ASSEMBLY, TOP MOUNTED, ISS (22.625")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205716	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205717	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")		12	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	EVAS	205718	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		16	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	EVAS	205719	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")		23	EA	FLT	RDYN/TULSA	01/00/00		
CCM 287	THORNTON	LP/S-5	205722	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (8.626")		12	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205723	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (22.625")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205725	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205726	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")		12	EA	FLT	RDYN/KSCX			
CCM 805	THORNTON	EVAS	205727	HANDRAIL ASSEMBLY, TOP - MOUNTED - ISS (8.53")		23	EA	FLT	RDYN/TULSA	01/00/00		
CCM 805	THORNTON	EVAS	205728	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (25.53")		31	EA	FLT	RDYN/TULSA	01/00/00		

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 287	THORNTON	LP/S-5	205731	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.626")		12	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205732	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (22.625")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205734	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")		4	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205735	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")		2	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205736	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		16	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205737	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")		2	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205738	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		16	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205739	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		16	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205740	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")		2	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205741	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		16	EA	FLT	RDYN/KSCX			
CCM 287	THORNTON	LP/S-5	205742	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")		2	EA	FLT	RDYN/KSCX			
CCM 287	GUERRA	LP/S-5	205744	AMMONIA SERVICER		1	EA	GSE	MTRMR/DE			
	GRIFFIN	LP/S-5	205745	FLIGHT RELEASABLE GRAPPLE FIXTURES (Z1)		1	EA	FLT	RDYN/CAPK			
CCM 263	THORNTON	LP/S-5	205756	GO-NO GO GAUGES		1	SE	GSE	RDYN/CAPK			
CCM 805	SEXTON	EVR	205765	FLIGHT ROBOTIC H-FIXTURE KITS		3	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205766	FLIGHT ROBOTIC H-FIXTURE KITS		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205767	FLIGHT ROBOTIC H-FIXTURE KITS		2	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205768	FLIGHT ROBOTIC H-FIXTURE KITS		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205769	FLIGHT ROBOTIC H-FIXTURE KITS		2	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205770	FLIGHT ROBOTIC H-FIXTURE KITS		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205771	FLIGHT ROBOTIC H-FIXTURE KITS		2	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205772	FLIGHT ROBOTIC H-FIXTURE KITS		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205773	FLIGHT ROBOTIC H-FIXTURE KITS		2	EA	FLT	BNA/CP			
CCM 889	SEXTON	EVR	205774	MTC ROBOTIC TARGET		3	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205775	MTC ROBOTIC TARGET		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205776	MTC ROBOTIC TARGET		2	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205777	MTC ROBOTIC TARGET		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205778	MTC ROBOTIC TARGET		2	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205779	MTC ROBOTIC TARGET		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205780	MTC ROBOTIC TARGET		2	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205781	MTC ROBOTIC TARGET		4	EA	FLT	BNA/CP			
CCM 805	SEXTON	EVR	205782	MTC ROBOTIC TARGET		2	EA	FLT	BNA/CP			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 263	SUGGS	LP/S-5	205784	PLASMA CATHODE UNIT (PCU)		1	EA	QUL	RDYN/CAPK	01/00/00		
CCM 1270	SUGGS	LP/S-5	205785	PLASMA CATHODE UNIT (PCU)		2	EA	FLT	RDYN			
CCM 805; mod 530: CR1815-S/A 962	THORNTON	LP/S-5	205788	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		11	EA	FLT	RDYN/KSCX			
CCM 061	CHAMBLISS	LP/S-4	205789	EEATCS - QUICK DISC. - FEMALE (ACTIVE)		4	EA	TNG	RDYN			
CCM 061	CHAMBLISS	LP/S-4	205790	EEATCS - QUICK DISC. - MALE (PASSIVE)		4	EA	TNG	RDYN			
CCM 287	GUERRA	LP/S-2	205791	BATTERY ORU SIMULATOR ASSEMBLY		1	EA	DEV	RDYN			
CCM 287			205793	TYPE 1 PROTECTIVE FIXTURE		1	EA	FEQ	RDYN/CAP			
CCM 287			205794	STANDARD ORU FIN PROTECTIVE FIXTURES		1	EA	FEQ	RDYN/CAP			
CCM 287			205795	CHIA-ADAPTER PLATE ASSY		1	EA	DEV	RDYN/CAP			
CCM 287			205796	ORU HANDLING SET		1	EA	FEQ	RDYN/CAP			
CCM 287			205901	SOFT DOCK - CETA		2	EA	FLT	RDYN/KSCX			
CCM 458			205904	RTD CABLES/ASSEMBLIES (20/30')		20	EA	FLT	BNA			
CCM 458			205906	RTD CABLES/ASSEMBLIES (3/30')		3	EA	FLT	BNA			
CCM 458			205908	RTD CABLES/ASSEMBLIES (36/30')		36	EA	FLT	BNA			
CCM 458			205909	RTD CABLES/ASSEMBLIES (4/30')		4	EA	FLT	BNA			
CCM 458			205910	RSU REMOTE ANTENNA CABLES FOR CARGO ELEMENT (2/25')		2	EA	FLT	BNA			
CCM 458			205911	RSU REMOTE ANTENNA CABLES FOR CARGO ELEMENT (1/25')		1	EA	FLT	BNA			
CCM 458			205912	RSU REMOTE ANTENNA CABLES FOR CARGO ELEMENT (5/15)		5	EA	FLT	BNA			
CCM 458			205918	RTD CABLE/ASSEMBLIES (4/50')		4	EA	FLT	BNA			
CCM 458			205919	RTD CABLE/ASSEMBLIES (2/50')		2	EA	FLT	BNA			
CCM 458			205920	RSU REMOTE ANTENNA CABLES FOR CARGO ELEMENT (1/15')		1	EA	FLT	BNA			
CCM 399			205917	EARLY COMM SYSTEM SPEL TEST BOX		1	EA	DEV	RD/CANPA			
CCM 687			205921	SOLAR ARRAY ELECTRONIC SIMULATOR (SAES)		1	TSE	TSE	RDYN/CP			
CCM 805			205922	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")		6	EA	FLT	BNA/CP			
CCM 805			205923	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")		3	EA	FLT	BNA/CP			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 805			205924	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")		6	EA	FLT	BNA/CP			
CCM 805			205925	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")		3	EA	FLT	BNA/CP			
CCM 805			205926	HANDHOLD ASSY, SIDE MOUNTED, SHORT-ISS (8.53")		6	EA	FLT	BNA/CP			
CCM 805			205927	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")		3	EA	FLT	BNA/CP			
CCM 805			205928	HANDHOLD ASSY, SIDE MOUNTED, SHORT-ISS (8.53")		6	EA	FLT	BNA/CP			
CCM 805			205929	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (8.53")		3	EA	FLT	BNA/CP			
CCM 805			205930	HANDRAIL ASSY, TOP- MOUNTED - ISS (85.7")		2	EA	FLT	BNA/KSC			
CCM 805			205931	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		2	EA	FLT	BNA/KSC			
CCM 805			205932	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		2	EA	FLT	BNA/KSC			
CCM 805			205933	SIDE MOUNTED PASSIVE WIF ASSY		6	EA	FLT	BNA/KSC			
CCM 805			205934	HANDRAIL ASSY, TOP- MOUNTED - ISS (8.53")		7	EA	EM	BNA/CP			
CCM 805			205935	HANDRAIL ASSY, TOP- MOUNTED - ISS (8.53")		7	EA	FLT	BNA/CP			
CCM 805			205936	HANDRAIL ASSY, TOP- MOUNTED - ISS (8.53")		14	EA	FLT	BNA/CP			
CCM 805			205937	HANDRAIL ASSY, TOP- MOUNTED - ISS (25.53")		1	EA	EM	BNA/CP			
CCM 805			205938	HANDRAIL ASSY, TOP- MOUNTED - ISS (25.53")		1	EA	FLT	BNA/CP			
CCM 805			205939	HANDRAIL ASSY, TOP- MOUNTED - ISS (25.53")		2	EA	FLT	BNA/CP			
CCM 805			205940	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		9	EA	FLT	BNA/CP			
CCM 805			205941	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		2	EA	FLT	BNA/CP			
CCM 805			205942	HANDRAIL ASSY, TOP- MOUNTED-ISS (18.15")		3	EA	FLT	BNA/CP			
CCM 805			205943	HANDRAIL ASSY, TOP- MOUNTED-ISS (8.53")		7	EA	FLT	BNA/CP			
CCM 805			205944	HANDRAIL ASSY, TOP- MOUNTED-ISS (25.53")		1	EA	FLT	BNA/CP			
CCM 805			205945	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		4	EA	FLT	BNA/CP			
CCM 805			205946	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		4	EA	FLT	BNA/CP			
CCM 805			205947	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		9	EA	FLT	BNA/CP			
CCM 805			205948	HANDRAIL ASSY, TOP- MOUNTED, EXTENDED -ISS		2	EA	FLT	BNA/CP			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 805			205949	HANDRAIL ASSY, TOP-MOUNTED-ISS (18.15")		3	EA	FLT	BNA/CP			
CCM 805			205950	HANDRAIL ASSY, TOP-MOUNTED-ISS (8.53")		4	EA	FLT	BNA/CP			
CCM 805			205951	GAP SPANNER (50"0)		3	EA	FLT	BNA/KSC			
CCM 805			205952	GAP SPANNER (50")		3	EA	FLT	BNA/KSC			
CCM 805			205953	H-HANDLES MASTER TOOL		1	EA	GSE	BNA/CP			
CCM 805			205954	MICRO FIXTURE MTCT MOUNTING FIXTURE		1	EA	GSE	BNA/CP			
CCM 805			205955	MICROCONICAL FITTING MTCT MOUNTING FIXTURE		1	EA	GSE	BNA/CP			
CCM 805			205956	H-HANDLE MTCT MOUNTING FIXTURE		1	EA	GSE	BNA/CP			
CCM 896			205963	FLIGHT RELEASABLE GRAPPLE FIXTURE, RMS		1	EA	FLT	BNA			
CCM 458			205967	DDCU HP RTD CABLES/ASSEMBLIES (2/20')		2	EA	FLT	BNA			
CCM 458			205968	DDCU-HP RTD CABLES/ASSEMBLIES (2/50')		2	EA	FLT	BNA/KSC			
CCM 458			205969	REMOTE ANTENNAS FOR Z1		2	EA	FLT	BNA/KSC			
CCM 458			205970	REMOTE ANTENNAS FOR Z1		1	EA	FLT	BNA/KSC			
CCM 458			205971	RSU FOR Z1		2	EA	FLT	BNA/KSC			
CCM 458			205972	REMOTE ANTENNAS FOR P6		5	EA	FLT	BNA/KSC			
CCM 458			205973	REMOTE ANTENNAS FOR P6		1	EA	FLT	BNA/KSC			
CCM 458			205974	RSU FOR P6		5	EA	FLT	BNA/KSC			
CCM 986			205977	CIRCUIT INTERRUPT DEVICE		6	EA	FLT	BNA/KSC			
CCM 986			205978	CIRCUIT INTERRUPT DEVICE		1	EA	BB	BOE/BNA			
CCM 986			205979	CIRCUIT INTERRUPT DEVICE		1	EA	EM	BNA/KSC			
CCM 1194			205980	PUMP AND FLOW CONTROL SUBASSEMBLY (PFCS)		1	EA	FLT	BNA/HS			
CCM 896			205983	TOP MOUNTED PASSIVE WIF ASSY		2	EA	FLT	BNA			
CCM 896			205984	GAP SPANNER, 70"		1	EA	FLT	BNA			
CCM 458			205975	RSU FOR P6		1	EA	FLT	BNA/KSC			
CCM 896			205976	AMMONIA SERVICER FSE NBT SIMULATOR		1	EA	MCK	BNA			
CCM 896			205981	BAYONET FITTING, FEMALE RECEPTACLE		1	EA	FLT	BNA			
CCM 896			205985	HANDRAIL ASSY, TOP-MOUNTED, ISS (8.53")		2	EA	FLT	BNA			
CCM 896			205988	HANDRAIL ASSY, TOP-MOUNTED, ISS (18.15")		3	EA	FLT	BNA			
CCM 2138			206001	TIE WRAP		3	EA	FLT	BCP			
CCM 1815 MOD			206003	HANDRAIL ASSEMBLY, TOP-MOUNTED, ISS (15.44")		2	EA	FLT	JSC			
CCM 1815 MOD			206004	HANDRAIL ASSEMBLY, TOP-MOUNTED, ISS (8.15")		2	EA	FLT	JSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 1815 MOD			206005	HANDRAIL ASSEMBLY, TOP- MOUNTED, ISS (12.15")		2	EA	FLT	JSC			
CCM 1815 MOD			206006	HANDRAIL ASSEMBLY, TOP- MOUNTED, ISS (6.15")		2	EA	FLT	JSC			
CCM 1815 MOD			206007	HANDRAIL ASSEMBLY		2	EA	FLT	JSC			
CCM 1815 MOD			206008	HANDRAIL ASSEMBLY, TOP- MOUNTED, ISS (8.53")		1	EA	FLT	JSC			
CCM 1815 MOD			206009	HANDRAIL ASSEMBLY, TOP- MOUNTED, ISS (18.15")		10	EA	FLT	JSC			
CCM 2665			206012	SOLAR ARRAY BLANKET BOX LABEL		2	SE	FLT	LMMS			
CCM 2665			206013	SOLAR ARRAY BLANKET BOX LABEL		2	SE	FLT	LMMS			
CCM 2665			206014	SOLAR ARRAY BLANKET BOX LABEL		2	SE	FLT	LMMS			
CCM 2665			206015	SOLAR ARRAY BLANKET BOX LABEL		2	SE	FLT	LMMS			
CCM 2665			206016	SOLAR ARRAY BLANKET BOX LABEL		2	SE	TRG	LMMS			
CCM 2665			206017	SOLAR ARRAY BLANKET BOX LABEL (SPARE)		2	SE	FLT	LMMS			
CCM 2575			206025	EVA HANDRAIL		4	EA	FLT	RDYN			
CCM 2575			206026	EVA HANDRAIL		4	EA	FLT	RDYN			
CCM 2575			206027	EVA HANDRAIL		4	EA	FLT	RDYN			
CCM 2575			206028	EVA HANDRAIL		4	EA	FLT	RDYN			
CCM 3525			206029	HANDRAIL ASSY, TOP MOUNTED, EXT (25.53")		4	EA	FLT	KSC			
CCM 3525			206030	HANDRAIL ASSY, TOP MOUNTED, EXT (25.53")		4	EA	FLT	TULS			
CCM 3525			206031	HANDRAIL ASSY, TOP MOUNTED, EXT (8.53")		8	EA	FLT	TULS			
CCM 3525			206032	HANDRAIL ASSY, TOP MOUNTED, EXT (8.53")		8	EA	FLT	TULS			
CCM 3525			206033	HANDRAIL ASSY, TOP MOUNTED, EXT (8.53")		1	EA	FLT	KSC			
CCM 3525			206034	WIF, SIDE MOUNTED, PASSIVE		9	EA	FLT	TULS			
CCM 3525			206035	WIF, SIDE MOUNTED, PASSIVE		9	EA	FLT	TULS			
CCM 3525			206036	WIF, SIDE MOUNTED, PASSIVE		2	EA	FLT	TULS			
CCM 3525			206037	WIF, SIDE MOUNTED, PASSIVE		1	EA	FLT	KSC			
CCM 3525			206038	WIF, SIDE MOUNTED, PASSIVE		1	EA	FLT	KSC			
CCM 3525			206039	HANDHOLD ASSY, SIDE MOUNTED, SHORT (8.53")		6	EA	FLT	TULS			
CCM 3525			206040	HANDHOLD ASSY, SIDE MOUNTED, SHORT (8.53")		6	EA	FLT	TULS			
CCM 3525			206041	HANDHOLD ASSY, SIDE MOUNTED, SHORT (8.53")		1	EA	FLT	KSC			
CCM 3525			206042	HANDHOLD ASSY, SIDE MOUNTED, SHORT (8.53")		1	EA	FLT	TULS			
CCM 3525			206043	HANDHOLD ASSY, SIDE MOUNTED, SHORT (8.53")		1	EA	FLT	KSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 3525			206044	HANDHOLD ASSY, SIDE MOUNTED, SHORT (8.53")		1	EA	FLT	TULS			
CCM 3525			206045	HANDRAIL ASSY, TOP MOUNTED, (6.15")		3	EA	FLT	KSC			
CCM 3525			206046	HANDRAIL ASSY, TOP MOUNTED, (6.15")		3	EA	FLT	TULS			
CCM 3525			206047	HANDRAIL ASSY, TOP MOUNTED, (6.15")		2	EA	FLT	KSC			
CCM 3525			206048	HANDRAIL ASSY, TOP MOUNTED, (6.15")		2	EA	FLT	TULS			
CCM 3525			206049	HANDRAILS 6" EXT BOTH SIDES		4	EA	FLT	TULS			
CCM 3525			206050	HANDRAILS 6" EXT BOTH SIDES		4	EA	FLT	TULS			
CCM 3525			206051	HANDRAILS 6" EXT BOTH SIDES		6	EA	FLT	TULS			
CCM 3525			206052	HANDRAIL ASSY, TOP MOUNTED (8.53")		4	EA	FLT	TULS			
CCM 3525			206053	HANDRAIL ASSY, TOP MOUNTED (8.53")		4	EA	FLT	TULS			
CCM 3525			206054	HANDHOLD ASSY, TOP MOUNTED (8.53")		8	EA	FLT	TULS			
CCM 3525			206055	HANDHOLD ASSY, TOP MOUNTED (8.53")		8	EA	FLT	TULS			
CCM 3525			206056	HANDRAIL ASSY, TOP MOUNTED (18.15")		6	EA	FLT	TULS			
CCM 3525			206057	HANDRAIL ASSY, TOP MOUNTED (18.15")		6	EA	FLT	TULS			
CCM 3525			206058	HANDRAIL ASSY, TOP MOUNTED (24.15")		1	EA	FLT	KSC			
CCM 3525			206059	HANDHOLD ASSY, TOP MUNTED (8.62") CLEAR		4	EA	FLT	KSC			
CCM 3525			206060	HANDHOLD ASSY, TOP MOUNTED (8.62") CLEAR		4	EA	FLT	TULS			
CCM 3525			206061	HANDHOLD ASSY, TOP MOUNTED (8.62") CLEAR		4	EA	FLT	KSC			
CCM 3525			206062	HANDHOLD ASSY, TOP MOUNTED (8.62") CLEAR		4	EA	FLT	TULS			
CCM 3525			206063	HANDRAIL EXTRUSION		6	EA	FLT	TULS			
CCM 3525			206064	HANDRAIL EXTRUSION		6	EA	FLT	TULS			
CCM 3525			206065	FRENCH HOOK		6	EA	FLT	KSC			
CCM 3525			206066	FRENCH HOOK		6	EA	FLT	TULS			
CCM 3525			206067	HANDHOLD ASSY, SIDE MOUNTED, TALL		1	EA	FLT	TULS			
CCM 3525			206068	HANDHOLD ASSY, SIDE MOUNTED, TALL		1	EA	FLT	TULS			
CCM 3525			206069	EQUIPMENT HOOK		4	EA	FLT	SHELDAHL			
CCM 3525			206070	"D" RING		4	EA	FLT	SHELDAHL			
CCM 6172			206077	HANDRAIL ASSY, TOP MOUNTED, EXT 25.53"		8	EA	FLT	KSC			
CCM 6172			206078	HANDRAIL ASSY, TOP MOUNTED, EXT 25.53"		8	EA	FLT	HSV			
CCM 6172			206079	WIF, TOP MOUNTED, PASSIVE		3	EA	FLT	KSC			
CCM 6172			206080	HANDRAIL ASSY, TOP MOUNTED, 21.941"		1	EA	FLT	KSC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 6172			206081	HANDRAIL ASSY, TOP MOUNTED, 8.53"		3	EA	FLT	KSC			
CCM 6172			206082	HANDRAIL ASSY, TOP MOUNTED, 18.15"		1	EA	FLT	KSC			
CCM 6172			206083	HANDRAIL ASSY, TOP MOUNTED, 18.15"		1	EA	FLT	HSV			
CCM 6172			206084	FRENCH HOOK		4	EA	FLT	KSC			
CCM 6172			206085	FRENCH HOOK		4	EA	FLT	HSV			
CCM 6172			206086	EVA WIRE TIE		2	EA	FLT	KSC			
CCM 6172			206087	EVA WIRE TIE		2	EA	FLT	HSV			
CCM 6172			206088	HANDHOLD ASSY, SIDE MOUNTED, TALL		8	EA	FLT	KSC			
CCM 6172			206089	HANDLE COMOND, 6"		8	EA	FLT	KSC			
CCM 6172			206090	PIN, CAPTURE		12	EA	FLT	KSC			
CCM 6172			206091	WASHER		24	EA	FLT	KSC			
CCM 6172			206092	HANDRAIL ASSY, TOP MOUNTED, 22.625"		2	EA	FLT	KSC			
CCM 6815			206093	MODIFIED TRUNCATED CONE TARGET		2	EA	FLT	BHOU			
CCM 3525			206071	CAM BUCKLE ASSY		2	EA	FLT	SHELDAHL			
	GALLOWAY	LP/S-2	305178	GA1-01291-3, ELEMENT ACCESS/TEST STAND (ROTATING LAB/HAB)		1	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	305180	UPPER STRUCTURE ASSY (GH1-01289)		9	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	305181	UPPER STRUCTURE ASSY (GH1-01289)		8	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	305183	UPPER STRUCTURE ASSY (GH1-01289)		9	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	305184	UPPER STRUCTURE ASSY (GH1-01289)		9	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	305185	GX1-01094, RACK SHIPPING CONTAINER		2	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	305186	GX1-01094, RACK SHIPPING CONTAINER		5	EA	GSE	BMSD/HSVE			
	GLORIOSO	LP/S-3	305755	S-H18, VIDEO TAPES		4	EA	QUL	BMSD/HSVE			
CCM 287	GRIFFIN	LP/S-3	305789	PDGF MOUNTING ASSEMBLY, UNIT 1		1	EA	FLT	BMSD/HSVE			
CCM 147	JONES	LP/S-3	305798	PORTABLE BREATHING APPARATUS WITH 30-FT HOSE (LAB) (WITH QUICK DISCONNECT)		2	EA	FLT	BMSD/HSVE			
CCM 395	GLORIOSO	LP/S-3	305890	SPACE-TO-SPACE STATION RADIO(SSSR)		1	EA	FLT	BMSD/HSVE			
	GRIFFIN	LP/S-3	306000	GRAPPLE FIXTURE, FRGF (GROUND INSTALL AT KSC) (LAB)		1	EA	FLT	BMSD/KSCX			
CCM 395	GLORIOSO	LP/S-3	306146	UHF ANTENNA SIMULATOR (DVTM)		1	EA	FEU	BMSD/HSVE			
	GALLOWAY	LP/S-2	306151	NODE 1 CAPTURE COMPONENTS (FROM NODE 1/LAB I/F)		1	SE	FLT	BMSD/HSVE			
	GALLOWAY	LP/S-2	306157	NODE 1 CAPTURE COMPONENTS (FROM NODE 1/AL I/F)		1	SE	FLT	BMSD/HSVE			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 056	GRIFFIN	LP/S-2	306176	GRAPPLE FIXTURE, FLIGHT RELEASABLE (AL)		7	EA	FLT	BMSD/HSVE			
CCM 217	PORTER	LP/S-2	306179	UMBILICAL INTERFACE ASSEMBLY		1	EA	FLT	BMSD/HSVE			
CCM 217	PORTER	LP/S-2	306180	POWER SUPPLY ASSEMBLY (PSA)		1	EA	FLT	BMSD/HSVE			
CCM 217	PORTER	LP/S-2	306183	EMU DON/DOFF ASSEMBLY		2	EA	FLT	BMSD/HSVE			
CCM 147	JONES	LP/S-2	306185	PORTABLE BREATHING MASK WITH 30-FT HOSE (A/L)(WITH QUICK DISCONNECT)		2	EA	FLT	BMSD/HSVE			
CCM 1118	THORNTON	LP/S-2	306202	TOP MOUNTED PASSIVE WIF ASSY		4	EA	FLT	BMSD/HSVE			
CCM 1118	THORNTON	LP/S-2	306203	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")		42	EA	FLT	BMSD/HSVE			
	REUTER	LP/S-3	306212	CONTINGENCY WASTE WATER COLLECTION BAG		3	EA	FLT	BMSD/HSVE			
	JUE/OG		306213	SUN SPARC 10		3	EA	CSE	BMSD/HSVE			
	JUE/OG		306214	RQMTS & TRACEABILITY MGMT (RTM) S/W		16	EA	CSE	BMSD/HSVE			
CCM 228	GALLOWAY	LP/S-2	306218	GH1-01248 HATCH OPERATION KIT,1G		2	EA	GSE	BMSD/HSVE			
CCM 228	GALLOWAY	LP/S-2	306219	GH1-01256 HATCH RESTRAINT FIXTURE		8	EA	GSE	BMSD/HSVE			
CCM 805	THORNTON	LP/S-2	306224	EVA TOOL STOWAGE DEVICE ASSY A/L		2	EA	FLT	BMSD/HSVE			
CCM 379	THORNTON	LP/S-3	306239	HANDRAIL, ASSEMBLY - OIH (24.00")		37	EA	FLT	BMSD/HSVE			
CCM 379	THORNTON	LP/S-3	306240	HANDRAIL, ASSEMBLY - OIH (24.00")		32	EA	FLT	BMSD/HSVE			
CCM 379	THORNTON	LP/S-3	306241	SLIDEWIRE ASSEMBLY - ON ORBIT INSTALLED (290")		1	EA	FLT	BMSD/HSVE			
CCM 563	CLUBB	LP/S-3	306268	PCS LAPTOP W/115 VAC POWER ADAPTER, MIL-STD 1553B CARD ASSEMBLY AND ACCESSORY KIT		2	EA	FEU	BMSD/HSVE			
CCM 563	CLUBB	LP/S-3	306270	PCS LAPTOP, MIL-STD 1553B CARD ASSEMBLY, ETHERNET CARD AND ACCESSORY KIT		2	EA	FLT	BMSD/HSVE			
CCM 563	CLUBB	LP/S-3	306271	PCS 120 VDC POWER SUPPLY, 1553/POWER UOP CABLE AND ETHERNET CABLE		2	EA	FLT	BMSD/HSVE			
CCM 563	CLUBB	LP/S-3	306293	PCS CSCI (5A/6A ENG 1)		1	EA	DEV	BMSD/HSVE			
CCM 563	CLUBB	LP/S-3	306294	PCS CSCI (5A/6A FQT)		1	EA	FLT	BMSD/HSVE			
CCM 563	CLUBB	LP/S-3	306295	PCS CSCI (5A/6A ENG 2)		1	EA	DEV	BMSD/HSVE			
	JONES	LP/S-3	306298	PBA BRACKETS (LAB)		2	EA	FLT	BMSD/HSVE			
	JONES	LP/S-2	306299	PBA BRACKETS (A/L)		2	EA	FLT	BMSD/HSVE			
	JONES	LP/S-2	306300	PBA BRACKETS(NODE 1)		1	EA	PRO	BMSD/HSVE			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 287			306305	ROBOTICS WORKSTATION (RWS)		1	EA	FEU	NASA/SPAR			
CCM 263	THORNTON	LP/S-2	306306	GO-NO GO GAUGES		1	SE	GSE	BMSD/HSVE			
CCM 1118	THORNTON	LP/S-2	306313	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")		18	EA	FLT	BMSD/HSVE			
CCM 217	PORTER	LP/S-2	306314	BATTERY STORAGE ASSEMBLY (BSA)		1	EA	FLT	BMSD/HSVE	01/00/00		
CCM 330	GLORIOSO	LP/S-3	306315	DVTU RADIO (6B BOX REV. D)		1	EA	DEV	BMSD/HSVE			
CCM 310	GLORIOSO	LP/S-3	306316	GPS RECEIVER PROCESSOR (LAB)		1	EA	FEU	BMSD/HSVE			
	REUTER	LP/S-3	306318	TRACE CONTAMINANT CONTROL SIMULATION COMPUTER PROGRAM (VERS. 8.1A)		1	EA	FLT	BMSD/HSVE			
	WOOD	LP/S-3	306324	SSPF BASE ASSY (GH1- 01289)		1	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	306325	MSFC BASE ASSY (GH1- 01289)		9	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	306326	MSFC BASE ASSY (GH1- 01289)		8	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	306327	MSFC BASE ASSY (GH1- 01289)		9	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	306328	MSFC BASE ASSY (GH1- 01289)		9	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	306329	STARBOARD CROSSOVER STRUCTURE ATTACH BRKTS KIT (GH1-01289)		1	EA	GSE	BMSD/HSVE			
	WOOD	LP/S-3	306330	PORT CROSSOVER STRUCTURE ATTACH BRKTS KIT (GH1-01289)		1	EA	GSE	BMSD/HSVE			
CCM 189	SCHEIB	U&O	306331	ISPR-5		1	EA	FLT	BMSD/HSVE			
CCM 287	THORNTON	EVAS	306333	HANDRAIL ASSEMBLY, TOP- MOUNTED-ISS (8.53")		4	EA	FLT	BMSD/HSVE			
CCM 217			306344	BATTERY CHARGER ASSEMBLY (BCA)		1	EA	FLT	BMSD/HSVE			
CCM 379	THORNTON	LP/S-2	306348	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY		7	EA	FLT	BMSD/HSVE			
CCM 379	THORNTON	LP/S-3	306349	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY		10	EA	FLT	BMSD/HSVE			
CCM 1118	THORNTON	LP/S-2	306350	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY		4	EA	FLT	BMSD/HSVE			
CCM 379	THORNTON	LP/S-2	306351	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY		7	EA	FLT	BMSD/HSVE			
CCM 1289	WOOD	LP/S-3	306355	ARIS KIT 1 - EXPRESS		1	KT	FLT	BMSD/HSVE			
CCM 1289			306356	ARIS KIT 2 - EXPRESS		1	KT	FLT	BMSD/HSVE			
CCM 1289	WOOD	LP/S-3	306357	ARIS KIT 3 - EXPRESS		1	KT	FLT	BMSD/HSVE			
CCM 1289			306358	ARIS KIT 4 - EXPRESS		1	KT	FLT	BMSD/HSVE			
CCM 1289	WOOD	LP/S-3	306359	ARIS KIT 5 - ISPR		1	KT	FLT	BMSD/HSVE			
CCM 1289	WOOD	LP/S-3	306360	ARIS KIT 6 - ISPR		1	KT	FLT	BMSD/HSVE			
CCM 1289	WOOD	LP/S-3	306362	ARIS KIT 8 - ISPR		1	KT	FLT	BMSD/HSVE			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 1289	WOOD	LP/S-3	306363	ARIS KIT 9 - ISPR		1	KT	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306370	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306371	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306372	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306373	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306374	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306375	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306376	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306377	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306378	ISPR-4		1	EA	FLT	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306385	ISPR-5		1	EA	FLT/EXP	BMSD/HSVE			
CCM 074	WOOD	LP/S-3	306386	REME 1313 HARDWARE		1	EA	FLT/EXP	BMSD/HSVE			
CCM 189	SANDARS		306403	MAR COOLING MODULE (MCM) MC621-0089-0001		1	EA	FLT	BMSD/HSVE			
CCM 287	JONES		306405	PBA I/F QUICK DISCONNECT (ELEMENT SIDE) (LAB)		2	EA	FLT	BMSD/HSVE			
CCM 147	JONES	LP/S-2	306406	PBA I/F QUICK DISCONNECT (ELEMENT SIDE) (A/L)		2	EA	FLT	BMSD/HSVE			
CCM 210 B			306427	ROBOTIC WORKSTATION (RWS)		1	KIT	FLT	NASA/SPAR			
CCM 210 B			306428	ROBOTIC WORKSTATION (RWS)		1	KIT	FLT	NASA/SPAR			
CCM 210			306430	WORKSTATION HOST S/W (WHS)		1	EA	TSE	NASA/SPAR			
CCM 210			306431	VIDEO GRAPHICS S/W (VGS)		1	EA	TSE	NASA/SPAR			
CCM 805			306436	MICROCONICAL FITTING (FLANGED)		3	EA	FLT	BMSD/HSVE			
CCM 379			306447	MICROCONICAL FITTING (3/4 INCH HOLE)		1	EA	DEV	BMSD/HSVE			
CCM 379			306512	PLATE, STRUCTURAL ADAPTER-SLIDEWIRE		1	SET	FLT	BMSD/HSVE			
CCM 379			306514	PLATE, STRUCTURAL ADAPTER-SLIDEWIRE		1	SET	FLT	BMSD/HSVE			
CCM 379			306515	PLATE, STRUCTURAL ADAPTER-SLIDEWIRE		1	SET	FLT	BMSD/HSVE			
CCM 591			306521	GPS ANTENNA SPLITTER BOX KIT		1	EA	EM	HSV/KSC			
CCM 272			306544	METOX REGENERATOR		2	EA	FLT	BMSD/HSVE			
CCM 287			306550	PBA QUICK DISCONNECT ASSY. (INCL 02 CONNECTOR)		1	EA	FLT	BMSD/HSVE			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 287			306551	PBA QUICK DISCONNECT ASSY. (INCL 02 CONNECTOR)		1	EA	FLT	BMSD/HSVE			
CCM 136	FLYNT	LP/S-2	306553	ORLAN-M SPACE SUIT COMMUNICATION SET		2	EA	FEU	BMSD/HSVE			
CCM 290			306555	MANUAL BERTHING MECHANISM (MBM)		1	EA	FLT	BMSD/HSVE			
CCM 137			306556	CLASS I/II EMU		1	EA	TSE	BMSD/HSVE			
CCM 310			306557	GPS RECEIVER PROCESSOR (LAB)		1	EA	FEU	BMSD/HSVE			
CCM 290			306559	MICROCONICAL TORQUE MULTIPLIER		1	EA	FLT	BMSD/HSVE			
CCM 290			306560	PISTOL GRIP TOOL		1	EA	FLT	BMSD/HSVE			
CCM 290			306561	SOCKET SET		1	EA	FLT	BMSD/HSVE			
CCM 290			306562	WORKSITE INTERFACE (WIF'S)		5	EA	FLT	BMSD/HSVE			
CCM 272			306563	A/L METOX CANNISTER		2	EA	FLT	BMSD/HSVE			
CCM 287			306571	VSC MOUNTING KIT, UNIT		1	EA	FLT	BMSD			
CCM 287			306573	PDGF ORU ASSEMBLY, UNIT 1		1	EA	FLT	BMSD			
CCM 287			306574	PDGF CONNECTOR SAVER SET, UNIT 1		1	EA	FLT	BMSD			
CCM 287			306575	PDGF EXTERNAL HARNESS, UNIT 1		1	EA	FLT	BMSD			
CCM 287			306576	PDGF ORU ASSEMBLY, UNIT 2		1	EA	FLT	BMSD			
CCM 287			306577	PDGF MOUNTING ASSEMBLY, UNIT 2		1	EA	FLT	BMSD			
CCM 287			306578	PDGF CONNECTOR SAVER SET, UNIT 2		1	EA	FLT	BMSD			
CCM 287			306579	VSC MOUNTING KIT, UNIT 2		1	EA	FLT	BMSD			
CCM 287			306580	PDGF EXTERNAL HARNESS, UNIT 2		1	EA	FLT	BMSD			
CCM 342			306585	CBM TEST FIXTURE KIT		1	EA	TSE	MSFC			
CCM 399			306586	ECOMM RF FEEDTHROUGH PLATE COAXIAL CONNECTOR		4	EA	FLT	HSV			
CCM 399			306587	ECOMM RF FEEDTHROUGH PLATE COAXIAL CONNECTOR		2	EA	FLT	HSV			
CCM 399			306589	ECOMM ECOM SOCKET		1	EA	FLT	HSV			
CCM 399			306590	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR		2	EA	FLT	HSV			
CCM 399			306591	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR		1	EA	FLT	HSV			
CCM 399			306592	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR		2	EA	FLT	HSV			
CCM 399			306593	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR		1	EA	FLT	HSV			
CCM 399			306594	ECOMM HATCH TO ANTENNA CABLE SETS		2	EA	FLT	HSV/KSC			
CCM 399			306595	ECOMM HATCH TO ANTENNA CABLE SETS		1	EA	FLT	HSV			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 287			306596	HANDRAIL ASSEMBLY, OIH 12"		20	EA	FLT	BMSD			
CCM 272			306597	CONNECTOR (NATCO6G17NBSN)		1	EA	FLT	BMSD/HSVE			
CCM 272			306598	BACKSHELL (NZGA-LG- 17N12)		1	EA	FLT	BMSD/HSVE			
CCM 272			306599	CONTACTS (NZGC-C-12SB)		6	EA	FLT	BMSD/HSVE			
CCM 272			306600	SEAL PLUGS (MS27488-12)		4	EA	FLT	BMSD/HSVE			
CCM 210 B			306601	WORKSTATION HOST S/W (WHS) (LEVEL -II ++)		1	EA	TSE	BMSD/HSVE			
CCM 210 B			306602	VIDEO GRAPHICS S/W (VGS) (LEVEL - II ++)		1	EA	TSE	BMSD/HSVE			
CCM 563			306603	EPCS LAPTOP W/115 VAC POWER ADAPTER, MIL-STD 1553B CARD ASSEMBLY AND ACCESSORY KIT		1	EA	FEU	BMSD/HSVE			
CCM 563			306605	PCS CSCI (5A/6A TRR)		1	EA	DEV	BMSD/HSVE			
CCM 399			306606	PASSIVE PROBE		2	EA	FLT	HSV			
CCM 399			306607	PASSIVE PROBE		1	EA	FLT	HSV			
CCM 438			306608	PCS FLIGHT SOFTWARE (FQT)		1	EA	ENG	HSV			
CCM 591			306609	SPACE INTEGRATED GPS/INS (SIGI)		1	EA	FEU	HSV			
CCM 591			306610	SPACE INTEGRATED GPS/INS (SIGI)		1	EA	FLT	HSV/KSC			
CCM 591			306611	SPACE INTEGRATED GPS/INS (SIGI)		1	EA	FLT	HSV/KSC			
CCM 805			306614	HANDRAIL ASSEMBLY, OIH (12.00")		22	EA	FLT	HSV			
CCM 642			306615	UMBILICAL RESTRAINT BRACKETS		24	EA	FLT	BOE/HSV			
CCM 642			306616	UMBILICAL VELCRO RESTRAINT		24	EA	FLT	BOE/HSV			
CCM 642			306617	UMBILICAL STRAIN RELIEF ATTACH POINTS		2	EA	FLT	BOE/HSV			
CCM 642			306619	QUARTER TURN FASTENER		20	EA	FLT	BOE/HSV			
CCM 850			306621	KU-BAND FORWARD LINK KIT		1	EA	FLT	HSV/KSC			
CCM 438			306622	PCS FLIGHT SOFTWARE (MBF FQT)		1	EA	ENG	HSV			
CCM 438			306623	PCS FLIGHT SOFTWARE		1	EA	FLT	HSV			
CCM 438			306624	COMMON VIDEO INTERFACE UNIT (CUIU)		3	EA	FLT	HSV			
CCM 438			306625	COMMON VIDEO INTERFACE UNIT (CUIU)		3	EA	FLT	HSV			
CCM 591			306626	NETWORK ANALYZER		1	EA	TSE	HSV			
				PLUS ASSOCIATED RF SPLITTERS/CONNNECTOR ADAPTER								
CCM 898			306627	BRACKET		1	EA	FLT	BHSV			
CCM 898			306628	BOLT		4	EA	FLT	BHSV			
CCM 898			306629	NUT		4	EA	FLT	BHSV			
CCM 898			306630	WASHER		4	EA	FLT	BHSV			
CCM 898			306631	WASHER		4	EA	FLT	BHSV			
CCM 719			306642	SHUTTLE PRESSURE EQUALIZATION VALVE		1	EA	FLT	BOE/HSV			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 697; CCM 6451			306643	RACK SHIPPING CONTAINER (RSC) G-109		1	EA	GSE	B-MSFC			
CCM 697			306644	RACK HANDLING ADAPTERS (INCLUDING HOISTING AND TITLTING DEVICES		1	KIT	GSE	HSV			
CCM 1344			306646	PDGF SADDLE BRACKET/CONNECTOR		1	EA	FLT	HSV/KSC			
CCM 1344			306647	PDGF HARNESS ASSY		1	EA	FLT	HSV/KSC			
CCM 1118			306648	HANDRAIL, CUSTOM, 21.941 IN.		22	EA	FLT	HSV			
CCM 1118			306649	12" ON-ORBIT INSTL. HANDRAIL		15	EA	FLT	HSV			
CCM 1118			306650	24" ON-ORBIT INSTL. HANDRAIL		41	EA	FLT	HSV			
CCM 1118			306651	TOP MOUNTED WIF PASSIVE HALF		5	EA	FLT	HSV			
CCM 1118			306652	SIDE MOUNTED WIF PASSIVE HALF		3	EA	FLT	HSV			
CCM 1118			306653	QUARTER TURN ASSY		14	EA	FLT	HSV			
CCM 1118			306654	NUT PLATE		14	EA	FLT	HSV			
CCM 1118			306655	LATCH PLATE		14	EA	FLT	HSV			
CCM 1270			306656	WIRE TIE		3	EA	FLT	BMSD			
CCM 1559			306659	SIGI "PIGTAIL"		2	EA	FLT	HSV/KSC			
CCM 1866			306679	KNEE BRACES FOR MPLM 1		16	EA	FLT	BMSD			
CCM 2000			306710	WIF		2	EA	FLT	BKSC			
CCM 2000			306711	WIF ADAPTER PLATE		2	EA	FLT	BKSC			
CCM 2160			306715	GH1-01248 HATCH OPERATION KIT 1G (S/N 001004)		1	EA	GSE	BMSD			
CCM 2199			306716	CUPOLA SCRATCH PANE FRAME KITS-TOP		1	SE	FLT	BMSD			
CCM 2160			306717	GH1-01248 HATCH OPERATION KIT 1G (S/N 000002)		1	EA	GSE	BMSD			
CCM 2160			306718	GH1-01248 HATCH OPERATION KIT 1G (S/N 000001)		1	EA	GSE	BMSD			
CCM 2482			306719	OXYGEN RECHARGE COMPRESSOR ASSEMBLY (ORCA)		1	EA	QUL	BMSD			
CCM 2452			306720	POSITIVE PRESSURE RELIEF ASSY		3	EA	FLT	BMSD			
CCM 2452			306721	POSITIVE PRESSURE RELIEF ASSY		3	EA	FLT	BMSD			
CCM 2452			306722	POSITIVE PRESSURE RELIEF ASSY		3	EA	FLT	BMSD			
CCM 2452			306723	POSITIVE PRESSURE RELIEF ASSY		1	EA	FLT	BMSD			
CCM 2199			306724	CUPOLA SCRATCH PANE FRAME KITS, STA-TOP		1	SE	FLT	BMSD			
CCM 2645			306731	UMBILICAL INTERFACE ASSY (UIA)		1	EA	FLT	BMSD			
CCM 2645			306732	FLUID PUMP UNIT (FPU)		1	EA	FLT	BMSD			
CCM 2199			306733	CUPOLA SCRATCH PANE FRAME KITS-SIDE		6	SE	FLT	BMSD			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 2199			306734	CUPOLA SCRATCH PANE FRAME KITS, STA-SIDE		1	SE	FLT	BMSD			
CCM 2825			306753	LAUNCH RESTRAINT FASTENER		7	EA	FLT	KSC			
CCM 2825			306754	HANDRAIL (UNIQUE), 12"		2	EA	FLT	KSC			
CCM 2821			306757	PREBREATHE HOSE ASSEMBLY (PHA) QD		2	EA	FLT	BMSD			
CCM 2865			306769	MASS SIMULATOR ASSY		1	EA	FLT	BMSD			
CCM 2676			306771	PORTABLE COMPUTER SYSTEM (PCS) WITH FQT SOFTWARE		1	EA	FLT	BMSD			
CCM 3020			306778	WINDOW FRAMES - STA		2	EA	FLT	BMSD			
CCM 3020			306779	WINDOW FRAMES - FLT		7	EA	FLT	BMSD			
CCM 3020			306781	WINDOW FRAME, SPARE		2	EA	FLT	BMSD			
CCM 3204			306780	A/L CREWLOCK WALL BRACKET KIT		1	EA	FLT	BMSD			
CCM 32205			306783	FLUID PUMP UNIT (FPU)		1	EA	FLT	BMSD			
CCM 3205			306784	FLUID PUMP UNIT (FPU)		1	EA	FLT	BMSD			
CCM 2857			306785	ITCS COOLANT SAMPLING BAG, 5 ML		2	EA	QUL	BMSD			
CCM 2857			306786	ITCS COOLANT SAMPLING BAG, 100 ML		2	EA	QUL	BMSD			
CCM 2879			306803	IMV DIFFUSER ASSEMBLY		3	EA	FLT	BMSD			
CCM 2879			306834	POSITIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 2879			306835	POSITIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 2879			306836	POSITIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 2879			306837	NEGATIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 2879			306838	NEGATIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 2879			306839	NEGATIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 2879			306840	NEGATIVE PRESSURE RELIEF VALVE		1	EA	FLT	BMSD			
CCM 4471			306868	SPCU HEAT EXCHANGER		1	EA	FLT	BMSD			
CCM 4370			306869	KBAR CAPTURE MECHANISM		8	EA	FLT	BMSD			
CCM 4370			306870	KBAR CAPTURE MECHANISM		8	EA	FLT	BMSD			
CCM 3072			306872	PCU HANDRAILS		4	EA	FLT	BMSFC			
CCM 3072			306874	BCDU HANDRAILS		4	EA	FLT	BMSFC			
CCM 3072			306875	UTA HANDRAILS		4	EA	FLT	BMSFC			
CCM 3072			306876	FHRC HANDRAILS		6	EA	FLT	BMSFC			
CCM 3072			306879	PUMP MODULE HANDRAILS		6	EA	FLT	BSMD			
CCM 3072			306880	CMG HANDRAILS		8	EA	FLT	BSMD			
CCM 3072			306881	BATTERY HANDRAILS		6	EA	FLT	BSMD			
CCM 3072			306882	MT/TULS REEL HANDRAILS		6	EA	FLT	BSMD			
CCM 3072			306883	LDU HANDRAILS		6	EA	FLT	BSMD			
CCM 3072			306885	PVR HANDRAILS		8	EA	FLT	BMSFC			
CCM 3072			306886	PCU HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306888	BCDU HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306889	UTA HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306890	FHRC HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306893	PUMP MODULE HANDRAILS		1	EA	FLT	BSMD			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 3072			306894	CMG HANDRAILS		1	EA	FLT	BSMD			
CCM 3072			306895	BATTERY HANDRAILS		1	EA	FLT	BSMD			
CCM 3072			306896	MT/TULS REEL HANDRAILS		1	EA	FLT	BSMD			
CCM 3072			306897	LDU HANDRAILS		1	EA	FLT	BSMD			
CCM 3072			306899	PVR HANDRAILS		1	EA	FLT	BMSFC			
CCM 5389			306902	UOP (LAB - X1)		1	EA	FLT	BHSV			
CCM 5389			306903	UOP (LAB - X2)		1	EA	FLT	BHSV			
CCM 5389			306904	UOP (LAB - X3)		1	EA	FLT	BHSV			
CCM 5389			306905	UOP (LAB - X4)		1	EA	FLT	BHSV			
CCM 5389			306906	UOP (MSS CUPOLA)		1	EA	FLT	BHSV			
CCM 5389			306907	UOP (LAB)		1	EA	FLT	BHSV			
CCM 5389			306908	UOP (NODE 1)		1	EA	FLT	BHSV			
CCM 5389			306909	UOP (LAB - X1)		1	EA	FLT	BHSV			
CCM 5389			306910	UOP (LAB - X4)		1	EA	FLT	BHSV			
CCM 5389			306911	UOP (NODE 1)		1	EA	FLT	BHSV			
CCM 3072			306912	SAPA #162 MTC TARGET		2	EA	FLT	BSMD			
CCM 3072			306913	SAPA #1 & 2 HANDRAILS		4	EA	FLT	BSMD			
CCM 3072			306914	SAPA #1 & 2 HANDRAIL PIN		4	EA	FLT	BSMD			
CCM 3072			306915	SAPA #1 & 2 HANDRAILS PIN		4	EA	FLT	BSMD			
CCM 3072			306916	SAPA #1 & 2 HANDRAILS		2	EA	FLT	BSMD			
CCM 3072			306917	PCU HANDRAILS		4	EA	FLT	BSMD			
CCM 3072			306918	PCU HANDRAIL PIN		4	EA	FLT	BSMD			
CCM 3072			306919	PCU HANDRAILS PIN		4	EA	FLT	BSMD			
CCM 3072			306920	SAPA #3 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306921	SAPA #3 MTC TARGET		2	EA	FLT	BMSFC			
CCM 3072			306922	SAPA #3 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306923	SAPA #3 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306924	SAPA #3 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306925	SAPA #4 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306926	SAPA #4 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306927	SAPA #4 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306928	SAPA #4 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306929	SAPA #4 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306930	SAPA #5 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306931	SAPA #5 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306932	SAPA #5 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306933	SAPA #5 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306934	SAPA #5 HANDRAIL		1	EA	FLT	BMSFC			
CCM 3072			306935	SAPA #6 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306936	SAPA #6 HANDRAIL		2	EA	FLT	BMSFC			
CCM 3072			306937	SAPA #6 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306938	SAPA #6 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306939	SAPA #6 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306940	BCDU HANDRAILS		4	EA	FLT	BSMD			
CCM 3072			306941	BCDU HANDRAIL PIN		4	EA	FLT	BSMD			
CCM 3072			306942	BCDU HANDRAILS PIN		4	EA	FLT	BSMD			
CCM 3072			306943	UTA HANDRAILS		4	EA	FLT	BSMD			
CCM 3072			306944	UTA HANDRAIL PIN		4	EA	FLT	BSMD			
CCM 3072			306945	UTA HANDRAILS PIN		4	EA	FLT	BSMD			
CCM 3072			306946	FHRC HANDRAILS		6	EA	FLT	BSMD			
CCM 3072			306947	FHRC HANDRAIL PIN		6	EA	FLT	BSMD			
CCM 3072			306948	FHRC HANDRAILS PIN		6	EA	FLT	BSMD			
CCM 3072			306952	LWAPA #5 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306953	LWAPA #5 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306954	LWAPA #5 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306955	LWAPA #5 HANDRAILS PIN		2	EA	FLT	BMSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 3072			306956	LWAPA #5 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306960	LWAPA #6 MTC TARGET		1	EA	FLT	BSMD			
CCM 3072			306961	LWAPA #6 HANDRAILS		2	EA	FLT	BSMD			
CCM 3072			306962	LWAPA #6 HANDRAIL PIN		2	EA	FLT	BSMD			
CCM 3072			306963	MBSU-CP HANDRAIL PIN		2	EA	FLT	BSMD			
CCM 3072			306964	LWAPA #6 HANDRAILS		1	EA	FLT	BSMD			
CCM 3072			306965	PUM MODULE HANDRAILS		6	EA	FLT	BMSFC			
CCM 3072			306966	PUMP MODULE HANDRAIL PIN		6	EA	FLT	BMSFC			
CCM 3072			306967	PUMP MODULE HANDRAILS PIN		6	EA	FLT	BMSFC			
CCM 3072			306968	LAPA #1 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306969	LAPA #1 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306970	LAPA #1 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306971	LAPA #1 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306972	LAPA #1 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			306973	CMB HANDRAILS		8	EA	FLT	BMSFC			
CCM 3072			306974	CMG HANDRAIL PIN		8	EA	FLT	BMSFC			
CCM 3072			306975	CMG HANDRAILS PIN		8	EA	FLT	BMSFC			
CCM 3072			306976	LWAPA #1 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306977	LWAPA #1 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306978	LWAPA #1 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306979	LWAPA #1 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306980	LWAPA #1 HANDRAIL		1	EA	FLT	BMSFC			
CCM 3072			306981	BATTERY HANDRAILS		8	EA	FLT	BMSFC			
CCM 3072			306982	BATTERY HANDRAIL PIN		8	EA	FLT	BMSFC			
CCM 3072			306983	BATTERY HANDRAILS PIN		8	EA	FLT	BMSFC			
CCM 3072			306984	MAPA #1 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306985	MAPA #1 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306986	MAPA #1 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306987	MAPA #1 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306988	MAPA #1 HANDRAIL		1	EA	FLT	BMSFC			
CCM 3072			306989	MT/TULS HANDRAILS		6	EA	FLT	BMSFC			
CCM 3072			306990	MT/TULS HANDRAIL PIN		6	EA	FLT	BMSFC			
CCM 3072			306991	MT/TULS HANDRAILS PIN		6	EA	FLT	BMSFC			
CCM 3072			306992	LWAPA #3 MRC TARGET		1	EA	FLT	BMSFC			
CCM 3072			306993	LWAPA #3 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			306994	LWAPA #3 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306995	LWAPA #3 HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			306996	LWAPA #3 HANDRAIL		1	EA	FLT	BMSFC			
CCM 3072			306997	LDU HANDRAILS		6	EA	FLT	BMSFC			
CCM 3072			306998	LDU HANDRAIL PIN		6	EA	FLT	BMSFC			
CCM 3072			306999	LDU HANDRAILS PIN		6	EA	FLT	BMSFC	BMSFC		
CCM 3072			307000	LWAPA #4 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			307001	LDU HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			307002	LDU HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			307003	LDU HANDRAIL PIN		2	EA	FLT	BMSFC			
CCM 3072			307004	LWAPA #4 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			307005	KU BAND HANDRAILS		6	EA	FLT	BMSFC			
CCM 3072			307006	KU BAND PIN		6	EA	FLT	BMSFC			
CCM 3072			307007	KU BAND PIN		6	EA	FLT	BMSFC			
CCM 3072			307008	LWAPA #2 MTC TARGET		1	EA	FLT	BMSFC			
CCM 3072			307009	LWAPA #2 HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			307010	LWAPA #2 HANDRAILS PIN		2	EA	FLT	BMSFC			
CCM 3072			307011	LWAPA #2 HANDRAILS PIN		2	EA	FLT	BMSFC			
CCM 3072			307012	LWAPA #2 HANDRAILS		1	EA	FLT	BMSFC			
CCM 3072			307013	PVR HANDRAILS		8	EA	FLT	BMSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 3072			307014	PVR PIN		8	EA	FLT	BMSFC			
CCM 3072			307015	PVR PIN		8	EA	FLT	BMSFC			
CCM 3072			307016	PVR HANDRAILS		1	EA	FLT	BMSFC			
CCM 5477			307018	UOP (AIRLOCK)		1	EA	FLT	BHSV			
CCM 5897			307019	PUSHROD PROTECTIVE COVERS		1	EA	FLT	BMSFC			
CCM 4370			307020	KBAR ASSEMBLY		4	EA	FLT	BMSD			
CCM 4370			307021	KBAR ASSEMBLY		4	EA	FLT	BMSD			
CCM 4370			307022	KBAR ASSEMBLY		6	EA	FLT	BMSD			
CCM 4370			307023	KBAR ASSEMBLY		6	EA	FLT	BMSD			
CCM 5477			307024	BRACKET, AFT CLOSEOUT		1	EA	FLT	BMSFC			
CCM 3072			307028	CMG HANDRAILS		5	EA	FLT	BMSFC			
CCM 3072			307029	CMG HANDRAILS		2	EA	FLT	BMSFC			
CCM 3072			307030	KU BANDS HANDRAILS		4	EA	FLT	BMSFC			
CCM 3072			307031	KU BANDS HANDRAILS		3	EA	FLT	BMSFC			
CCM 3072			307032	KU BANDS HANDRAILS		2	EA	FLT	BMSFC			
CCM 5477			307033	SSPF BASE ASSEMBLY		1	EA	FLT	BMSFC			
CCM 5477			307034	SSPF BASE ASSEMBLY		1	EA	FLT	BMSFC			
CCM 5477			307035	UPPER STRUCTURE ASSEMBLY		1	EA	FLT	BMSFC			
CCM 5477			307036	UPPER STRUCTURE ASSEMBLY		1	EA	FLT	BMSFC			
CCM 6180			307037	HANDRAIL ASSEMBLY (MBSU)		1	EA	FLT	BMSFC			
CCM 6180			307038	HANDRAIL ASSEMBLY (MBSU)		4	EA	FLT	BMSFC			
CCM 6823			307047	HANDRAIL ASSEMBLY (N- MDM RADIATOR)		5	EA	FLT	BMSFC			
CCM 6823			307049	HANDRAIL ASSEMBLY (FHRC)		1	EA	FLT	BMSFC			
CCM 6823			307050	HANDRAIL ASSEMBLY (FHRC)		4	EA	FLT	BMSFC			
CCM 6823			307051	HANDRAIL ASSEMBLY (PM)		2	EA	FLT	BMSFC			
CCM 6823			307052	HANDRAIL ASSEMBLY (PM)		6	EA	FLT	BMSFC			
CCM 6180			307060	EVA HANDRAIL ASSY		5	EA	FLT	BMSFC			
CCM 6180			307061	EVA HANDRAIL ASSY		2	EA	FLT	BMSFC			
CCM 6180			307062	EVA HANDRAIL ASSY		2	EA	FLT	BMSFC			
CCM 6180			307063	HANDRAIL		3	EA	FLT	BMSFC			
CCM 6180			307064	PIN		3	EA	FLT	BMSFC			
CCM 6180			307065	PIN		3	EA	FLT	BMSFC			
CCM 6135			307068	HATCH CSCS TARGET HATCH		2	EA	FLT	BMSFC			
CCM 6823			307069	GAP SPANNER (GROUND INSTALL)		3	EA	FLT	BMSFC			
CCM 6823			307071	GAP SPANNER (GROUND INSTALL)		3	EA	FLT	BMSFC			
CCM 6179; 02- 765			307073	HANDRAIL SAPA #6		4	EA	FLT	BMSFC			
CCM 6179			307074	MTC TARGET		18	EA	FLT	BMSFC			
CCM 6179			307075	HANDRAILS		36	EA	FLT	BMSFC			
CCM 6179			307076	HANDRAIL PIN		36	EA	FLT	BMSFC			
CCM 6179			307077	HANDRAIL PINS		36	EA	FLT	BMSFC			
CCM 6179			307078	HANDRAILS		18	EA	FLT	BMSFC			
02-765 per CCM 6179			307079	HANDRAIL SAPA #6		1	EA	FLT	BMSFC			
CCM 6983			307080	MTC TARGET		2	EA	FLT	BMSFC			
CCM 6983			307081	HANDRAIL		4	EA	FLT	BMSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 6983			307082	HANDRAIL PIN		4	EA	FLT	BMSFC			
CCM 6983			307083	HANDRAIL PIN		4	EA	FLT	BMSFC			
CCM 6983			307084	HANDRAIL		2	EA	FLT	BMSFC			
CCM 6983			307085	HANDRAIL		8	EA	FLT	BMSFC			
CCM 6983			307086	HANDRAIL		2	EA	FLT	BMSFC			
02-765 per CCM 6179			307087	QUARTER TURN FASTENERS		10	EA	FLT	TBE			
02-765 per CCM 6179			307088	NUT PLATE, LATCH		10	EA	FLT	TBE			
02-765 per CCM 6179			307089	PLATE, LATCH		10	EA	FLT	TBE			
CCM 8037, S/A 1309			307097	COVER ASSEMBLY, WINDOW - HATCH		3	EA	FLT	B-MSFC			
CCM 9201, S/A 1338			307098	TOP MOUNTED HANDRAIL ASSEMBLY		2	EA	FLT	MSFC			
CCM 9201, S/A 1338			307099	TOP MOUNTED HANDRAIL ASSEMBLY		2	EA	FLT	MSFC			
CCM 9722, S/A 1363			316800	ACTEX FILTER ASSY		1	EA	FLT	BMSFC			
CCM 9722, S/A 1363			316801	QUICK DISCONNECT		1	EA	FLT	BMSFC			
CCM 9722, S/A 1363			316802	QUICK DISCONNECT		1	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316815	RACK ASSY, RFR		2	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316816	ACY SYSTEM		1	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316817	ACY PRIVACY ENCLOSURE		1	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316818	RACK MIXING FAN ASSY, HRF		2	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316819	ACTEX FILTER ASSY		1	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316822	DC TO DC CONVERTER MODULE		64	EA	FLT	BMSFC			
CCM 9831, S/A 1464			316823	BSSPCM		**	EA	GRD	Wildwood			
CCM 9831, S/A 1464			316824	BSSPCM		**	EA	FLT	Wildwood			
CCM 9831, S/A 1464			316825	BSSPCM		**	EA	FLT	Wildwood			
CCM 9831, S/A 1464			316826	1553 Hybrid Module Microcircuit		1*	EA	FLT	Wildwood			
CCM 9831, S/A 1464			316827	Transistor		30	EA	FLT	Wildwood			
CCM 10030, S/A 1488			316826	ACY SYSTEM		1	EA	GSE	BMSFC			
CCM 10030, S/A 1488			316827	ACY PRIVACY ENCLOSURE		1	EA	GSE	BMSFC			
CCM 10030, S/A 1488			316828	ACY SYSTEM		1	EA	GSE	BMSFC			ID number updated on Mod 1563 due to duplication.
CCM 10030, S/A 1488			316829	ACY PRIVACY ENCLOSURE		1	EA	GSE	BMSFC			ID number updated on Mod 1563 due to duplication.
CCM 10318, S/A 1507			316832	6- POST RACK ASSY		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316834	EDDIE-BOLT 2 PIN		8	EA	FLT	B-MSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10318, S/A 1507			316835	EDDIE-BOLT 2 PIN		44	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316836	EDDIE-BOLT 2 PIN		68	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316837	EDDIE-BOLT 2 PIN		120	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316838	EDDIE-BOLT 2 PIN		36	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316839	ASSY, TOP PLATE, LEFT		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316840	ASSY, TOP PLATE, RIGHT		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316841	STIFFENER		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316842	STIFFENER		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316843	DOUBLE PLATE ASSY		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316844	JUMPER ASSY		4	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316854	DRILL JIG		1	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316855	ROUTING FIXTURE		1	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316856	DRILL JIG		1	EA	FLT	B-MSFC			
CCM 10405, S/A 1496			316857	CARBON DIOXIDE REMOVAL ASSEMBLY (CDRA)		1	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316858	69" SEAT TRACK		4	EA	GSE	BMSFC			
CCM 10030, S/A 1488			316859	69" SEAT TRACK		4	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316860	CONNECTOR		4	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316861	CABLE CLAMP SET		4	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316862	CONNECTOR		6	EA	FLT	BMSFC			
CCM 10030, S/A 1488			316863	CABLE CLAMP SET		6	EA	FLT	BMSFC			
CCM 10318, S/A 1507			316864	TORQUE ROD ASSEMBLY		2	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316870	POST STABILIZER		12	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316871	CLIP		28	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316872	EDDIE BOLT		56	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316873	SCREW		64	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316874	NUT, LOCK		64	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316875	WASHER		88	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316876	WASHER		52	EA	FLT	B-MSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10318, S/A 1507			316877	HHR FLIGHT RACK		1	EA	FLT	B-MSFC			
CCM 10318, S/A 1507			316878	HHR QUAL RACK		1	EA	QUAL	B-MSFC			
CCM 10775, S/A 1482			316884	CLAMP, SPLIT		4	EA	FLT	BMSFC			
CCM 10775, S/A 1482			316885	CLAMP, SPLIT		5	EA	FLT	BMSFC			
SSCM 10829, S/A 1563	SpaceX		316886	Couplers, Radio Frequency		5	EA	FLT	BMSFC			Added on Mod 1563
CCM 11069 S/A1528			316895	SERIAL-PARALLEL DEVICE (SPD) CARD		4	EA	GSE	KSC			Changed from FLT to GSE per SSCN 11069.
CCM 11171, S/A 1548			316896	CLAMP, ROUND, V-BAND		1	EA	FLT	B-MSFC			
CCM 10560, S/A 1552			316887	N3-LAB LOOP A AMMONIA HOSE KIT - SUPPLY		1	EA	FLT	B-MSFC			
CCM 10560, S/A 1552			316888	N3-LAB LOOP A AMMONIA HOSE KIT - RETURN		1	EA	FLT	B-MSFC			
CCM 10560, S/A 1552			316889	N3-LAB LOOP B AMMONIA HOSE KIT - SUPPLY		1	EA	FLT	B-MSFC			
CCM 10560, S/A 1552			316890	N3-LAB LOOP B AMMONIA HOSE KIT - RETURN		1	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316898	HANDRAIL TUBE		4	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316899	PIN		4	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316900	PIN		4	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316901	ATA QUAL ORU		1	EA	QUAL	B-MSFC			
CCM 10595 S/A 1550			316902	NUT, SLIDE		54	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316903	SHIM		60	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316904	SLIDE, TENSION		36	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316905	SQUARE RING		90	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316906	SHIM		40	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316907	RETAINER, PIN		18	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316909	RETAINER, BLOCK		18	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316910	RECTANGULAR BLOCK		18	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316911	BLOCK, SLIDE		18	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316912	SLIDE, SHEAR		18	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316913	WASHER, ELC		54	EA	FLT	B-MSFC			
CCM 10560, S/A 1552			316915	SHIELD ASSY KIT, END CONE		1	EA	FLT	B-MSFC			

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
CCM 10560, S/A 1552			316916	MULTILAYER INSULATION BERTHING MECHANISM ASSEMBLY LAB A		4	EA	FLT	B-MSFC			
CCM 10560, S/A 1552			316917	MULTILAYER INSULATION ASSEMBLY, LAB A BERTHING MECHANISM		4	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316918	SLIDE, TENSION		36	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316919	TOP MOUNTED HANDRAIL ASSEMBLY		4	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316920	HIP KINEMATIC MOUNT, TENSION		1	EA	FLT	B-MSFC			
CCM 10595 S/A 1550			316921	HIP KINEMATIC MOUNT, SHEAR		1	EA	FLT	B-MSFC			
SSCN 10560			316926	METEOROID DEBRIS COVER CENTER SECTION ASSEMBLY		1	EA	FLT				Added via letter 09-0301
SSCN 10560			316927	METEOROID DEBRIS COVER CENTER SECTION ASSEMBLY			EA	FLT				Added via letter 09-0301
SSCN 10560			316928	O1 POST ASSY, FRONT		1	EA	FLT				Added via letter 09-0301
SSCN 10560			316929	O1 POST ASSY, REAR			EA	FLT				Added via letter 09-0301
SSCN 10560			316930	PIN, ATTACHMENT		1	EA	FLT				Added via letter 09-0301
SSCN 10560			316931	PIN, ATTACHMENT		1	EA	FLT				Added via letter 09-0301
SSCN 10560			316932	PLATE, LATCH		12	EA	FLT				Added via letter 09-0301
SSCN 10560			316933	NUT PLATE, LATCH		12	EA	FLT				Added via letter 09-0301
SSCN 10560			316934	BACK PLATE, QUARTER TURN FASTENER		14	EA	FLT				Added via letter 09-0301
SSCN 10560			316935	QUARTER TURN ASSY		14	EA	FLT				Added via letter 09-0301
SSCN 10560			316936	HOOK ASSEMBLY EQUIPMENT		11	EA	FLT				Added via letter 09-0301
SSCN 10560			316937	REMOTE MANUAL OVERRIDE ASSY, IMV		1	EA	FLT				Added via letter 09-0301
SSCN 11372, Mod 1595			316938	AV3 RACK ASSEMBLY MOCKUP	TBD	1	EA	GSE	B-MSFC	2/6/2009	2/6/2009	Added by Mod 1595
SSCN 11069			316939	SERIAL-PARALLEL DEVICE (SPD) CARD		1	EA	GSE	KSC			Added per SSCN 11069
SSCN 11625, Mod 1628			316942	Russian Interface Hydro Connector - Female	y008036-006	10	EA	FLT	B-MSFC	6/7/2010	6/7/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316943	Russian Interface Hydro Connector - Male	y008019-012A	2	EA	Non-Flt	B-MSFC	6/7/2010	6/7/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316944	Returned RFTA Filter Set		1	EA	FLT	B-MSFC	8/17/2009	8/17/2009	Added by Mod 1628
SSCN 11625, Mod 1628			316945	Returned RFTA Filter Set		1	EA	FLT	B-MSFC	9/9/2009	9/9/2009	Added by Mod 1628
SSCN 11625, Mod 1628			316946	Returned RFTA Filter Set		1	EA	FLT	B-MSFC	4/2/2010	4/2/2010	Added by Mod 1628
SSCN 11372, Mod 1595			316948	ICU Mock-up		2	EA	Non-Flt	B-MSFC	12/4/2009	12/4/2009	Added per SSCN 11372
SSCN 11625, Mod 1628			316978	Valve Spool, RFTA	96M12333-1	1	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316979	Handle Rail, RFTA	96M12334-1	1	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316980	Handle Body, RFTA	96M12335-1	1	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316981	Bushing, RFTA	96M12336-1	1	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 11625, Mod 1628			316982	Washer, RFTA	96M12337-1	1	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316983	Valve Cap, RFTA	96M12341-1	1	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316984	Fitting	RFN9804-13	2	EA	FLT	B-MSFC	4/15/2010	4/15/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316985	Valve Spool, RFTA	96M12333-1	4	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316986	Handle Rail, RFTA	96M12334-1	4	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316987	Handle Body, RFTA	96M12335-1	4	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316988	Bushing, RFTA	96M12336-1	4	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316989	Washer, RFTA	96M12337-1	4	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316990	Valve Cap, RFTA	96M12341-1	4	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11625, Mod 1628			316991	Fitting	RFN9804-13	8	EA	FLT	B-MSFC	8/10/2010	8/10/2010	Added by Mod 1628
SSCN 11801; CCO 1636			316992	Cable	16 AWG	60	FT	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316993	Connector	NATC06G25LN3S B	1	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316994	Connector	NATC06G25LN7S N	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316995	Connector	NATC06G25N35S C	8	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316996	Connector	NATC07T25LN7PC	1	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316997	Connector	NATC07T25N35PC	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316998	Cap	NATC-PPC-N-25-0	11	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			316999	Cap	NATC-RPC-N-25-0	3	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317000	Jumper, 1553 B LB-A	1F89741-1	1	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317001	Jumper, 1553 B LB-B	1F89743-1	1	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317002	M/W A4 Node IMV Supply	683-92226-4	1	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 12141, Mod 1629			317017	SSPCM	9070147-1 or 683- 46314-1	1	EA	FLT	B-MSFC	7/1/2010	5/1/2010	Added by Mod 1629
SSCN 12158, Mod 1629			317018	8/2 EXPRESS Rack Assembly ARIS	683-46052-1	1	EA	FLT	KSC	6/23/2010	6/1/2010	Added by Mod 1629
SSCN 11801; CCO 1636			317019	Cable	NDBC-TFE-22-2SJ- 75	200	FT	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317020	Cable	NSFW-SIL-8	80	FT	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317021	Backshell	NZGA-SG-25-N-12	6	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317022	Backshell	NZGA-SG-25-N-16	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317023	Backshell	NZGA-SG-25-N-24	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 11801; CCO 1636			317024	Backshell	NZGA-SG-25-N-28	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317025	Backshell	NZGA-SG-25-N-40	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317026	Contact	NZGC-C-22DSB	98	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317027	Contact	NZGC-C-22DSB	38	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317028	Contact	NZGC-C-22DSB	74	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317029	Contact	NZGC-C-4SB	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317030	Contact	NZGC-C-8PB	2	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317031	Contact	NZGC-C-8SB	6	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317032	Seal Plug	NZGSP-22DP	160	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317033	Seal Plug	NZGSP-22DS	912	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317034	Seal Plug	NZGSP-4	1	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317035	Seal Plug	NZGSP-8	13	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317036	Cap	NATC-PPC-N-09-0	6	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317037	Cap	NATC-PPC-N-11-0	12	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317038	Cap	NATC-PPC-N-13-0	24	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317039	Cap	NATC-PPC-N-15-0	4	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317040	Cap	NATC-RPC-N-09-0	6	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317041	Cap	NATC-RPC-N-11-0	12	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317042	Cap	NATC-RPC-N-13-0	24	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 11801; CCO 1636			317043	Cap	NATC-RPC-N-15-0	4	EA	FLT	B-MSFC	3/31/2010	3/31/2010	Added by CCO 1636
SSCN 12325; S/A 1648			317044	Suitcase Test Environment for Payloads (STEP)	683-21446-1	2	EA	GSE	B-MSFC	7/12/2010	7/12/2010	Added by S/A 1648
SSCN 12378; S/A 1803, 1832			317424	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		12/13/2013	Changed need date per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317425	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		12/20/2013	Changed need date per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317426	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		2/3/2014	Changed need date per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317427	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		2/6/2014	Changed need date per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317428	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		3/10/2014	Changed need date per S/A 1832. Added per S/A 1803

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12465; S/A 1685			317440	Passive FRAM Drill Template	1J00517-003	1	EA	GSE	OSS		12/1/2010	Added by S/A 1685
SSCN 12465; S/A 1685			317443	Pin, Z	683-97530-1	2	EA	FLT	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317444	Pin, Z	683-97530-2	2	EA	FLT	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317445	Top Mounted Handrail Assy	SEG33106347-823	2	EA	FLT	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317446	Top Mounted Handrail Assy	SEG33106347-851	4	EA	FLT	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317447	Cable Assembly, W2 LMC FRAM	683-97790-2	1	EA	FLT	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317448	Passive FRAM Installation Kit	1J00520-009	1	EA	FLT	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317449	Alignment Fixture Assy PFRAM	683-97110-001	1	EA	GSE	BHOU		1/7/2011	Added by S/A 1685
SSCN 12465; S/A 1685			317451	LMC Tooling Assy - ATA FSE	DJ683-97540-1	1	EA	GSE	OSS		12/1/2010	Added by S/A 1685
SSCN 12465; S/A 1685			317452	Insert Retainer Location Tool	DJ683-97718-1	1	EA	GSE	OSS		12/1/2010	Added by S/A 1685
SSCN 12465; S/A 1685			317453	Crosstie, Flat, Long	9008368-1	2	EA	FLT	BHOU		12/1/2010	Added by S/A 1685
SSCN 12546; S/A 1706			317454	Random Vibration Stand	SK683-97082	1	EA	GSE	B-MSFC		3/1/2011	Added by S/A 1706
SSCN 12546; S/A 1706			317456	Kit, Connector Cables	SK683-80528	1	EA	GSE	B-MSFC	1/4/2011	1/4/2011	Added by S/A 1706
SSCN 12443; S/A 1771			317457	Laptop Computer, Model T61P	6457-HU1	1	EA	GSE	B-MSFC		10/21/2011	Added per S/A 1771
SSCN 12803; S/A 1859			317474	Valve Spool, RFTA	96M12333-1	3	EA	FLT	B-MSFC	10/31/2011	10/31/2011	Added per S/A 1859
SSCN 12803; S/A 1859			317475	Handle Rail, RFTA	96M12334-1	3	EA	FLT	B-MSFC	10/31/2011	10/31/2011	Added per S/A 1859
SSCN 12803; S/A 1859			317476	Handle Body, RFTA	96M12335-1	3	EA	FLT	B-MSFC	10/31/2011	10/31/2011	Added per S/A 1859
SSCN 12803; S/A 1859			317477	Bushing, RFTA	96M12336-1	3	EA	FLT	B-MSFC	10/31/2011	10/31/2011	Added per S/A 1859
SSCN 12803; S/A 1859			317478	Washer, RFTA	96M12337-1	3	EA	FLT	B-MSFC	10/31/2011	10/31/2011	Added per S/A 1859
SSCN 12803; S/A 1859			317479	Valve Cap, RFTA	96M12341-1	3	EA	FLT	B-MSFC	10/31/2011	10/31/2011	Added per S/A 1859
SSCN 12788; S/A 1782			317481	Panel Handle Latch Assy – ISIS	683-43700-3	10	EA	FLT	B-MSFC		11/1/2011	Added per S/A 1782
SSCN 12788; S/A 1782			317482	Panel Handle Latch Assy – ISIS	683-43700-4	10	EA	FLT	B-MSFC		11/1/2011	Added per S/A 1782
SSCN 12836; S/A 1786			317500	T61 Laptop Computer	SEG33120761-301	4	EA	GSE	B-MSFC		1/16/2012	Added per S/A 1786
SSCN 12836; S/A 1786			317501	Symantec Endpoint Protection Software (as defined by the ISS program for Onboard and Ground Government-Owned laptops)	TBD	1	EA	FLT	B-MSFC		6/16/2012	Updated nomenclature and need date per letter 12-011920 concurrence dated 08/27/2012. Added per S/A 1786
SSCN 12836; S/A 1786			317502	Virus Definition Updates	TBD	As Req'd	EA	FLT	B-MSFC		12/5/2012	Added per S/A 1786
SSCN 12836; S/A 1786			317503	SSC Software (w/ Virus Definition push to EXPRES Laptop capability)	TBD	1	EA	FLT	B-MSFC		11/13/2012	Added per S/A 1786

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 12209; S/A 1825, 1932			317507	CASEO Tabletop Mock-up	N/A	1	EA	MCK	JSC	2/10/2012	2/10/2012	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			317508	CASEO XYZ Interface Mock-up, Seat-track Mount	N/A	1	EA	MCK	JSC	2/10/2012	2/10/2012	Added per S/A 1825
SSCN 12639; S/A 1999			317509	Cold Plate	683-56045-8	2	EA	FLT	B-MSFC	6/1/2012	6/1/2012	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12639; S/A 1999			317510	Labels for Mod Kit Hardware	683-98358	1	EA	FLT	B-MSFC		12/16/2013	Added per definitization of SSCN 12639 on S/A 1999.
SSCN 12209; S/A 1825, 1932			317518	Connector, Receptacle, Jam Nut, Power	NATC07T15N4PN	1	EA	FLT	BHSV		4/30/2012	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			317519	Backshell, 90 deg	NZGA-SG-15-N-12	3	EA	FLT	BHSV		4/30/2012	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			317520	Quick Disconnet, Female	683-15179-32	1	EA	FLT	BHSV	2/20/2013	4/30/2012	Updated nomenclature per SSCN 12209 credit definitized on S/A 1932Added per S/A 1825
SSCN 12209; S/A 1825, 1932			317521	Pressure Cap, Male	683-15179-52	1	EA	FLT	BHSV	2/20/2013	4/30/2012	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			317522	Pressure Plug, Female	683-15179-60	3	EA	FLT	BHSV	2/20/2013	4/30/2012	Added per S/A 1825
SSCN 12209; S/A 1825, 1932			317523	Plug	683-16347-816	2	EA	FLT	BHSV	2/20/2013	4/30/2012	Added per S/A 1825
SSCN 12916; S/A 1947			317524	Suitcase Test Environment for Payloads (STEP) Interface Cable	683-21447-1	9	EA	GSE	B-MSFC		4/14/2014	Added per SSCN 12916 definitized on S/A 1947
SSCN 12916; S/A 1947			317525	EXPRESS Rack Suitcase Simulator (ScS) Middeck Locker Interface Cable	683-65074-2	2	EA	GSE	B-MSFC		4/14/2014	Added per SSCN 12916 definitized on S/A 1947
SSCN 12916; S/A 1947			317526	EXPRESS Rack ScS ISIS Interface Cable	683-65073-2	2	EA	GSE	B-MSFC		4/14/2014	Added per SSCN 12916 definitized on S/A 1947
SSCN 12916; S/A 1947			317527	PIX Router (Cisco 501 Series)	TBD	5	EA	GSE	B-MSFC		4/14/2014	Added per SSCN 12916 definitized on S/A 1947
SSCN 12378; S/A 1832			317528	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		5/19/2014	Added per S/A 1832
SSCN 12378; S/A 1832			317529	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		5/28/2014	Added per S/A 1832
SSCN 12378; S/A 1832			317530	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		7/1/2014	Added per S/A 1832
SSCN 12378; S/A 1832			317531	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		7/7/2014	Added per S/A 1832
SSCN 12378; S/A 1832			317532	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	B-MSFC		8/7/2014	Added per S/A 1832
CCM 6052 - S/A 1183			031796	HATCH FITTINGS (SPARE)		4	EA	FLT	BHSV			
CCM 6052 - S/A 1183			031797	HATCH CBCS TARGET ASSEMBLY HATCH TARGET		4	EA	FLT	BHSV			
SSCN 13324; S/A 1960			317888	Integrated Motor/Controller Assy (MCA)	1F03158-515	1	EA	FLT	B-MSFC		5/1/2014	Added per SSCN 13324 definitized on S/A 1960
SSCN 12639; S/A 1999			318026	Stereolithography Box (C2V2 Comm Unit)		2	EA	MCK	B-MSFC	1/7/2013	1/7/2013	Added per definitization of SSCN 12639 on S/A 1999.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13571; S/A 1927			318031	Protective Cap	NATC-PPC-N-25-0	1	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318032	Protective Cap	NATC-RPC-N-25-0	1	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318033	Connector	NATC06G25LN3P N	1	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318034	Connector	NATC07T25LN3SN	1	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318035	Backshell	NZGA-SG-25-N-36	2	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318036	Contact	NZGC-C-4PB	2	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318037	Contact	NZGC-C-4SB	2	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318038	Seal Plug	NZGSP-8	2	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318039	Wire, 8 AWG	NSFW-SIL-8	120	EA	FLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318040	Connector	D38999/26FJ3PN	1	EA	NonFLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318041	Connector	D38999/24FJ3SN	1	EA	NonFLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318042	Backshell	447HS364M2528	2	EA	NonFLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13571; S/A 1927			318043	Wire, 12 AWG	M27500-12RE2U00	200	EA	NonFLT	B-MSFC		2/15/2013	Added per SSCN 13571 definitized on S/A 1927
SSCN 13501; S/A 1989			318044	Connector	NATC06G25N24P B	2	EA	FLT	B-MSFC		7/8/2013	Added per SSCN 13501 definitized on S/A 1989
SSCN 13501; S/A 1989			318045	Connector	NATC07T25N24SB	1	EA	FLT	B-MSFC		7/8/2013	Added per SSCN 13501 definitized on S/A 1989
SSCN 13501; S/A 1989			318046	Connector	NATC0625N29SC	1	EA	FLT	B-MSFC		7/8/2013	Added per SSCN 13501 definitized on S/A 1989
SSCN 13781; S/A 2005			321004	Connector	MS27467T17F6P	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321005	Connector	NB6GE14-4SNT	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321006	Cable	M27500-12RE3U06	72	FT	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321007	Backshell	NB-S-14	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321008	Protective Cover	660-012M17H8-02	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321009	Protective Cap	NB-PPC-14C	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321010	Connector	MS27467T15F35P	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321011	Connector	MS27467T15F35S	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321012	Protective Cover	660-012M15H12- 01	12	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321016	Backshell	M85049/36-14N05	12	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321017	Cable	NDBC-TFE-22-2SJ- 75	72	FT	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13781; S/A 2005			321018	Cable	NDBC-TFE-22-2SJ- 100	432	FT	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.

INTERNATIONAL SPACE STATION PROGRAM
J-2 GOVERNMENT FURNISHED EQUIPMENT (GFE) LIST - REVISION 112

NAS15-10000
MOD 2054 (S/A)

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	HDWE TYPE	DEST'N	RECVD. DATE(AF)	NEED DATE	Comments
SSCN 13789; S/A 2003			321021	C2V2 Comm Unit Bottom Plate Assembly	TBD	4	EA	FLT	B-MSFC		3/31/2014	Added per definitization of SSCN 13789 on S/A 2003.
SSCN 13781; S/A 2005			321022	Backshell	M85049/49-2-16N	6	EA	FLT	B-MSFC		8/9/2013	Added per definitization of SSCN 13781 on S/A 2005.
SSCN 13822; S/A 2035			321049	Wire	NSFW-SIL-4	10	FT	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321050	Wire	NSFW-SIL-8	10	FT	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321051	Backshell	NZGA-SX-15-N-16	1	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321052	Backshell	NZGA-SG-15-N-16	2	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321053	Backshell	NZGA-SX-25-N-32	1	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321054	Backshell	NZGA-SG-25-N-32	1	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321055	Contacts	NZGC-C-4-SB	10	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321056	Contacts	NZGC-C-16PB	18	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321059	Connector	NATC06G15N97P N	2	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321060	Connector	NATC06G25LN7S N	1	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321061	Connector	NATC06G15N97P A	1	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13822; S/A 2035			321062	Connector	NATC07T25LN3SN	1	EA	FLT	B-MSFC		1/6/2014	Added per definitization of SSCN 13822 on S/A 2035.
SSCN 13799; S/A 2051			321068	HOSC DTN-2 DTN Nodes	TBD	2	EA	FEU	B-MSFC		6/1/2014	Added per definitization of SSCN 13799 on S/A 2051.

*NOTE: Microcircuit needed to repair the 1553 anomaly on BSPCM S/N13 - available from Wildwood but is no longer procurable

**NOTE: Total Requirement - 12 Units, 1st Unit must be S/N 13. Any part number of BSSPCM can be substituted to meet the total quantity of 12 units,

Attachment J-2 - CHANGE LOG

REV	DATE	CHANGES MADE	CHANGES POSTED BY
Rev 97; Mod 1563	1/9/2009	TAB 1 - Section I: GFE/US. Incorporated additions from the following: Mod 1481 PIO 93 Mod 1557 SSCN 10990 Mod 1563 SSCN 10829 Corrected duplicate ID numbers from SSCN 10030 (316826 & 827 to 316828 & 829)	D. Clemons Sr.
Rev 98; Mod 1566	2/12/2009	TAB 1 - Section I: GFE/US. Deleted ID number 000700 via directive 5052 Rev. 1 dated 01/14/2009.	E. Hale
Rev 99; Mod 1570		TAB 1 - Section I: GFE/US. Added ID number 001342 via Mod 1570. Added ID numbers 001364 through 001373 via letter 09-0301 dated 02/24/2009. Added ID numbers 316926 through 316937 via letter 09-0301 dated 02/24/2009. Deleted ID number 316897 via letter 09-0301 dated 02/24/2009. Added ID numbers 001359 through 001363 per PIO 97 on Mod 1570. Updated ID number 316895 and added 316939 per SSCN 11069.	E. Hale
Rev 100; Mod 1590	7/23/2009	Tab 1 - Section I: GFE/US Added ID numbers 001430 thru 001434 per SSCN 11348 definitized on Mod 1589. Added ID numbers 001405 thru 001427 per SSCN 11670 definitized on Mod 1577. Added ID numbers 001356 thru 001358 per SSCN 11311 definitized on Mod 1583. Added ID number 001435 per SSCN 11745 on Mod 1590.	E. Hale
Rev 101; Mod 1594	8/13/2009	TAB 1 - Section I: GFE/US Added ID Number 001444 per definitization of SSCN 11848 on Mod 1594.	E. Hale
Rev 102; Mod 1598	9/10/2009	TAB 1 - Section I: GFE/US Added ID Numbers 001353, 001403, 001443 and 316938 per definitization of SSCN 11372 on Mod 1595. Added ID Numbers 001445 thru 001449 per SSCN 11809 on Mod 1598.	E. Hale
Rev 103; Mod 1637	4/20/2010	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1599 SSCN 11431 Mod 1609 SSCN 11404, 11908 Mod 1624 SSCN 12140 Mod 1628 SSCN 11625 Mod 1629 SSCN 12141, 12158 Mod 1633 SSCN 12085 Mod 1637 SSCN 11885 Updated destination and need dates on ID Numbers 001430 thru 001434.	E. Hale

Attachment J-2 - CHANGE LOG

REV	DATE	CHANGES MADE	CHANGES POSTED BY
Rev 104; Mod 1658	8/13/2010	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1636, SSCN 11801 Mod 1610, SSCN 11812 Mod 1641, SSCN 12270, 12159 Mod 1648, SSCN 12325, 12275 Revised directive signed 05/20/2010, SSCN 12062 Revised directive signed 07/30/2010, SSCN 11553 Mod 1658, SSCN 11947	E. Hale
Rev 105; Mod 1693	12/14/2010	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1685, SSCN 12465 Mod 1679, SSCN 12521	E. Hale
Rev 106; Mod 1733	5/12/2011	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1698, PIO 99 Mod 1701, SSCN 12455 Mod 1706, SSCN 12546 Mod 1713, SSCN 12556 Mod 1717, SSCN 12721 Mod 1720, SSCN 12753 Mod 1728, SSCN 12719 Mod 1733, SSCN 12778	E. Hale
Rev 107; Mod 1752	8/15/2011	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1736, SSCN 12693 Mod 1743, SSCN 12810 Mod 1742, SSCN 12446 Mod 1752, SSCN 12852, 12816	E. Hale

Attachment J-2 - CHANGE LOG

REV	DATE	CHANGES MADE	CHANGES POSTED BY
Rev 108; S/A 1816	3/5/2012	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1769, SSCN 10395 Mod 1771, SSCN 12443 Mod 1782, SSCN 12788 Mod 1785, SSCN 12422 Mod 1786, SSCN 12836, 12854, 13070 Mod 1790, PIO 98 Mod 1791, SSCN 12784 Mod 1792, SSCN 12202 Mod 1794, SSCN 12283 Mod 1797, SSCN 12358 Mod 1802, SSCN 12441 Mod 1803, SSCN 12378 Mod 1808, SSCN 12816 Mod 1809, SSCN 13123 Mod 1816, PIO 101	E. Hale

Attachment J-2 - CHANGE LOG

REV	DATE	CHANGES MADE	CHANGES POSTED BY
Rev 109; S/A 1878	8/7/2012	TAB 1 - Section I: GFE/US Incorporated additions from the following: Mod 1822, SSCN 13057 Mod 1824, SSCN 13184 Mod 1825, SSCN 12209 Mod 1827, SSCN 12860 Mod 1829, SSCN 12870 Mod 1834, SSCN 12831 Mod 1832, SSCN 12378 Mod 1839, SSCN 13096 Mod 1841, SSCN 13245 Mod 1842, SSCN 13243 Mod 1852, SSCN 13276 Letter 12-005961, SSCN 12202 Mod 1856, SSCN 13190 Mod 1854, SSCN 12443 Mod 1859, SSCN 12803 Mod 1865, SSCN 13097 Mod 1874, SSCN 13300 Mod 1878, SSCN 13209	E. Hale

Attachment J-2 - CHANGE LOG

REV	DATE	CHANGES MADE	CHANGES POSTED BY
Rev 110; S/A 1975	4/19/2013	TAB 1 - Section I: GFE/US Incorporated updates and additions from the following: Letter 12-011920, SSCN 12836 S/A 1887, SSCN 13204 S/A 1900, SSCN 13312 S/A 1922, PIO 106 S/A 1925, SSCN 13267 S/A 1927, SSCN 13571 S/A 1932, SSCN 12209 Credit S/A 1943, SSCN 13047 S/A 1944, SSCN 12837 S/A 1947, SSCN 12916 S/A 1952, PIO 103 S/A 1959, SSCN 13121 S/A 1960, SSCN 13324 S/A 1961, PIO 105 S/A 1963, SSCN 13528 S/A 1975, SSCN 13641	E. Hale
Rev 111; S/A 1995	6/12/2013	TAB I - Section I: GFE/US 1) Added items 003709-003710 per letter 13-006139 concurrence dated 04/23/2013. 2) Updated delivery date and quantity of items 003631-003632 per letter 13-006139 concurrence dated 04/23/2013. 3) Added items 003696-003703 per definitization of SSCN 13241 on S/A 1974. 4) Added items 318044-318046 per definitization of SSCN 13501 on S/A 1989. 5) Added items 003922-003928 per definitization of PIO 109 on S/A 1981. 6) Added items 004573-004574 and 004630-004632 per definitization of SSCN 13763 on S/A 1995.	E. Hale

CHANGE NUMBER	DEVELOPER INDIVID/ORG	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	FLT. NO.	DEST'N	RECVD. DATE(AF)	REMARKS
CCM 5052			000700	PFE COVERS	11	EA	FLT		KSC		Deleted ID number 000700 via directive 5052 Rev. 1 dated 01/14/2009.
SSCN 12202; S/A 1792			001643	Tool, Holding, NATC Plug	1	EA	ST	NFS	HSR		Deleted per letter 12-005961 concurrence dated 06/11/2012. Added per S/A 1792
SSCN 12443; S/A 1771			001962	Brick, Cobalt	4	EA	FLT	NFS	BHOU		Deleted per S/A 1854. Added per S/A 1771
CCM 10560, S/A 1552			316897	HANDRAIL ASSEMBLY, 24" LG	1	EA	FLT		B-MSFC		Deleted ID number 316897 via letter 09-0301 dated 02/24/2009.
SSCN 12378; S/A 1803, 1832			317429	iPEHG Flight Unit	1	EA	FLT	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317430	iPEHG Flight Unit	1	EA	FLT	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317431	iPEHG Flight Unit	1	EA	FLT	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317432	iPEHG Ground Unit	1	EA	GSE	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317433	iPEHG Ground Unit	1	EA	GSE	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317434	iPEHG Ground Unit	1	EA	GSE	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317435	iPEHG Ground Unit	1	EA	GSE	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317436	iPEHG Ground Unit	1	EA	GSE	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803
SSCN 12378; S/A 1803, 1832			317437	iPEHG Ground Unit	1	EA	GSE	NFS	B-MSFC		Deleted per S/A 1832. Added per S/A 1803

ATTACHMENT J-2/Section II
Government Furnished Material

SECTION II: GOVERNMENT FURNISHED MATERIAL

In accordance with clause G-12 Government Furnished Material, the following materials will be furnished by the Government:

- (a) Liquid Nitrogen (LN2)
- (b) Ammonia
- (c) Liquid Argon
- (d) Gaseous Helium
- (e) Xenon
- (f) Decals
- (g) Placards
- (h) Inventory Tags
- (i) Handrail Dog Bone

**Attachment J-2/Section III
Government Furnished Data**

RESPON. TEAM	STAT CODE	TTA/ID	PRODUCT	FIDELITY	SOURCE	NEED DATE	DISPOSITION
LP/1	A	MT-45-1	NASA/RSA Joint Tech. Standards Doc. (Draft)	Data	MSFC/SSPO	1/30/95	
LP/2	A	JT-2-1	Joint Airlock TN Report	Data	JSC/Eng	9/30/96	
LP/5	A	LT-4A-1	Battery Life Test 26% & 31% KOH Perf. Rep.	Data	LeRC	Monthly	
C&DH	A	MT-8-2	SAMS MDM Sims/Reports	Data	MSFC	9/30/95	
C&T	A	JT-11-1	Space-to-Space Comm Sys ICD	Data	JSC/Eng	6/30/95	Updates as Req.
C&T	A	JT-11-2	USOS to Ground System ICD	Data	JSC/Eng	1/31/95	Updates as Req.
C&T	A	JT-14-1	Communications Coverage Reports	Data	JSC/Eng	DACs	
C&T	A	MT-43-1	Internal Audio/Video Breadboard Test Results	Data	MSFC	12/31/95	
EP	A	JT-20-1	Wiring Environmental Test Reports	Data	JSC/Eng	9/30/95	
EP	A	JT-20-2	Power Interface Test Reports	Data	JSC/Eng	6/30/95	
EP	A	LT-9D-1	EPS Performance Assessments	Data	LeRC	DACs	
EP	A	LT-13-1	Secondary Power System Test Reports	Data	LeRC	As Required	
EP	A	MT-44-1	EPS Breadboard Test Results	Data	MSFC	As Required	
EVAS	A	JT-18-1	EVA Test Plans and Reports	Data	JSC/Eng	As Required	
EVAS	A	JT- 81-1	Data Sets of EMU	Data	JSC/Eng	12/31/94	Updates as Req.
EVR	A	JT-26A-1	ORU to RSIS Analysis and Test Reports	Data	JSC/Eng	As Required	
EVR	A	JT-26B-1	Robotic Compatibility Analyses and Test Rep.	Data	JSC/Eng	3/31/95	
EVR	A	JT-43-1	Control Loop Latency Analysis	Data	JSC/Eng	6/15/95	
EVR	A	JT-43-2	Emergency Stop Implementation Trade Study	Data	JSC/Eng	12/31/94	
EVR	A	JT-43-3	Camera/AVU/Robotic Control Arb. Analysis	Data	JSC/Eng	9/30/95	
EVR	A	JT-43-4	Magnetic End Effector Use on ISSA Analysis	Data	JSC/Eng	9/30/95	
EVR	A	JT-43-5	US Robotics Timeline Analysis	Data	JSC/Eng	9/30/95	
EVR	A	JT-43-6	US Dextrous Robotic Trade Studies	Data	JSC/Eng	9/30/95	
EVR	A	JT-43-7	RSIS, Volume II	Data	JSC/Eng	3/31/95	Semi-annual Up.
FCS	A	JT-54-1	FCE Stowage and Config Drawings	Data	JSC/S&LS	As Required	
FCS	A	JT-54-2	Crew I/F - Human Factors Analysis Reports	Data	JSC/S&LS	DACs	
GN&C	A	JT-108-1	GN&C Interface Assessment Reports	Data	JSC/Eng	DACs	
LS	A	MT-26-2	ECLSS Comp. Design & Dev. Report	Data	MSFC	7/31/95	Update As Req.
LS	A	MT-28-1	ECLSS CMIF Test Facility Data	Data	MSFC	As Required	

STAT CODES

A: Prime/NASA Team Lead Agreements Confirmed

B: Prime/NASA Prel. Agreements (Need Team Lead Concurrences)

C: NASA Team Lead Confirmed - Need Prime Team Lead Concurrence

D: Prime Team Lead Confirmed - Need NASA Team Lead Concurrence

RESPON. TEAM	STAT CODE	TTA/ID	PRODUCT	FIDELITY	SOURCE	NEED DATE	DISPOSITION
LS	A	MT-30-1	ECLSS System/Subsystem/Comp. Test Reports	Data	MSFC	IDRs	
S&MS	A	AT-N1-1	Hypervelocity Impact Test Data (Large Size)	Data	ARC	IDR	
S&MS	A	JF-35-1	Hypervelocity Impact Test Data (Hazardous)	Data	WSTF	IDR	
S&MS	A	JT-6-1	S0 Acoustic Test Report	Data	JSC/Eng	3/30/97	
S&MS	A	JT-6-2	S1 Acoustic Test Report	Data	JSC/Eng	7/31/97	
S&MS	A	JT-6-3	P3 Acoustic Test Report	Data	JSC/Eng	9/1/98	
S&MS	A	JT-51-1	Hypervelocity Impact Test Data	Data	JSC/S&LS	As Required	
S&MS	A	LT-17-1	3-Bay Fast Mast Test Report	Data	LeRC	2/1/95	
S&MS	A	MT-11-1	Mechanisms Testbed CBM Test Results	Data	MSFC	4/30/95	
S&MS	A	MT-18-1	Structural Loads Math Model Validation Rep.	Data	MSFC	As Required	
S&MS	A	MT-22-1	Hypervelocity Impact Test Data	Data	MSFC	As Required	
S&MS	A	MT-24-1	Seal Test Data/Reports	Data	MSFC	IDR	
S&MS	A	MT-46-1	M/D Penetration Hole/Crack Analysis Results	Data	MSFC	9/30/95	
TC	A	JT-15A-1	JSC Thermal Test Reports	Data	JSC/ENG	As Required	
VAT	A	JT-29-1	Loads & Dynamics Forcing Functions	Data	JSC/ENG	IDR-9 mo.	
VAT	A	JT-29-2	Loads & Dynamics Loads Documentation	Data	JSC/ENG	IDR-1 mo.	
VAT	A	JT-31-1	Time-phased Int sys electrical loads	Data	JSC/ENG	DACs	
VAT	A	JT-31-2	Time-phased Int sys thermal loads	Data	JSC/ENG	DACs	
VAT	A	JT-31-3	Altitude Strategy	Data	JSC/ENG	DACs	
VAT	A	JT-31-4	Prop Resupply/Return Requirements Anal.	Data	JSC/ENG	DACs	
VAT	A	JT-32-1	Robotic Assembly Seq Assess Doc	Data	JSC/ENG	DACs	
VAT	A	JT-33-1	Assem Anal & Model/Config Databook	Data	JSC/ENG	DACs	
VAT	A	JT-38-1	Int. Dynamics & Control Perf. Assess. Reports	Data	JSC/ENG	DACs	
VAT	A	JT-N3-1	Russian/ESA Vehicle Thruster Firing Histories	Data	JSC/ENG	IDR-6 mo.	
VAT	A	JT-N3-2	ISSA Plume and Docking Loads Assess.	Data	JSC/ENG	IDR-1 mo.	
VET	A	JE-115-1	Environment Measure Pack Def Report	Data	JSC/ENG	9/30/95	
VET	A	JF-34-1	Material and Component Test Reports	Data	WSTF	As Required	
VET	A	JT-30-2	Int Des Contamination Assess. Reports	Data	JSC/ENG	DACs	
VET	A	JT-63-1	Russian Pyro EMI/EMC Test Reports	Data	JSC/ENG	7/31/96	

STAT CODES

A: Prime/NASA Team Lead Agreements Confirmed

B: Prime/NASA Prel. Agreements (Need Team Lead Concurrences)

C: NASA Team Lead Confirmed - Need Prime Team Lead Concurrence

D: Prime Team Lead Confirmed - Need NASA Team Lead Concurrence

RESPON. TEAM	STAT CODE	TTA/ID	PRODUCT	FIDELITY	SOURCE	NEED DATE	DISPOSITION
VET	A	JT-114-1	Beat Frequency Analysis Report	Data	JSC/ENG	9/30/96	
VET	A	JT-N8-1	Material Anomaly Reports	Data	JSC/ENG	As Required	
VET	A	LT-8A-1	Plasma Contactor Cathode Assy Test Data Rep.	Data	LeRC	9/30/95	
VET	A	MT-9-1	EMC System Analysis Reports	Data	MSFC	9/30/95	Update As Req.
VET	A	MT-31-1	Materials Characterization Reports	Data	MSFC	As Required	
VET	A	MT-31-2	Materials Failure Analysis Rep.	Data	MSFC	As Required	
VET	A	MT-58-1	Materials Test Reports	Data	MSFC	As Required	
VET	A	MT-N3-1	MIUL/MUA MAPTIS Database	Data	MSFC	3/30/95	
VIT	A	JE-107-1	GFE Project Imp. Agreement Guidelines Doc.	Data	JSC/Eng	12/1/95	

STAT CODES

A: Prime/NASA Team Lead Agreements Confirmed

B: Prime/NASA Prel. Agreements (Need Team Lead Concurrences)

C: NASA Team Lead Confirmed - Need Prime Team Lead Concurrence

D: Prime Team Lead Confirmed - Need NASA Team Lead Concurrence

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
000022	PCS CSCI (FQT) (2A)	CCM 563			
000022-4	Acceptance Data Package	CCM 2752			
000022-1.2.1	Notes and Comments				
000022-1.2.2	Waiver/Deviation Record				
000022-1.2.3	Unexplained Anomalies Record				
000022-1.2.4	Unplanned/Deferred Work				
000022-1.2.5	Preplanned/Assigned Work				
000022-1.2.6	S/W Specifications Documents				
000022-1.2.7	Program Listing				
000022-1.2.8	Version Description Document				
000022-1.2.9	User's Guide or Syst. Operating Manual				
000022-1.2.10	Certifications				
000022-2	Acceptance Test Report	CCM 563			
000022-4	Software Interface Data				
000022-4.1	S/W Attribute Tables			To be resolved by PCM 239	
000022-4.2	Functional ICD Requirement			To be resolved by PCM 239	
000022-4.4	Input Output constraints				
000022-15	IP&CL	CCM 240		Delivered ccm 240 delivered or NR 12/01/95 (Initial) 03/01/96 (2A-	
000022-22	Qualification Test Plan	CCM 563			
000022-23	Qualification Test Procedure	CCM 563			
000022-24	Qualification Test Report	CCM 563			
000022-26	Problem Reporting & Corrective Action				
000022-28	Spec. Traceability Report Report	CCM 563		(Partial: Trace from SM&C to PTRS) JSC 27274	
000023	PCS CSCI (END ITEM)				
000023-4	Acceptance Data Package	CCM 563			
000023-1.2.1	Historical Log	CCM 563			
000023-1.2.2	Wavier Deviation Records	CCM 563			
000023-1.2.3	Unexplained Anomalies Records	CCM 563			
000023-1.2.4	Unplanned/Deferred Work	CCM 563			
000023-1.2.5	Preplanned/Deferred Work	CCM 563			
000023-1.2.6	S/W Specification Doc	CCM 563			
000023-1.2.7	Program Listing	CCM 563			
000023-1.2.9	User Guide or System Operating Manual	CCM 563			
000023-1.2.10	Certifications	CCM 563			
25	LG AVIONICS BOX ROBOTIC SIMULATOR	ccm 805			
26	MED AVIONICS BOX ROBOTIC SIMULATOR	ccm 287			
28	EXTERNAL VIDEO CAMERA BOOM	ccm 805			
000028-4	Acceptance Data Package	ccm 805			
29	EXTERNAL VIDEO CAMERA BOOM	ccm 805			
000029-4	Acceptance Data Package	ccm 805			
30	P3, SARJ RJMC STRUCTURE	ccm 287			
31	SO FACE 1 STRUCTURE	ccm 287			
131	EPCS CSCI (2A FQT)	CCM 563			
000131-4	Acceptance Data Package	CCM 2752			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000131-4.1	SW Attribute Data Table	CCM 240			
000131-4.2	Functional ICD Requirements	CCM 240			
000131-15	Instrumentation Program and Control List	CCM 240			
000131-22	Qualification Test Plan	CCM 563			
000131-23	Qualification Test Procedures	CCM 563			
000131-24	Qualification Test Reports	CCM 563			
000131-26	Problem Reporting & Corrective Action	CCM 240			
000131-28	Spec. Traceability & Compliance Report	CCM 240			
134	OIU S/W LOAD FINAL DID # 1	CCM 273			
136	TIMELINER ONBOARD EXECUTOR DID #1	CCM 273			
137	TIMELINER COMPLIER (GROUND) DID #1	CCM 273			
154	EPCS CSCI (3A FQT)	CCM 240			
000154-1	Acceptance Data Package	CCM 240			
000154-4.1	SW Attribute Data Table	CCM 240			
000154-4.2	Functional ICD Requirements	CCM 240			
000154-15	Instrumentation Program and Control List	CCM 240			
000154-22	Qualification Test Plan	CCM 240			
000154-23	Qualification Test Procedures	CCM 240			
000154-24	Qualification Test Reports	CCM 240			
000154-26	Problem Reporting & Corrective Action	CCM 240			
000154-28	Spec. Traceability & Compliance Report	CCM 240			
156	EPCS CSCI (4A FQT)	CCM 563			
000156-1	Acceptance Data Package	CCM 2752			
000156-4.1	SW Attribute Data Table	CCM 240			
000156-4.2	Functional ICD Requirements	CCM 240			
000156-15	Instrumentation Program and Control List	CCM 240			
000156-22	Qualification Test Plan	CCM 563			
000156-23	Qualification Test Procedures	CCM 563			
000156-24	Qualification Test Reports	CCM 563			
000156-26	Problem Reporting & Corrective Action	CCM 240			
000156-28	Spec. Traceability & Compliance Report	CCM 240			
158	EPCS CSCI (5A FQT)	CCCM 563			
000158-1	Acceptance Data Package	CCM 2752			
000158-4.1	SW Attribute Data Table	CCM 240			
000158-4.2	Functional ICD Requirements	CCM 240			
000158-15	Instrumentation Program and Control List	CCM 240			
000158-22	Qualification Test Plan	CCM 563			
000158-23	Qualification Test Procedures	CCM 563			
000158-24	Qualification Test Reports	CCM 563			
000158-26	Problem Reporting & Corrective Action	CCM 240			
000158-28	Spec. Traceability & Compliance Report	CCM 240			
000101	PATHS DATA SYSTEM SOFTWARE			DELIVERY COMPLETE; NO FURTHER	
000179	ECOMM CTP FIRMWARE	ccm 399			
000179-1	Acceptance Data Package	CCM 2752			
000179-26	Problem Reporting & Corrective Action	ccm 399			
240	MCOR HARDWARE ASSEMBLY	ccm 952			
000240-1	Acceptance Data Package	CCM 2752			
000240-2	Acceptance Test Report	ccm 952			
000240-6	Dimensions (physical and shipping)	ccm 952			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000240-9	FMEA/CIL	ccm 952			
000240-11	Hardware Drawings	ccm 952			
000240-13	Hazard Reports/System Description (SMACR Acceptable	ccm 952			
000240-17	Limited Life List	ccm 952			
000240-23	Qualification Test Procedures	ccm 952			
000240-24	Qualification Test Reports	ccm 952			
000240-27	Reliability and Maintainability Predictions Report	ccm 952			
000240-31	Indentured Parts List	ccm 952			
000240-32	Mass Properties	ccm 952			
000240-33	Power/Thermal	ccm 952			
000240-34	Volume Report	ccm 952			
000241	EDO CARRIER PALLET-FLIGHT UNIT	ccm 901			
000241-4	Acceptance Data Package	CCM 2752			
000241-2	Acceptance Test Report	ccm 901			
000241-3.1	Reports, Structural Analyses of GFE	ccm 901			
000241-3.2	Integrated Thermal Control Plans and Reports	ccm 901			
000241-3.3	Microgravity Control Plan for GFE	ccm 901			
000241-3.4	Analyses and Analytical Models of GFE	ccm 901			
000241-3.5	Fracture Control Plan of GFE	ccm 901			
000241-6	Dimensions (physical and shipping)	ccm 901			
000241-8	Fault Isolation/Repair Verification	ccm 901			
000241-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 901			
000241-11A	Engineering Drawings	ccm 901			
000241-11B	Engineering CAD Models	ccm 901			
000241-13	Hazard Reports/System Description	ccm 901			
000241-14	Interface Control Documents	ccm 901			
000241-16	Isometric View-Components and Attaching Hardware	ccm 901			
000241-17	Limited Life List	ccm 901			
000241-20	Operational Constraints	ccm 901			
000241-22	Qualification Test Plans	ccm 901			
000241-23	Qualification Test Procedures	ccm 901			
000241-24	Qualification Test Reports	ccm 901			
000241-26	Problem Reporting & Corrective Action (PRACA)	ccm 901			
000241-27	Reliability and Maintainability Predictions Report	ccm 901			
000241-28	Specification Traceability and Compliance Report	ccm 901			
000241-29	Weight (including Wet Weight)	ccm 901			
000241-31	Indentured Parts List	ccm 901			
000241-32	Mass Properties Report	ccm 901			
000241-34	Volume Report	ccm 901			
000241-36	Electrical Power and Thermal Consumption	ccm 901			
000241-37	Constraints and Operational Limits	ccm 901			
000275	PUMP FLOW CONTROL SYSTEM	ccm 1815			
00275-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000275-13	Hazard Reports/System Description	ccm 1815			
000275-17	Limited Life List	ccm 1815			
000275-27	Reliability and Maintainability Predictions Report	ccm 1815			
000276	LAB CRADLE ASSEMBLY	ccm 1815			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000276-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000276-13	Hazard Reports/System Description	ccm 1815			
000276-17	Limited Life List	ccm 1815			
000276-27	Reliability and Maintainability Predictions Report	ccm 1815			
000277	EARLY AMMONIA SERVICER AND KIT	ccm 1815			
000277-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000277-13	Hazard Reports/System Description	ccm 1815			
000277-17	Limited Life List	ccm 1815			
000277-27	Reliability and Maintainability Predictions Report	ccm 1815			
000278	POWER DATA GRAPPLE FIXTURE RIGID UMBILICAL	ccm 1815			
000278-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000278-13	Hazard Reports/System Description	ccm 1815			
000278-17	Limited Life List	ccm 1815			
000278-27	Reliability and Maintainability Predictions Report	ccm 1815			
000286	EVA HANDRAIL	ccm 1503			
000286-11A	Engineering Drawings	ccm 1503			
000286-32	Mass Properties Report	ccm 1503			
000286-34	Volume Report	ccm 1503			
000287	EVA HANDRAIL	ccm 1503			
000287-11A	Engineering Drawings	ccm 1503			
000287-32	Mass Properties Report	ccm 1503			
000286-34	Volume Report	ccm 1503			
288	DRILL PLATE	ccm 1503			
000288-11A	Engineering Drawings	ccm 1503			
000289	HIGH DATA RATE RECORDER JUNCTION BOX	ccm 1503			
000289-11A	Engineering Drawings	ccm 1503			
000289-13	Hazard Reports/System Description	ccm 1503			
000289-14	Interface Control Documents	ccm 1503			
000289-32	Mass Properties Report	ccm 1503			
000289-34	Volume Report	ccm 1503			
000290	CABLE MARKERS, HT-TMS-CM-1/4-4H	ccm 1503			
000290-11A	Engineering Drawings	ccm 1503			
000290-13	Hazard Reports/System Description	ccm 1503			
000290-32	Mass Properties Report	ccm 1503			
000290-34	Volume Report	ccm 1503			
000291	FORGING	ccm 1503			
000291-11A	Engineering Drawings	ccm 1503			
000291-13	Hazard Reports/System Description	ccm 1503			
000291-32	Mass Properties Report	ccm 1503			
000291-34	Volume Report	ccm 1503			
000298	JSS TOP MOUNTED HANDRAILS	ccm 1815			
000298-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000298-13	Hazard Reports/System Description	ccm 1815			
000299	JSS TOP-MOUNTED PASSIVE WIF ASSEMBLY	CCM 1815			
000299-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000299-13	Hazard Reports/System Description	ccm 1815			
000300	PFCS EVA HANDRAIL	ccm 1815			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000300-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000300-13	Hazard Reports/System Description	ccm 1815			
000301	PFCS EVA HANDRAIL	ccm 1815			
000301-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000301-13	Hazard Reports/System Description	ccm 1815			
000303	COMMON STRUCTURE INSERT SUBCARRIER ASSEMBLY	ccm 1815			
000303-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000303-13	Hazard Reports/System Description	ccm 1815			
000303-17	Limited Life List	ccm 1815			
000303-27	Reliability and Maintainability Predictions Report	ccm 1815			
000304	ON-ORBIT STOWAGE PLATFORM ASSEMBLY	ccm 1815			
000304-9	Failure Modes and Effects Analysis (FMEA) and Critical Items List	ccm 1815			
000304-13	Hazard Reports/System Description	ccm 1815			
000304-17	Limited Life List	ccm 1815			
000304-27	Reliability and Maintainability Predictions Report	ccm 1815			
000310	OXYGEN GENERATION ASSEMBLY (OGA) BASIC BUS	ccm 1420			
000310-11	Hardware Configuration	ccm 1420			
000310-13	Hazard Reports/System Description	ccm 1420			
000310-15	Instrumentation Program and Control List	ccm 1420			
000311	OXYGEN GENERATION ASSEMBLY (OGA) BASIC TELEMETRY AND COMMAND	CCM 1420			
000311-11	Hardware Configuration	ccm 1420			
000311-13	Hazard Reports/System Description	ccm 1420			
000311-15	Instrumentation Program and Control List	ccm 1420			
000312	OXYGEN GENERATION ASSEMBLY (OGA) ENGINEERING CYCLE	ccm 1420			
000312-11	Hardware Configuration	ccm 1420			
000312-13	Hazard Reports/System Description	ccm 1420			
000312-15	Instrumentation Program and Control List	ccm 1420			
000313	OXYGEN GENERATION ASSEMBLY (OGA) FLIGHT CYCLE	ccm 1420			
000313-11	Hardware Configuration	ccm 1420			
000313-13	Hazard Reports/System Description	ccm 1420			
000313-15	Instrumentation Program and Control List	ccm 1420			
000314	WATER PROCESSOR ASSEMBLY (WPA) BASIC BUS	ccm 1420			
000314-11	Hardware Configuration	ccm 1420			
000314-13	Hazard Reports/System Description	ccm 1420			
000314-15	Instrumentation Program and Control List	ccm 1420			
000315	WATER PROCESSOR ASSEMBLY (WPA) BASIC TELEMETRY AND COMMAND	ccm 1420			
000315-11	Hardware Configuration	ccm 1420			
000315-13	Hazard Reports/System Description	ccm 1420			
000315-15	Instrumentation Program and Control List	ccm 1420			
000316	WATER PROCESSOR ASSEMBLY (WPA) ENGINEERING CYCLE	ccm 1420			
000316-11	Hardware Configuration	ccm 1420			
000316-13	Hazard Reports/System Description	ccm 1420			
000316-15	Instrumentation Program and Control List	ccm 1420			
000323	CBCS HATCH WINDOW BERTHING TARGET (USL, MPLM, SPARE	ccm 2487			
000323-11A	Engineering Drawings	ccm 2487			
000323-13	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000324	PMA 2 CBCS BERTHING TARGET	ccm 2487			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000324-11A	Engineering Drawings	ccm 2487			
000324-13	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000325	PMA 3 CBCS BERTHING TARGET	ccm 2487			
000325-11A	Engineering Drawings	ccm 2487			
000325-13	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000326	PMA CBCS BERTHING TARGET	ccm 2487			
000326-11A	Engineering Drawings	ccm 2487			
000326-13	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000326-40	Center Boresight Camera Ssystem (CBCS) Cue Accuracy	ccm 2487			
000327	3M SCOTCHLITE DIAMOND GRADE VIP 3992	ccm 2487			
000327-11A	Engineering Drawings	ccm 2487			
000327-13	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000328	MICROCONICAL FITTING (CUSTOM 455 VERSION)	CCM 1503			
000328-11A	Engineering Drawings	CCM 1503			
000328-13	Hazard Reports/System Description	CCM 1503			
000328-32	Mass Properties Report	CCM 1503			
000328-34	Volume Report	CCM 1503			
329	P5 CONNECTOR	ccm 2487			
000329-11A	Engineering Drawings	ccm 2487			
000329-13	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000329-32	Mass Properties	ccm 2487			
000329-33	Volume Report	ccm 2487			
335	SPARE CBCS BERTHING TARGET	ccm 2487			
000335-11A	Engineering Drawings	ccm 2487			
000335-34	Hazard Reports/System Description - SMACR acceptable	ccm 2487			
000464	FLIGHT ROBOTIC H--FIXTURE KIT	CCM 2671			
000464-11	Hardware Configuration	CCM 2671			
000464-13	Hazard Reports/System Description	CCM 2671			
000465	MTC ROBOTIC TARGET	CCM 2671			
000465-11	Hardware Configuration	CCM 2671			
000465-13	Hazard Reports/System Description	CCM 2671			
000468	EVA HANDRAIL	ccm 2512			
000468-11	Hardware Configuration	ccm 2512			
000468-13	Hazard Reports/System Description	ccm 2512			
000469	EVA HANDRAIL	ccm 2512			
000469-11	Hardware Configuration	ccm 2512			
000469-13	Hazard Reports/System Description	ccm 2512			
000470	EVA HANDRAIL PIN	ccm 2512			
000470-11	Hardware Configuration	ccm 2512			
000470-13	Hazard Reports/System Description	ccm 2512			
000471	EVA HANDRAIL PIN	ccm 2512			
000471-11	Hardware Configuration	ccm 2512			
000471-13	Hazard Reports/System Description	ccm 2512			
000472	FLIGHT ROBOTIC H-FIXTURE KIT	ccm 2512			
000472-11	Hardware Configuration	ccm 2512			
000472-13	Hazard Reports/System Description	ccm 2512			
000473	MTC ROBOTIC TARGET	ccm 2512			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000473-11	Hardware Configuration	ccm 2512			
000473-13	Hazard Reports/System Description	ccm 2512			
000474	TOP MOUNTED HANDRAIL ASSEMBLY	ccm 2512			
000474-11	Hardware Configuration	ccm 2512			
000474-13	Hazard Reports/System Description	ccm 2512			
000476	MPLM, POWER VESTIBULE JUMPER ASSY	ccm 2652			
000476-6	Dimensions (Physical and Shipping)	ccm 2652			
000476-8	Fault Isolation/Repair Verification	ccm 2652			
000476-9	FMEA/CIL	ccm 2652			
000476-11A	Hardware Drawings	ccm 2652			
000476-13	Hazard Reports/System Description	ccm 2652			
000476-16	Isometric Views - Component and Attach H/W				
000476-17	Limited Life List				
000476-27	Reliability and Maintainability Predictions Report				
000476-29	Weight (including Wet Weight)				
000476-32	Mass Properties				
000477	BRACKET, ISS HANDRAIL	ccm 2605			
000477-9	FMEA/CIL	ccm 2605			
000477-11A	Engineering Drawings	ccm 2605			
000477-13	Hazard Reports/System Discriptions	ccm 2605			
000477-17	Limited Life List	ccm 2605			
000477-27	Reliability and Maintainability Predictions Report	ccm 2605			
000478	BRACKET, PIN	ccm 2605			
000478-9	FMEA/CIL	ccm 2605			
000478-11A	Engineering Drawings	ccm 2605			
000478-13	Hazard Reports/System Discriptions	ccm 2605			
000478-17	Limited Life List	ccm 2605			
000478-27	Reliability and Maintainability Predictions Report	ccm 2605			
000483	ISS TOP-MOUNTED PASSIVE WIF ASSY	ccm 2605			
000483-9	FMEA/CIL	ccm 2605			
000483-11A	Engineering Drawings	ccm 2605			
000483-13	Hazard Reports/System Discriptions	ccm 2605			
000483-17	Limited Life List	ccm 2605			
000483-27	Reliability and Maintainability Predictions Report	ccm 2605			
000485	H-FIXTURE, FIXTURE KIT ASSEMBLY	ccm 2605			
000485-9	FMEA/CIL	ccm 2605			
000485-11A	Engineering Drawings	ccm 2605			
000485-13	Hazard Reports/System Discriptions	ccm 2605			
000485-17	Limited Life List	ccm 2605			
000485-27	Reliability and Maintainability Predictions Report	ccm 2605			
000486	TOP MOUNTED HANDRAIL ASSY	ccm 2605			
000486-9	FMEA/CIL	ccm 2605			
000486-11A	Engineering Drawings	ccm 2605			
000486-13	Hazard Reports/System Discriptions	ccm 2605			
000486-17	Limited Life List	ccm 2605			
000486-27	Reliability and Maintainability Predictions Report	ccm 2605			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000486-32	Mass Properties	ccm 2605			
000486-32	Mass Properties	ccm 2605			
000486-32	Mass Properties	ccm 2605			
000487	ISS TOP MOUNTED PASSIVE WIF ASSY				
000487-9	FMEA/CIL	ccm 2605			
000487-11A	Engineering Drawings	ccm 2605			
000487-13	Hazard Reports/System Discriptions	ccm 2605			
000487-17	Limited Life List	ccm 2605			
000487-27	Reliability and Maintainability Predictions Report	ccm 2605			
000487-32	Mass Properties	ccm 2605			
000487-32	Mass Properties	ccm 2605			
000487-32	Mass Properties	ccm 2605			
000490	POWER VIDEO GRAPPLE FIXTURE				
000490-9	FMEA/CIL	ccm 2605			
000490-11A	Engineering Drawings	ccm 2605			
000490-13	Hazard Reports/System Discriptions	ccm 2605			
000490-17	Limited Life List	ccm 2605			
000490-27	Reliability and Maintainability Predictions Report	ccm 2605			
000490-32	Mass Properties	ccm 2605			
000490-32	Mass Properties	ccm 2605			
000490-32	Mass Properties	ccm 2605			
000492	EXTERNAL STOWAGE PLATFORM PASSIVE ATTACHMENT DEVICE ASSEMBLY	ccm 2605			
000492-11A	Engineering Drawings	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000493	EXTERNAL STOWAGE PLATFORM ACTIVE ATTACHMENT DEVICE ASSEMBLY	ccm 2605			
000492-11A	Engineering Drawings	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000492-32	Mass Properties	ccm 2605			
000492-33	Power and Thermal	ccm 2605			
000492-33	Power and Thermal	ccm 2605			
000492-33	Power and Thermal	ccm 2605			
000494	NODE 1 TO ESP 2 POWER CABLE	ccm 2605			
000494-11A	Engineering Drawings	ccm 2605			
000494-32	Mass Properties	ccm 2605			
000494-32	Mass Properties	ccm 2605			
000494-32	Mass Properties	ccm 2605			
000494-34	Volume	ccm 2605			
000494-34	Volume	ccm 2605			
000494-34	Volume	ccm 2605			
000495	ESP 1 TO ESP 2 POWER CABLE	ccm 2605			
000495-11A	Engineering Drawings	ccm 2605			
000495-32	Mass Properties	ccm 2605			
000495-32	Mass Properties	ccm 2605			
000495-32	Mass Properties	ccm 2605			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000495-34	Volume	ccm 2605			
000495-34	Volume	ccm 2605			
000495-34	Volume	ccm 2605			
000496	DDCU-COLD PLATE	ccm 2605			
000496-9	FMEA/CIL	ccm 2605			
000496-11A	Engineering Drawings	ccm 2605			
000496-13	Hazard Reports/System Discriptions	ccm 2605			
000496-17	Limited Life List	ccm 2605			
000496-27	Reliability and Maintainability Predictions Report	ccm 2605			
000496-33	Power and Thermal	ccm 2605			
000496-33	Power and Thermal	ccm 2605			
000496-33	Power and Thermal	ccm 2605			
000497	DDCU-CP FLIGHT SUPPORT EQUIPMENT	ccm 2605			
000497-11A	Engineering Drawings	ccm 2605			
000497-32	Mass Properties	ccm 2605			
000497-32	Mass Properties	ccm 2605			
000497-32	Mass Properties	ccm 2605			
000498	MBSU-COLD PLATE	ccm 2605			
000498-9	FMEA/CIL	ccm 2605			
000498-11A	Engineering Drawings	ccm 2605			
000498-13	Hazard Reports/System Discriptions	ccm 2605			
000498-17	Limited Life List	ccm 2605			
000498-27	Reliability and Maintainability Predictions Report	ccm 2605			
000498-33	Power and Thermal	ccm 2605			
000498-33	Power and Thermal	ccm 2605			
000498-33	Power and Thermal	ccm 2605			
000499	MBSU FLIGHT SUPPORT EQUIPMENT	ccm 2605			
000499-11A	Engineering Drawings	ccm 2605			
000499-32	Mass Properties	ccm 2605			
000499-32	Mass Properties	ccm 2605			
000499-32	Mass Properties	ccm 2605			
000500	UTILITY TRANSFER ASSEMBLY (UTA)	ccm 2605			
000500-11A	Engineering Drawings	ccm 2605			
000500-32	Mass Properties	ccm 2605			
000500-32	Mass Properties	ccm 2605			
000500-32	Mass Properties	ccm 2605			
000500-33	Power and Thermal	ccm 2605			
000500-33	Power and Thermal	ccm 2605			
000500-33	Power and Thermal	ccm 2605			
000501	UTA FLIGHT SUPPORT EQUIPMENT	ccm 2605			
000501-11A	Engineering Drawings	ccm 2605			
000501-32	Mass Properties	ccm 2605			
000501-32	Mass Properties	ccm 2605			
000501-32	Mass Properties	ccm 2605			
000502	BATTERY CHARGE/DISCHARGE UNIT (DDCU)	ccm 2605			
000502-9	FMEA/CIL	ccm 2605			
000502-11A	Engineering Drawings	ccm 2605			
000502-13	Hazard Reports/System Discriptions	ccm 2605			
000502-17	Limited Life List	ccm 2605			
000502-27	Reliability and Maintainability Predictions Report	ccm 2605			
000502-33	Power and Thermal	ccm 2605			
000502-33	Power and Thermal	ccm 2605			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000502-33	Power and Thermal	ccm 2605			
000503	BCDU FLIGHT SUPPORT EQUIPMENT	ccm 2605			
000503-11A	Engineering Drawings	ccm 2605			
000503-32	Mass Properties	ccm 2605			
000503-32	Mass Properties	ccm 2605			
000503-32	Mass Properties	ccm 2605			
000516	PUMP MODULE ASSEMBLY (PMA)	ccm 2605			
000516-9	FMEA/CIL	ccm 2605			
000516-11A	Engineering Drawings	ccm 2605			
000516-13	Hazard Reports/System Discriptions	ccm 2605			
000516-17	Limited Life List	ccm 2605			
000516-27	Reliability and Maintainability Predictions Report	ccm 2605			
000516-33	Power and Thermal	ccm 2605			
000516-33	Power and Thermal	ccm 2605			
000516-33	Power and Thermal	ccm 2605			
000517	PMA FLIGHT SUPPORT EQUIPMENT	ccm 2605			
000517-9	FMEA/CIL	ccm 2605			
000517-11A	Engineering Drawings	ccm 2605			
000517-13	Hazard Reports/System Discriptions	ccm 2605			
000517-17	Limited Life List	ccm 2605			
000517-27	Reliability and Maintainability Predictions Report	ccm 2605			
000517-33	Power and Thermal	ccm 2605			
000517-33	Power and Thermal	ccm 2605			
000517-33	Power and Thermal	ccm 2605			
000518	FLEX HOSE ROTARY COUPLER (FHRC)	ccm 2605			
00518-9	FMEA/CIL	ccm 2605			
000518-11A	Engineering Drawings	ccm 2605			
000518-13	Hazard Reports/System Discriptions	ccm 2605			
000518-17	Limited Life List	ccm 2605			
000518-27	Reliability and Maintainability Predictions Report	ccm 2605			
000518-32	Mass Properties	ccm 2605			
000518-32	Mass Properties	ccm 2605			
000518-32	Mass Properties	ccm 2605			
000519	FHRC FLIGHT SUPPORT EQUIPMENT	ccm 2605			
000519-9	FMEA/CIL	ccm 2605			
000519-11A	Engineering Drawings	ccm 2605			
000519-13	Hazard Reports/System Discriptions	ccm 2605			
000519-17	Limited Life List	ccm 2605			
000519-27	Reliability and Maintainability Predictions Report	ccm 2605			
000519-32	Mass Properties	ccm 2605			
000519-32	Mass Properties	ccm 2605			
000519-32	Mass Properties	ccm 2605			
000525	BERTHING CUE SYSTEM	ccm 2605			
000525-9	FMEA/CIL	ccm 2605			
000525-11A	Engineering Drawings	ccm 2605			
000525-13	Hazard Reports/System Discriptions	ccm 2605			
000525-17	Limited Life List	ccm 2605			
000525-27	Reliability and Maintainability Predictions Report	ccm 2605			
000525-32	Mass Properties	ccm 2605			
000525-32	Mass Properties	ccm 2605			
000525-32	Mass Properties	ccm 2605			
000526	PCS CSCI (R2)	ccm 4375			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

000526-22	Qualification Test Plan	ccm 4375			
000526-23	Qualification Test Procedures	ccm 4375			
000526-24	Qualification Test Reports	ccm 4375			
000526-28	Spec. Traceability & Compliance Report	ccm 4375			
000527	PCS CSCI (R3)	ccm 4375			
000527-22	Qualification Test Plan	ccm 4375			
000527-23	Qualification Test Procedures	ccm 4375			
000527-24	Qualification Test Reports	ccm 4375			
000527-28	Spec. Traceability & Compliance Report	ccm 4375			
000528	PCS CSCI (R4)	ccm 4375			
000528-22	Qualification Test Plan	ccm 4375			
000528-23	Qualification Test Procedures	ccm 4375			
000528-24	Qualification Test Reports	ccm 4375			
000528-28	Spec. Traceability & Compliance Report	ccm 4375			
000551	TETHER HOOKS	ccm 4635			
000551-11A	Hardware Drawings	ccm 4635			
000607	ACAS EBCS MIRROR TARGET	ccm 5046	S/A 1127		
000607-11A	Hardware Drawings	ccm 5046	S/A 1127		
000608	MBS EBCS MIRROR TARGET	ccm 5046	S/A 1127		
000608-11A	Hardware Drawings	ccm 5046	S/A 1127		
000611	P3 EBCS MIRROR TARGET	ccm 5046	S/A 1127		
000611-11A	Hardware Drawings	ccm 5046	S/A 1127		
000612	S3 MIRROR TARGET	ccm 5046	S/A 1127		
000612-11A	Hardware Drawings	ccm 5046	S/A 1127		
000613	ACAS SIMULATOR	ccm 5046	S/A 1127		
000613-11A	Hardware Drawings	ccm 5046	S/A 1127		
000615	OOI WIF ADAPTER PLATE	ccm 5942			
000615-11A	Hardware Drawings	ccm 5942			
000616	SSU MLI BLANKET	ccm 5985	S/A 1124		
000616-11A	Hardware Drawings	ccm 5985	S/A 1124		
000617	ECU MLI BLANKET	ccm 5985	S/A 1124		
000617-11A	Hardware Drawings	ccm 5985	S/A 1124		
105067	FLIGHT RELEASABLE GRAPPLE FIXTURE (CUPOLA) (FLT)	Per CCM 290			
105067-1	End Item Data Package (ADP)	GCM 2752		Consistent with Shuttle ADP requirements	
105141	CCTV TARGET (KEEL CAMERA) (NODE 1)	ccm 287			
105141-1	Acceptance Data Package [partial]	ccm 287		All Keel Targets delivered at once -- one ADP for all Targets	
105141-2	Acceptance Test Report	ccm 287		With ADP	
105141-7	Electronic Design Data (VMDB Content) [partial]	ccm 287			
105141-7.1.2	Engineering Drawings	ccm 287		Delivered	
105141-7.1.5	Engineering Change Data	ccm 287			
105141-7.1.6	Waiver and Deviations	ccm 287			
105141-7.3.1	Mass Properties(Weight Only)	ccm 287		Delivered	
105141-11A	Hardware Drawings	ccm 287		[TLEI] Available in JSC Library SED- #00100007	
105141-14	Interface Control Documents	ccm 287		Available in NSTS 21000	
105141-22	Qualification Test Plan	ccm 287			
105141-23	Qualification Test Procedures	ccm 287			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105141-24	Qualification Test Reports	ccm-287			
105141-26	Problem Reporting & Corrective Action	ccm-287			
105141-28	Spec. Traceability & Compliance Report	ccm-287			
105144	CCTV TARGET (KEEL CAMERA) (NODE 2)	ccm-287			
105144-1	Acceptance Data Package [partial]	ccm-287		All Keel Targets delivered at once -- one-ADP for all Targets	
105144-2	Acceptance Test Report	ccm-287		With ADP	
105144-3	Analysis Data & Analytical Models	ccm-287			
105144-3.2	Thermal Control Plan & Reports of GFE	ccm-287			
105144-7	Electronic Design Data (VMDB Content) [partial]	ccm-287			
105144-7.1.2	Engineering Drawings	ccm-287		Delivered	
105144-7.1.5	Engineering Change Data	ccm-287			
105144-7.1.6	Waiver and Deviations	ccm-287			
105144-7.3.1	Mass Properties(Weight Only)	ccm-287		Delivered	
105144-11A	Hardware Drawings	ccm-287		[TLEI] Available in JSC Library SED-#20126227	
105144-14	Interface Control Documents	ccm-287		Available in NSTS 21000	
105144-26	Problem Reporting & Corrective Action	ccm-287			
105146	FLIGHT RELEASABLE GRAPPLE FIXTURE (NODE 2) (FLT)				
105146-1	End Item Data Package (ADP)	CCM-2752		Consistent with Shuttle ADP requirements	
105156	APAS DOCKING MECHANISM (ACTIVE) (FLT)	ADMIN		See Attachment J-12, International	
105158	FLIGHT RELEASABLE GRAPPLE FIXTURE (PMA 2) (FLT)				
105158-1	End Item Data Package (ADP)	CCM-2752		Consistent with Shuttle ADP requirements	
105159	APAS DOCKING MECHANISM (PASSIVE) (FLT)	ADMIN		See Attachment J-12, International	
105162	FLIGHT RELEASABLE GRAPPLE FIXTURE (PMA 3) (FLT)				
105162-1	End Item Data Package (ADP)	CCM-2752		Consistent with Shuttle ADP requirements	
105163	APAS DOCKING MECHANISM (PASSIVE)	ccm-287			
105163-1	Acceptance Data Package	CCM-2752			
105168	NASA STANDARD INITIATORS (P1) (FLT)	CCM-287			
105168-1	Acceptance Data Package	CCM-2752		This data is provided in the NSI Flight-	
105168-1.1.1	Historical Log				
105168-1.1.2	Waiver/Deviation Record				
105168-1.1.7	Ident: As Designed/As-Built Listing				
105168-1.1.9	Age- Sensitive				
105168-1.1.13	Pyrotechnic Data/Lot Certificate				
105168-1.1.15	Certifications				
105168-1.1.16	Material Safety Data Sheet				
105168-2	Acceptance Test Report	CCM-287			
105168-12	Hardware Specification			Delivered	
105169	NASA STANDARD INITIATORS (S1) (FLT)	CCM-287			
105169-1	Acceptance Data Package	CCM-2752		This data is provided in the NSI Flight-	
105169-1.1.1	Historical Log				
105169-1.1.2	Waiver/Deviation Record				
105169-1.1.7	Ident: As Designed/As-Built Listing				
105169-1.1.13	Pyrotechnic Data/Lot Certificate				
105169-1.1.15	Certifications				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105169-1.1.16	Material Safety Data Sheet				
105169-2	Acceptance Test Report	CCM 287			
105169-12	Hardware Specification			Delivered	
105174	CCTV TARGET (KEEL CAMERA) (P1)	ccm 287			
105174-1	Acceptance Data Package [partial]	ccm 287		All Keel Targets delivered at once -- one-ADP for all Targets	
105174-2	Acceptance Test Report	ccm 287		With ADP	
105174-7	Electronic Design Data (VMDB Content) [partial]	ccm 287			
105174-7.1.2	Engineering Drawings	ccm 287		Delivered	
105174-7.1.5	Engineering Change Data	ccm 287			
105174-7.1.6	Waiver and Deviations	ccm 287			
105174-7.3.1	Mass Properties(Weight Only)	ccm 287		Delivered	
105174-11A	Hardware Drawings	ccm 287		[TLEI] Available in JSC Library SED-#39126237	
105174-14	Interface Control Documents	ccm 287		Available in NSTS 21000	
105174-26	Problem Reporting & Corrective Action	ccm 287			
105175	FLIGHT RELEASABLE GRAPPLE FIXTURE (P1) (FLT)				
105175-1	End Item Data Package (ADP)			Consistent with Shuttle ADP requirements	
105178	CCTV TARGET (KEEL CAMERA) (P3)	ccm 287			
105178-1	Acceptance Data Package [partial]	ccm 287		All Keel Targets delivered at once -- one-ADP for all Targets	
105178-2	Acceptance Test Report	ccm 287		With ADP	
105178-7	Electronic Design Data (VMDB Content) [partial]	ccm 287			
105178-7.1.2	Engineering Drawings	ccm 287		Delivered	
105178-7.1.5	Engineering Change Data	ADMIN			
105178-7.1.6	Waiver and Deviations	ADMIN			
105178-7.3.1	Mass Properties (Weight Only)	ccm 287		Delivered	
105178-11A	Hardware Drawings	ccm 287		[TLEI] Available in JSC Library SED-	
105178-14	Interface Control Documents	ccm 287		Available in NSTS 21000	
105178-26	Problem Reporting & Corrective Action	ccm 287			
105179	FLIGHT RELEASABLE GRAPPLE FIXTURE (P3) (FLT)	ADMIN			
105179-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
105180	GPS ANTENNA ASSEMBLY (FLT)				
105180-1	Acceptance Data Package	CCM 2752			
105180-1.1.1	Historical Log				
105180-1.1.2	Waiver/Deviation Record				
105180-1.1.3	Unexplained Anomalies Record				
105180-1.1.4	Shortages				
105180-1.1.7	Ident: As Designed/As-Built Listing				
105180-1.1.8	Operating Time/Cycle				
105180-1.1.9	Age Sensitive/Time-Action Items				
105180-1.1.10	Nonstandard Calibration				
105180-1.1.15	Certifications				
105180-2	Acceptance Test Report				
105180-6	Dimensions (Physical and Shipping)			Provided to ISS PO for incorporation	
105180-7	Electronic Design Data(VMD Content)			Update as required	
105180-7.1.1	Indentured Parts List			Update as required	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105180-7.1.2	Engineering Drawings			[BD, ICD, LO, S, EDT, TLEI] Update as	
105180-11B	Engineering Models	ADMIN		Update as required; native electronic	
105180-7.1.5	Engineering Change Data	ADMIN			
105180-7.1.6	Waiver and Deviations	ADMIN			
105180-32	Mass Properties	ADMIN		Update Quarterly	
105180-33	Power/Thermal	ADMIN		Update Quarterly	
105180-34	Volume	ADMIN		Update Quarterly	
105180-7.3.6	Annual Resupply & Return Planning Data RPT	ADMIN		Update Quarterly	
105180-8	Fault Isolation/Repair Verification			Product per DID from ISS PO; Tech data from GFE project by 05/05/96	
105180-9	FMEA/CIL			CDR- Level	
105180-11A	Hardware Drawings			[BD, ICD, LO, S, EDT, TLEI] prepared per	
105180-12	Hardware Specifications (PTRS)			Update @ CDR+ 45 days	
105180-13	Hazard Report/System Description			Hardcopy; Data package includes	
105180-14	Interface Control Documents			Part 1 approved	
105180-16	Isometric Views-components & attach HW				
105180-17	Limited Life List				
105180-22	Qualification Test Plan			Prelim. QTP delivered at PDR	
105180-23	Qualification Test Procedure			Prelim. at T-60 days	
105180-24	Qualification Test Report				
105180-26	Problem Reporting & Corrective Action				
105180-27	Reliability & Maintainability Prediction Report			Based on existing COTS data	
105180-28	Spec. Traceability & Compliance Report				
105180-29	Weight (including Wet Weight)			Incorporated into VMDB 10/16/95	
105181	CCTV TARGET (KEEL CAMERA) (S0)	ecm-287			
105181-1	Acceptance Data Package [partial]			All Keel Targets delivered at once -- one ADP for all Targets	
105181-1.1.1	Historical Log	ecm-287			
105181-1.1.2	Waiver/Deviation Record	ecm-287			
105181-1.1.3	Unexplained Anomalies Records	ecm-287			
105181-1.1.4	Shortages	ecm-287			
105181-1.1.5	Unplanned/Deferred Work	ecm-287			
105181-1.1.6	Preplanned/Assigned Work	ecm-287			
105181-1.1.7	Ident: As Designed/As-Built Listing	ecm-287			
105181-1.1.10	Nonstandard Calibration	ecm-287			
105181-1.1.15	Certifications	ecm-287			
105181-1.1.16	Material Safety Data Sheet	ecm-287			
105181-2	Acceptance Test Report	ecm-287			
105181-3	Analysis Data & Analytical Models	ecm-287			
105181-3.2	Thermal Control Plan & Reports of GFE	ecm-287			
105181-13	Hazard Report/System Description	ecm-287			
105181-22	Qualification Test Plan	ecm-287			
105181-23	Qualification Test Procedures	ecm-287			
105181-24	Qualification Test Reports	ecm-287			
105181-26	Problem Reporting & Corrective Action	ecm-287			
105181-28	Spec. Traceability & Compliance Report	ecm-287			
105183	FLIGHT RELEASABLE GRAPPLE FIXTURE (S0) (FLT)				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105183-4	End Item Data Package (ADP)	GCM 2752		Consistent with Shuttle ADP requirements	
105185	CCTV TARGET (KEEL CAMERA) (S1)	ccm 287			
105185-4	Acceptance Data Package [partial]	ccm 287		All Keel Targets delivered at once -- one ADP for all Targets	
105185-2	Acceptance Test Report	ccm 287		With ADP	
105185-7	Electronic Design Data (VMDB Content) [partial]	ccm 287			
105185-7.1.2	Engineering Drawings	ccm 287		Delivered	
105185-7.1.5	Engineering Change Data	ccm 287			
105185-7.1.6	Waiver and Deviations	ccm 287			
105185-7.3.1	Mass Properties (Weight Only)	ccm 287		Delivered	
105185-11A	Hardware Drawings	ccm 287		[TLEI] Available in JSC Library SED-#39126237	
105185-14	Interface Control Documents	ccm 287		Available in NSTS 21000	
105185-26	Problem Reporting & Corrective Action	ccm 287			
105186	FLIGHT RELEASABLE GRAPPLE FIXTURE (S1) (FLT. 1)				
105186-4	End Item Data Package (ADP)	GCM 2752		Consistent with Shuttle ADP requirements	
105188	CCTV TARGET (KEEL CAMERA) (S3)	ccm 287			
105188-4	Acceptance Data Package [partial]	ccm 287		All Keel Targets delivered at once -- one ADP for all Targets	
105188-2	Acceptance Test Report	ccm 287		With ADP	
105188-7	Electronic Design Data (VMDB Content) [partial]	ccm 287		Delivered	
105188-7.1.2	Engineering Drawings	ccm 287		Delivered	
105188-7.1.5	Engineering Change Data	ccm 287			
105188-7.1.6	Waiver and Deviations	ccm 287			
105188-7.3.1	Mass Properties (Weight Only)	ccm 287		Delivered	
105188-11A	Hardware Drawings	ccm 287		[TLEI] Available in JSC Library SED-#39126237	
105188-14	Interface Control Documents	ccm 287		Available in NSTS 21000	
105188-26	Problem Reporting & Corrective Action	ccm 287			
105189	FLIGHT RELEASABLE GRAPPLE FIXTURE (S3) (FLT)	ADMIN			
105189-4	End Item Data Package (ADP)	GCM 2752		Consistent with Shuttle ADP requirements	
105208	GPS TEST SET (TSE)			Test Set #1 Lap Top computer only	
105208-30	Test Plan for GPS Standalone: SEIR for GPS Standalone GN&C Development Test Facility Test Plan for GPS Standalone GN&C Development Test Facility			Huntington Beach Huntington Beach	
105217	APAS DRILL PLATE TOOL (GSE)	ADMIN		See Attachment J-12, International Partner-sourced GFD	
105260	NASA STANDARD INITIATORS (FLT)	CCM 287			
105260-4	Acceptance Data Package	GCM 2752		This data is provided in the NSI Flight-Certification	
105260-1.1.1	Historical Log				
105260-1.1.2	Waiver/Deviation Record				
105260-1.1.7	Ident: As Designed/As-Built Listing				
105260-1.1.9	AGE-SENSITIVE				
105260-1.1.13	Pyrotechnic Data/Lot Certificate				
105260-1.1.15	Certifications				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105260-1.1.16	Material Safety Data Sheet				
105260-2	Acceptance Test Report	CCM 287			
105260-12	Hardware Specification			Delivered	
105261	UHF ANTENNA (S1) (FLT)				
105261-4	Acceptance Data Package [Full 1.1]	GCM 2752			
105261-26	Problem Reporting & Corrective Action				
105273	OIWIF SOCKET ASSY	CCM 379		CHANGED NOMENCLATURE	
105273-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105273-1.1.1	Historical Log				
105273-1.1.2	Waiver/Deviation Record				
105273-1.1.3	Unexplained Anomalies Records				
105273-1.1.4	Shortages				
105273-1.1.5	Unplanned/Deferred Work				
105273-1.1.6	Preplanned/Assigned Work				
105273-1.1.7	Ident: As Designed/As-Built Listing				
105273-1.1.15	Certifications				
105273-2	Acceptance Test Report			Part of ADP	
105273-3	Analysis Data & Analytical Models				
105273-3.1	Reports, Structural Analysis of GFE				
105273-3.2	Thermal Control Plan & Reports of GFE				
105273-3.4	Analysis and Analytical Models of GFE				
105273-3.5	Fracture Control Plan & Reports for GFE				
105273-6	Dimensions (Physical & shipping)			Quarterly thereafter	
105273-7	Electronic Design Data (VMDB Content) [partial]			Del Format To Be Negotiated	
105273-7.1.1	Indentured Parts List			Part of mass properties First del. 11/15/95 Quarterly thereafter	
105273-11A	Engineering Drawings	ADMIN		Update as required hardcopy, native format	
105273-11B	Engineering Models	ADMIN			
105273-7.1.5	Engineering Change Data	ADMIN			
105273-7.1.6	Waiver and Deviations	ADMIN			
105273-7.3.1	Mass Properties			Quarterly	
105273-7.3.3	Volume	ADMIN		Quarterly	
105273-7.3.4	Crew time for Assembly	ADMIN			
105273-7.3.5	Crew Time for Maintenance	ADMIN			
105273-7.3.6	Annual Resupply & Return Planning Data Rpt	ADMIN			
105273-9	FMEA/CIL				
105273-11A	Hardware Drawings			(LO, TLEI) hardcopy native format	
105273-12	Hardware Specifications			Only ICD & PIDS under ISS CM S684-10126	
105273-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 - Delivered Phase 3 - 06/01/96	
105273-14	Interface Control Documents			SSP 30256	
105273-16	Isometric Views-components & attach HW			Initial hardcopy 10/15/95	
105273-17	Limited Life List			Agreement contingent on 1 time memo stating non-applicability. Delivered with R&M report.	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105273-22	Qualification Test Plan			Cert. & Acceptance Req. Doc.delivery at CDR.	
105273-23	Qualification Test Procedures			As Required after CDR	
105273-24	Qualification Test Reports			Delivered with Hardware	
105273-26	Problem Reporting & Corrective Action				
105273-27	Reliability and Maintainability Prediction Report			Agreement contingent on 1 time memo stating non-applicability	
105273-28	Spec.Traceability Report	CCM-830			
105273	Compliance Report				
105273-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
105274	OIWIF SOCKET ASSY	CCM 379		CHANGED NOMENCLATURE	
105274-1	Acceptance Data Package (Only 911 tag)	ccm-561		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105274-2	Acceptance Test Report	ccm-561		Part of ADP	
105274-26	Problem Reporting & Corrective Action	ccm-561			
105275	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105275-1	Acceptance Data Package	CCM-2752		Separate ADP for each S/N	
105275-1.1.1	Historical Log				
105275-1.1.2	Waiver/Deviation Record				
105275-1.1.3	Unexplained Anomalies Records				
105275-1.1.4	Shortages				
105275-1.1.5	Unplanned/Deferred Work				
105275-1.1.6	Preplanned/Assigned Work				
105275-1.1.7	Ident: As Designed/As-Built Listing				
105275-1.1.15	Certifications				
105275-2	Acceptance Test Report			Part of ADP	
105275-3	Analysis Data & Analytical Models			PDR-level - Delivered	
105275-3.1	Reports, Structural Analysis of GFE				
105275-3.2	Thermal Control Plan & Reports of GFE				
105275-3.4	Analysis and Analytical Models of GFE				
105275-3.5	Fracture Control Plan & Reports for GFE				
105275-7	Electronic Design Data (VMDB Content)				
105275-7.1.1	Indentured Parts List			Quarterly;part of mass properties	
105275-11A	Engineering Drawings	ADMIN		Update as required, hardcopy native format	
105275-11B	Engineering Models	ADMIN		Update as required	
105275-7.1.5	Engineering Change Data	ADMIN			
105275-7.1.6	Waiver and Deviations	ADMIN			
105275-7.3.1	Mass Properties			Quarterly	
105275-7.3.3	Volume	ADMIN		Quarterly	
105275-9	FMEA/CIL			Agreement contingent on 1 time memo stating non-applicability	
105275-11A	Hardware Drawings			Hardcopy, native format	
105275-12	Hardware Specifications			S684-10126	
105275-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 -Delivered Phase 3 06/01/96	
105275-14	Interface Control Documents			SSP 30256	
105275-17	Limited Life List			Agreement contingent on 1 time memo stating non-applicability	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105275-22	Qualification Test Plan			Certification & Acceptance requirements documentation delivered at CDR	
105275-23	Qualification Test Procedures			As required after CDR	
105275-24	Qualification Test Reports			Delivered with hardware	
105275-26	Problem Reporting & Corrective Action				
105275-27	Reliability & Maintainability Prediction Report			Agreement contingent on 1 time memo stating non-applicability	
105275-28	Spec. Traceability Report	CCM 830			
105275	Compliance Report				
105276	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105276-1	Acceptance Data Package (Only 911 tag)	GCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP; (Weekend date correction)	
105276-2	Acceptance Test Report	per EA4-98-023		Part of ADP; (Weekend date correction)	
105276-26	Problem Reporting & Corrective Action				
105280	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105280-1	Acceptance Data Package (Only 911 tag)	GCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105280-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
105280-26	Problem Reporting & Corrective Action				
105322	NASA STANDARD INITIATORS (FLT)			FLT-Qual H/W	
105322-1	Acceptance Data Package	GCM 2752		This data is provided in the NSI Flight Certification	
105322-1.1.1	Historical Log				
105322-1.1.7	Ident: As Designed/As-Built Listing				
105322-1.1.13	Pyrotechnic Data/Lot Certificate				
105322-1.1.15	Certifications				
105322-1.1.16	Material Safety Data Sheet				
105322-2	Acceptance Test Report				
105322-3	Analysis Data & Analytical Models			Design Performance Spec. for NSI. SKB26100066-D	
105322-12	Hardware Specification			Delivered	
105421	EV CHARGED PARTICLE DIRECTIONAL SPECTROMETER (FLT)	CCM 287			
105421-1	Acceptance Data Package	GCM 2752			
105421-1.1.1	Historical Log			Per TPS Log	
105421-1.1.2	Waiver/Deviation Record				
105421-1.1.3	Unexplained Anomalies Record				
105421-1.1.4	Shortages				
105421-1.1.5	Unplanned/Deferred Work				
105421-1.1.6	Preplanned/Assigned Work				
105421-1.1.7	Identification-As Designed/As-Built Listing				
105421-1.1.8	Operating Time Cycle				
105421-1.1.9	Age-Sensitive/Time-Actions Items				
105421-1.1.10	Nonstandard Calibration				
105421-1.1.11	Repair Limitations				
105421-1.1.14	Non-Flt HW/Temporary Installations				
105421-1.1.15	Certifications				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105421-1.1.16	MSDS Data				
105421-1.2.1	Notes/Comments				
105421-1.2.2	Waiver/Deviation Record				
105421-1.2.3	Unexplained Anomalies Record				
105421-1.2.4	Unplanned/Deferred Work				
105421-1.2.5	Preplanned/Assigned Work				
105421-1.2.6	Specification Documents				
105421-1.2.7	Program Listing				
105421-1.2.8	Version Description Document				
105421-1.2.9	User's Guide or System Operating Manual				
105421-1.2.10	Certifications				
105421-2	Acceptance Test Report	CCM 287			
105421-3	Analysis Data & Analytical Models [partial]			Analysis data TBD, preliminary data at CDR, final at certification closure	
105421-3.1	Structural Analysis Report (If Developed)			Per Provider content	
105421-3.2	Thermal Control Plan & Report (If Developed)			Per Provider content	
105421-3.6	Component Electrical Power Data			Draft data delivered to end user per Provider content	
105421-3.7	Power Stability & Transient Models			Per Provider content	
105421-5	1553 Data Requirements			Delivery after Component PDR	
105421-6	Dimensions (Physical and Shipping)			Updated Quarterly	
105421-4	Software Interface Data				
105421-4.1	SW Attribute Data Table			To be resolved by PCM 239	
105421-4.2	Functional ICD Requirements			To be resolved by PCM 239	
105421-4.4	Input/Output Constraints			To be resolved by PCM 239	
105421-7	Electronic Design Data			Partial per PIA in work	
105421-30	IPL	ADMIN			
105421-11A	Engineering Drawings	ADMIN		[LO,TLEI]Preliminary Hardcopy Electronic if available Update	
105421-11B	Engineering Models	ADMIN		As available in unigraphics	
105421-7.1.5	Engineering Change Data	ADMIN			
105421-7.1.6	Waivers & Deviations	ADMIN			
105421-32	Mass Properties	ADMIN		Update Quarterly	
105421-33	Power & Thermal	ADMIN		Update Quarterly	
105421-9	FMEA/CIL			PDR Level - 01/15/96 - Hard copy & disk in native format. CDR Level - 08/01/96	
105421-11A	Hardware Drawings			01/15/96 Preliminary. Update at CDR	
105421-12	Hardware Specifications				
105421-13	Hazard Report/System Description			Phase 1-PDR level Phase 2-CDR level Phase 3-Final	
105421-14	Interface Control Documents				
105421-15	IP & CL			Initial will contain cyclic data only	
105421-16	Isometric Views - Comp. & Attach HW [partial]				
105421-17	Limited Life List			PDR Level - 01/15/96 - Hard copy & disk in native format. CDR Level - 08/01/96	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105421-19	Mission Timelines				
105421-20	Operational Constraints				
105421-21	Operational Sequence Diagrams				
105421-22	Qualification Test Plan			CDR projected 6/96	
105421-23	Qualification Test Procedure [partial]			Est date 11/96	
105421-24	Qualification Test Report				
105421-26	Problem Reporting & Corrective Action			Starting with Acceptance Testing Historical data to be used to derive MTBF:	
105421-27	Reliability & Maintainability Predict. Rpt			Phase 1 - PDR Level Phase 2 - CDR Level Final	
105421-28	Spec. Traceability Report				
105421	Compliance Report				
105421-29	Weight (including Wet Weight)			Update Quarterly	
105424	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105424-1	Acceptance Data Package (Only 911 tag)	GCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105424-2	Acceptance Test Report			Part of ADP	
105424-26	Problem Reporting & Corrective Action				
105428	PORTABLE BREATHING APPARATUS WITH 30-FT HOSE (NODE 1) (WITH QUICK DISCONNECT) (FLT)				
105428-1	Acceptance Data Package [partial]	CCM 358			
105428-1.1.1	Historical Log	GCM 358			
105428-1.1.2	Waiver/Deviation Record	CCM 358			
105428-1.1.3	Unexplained Anomalies Record	CCM 358			
105428-1.1.4	Shortages	CCM 358			
105428-1.1.5	Unplanned/Deferred Work	CCM 358			
105428-1.1.6	Preplanned/Assigned Work	CCM 358			
105428-1.1.7	Ident: As Designed/As-Built Listing	CCM 358			
105428-1.1.8	Operating Time/Cycle	CCM 358			
105428-1.1.9	Age-Sensitive/Time-Action Item	CCM 358			
105428-1.1.10	Nonstandard Calibration	GCM 358			
105428-1.1.11	Repair Limitations	CCM 358			
105428-1.1.12	Pressure Vessel Data	CCM 358			
105428-1.1.14	Nonflight Hardware/Temporary Installation	CCM 358			
105428-1.1.15	Certifications	CCM 358			
105428-1.1.16	Material Safety Data Sheet	CCM 358			
105428-2	Acceptance Test Report	CCM 358			
105428-3.1	Reports, Structural Analysis of GFE	GCM 358		Provided by NS2. Interim on 11/1/95 Final	
105428-3.2	Thermal Control Plan & Reports for GFE	GCM 358		Interim on 11/1/95 Final	
105428-3.5	Fracture Control Plan & Reports for GFE	CCM 358		Provided by NS2. Interim on 11/1/95 Final	
105428-6	Dimensions (Physical and Shipping)	CCM 358		SSP 50104, PBA ICD; Data in VMDB	
105428-9	FMEA/CIL	CCM 358		CDR level data	
105428-11A	Hardware Drawings	CCM 358		CDR level. Update as required [LO, EDT, TLEI]	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105428-12	Hardware Specifications	CCM 358		Delivered	
105428-13	Hazard Report/System Description	CCM 358		Phase 2-Data includes PBA & Bracket Phase 3 Data includes PBA & Bracket	
105428-14	Interface Control Documents	CCM 358		Delivered	
105428-16	Isometric Views - Comp. & Attach HW	CCM 358			
105428-17	Limited Life List	CCM 358		Available at CDR	
105428-22	Qualification Test Plan	CCM 358		Certification plan in place at CDR. May include RIDs.	
105428-23	Qualification Test Procedure	CCM 358			
105428-24	Qualification Test Report	CCM 358		Available 90 days post test	
105428-26	Problem Reporting & Corrective Action	CCM 358		Per data sheet as required.	
105428-27	Reliability & Maintainability Predict. Rpt	CCM 358		CDR level data	
105428-28	Spec. Traceability & Compliance Report	CCM 358		Available @ PRR	
105428-29	Weight (including Wet Weight)	CCM 358		SSP50104, PBA IGD: Data in VMDB-5/1/95	
105429	PORTABLE BREATHING APARATUS WITH 30-FT HOSE (NODE 2) (WITH QUICK DISCONNECT) (FLT)				
105429-1	Acceptance Data Package [partial]	ccm 561		(Weekend date correction)	
105429-1.1.1	Historical Log	ccm 561			
105429-1.1.4	Shortages	ccm 561			
105429-1.1.5	Unplanned/Deferred Work	ccm 561			
105429-1.1.6	Preplanned/Assigned Work	ccm 561			
105429-1.1.7	Ident: As Designed/As-Built Listing	ccm 561			
105429-1.1.15	Certifications	ccm 561			
105432	APDS BRASSBOARD (FSE) (now referred to as: Orbiter Docking System with SIM)	ADMIN		Specific H/W & Data TBD; No S&MA data required	
105444	APAS HANDLING/INSTALLATION EQUIPMENT (GSE)	ADMIN		See Attachment J-12, International Partner-sourced GFD	
105451	CREW AND EQUIPMENT TRANSITION AID (CETA) CART	CCM 379		CHANGED NOMENCLATURE	
105451-1	Acceptance Data Package [partial]	CCM 2752		Separate ADP for each S/N	
105451-1.1.1	Historical Log				
105451-1.1.2	Waiver/Deviation Record				
105451-1.1.3	Unexplained Anomalies Records				
105451-1.1.4	Shortages				
105451-1.1.5	Unplanned/Deferred Work				
105451-1.1.6	Preplanned/Assigned Work				
105451-1.1.7	Ident: As Designed/As-Built Listing				
105451-1.1.8	Operating Time/Cycles				
105451-1.1.11	Repair Limitations				
105451-1.1.14	Nonflight HW/Temporary Location				
105451-1.1.15	Certifications				
105451-2	Acceptance Test Report			Part of ADP	
105451-3	Analysis Data & Analytical Models				
105451-3.1	Reports, Structural Analysis of GFE				
105451-3.2	Thermal Control Plan & Reports of GFE				
105451-3.4	Analysis and Analytical Models of GFE				
105451-3.5	Fracture Control Plan & Reports for GFE				
105451-6	Dimensions (Physical & shipping)			Update quarterly thereafter	
105451-7	Electronic Design Data (VMDB Content) [partial]				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105451-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	
105451-7.1.2	Engineering Drawings	ADMIN		Update as required. Hardcopy in native format	
105451-7.1.3	Engineering Models			Update as required	
105451-7.1.5	Engineering Change Data	ADMIN			
105451-7.1.6	Waiver and Deviations	ADMIN			
105451-32	Mass Properties	ADMIN		Quarterly	
105451-34	Volume	ADMIN		Quarterly	
105451-7.3.4	Crew time for Assembly	ADMIN			
105451-7.3.5	Crew Time for Maintenance	ADMIN			
105451-7.3.6	Annual Resupply & Return Planning Data Rpt	ADMIN			
105451-8	Fault Isolation/Repair Verification				
105451-9	FMEA/CIL			Phase 1 - Delivered Phase 2 -08/01/96 (Electronic)	
105451-11A	Hardware Drawings			[LO, EDT, TLEI, CAD Model] Hardcopy in native format	
105451-12	Hardware Specifications			Only ICD & PIDS under ISS CM. S684-10126	
105451-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 - Delivered Phase 3 - 09/30/96	
105451-14	Interface Control Documents			SSP 30256	
105451-16	Isometric Views - Comp & Attach. HW			Initial Hardcopy: 10/15/95	
105451-17	Limited Life List			CDR Level; Electronic Copy	
105451-20	Operations Constraints			Update as required	
105451-22	Qualification Test Plan				
105451-23	Qualification Test Procedures			Post CDR	
105451-24	Qualification Test Reports				
105451-26	Problem Reporting & Corrective Action				
105451-27	Reliability & Maintainability Prediction Report			Phase 1 - Delivered Phase 2 -08/01/96	
105451-28	Spec Traceability Report	GCM 830			
105451-28	Compliance Report				
105451-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
105452	CREW AND EQUIPMENT TRANSITION AID (CETA) CART	CCM 379		CHANGED NOMENCLATURE	
105452-4	Acceptance Data Package [partial]	GCM 2752		Separate ADP for each S/N	
105452-1.1.1	Historical Log				
105452-1.1.2	Waiver/Deviation Record				
105452-1.1.3	Unexplained Anomalies Records				
105452-1.1.4	Shortages				
105452-1.1.5	Unplanned/Deferred Work				
105452-1.1.6	Preplanned/Assigned Work				
105452-1.1.7	Ident: As Designed/As-Built Listing				
105452-1.1.15	Certifications				
105452-2	Acceptance Test Report			Part of ADP	
105452-26	Problem Reporting & Corrective Action				
105459	H-HANDLE STAB. POINTS (SO)				
105459-4	Acceptance Data Package [partial]	CCM 2752		Separate ADP for each S/N	
105459-1.1.1	Historical Log				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105459-1.1.2	Waiver/Deviation Record				
105459-1.1.3	Unexplained Anomalies Records				
105459-1.1.4	Shortages				
105459-1.1.5	Unplanned/Deferred Work				
105459-1.1.6	Preplanned/Assigned Work				
105459-1.1.7	Ident: As Designed/As-Built Listing				
105459-1.1.15	Certifications				
105459-2	Acceptance Test Report	ecm 1270		Part of ADP	
105459-26	Problem Reporting & Corrective Action				
105462	H-HANDLE STAB. POINTS (S1)				
105462-4	Acceptance Data Package [partial]	GCM 2752		Separate ADP for each S/N	
105462-1.1.1	Historical Log				
105462-1.1.2	Waiver/Deviation Record				
105462-1.1.3	Unexplained Anomalies Records				
105462-1.1.4	Shortages				
105462-1.1.5	Unplanned/Deferred Work				
105462-1.1.6	Preplanned/Assigned Work				
105462-1.1.7	Ident: As Designed/As-Built Listing				
105462-1.1.15	Certifications				
105462-2	Acceptance Test Report	ecm 1270		Part of ADP	
105462-26	Problem Reporting & Corrective Action				
105463	H-HANDLE STAB. POINTS (P1)				
105463-4	Acceptance Data Package [partial]	GCM 2752		Separate ADP for each S/N	
105463-1.1.1	Historical Log				
105463-1.1.2	Waiver/Deviation Record				
105463-1.1.3	Unexplained Anomalies Records				
105463-1.1.4	Shortages				
105463-1.1.5	Unplanned/Deferred Work				
105463-1.1.6	Preplanned/Assigned Work				
105463-1.1.7	Ident: As Designed/As-Built Listing				
105463-1.1.15	Certifications				
105463-2	Acceptance Test Report	ecm 1270		Part of ADP	
105463-26	Problem Reporting & Corrective Action				
105464	H-HANDLE STAB. POINTS (P3)				
105464-4	Acceptance Data Package [partial]	GCM 2752		Separate ADP for each S/N; (Weekend-date correction)	
105464-1.1.1	Historical Log				
105464-1.1.2	Waiver/Deviation Record				
105464-1.1.3	Unexplained Anomalies Records				
105464-1.1.4	Shortages				
105464-1.1.5	Unplanned/Deferred Work				
105464-1.1.6	Preplanned/Assigned Work				
105464-1.1.7	Ident: As Designed/As-Built Listing				
105464-1.1.15	Certifications				
105464-2	Acceptance Test Report	ecm 1270		Part of ADP	
105464-26	Problem Reporting & Corrective Action				
105465	H-HANDLE STAB. POINTS (S3)				
105465-4	Acceptance Data Package [partial]	GCM 2752		Separate ADP for each S/N	
105465-1.1.1	Historical Log				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105465-1.1.2	Waiver/Deviation Record				
105465-1.1.3	Unexplained Anomalies Records				
105465-1.1.4	Shortages				
105465-1.1.5	Unplanned/Deferred Work				
105465-1.1.6	Preplanned/Assigned Work				
105465-1.1.7	Ident: As Designed/As-Built Listing				
105465-1.1.15	Certifications				
105465-2	Acceptance Test Report	ccm-1270		Part of ADP	
105465-26	Problem Reporting & Corrective Action				
105468	H-HANDLE STAB POINTS TARGETS (S0)	ccm-287			
105468-1	Acceptance Data Package [partial]	ccm-287		Separate ADP for each S/N	
105468-1.1.1	Historical Log	ccm-287			
105468-1.1.2	Waiver/Deviation Record	ccm-287			
105468-1.1.3	Unexplained Anomalies Records	ccm-287			
105468-1.1.4	Shortages	ccm-287			
105468-1.1.5	Unplanned/Deferred Work	ccm-287			
105468-1.1.6	Preplanned/Assigned Work	ccm-287			
105468-1.1.7	Ident: As Designed/As-Built Listing	ccm-287			
105468-1.1.15	Certifications	ccm-287			
105468-2	Acceptance Test Report	ccm-287		Part of ADP	
105468-7	Electronic Design Data (VMDB Content) [partial]	ccm-287			
105468-11A	Engineering Drawings	ccm-287			
105468-7.1.5	Engineering Change Data	ccm-287			
105468-7.1.6	Waiver and Deviations	ccm-287			
105468-13	Hazard Report/System Description	ccm-287		Prime requires drwgs that show edge	
105468-14	Interface Control Documents	ccm-287			
105468-17	Limited Life List	ccm-287		Limited to data to support verification of service life of paint coating	
105468-24	Qualification Test Reports	ccm-287			
105468-26	Problem Reporting & Corrective Action	ccm-287			
105468-28	Spec. Traceability & Compliance	ccm-287			
105471	H-HANDLE STAB POINTS TARGETS (S1)	ccm-287			
105471-1	Acceptance Data Package [partial]	ccm-287		Separate ADP for each S/N; (Weekend-date correction)	
105471-1.1.1	Historical Log	ccm-287			
105471-1.1.2	Waiver/Deviation Record	ccm-287			
105471-1.1.3	Unexplained Anomalies Records	ccm-287			
105471-1.1.4	Shortages	ccm-287			
105471-1.1.5	Unplanned/Deferred Work	ccm-287			
105471-1.1.6	Preplanned/Assigned Work	ccm-287			
105471-1.1.7	Ident: As Designed/As-Built Listing	ccm-287			
105471-1.1.15	Certifications	ccm-287			
105471-2	Acceptance Test Report	ccm-287		Part of ADP	
105471-26	Problem Reporting & Corrective Action	ccm-287			
105472	H-HANDLE STAB POINTS TARGETS (P1)	CCM-287			
105472-1	Acceptance Data Package [partial]	CCM-287		Separate ADP for each S/N	
105472-1.1.1	Historical Log	CCM-287			
105472-1.1.2	Waiver/Deviation Record	CCM-287			
105472-1.1.3	Unexplained Anomalies Records	CCM-287			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105472-1.1.4	Shortages	CCM 287			
105472-1.1.5	Unplanned/Deferred Work	CCM 287			
105472-1.1.6	Preplanned/Assigned Work	CCM 287			
105472-1.1.7	Ident: As Designed/As-Built Listing	CCM 287			
105472-1.1.15	Certifications	CCM 287			
105472-2	Acceptance Test Report	CCM 287		Part of ADP	
105472-26	Problem Reporting & Corrective Action	CCM 287			
105473	H-HANDLE STAB POINTS TARGETS (P3)	CCM 287			
105473-4	Acceptance Data Package [partial]	SSCN 263 -- ADMIN		Separate ADP for each S/N; (Weekend-date correction)	
105473-1.1.1	Historical Log	CCM 287			
105473-1.1.2	Waiver/Deviation Record	CCM 287			
105473-1.1.3	Unexplained Anomalies Records	CCM 287			
105473-1.1.4	Shortages	CCM 287			
105473-1.1.5	Unplanned/Deferred Work	CCM 287			
105473-1.1.6	Preplanned/Assigned Work	CCM 287			
105473-1.1.7	Ident: As Designed/As-Built Listing	CCM 287			
105473-1.1.15	Certifications	CCM 287			
105473-2	Acceptance Test Report	CCM 287		Part of ADP	
105473-26	Problem Reporting & Corrective Action	CCM 287			
105474	H-HANDLE STAB POINTS TARGETS (S3)	CCM 287			
105474-4	Acceptance Data Package [partial]	CCM 287		Separate ADP for each S/N	
105474-1.1.1	Historical Log	CCM 287			
105474-1.1.2	Waiver/Deviation Record	CCM 287			
105474-1.1.3	Unexplained Anomalies Records	CCM 287			
105474-1.1.4	Shortages	CCM 287			
105474-1.1.5	Unplanned/Deferred Work	CCM 287			
105474-1.1.6	Preplanned/Assigned Work	CCM 287			
105474-1.1.7	Ident: As Designed/As-Built Listing	CCM 287			
105474-1.1.15	Certifications	CCM 287			
105474-2	Acceptance Test Report	CCM 287		Part of ADP	
105474-26	Problem Reporting & Corrective Action	CCM 287			
105476	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105476-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105476-1.1.1	Historical Log				
105476-1.1.2	Waiver/Deviation Record				
105476-1.1.3	Unexplained Anomalies Records				
105476-1.1.4	Shortages				
105476-1.1.5	Unplanned/Deferred Work				
105476-1.1.6	Preplanned/Assigned Work				
105476-1.1.7	Ident: As Designed/As-Built Listing				
105476-1.1.15	Certifications				
105476-2	Acceptance Test Report			Part of ADP	
105476-26	Problem Reporting & Corrective Action				
105477	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105477-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105477-1.1.1	Historical Log				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105477-1.1.2	Waiver/Deviation Record				
105477-1.1.3	Unexplained Anomalies Records				
105477-1.1.4	Shortages				
105477-1.1.5	Unplanned/Deferred Work				
105477-1.1.6	Preplanned/Assigned Work				
105477-1.1.7	Ident: As Designed/As-Built Listing				
105477-1.1.15	Certifications				
105477-2	Acceptance Test Report			Part of ADP	
105477-26	Problem Reporting & Corrective Action				
105478	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105478-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag,	
105478-1.1.1	Historical Log				
105478-1.1.2	Waiver/Deviation Record				
105478-1.1.3	Unexplained Anomalies Records				
105478-1.1.4	Shortages				
105478-1.1.5	Unplanned/Deferred Work				
105478-1.1.6	Preplanned/Assigned Work				
105478-1.1.7	Ident: As Designed/As-Built Listing				
105478-1.1.15	Certifications				
105478-2	Acceptance Test Report	EA4-98-023		Part of ADP	
105478-26	Problem Reporting & Corrective Action				
105479	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	CCM 379		DELIVERED CHANGED NOMENCLATURE	
105479-4	Acceptance Data Package [partial]	CCM 2752		Separate ADP for each S/N	
105479-1.1.1	Historical Log				
105479-1.1.2	Waiver/Deviation Record				
105479-1.1.3	Unexplained Anomalies Records				
105479-1.1.4	Shortages				
105479-1.1.5	Unplanned/Deferred Work				
105479-1.1.6	Preplanned/Assigned Work				
105479-1.1.7	Ident: As Designed/As-Built Listing				
105479-1.1.15	Certifications				
105479-2	Acceptance Test Report			Part of ADP	
105479-3	Analysis Data & Analytical Models			Delivered to Marshall Horton	
105479-3.1	Reports, Structural Analysis of GFE				
105479-3.2	Thermal Control Plan & Reports of GFE				
105479-3.4	Analysis and Analytical Models of GFE				
105479-3.5	Fracture Control Plan & Reports for GFE				
105479-7	Electronic Design Data (VMDB Content) [partial]				
105479-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties. First delivery 11/15/95	
105479-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105479-11B	Engineering Models	ADMIN		Update as required	
105479-7.1.5	Engineering Change Data	ADMIN			
105479-7.1.6	Waiver and Deviations	ADMIN			
105479-32	Mass Properties	ADMIN		Quarterly	
105479-34	Volume	ADMIN		Quarterly	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105479-9	FMEA/CIL			Agreement contingent upon 1-time memo stating non-applicability	
105479-7.1.2	Hardware Drawings			[LO, TLEI] Hardcopy in native format	
105479-12	Hardware Specifications			Delivered	
105479-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 -Delivered	
105479-14	Interface Control Documents			SSP 30256	
105479-22	Qualification Test Plan				
105479-23	Qualification Test Procedures				
105479-24	Qualification Test Reports				
105479-26	Problem Reporting & Corrective Action				
105479-27	Reliability & Maintainability Prediction Report			Agreement contingent upon 1-time memo stating non-applicability	
105479-28	Spec Traceability & Compliance Report				
105479	HANDHOLD, TOP-MOUNTED (MT)			Delivered	
105479-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105479-1.1.1	Historical Log				
105479-1.1.2	Waiver/Deviation Record				
105479-1.1.3	Unexplained Anomalies Records				
105479-1.1.4	Shortages				
105479-1.1.5	Unplanned/Deferred Work				
105479-1.1.6	Preplanned/Assigned Work				
105479-1.1.7	Ident: As Designed/As-Built Listing				
105479-1.1.15	Certifications				
105479-2	Acceptance Test Report			Part of ADP	
105479-26	Problem Reporting & Corrective Action				
105480	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	ccm 805			
105480-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105480-1.1.1	Historical Log				
105480-1.1.2	Waiver/Deviation Record				
105480-1.1.3	Unexplained Anomalies Records				
105480-1.1.4	Shortages				
105480-1.1.5	Unplanned/Deferred Work				
105480-1.1.6	Preplanned/Assigned Work				
105480-1.1.7	Ident: As Designed/As-Built Listing				
105480-1.1.15	Certifications				
105480-2	Acceptance Test Report	ccm 1270		Part of ADP	
105480-26	Problem Reporting & Corrective Action				
105481	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105481-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105481-1.1.1	Historical Log				
105481-1.1.2	Waiver/Deviation Record				
105481-1.1.3	Unexplained Anomalies Records				
105481-1.1.4	Shortages				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105481-1.1.5	Unplanned/Deferred Work				
105481-1.1.6	Preplanned/Assigned Work				
105481-1.1.7	Ident: As Designed/As-Built Listing				
105481-1.1.15	Certifications				
105481-2	Acceptance Test Report	ecm 1270		Part of ADP	
105481-26	Problem Reporting & Corrective Action				
105482	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105482-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag; thereafter to reference original ADP	
105482-1.1.1	Historical Log				
105482-1.1.2	Waiver/Deviation Record				
105482-1.1.3	Unexplained Anomalies Records				
105482-1.1.4	Shortages				
105482-1.1.5	Unplanned/Deferred Work				
105482-1.1.6	Preplanned/Assigned Work				
105482-1.1.7	Ident: As Designed/As-Built Listing				
105482-1.1.15	Certifications				
105482-2	Acceptance Test Report	ecm 1270		Part of ADP	
105482-26	Problem Reporting & Corrective Action				
105483	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105483-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag; thereafter to reference original ADP; (Weekend date correction)	
105483-1.1.1	Historical Log				
105483-1.1.2	Waiver/Deviation Record				
105483-1.1.3	Unexplained Anomalies Records				
105483-1.1.4	Shortages				
105483-1.1.5	Unplanned/Deferred Work				
105483-1.1.6	Preplanned/Assigned Work				
105483-1.1.7	Ident: As Designed/As-Built Listing				
105483-1.1.15	Certifications				
105483-2	Acceptance Test Report	ecm 1270		Part of ADP	
105483-26	Problem Reporting & Corrective Action				
105484	HANDRAIL ASSEMBLY, TOP- MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105484-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105484-1.1.1	Historical Log				
105484-1.1.2	Waiver/Deviation Record				
105484-1.1.3	Unexplained Anomalies Records				
105484-1.1.4	Shortages				
105484-1.1.5	Unplanned/Deferred Work				
105484-1.1.6	Preplanned/Assigned Work				
105484-1.1.7	Ident: As Designed/As-Built Listing				
105484-1.1.15	Certifications				
105484-2	Acceptance Test Report			Part of ADP	
105484-3	Analysis Data & Analytical Models			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105484-3.1	Reports, Structural Analysis of GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105484-3.2	Thermal Control Plan & Reports of GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105484-3.4	Analysis and Analytical Models of GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105484-3.5	Fracture Control Plan & Reports for GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105484-7	Electronic Design Data (VMDB Content) [partial]				
105484-7.1.1	Indentured Parts List			Quarterly. Part of mass properties	
105484-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105484-11B	Engineering Models	ADMIN			
105484-7.1.5	Engineering Change Data	ADMIN			
105484-7.1.6	Waiver and Deviations	ADMIN			
105484-7.3.1	Mass Properties			Quarterly	
105484-7.3.3	Volume	ADMIN		Quarterly	
105484-7.10	Parts Selection and Control	ADMIN			
105484-9	FMEA/CIL			Agreement contingent upon memo stating non-applicability	
105484-11A	Hardware Drawings			[LO, TLEI] Hardcopy in native format	
105484-12	Hardware Specifications			Only ICD & PIDS under ISS CM. S684-10126	
105484-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 -Delivered	
105484-14	Interface Control Documents			SSP 30256	
105484-17	Limited Life List			Agreement contingent upon memo stating non-applicability	
105484-22	Qualification Test Plan			Delivered	
105484-23	Qualification Test Procedures			Post CDR	
105484-24	Qualification Test Reports				
105484-26	Problem Reporting & Corrective Action				
105484-27	Reliability and Maintainability Prediction Report			Agreement contingent upon memo stating non-applicability	
105484-28	Spec Traceability Report	GCM 830			
105484-28	Compliance Report				
105485	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105485-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag; thereafter (911 tag to reference original ADP)	
105485-1.1.1	Historical Log				
105485-1.1.2	Waiver/Deviation Record				
105485-1.1.3	Unexplained Anomalies Records				
105485-1.1.4	Shortages				
105485-1.1.5	Unplanned/Deferred Work				
105485-1.1.6	Preplanned/Assigned Work				
105485-1.1.7	Ident: As Designed/As-Built Listing				
105485-1.1.15	Certifications				
105485-2	Acceptance Test Report			Part of ADP	
105485-26	Problem Reporting & Corrective Action				
105486	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105486-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag,	
105486-1.1.1	Historical Log				
105486-1.1.2	Waiver/Deviation Record				
105486-1.1.3	Unexplained Anomalies Records				
105486-1.1.4	Shortages				
105486-1.1.5	Unplanned/Deferred Work				
105486-1.1.6	Preplanned/Assigned Work				
105486-1.1.7	Ident: As Designed/As-Built Listing				
105486-1.1.15	Certifications				
105486-2	Acceptance Test Report			Part of ADP	
105486-26	Problem Reporting & Corrective Action				
105487	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105487-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP)	
105487-1.1.1	Historical Log				
105487-1.1.2	Waiver/Deviation Record				
105487-1.1.3	Unexplained Anomalies Records				
105487-1.1.4	Shortages				
105487-1.1.5	Unplanned/Deferred Work				
105487-1.1.6	Preplanned/Assigned Work				
105487-1.1.7	Ident: As Designed/As-Built Listing				
105487-1.1.15	Certifications				
105487-2	Acceptance Test Report			Part of ADP	
105487-26	Problem Reporting & Corrective Action				
105488	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	ccm 805		changed date	
105488-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP) changed date	
105488-1.1.1	Historical Log				
105488-1.1.2	Waiver/Deviation Record				
105488-1.1.3	Unexplained Anomalies Records				
105488-1.1.4	Shortages				
105488-1.1.5	Unplanned/Deferred Work				
105488-1.1.6	Preplanned/Assigned Work				
105488-1.1.7	Ident: As Designed/As-Built Listing				
105488-1.1.15	Certifications				
105488-2	Acceptance Test Report	ccm 1270		Part of ADP	
105488-26	Problem Reporting & Corrective Action				
105489	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	ccm 805		changed date	
105489-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP) changed date	
105489-1.1.1	Historical Log				
105489-1.1.2	Waiver/Deviation Record				
105489-1.1.3	Unexplained Anomalies Records				
105489-1.1.4	Shortages				
105489-1.1.5	Unplanned/Deferred Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105489-1.1.6	Preplanned/Assigned Work				
105489-1.1.7	Ident: As Designed/As-Built Listing				
105489-1.1.15	Certifications				
105489-2	Acceptance Test Report	ccm 1270		Part of ADP	
105489-26	Problem Reporting & Corrective Action				
105490	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105490-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
105490-1.1.1	Historical Log				
105490-1.1.2	Waiver/Deviation Record				
105490-1.1.3	Unexplained Anomalies Records				
105490-1.1.4	Shortages				
105490-1.1.5	Unplanned/Deferred Work				
105490-1.1.6	Preplanned/Assigned Work				
105490-1.1.7	Ident: As Designed/As-Built Listing				
105490-1.1.15	Certifications				
105490-2	Acceptance Test Report	ccm 1270		Part of ADP	
105490-26	Problem Reporting & Corrective Action				
105491	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105491-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP); (Weekend date correction)	
105491-1.1.1	Historical Log				
105491-1.1.2	Waiver/Deviation Record				
105491-1.1.3	Unexplained Anomalies Records				
105491-1.1.4	Shortages				
105491-1.1.5	Unplanned/Deferred Work				
105491-1.1.6	Preplanned/Assigned Work				
105491-1.1.7	Ident: As Designed/As-Built Listing				
105491-1.1.15	Certifications				
105491-2	Acceptance Test Report	ccm 1270		Part of ADP; (Weekend date correction)	
105491-26	Problem Reporting & Corrective Action				
105492	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		Delivered CHANGED NOMENCLATURE	
105492-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105492-1.1.1	Historical Log				
105492-1.1.2	Waiver/Deviation Record				
105492-1.1.3	Unexplained Anomalies Records				
105492-1.1.4	Shortages				
105492-1.1.5	Unplanned/Deferred Work				
105492-1.1.6	Preplanned/Assigned Work				
105492-1.1.7	Ident: As Designed/As-Built Listing				
105492-1.1.15	Certifications				
105492-2	Acceptance Test Report			Part of ADP	
105492-3	Analysis Data & Analytical Models			Data delivered to Boeing Prime	
105492-3.1	Reports, Structural Analysis of GFE				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105492-3.2	Thermal Control Plan & Reports of GFE				
105492-3.4	Analysis and Analytical Models of GFE				
105492-3.5	Fracture Control Plan & Reports for GFE				
105492-7	Electronic Design Data (VMDB Content) [partial]			Del Format To Be Negotiated	
105492-7.1.1	Indentured Parts List			Quarterly. Part of mass properties	
105492-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105492-7.1.5	Engineering Change Data	ADMIN			
105492-7.1.6	Waiver and Deviations	ADMIN			
105492-7.3.1	Mass Properties			First delivery -11/15/95	
105492-7.3.3	Volume	ADMIN		First delivery -11/15/95	
105492-9	FMEA/CIL			Agreement contingent upon 1-time memo stating non-applicability	
105492-11A	Hardware Drawings			[LO, TLEI] Hardcopy in native format	
105492-12	Hardware Specifications			Delivered	
105492-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 -Delivered	
105492-14	Interface Control Documents			SSP 30256	
105492-22	Qualification Test Plan			Delivered	
105492-23	Qualification Test Procedures			Delivered	
105492-24	Qualification Test Reports			Delivered	
105492-26	Problem Reporting & Corrective Action				
105492-28	Traceability & Compliance Report				
105493	MICROCONICALS FITTINGS (3/4 INCH HOLE)	CCM 379		Delivered CHANGED NOMENCLATURE	
105493-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105493-1.1.1	Historical Log				
105493-1.1.2	Waiver/Deviation Record				
105493-1.1.3	Unexplained Anomalies Records				
105493-1.1.4	Shortages				
105493-1.1.5	Unplanned/Deferred Work				
105493-1.1.6	Preplanned/Assigned Work				
105493-1.1.7	Ident: As Designed/As-Built Listing				
105493-1.1.15	Certifications				
105493-2	Acceptance Test Report			Part of ADP	
105493-26	Problem Reporting & Corrective Action				
105494	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105494-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105494-1.1.1	Historical Log				
105494-1.1.2	Waiver/Deviation Record				
105494-1.1.3	Unexplained Anomalies Records				
105494-1.1.4	Shortages				
105494-1.1.5	Unplanned/Deferred Work				
105494-1.1.6	Preplanned/Assigned Work				
105494-1.1.7	Ident: As Designed/As-Built Listing				
105494-1.1.15	Certifications				
105494-2	Acceptance Test Report			Part of ADP	
105494-26	Problem Reporting & Corrective Action				
105495	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105495-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105495-1.1.1	Historical Log				
105495-1.1.2	Waiver/Deviation Record				
105495-1.1.3	Unexplained Anomalies Records				
105495-1.1.4	Shortages				
105495-1.1.5	Unplanned/Deferred Work				
105495-1.1.6	Preplanned/Assigned Work				
105495-1.1.7	Ident: As Designed/As-Built Listing				
105495-1.1.15	Certifications				
105495-2	Acceptance Test Report			Part of ADP	
105495-26	Problem Reporting & Corrective Action				
105496	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105496-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105496-1.1.1	Historical Log				
105496-1.1.2	Waiver/Deviation Record				
105496-1.1.3	Unexplained Anomalies Records				
105496-1.1.4	Shortages				
105496-1.1.5	Unplanned/Deferred Work				
105496-1.1.6	Preplanned/Assigned Work				
105496-1.1.7	Ident: As Designed/As-Built Listing				
105496-1.1.15	Certifications				
105496-2	Acceptance Test Report			Part of ADP	
105496-26	Problem Reporting & Corrective Action				
105497	MICROCONICAL FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105497-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105497-1.1.1	Historical Log				
105497-1.1.2	Waiver/Deviation Record				
105497-1.1.3	Unexplained Anomalies Records				
105497-1.1.4	Shortages				
105497-1.1.5	Unplanned/Deferred Work				
105497-1.1.6	Preplanned/Assigned Work				
105497-1.1.7	Ident: As Designed/As-Built Listing				
105497-1.1.15	Certifications				
105497-2	Acceptance Test Report			Part of ADP	
105497-26	Problem Reporting & Corrective Action				
105498	MICROCONICAL FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105498-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105498-1.1.1	Historical Log				
105498-1.1.2	Waiver/Deviation Record				
105498-1.1.3	Unexplained Anomalies Records				
105498-1.1.4	Shortages				
105498-1.1.5	Unplanned/Deferred Work				
105498-1.1.6	Preplanned/Assigned Work				
105498-1.1.7	Ident: As Designed/As-Built Listing				
105498-1.1.15	Certifications				
105498-2	Acceptance Test Report			Part of ADP	
105498-26	Problem Reporting & Corrective Action				
105499	MICROCONICAL FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105499-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105499-1.1.1	Historical Log				
105499-1.1.2	Waiver/Deviation Record				
105499-1.1.3	Unexplained Anomalies Records				
105499-1.1.4	Shortages				
105499-1.1.5	Unplanned/Deferred Work				
105499-1.1.6	Preplanned/Assigned Work				
105499-1.1.7	Ident: As Designed/As-Built Listing				
105499-1.1.15	Certifications				
105499-2	Acceptance Test Report			Part of ADP	
105499-26	Problem Reporting & Corrective Action				
105500	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105500-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105500-1.1.1	Historical Log				
105500-1.1.2	Waiver/Deviation Record				
105500-1.1.3	Unexplained Anomalies Records				
105500-1.1.4	Shortages				
105500-1.1.5	Unplanned/Deferred Work				
105500-1.1.6	Preplanned/Assigned Work				
105500-1.1.7	Ident: As Designed/As-Built Listing				
105500-1.1.15	Certifications				
105500-2	Acceptance Test Report			Part of ADP	
105500-26	Problem Reporting & Corrective Action				
105501	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105501-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105501-1.1.1	Historical Log				
105501-1.1.2	Waiver/Deviation Record				
105501-1.1.3	Unexplained Anomalies Records				
105501-1.1.4	Shortages				
105501-1.1.5	Unplanned/Deferred Work				
105501-1.1.6	Preplanned/Assigned Work				
105501-1.1.7	Ident: As Designed/As-Built Listing				
105501-1.1.15	Certifications				
105501-2	Acceptance Test Report			Part of ADP	
105501-26	Problem Reporting & Corrective Action				
105502	MICROCONICAL FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105502-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105502-1.1.1	Historical Log				
105502-1.1.2	Waiver/Deviation Record				
105502-1.1.3	Unexplained Anomalies Records				
105502-1.1.4	Shortages				
105502-1.1.5	Unplanned/Deferred Work				
105502-1.1.6	Preplanned/Assigned Work				
105502-1.1.7	Ident: As Designed/As-Built Listing				
105502-1.1.15	Certifications				
105502-2	Acceptance Test Report			Part of ADP	
105502-26	Problem Reporting & Corrective Action				
105503	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105503-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105503-1.1.1	Historical Log				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105503-1.1.2	Waiver/Deviation Record				
105503-1.1.3	Unexplained Anomalies Records				
105503-1.1.4	Shortages				
105503-1.1.5	Unplanned/Deferred Work				
105503-1.1.6	Preplanned/Assigned Work				
105503-1.1.7	Ident: As Designed/As-Built Listing				
105503-1.1.15	Certifications				
105503-2	Acceptance Test Report			Part of ADP	
105503-26	Problem Reporting & Corrective Action				
105504	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105504-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105504-1.1.1	Historical Log				
105504-1.1.2	Waiver/Deviation Record				
105504-1.1.3	Unexplained Anomalies Records				
105504-1.1.4	Shortages				
105504-1.1.5	Unplanned/Deferred Work				
105504-1.1.6	Preplanned/Assigned Work				
105504-1.1.7	Ident: As Designed/As-Built Listing				
105504-1.1.15	Certifications				
105504-2	Acceptance Test Report			Part of ADP	
105504-26	Problem Reporting & Corrective Action				
105505	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105505-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105505-1.1.1	Historical Log				
105505-1.1.2	Waiver/Deviation Record				
105505-1.1.3	Unexplained Anomalies Records				
105505-1.1.4	Shortages				
105505-1.1.5	Unplanned/Deferred Work				
105505-1.1.6	Preplanned/Assigned Work				
105505-1.1.7	Ident: As Designed/As-Built Listing				
105505-1.1.15	Certifications				
105505-2	Acceptance Test Report			Part of ADP	
105505-26	Problem Reporting & Corrective Action				
105506	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105506-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105506-1.1.1	Historical Log				
105506-1.1.2	Waiver/Deviation Record				
105506-1.1.3	Unexplained Anomalies Records				
105506-1.1.4	Shortages				
105506-1.1.5	Unplanned/Deferred Work				
105506-1.1.6	Preplanned/Assigned Work				
105506-1.1.7	Ident: As Designed/As-Built Listing				
105506-1.1.15	Certifications				
105506-2	Acceptance Test Report			Part of ADP	
105506-26	Problem Reporting & Corrective Action				
105507	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105507-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105507-1.1.1	Historical Log				
105507-1.1.2	Waiver/Deviation Record				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105507-1.1.3	Unexplained Anomalies Records				
105507-1.1.4	Shortages				
105507-1.1.5	Unplanned/Deferred Work				
105507-1.1.6	Preplanned/Assigned Work				
105507-1.1.7	Ident: As Designed/As-Built Listing				
105507-1.1.15	Certifications				
105507-2	Acceptance Test Report			Part of ADP	
105507-26	Problem Reporting & Corrective Action				
105508	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105508-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105508-1.1.1	Historical Log				
105508-1.1.2	Waiver/Deviation Record				
105508-1.1.3	Unexplained Anomalies Records				
105508-1.1.4	Shortages				
105508-1.1.5	Unplanned/Deferred Work				
105508-1.1.6	Preplanned/Assigned Work				
105508-1.1.7	Ident: As Designed/As-Built Listing				
105508-1.1.15	Certifications				
105508-2	Acceptance Test Report			Part of ADP	
105508-26	Problem Reporting & Corrective Action				
105509	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105509-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105509-1.1.1	Historical Log				
105509-1.1.2	Waiver/Deviation Record				
105509-1.1.3	Unexplained Anomalies Records				
105509-1.1.4	Shortages				
105509-1.1.5	Unplanned/Deferred Work				
105509-1.1.6	Preplanned/Assigned Work				
105509-1.1.7	Ident: As Designed/As-Built Listing				
105509-1.1.15	Certifications				
105509-2	Acceptance Test Report			Part of ADP	
105509-26	Problem Reporting & Corrective Action				
105510	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105510-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N; 911 tag	
105510-1.1.1	Historical Log				
105510-1.1.2	Waiver/Deviation Record				
105510-1.1.3	Unexplained Anomalies Records				
105510-1.1.4	Shortages				
105510-1.1.5	Unplanned/Deferred Work				
105510-1.1.6	Preplanned/Assigned Work				
105510-1.1.7	Ident: As Designed/As-Built Listing				
105510-1.1.15	Certifications				
105510-2	Acceptance Test Report			Part of ADP	
105510-26	Problem Reporting & Corrective Action				
105511	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105511-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N; 911 tag	
105511-1.1.1	Historical Log				
105511-1.1.2	Waiver/Deviation Record				
105511-1.1.3	Unexplained Anomalies Records				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105511-1.1.4	Shortages				
105511-1.1.5	Unplanned/Deferred Work				
105511-1.1.6	Preplanned/Assigned Work				
105511-1.1.7	Ident: As Designed/As-Built Listing				
105511-1.1.15	Certifications				
105511-2	Acceptance Test Report			Part of ADP	
105511-26	Problem Reporting & Corrective Action				
105512	MICROCONICALS FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105512-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N; 911 tag	
105512-1.1.1	Historical Log				
105512-1.1.2	Waiver/Deviation Record				
105512-1.1.3	Unexplained Anomalies Records				
105512-1.1.4	Shortages				
105512-1.1.5	Unplanned/Deferred Work				
105512-1.1.6	Preplanned/Assigned Work				
105512-1.1.7	Ident: As Designed/As-Built Listing				
105512-1.1.15	Certifications				
105512-2	Acceptance Test Report			Part of ADP	
105512-26	Problem Reporting & Corrective Action				
105513	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105513-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105513-1.1.1	Historical Log				
105513-1.1.2	Waiver/Deviation Record				
105513-1.1.3	Unexplained Anomalies Records				
105513-1.1.4	Shortages				
105513-1.1.5	Unplanned/Deferred Work				
105513-1.1.6	Preplanned/Assigned Work				
105513-1.1.7	Ident: As Designed/As-Built Listing				
105513-1.1.15	Certifications				
105513-2	Acceptance Test Report			Part of ADP	
105513-26	Problem Reporting & Corrective Action				
105514	MICROCONICALS FITTING (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105514-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105514-1.1.1	Historical Log				
105514-1.1.2	Waiver/Deviation Re+B732cord				
105514-1.1.3	Unexplained Anomalies Records				
105514-1.1.4	Shortages				
105514-1.1.5	Unplanned/Deferred Work				
105514-1.1.6	Preplanned/Assigned Work				
105514-1.1.7	Ident: As Designed/As-Built Listing				
105514-1.1.15	Certifications				
105514-2	Acceptance Test Report			Part of ADP	
105514-26	Problem Reporting & Corrective Action				
105517	APFR ASSY	ccm 805		changed date	
105517-4	Acceptance Data Package	CCM 2752		changed date	
105517-1.1.1	Historical Log				
105517-1.1.2	Waiver/Deviation Record				
105517-1.1.3	Unexplained Anomalies Records				
105517-1.1.4	Shortages				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105517-1.1.5	Unplanned/Deferred Work				
105517-1.1.6	Preplanned/Assigned Work				
105517-1.1.7	Ident: As Designed/As-Built Listing				
105517-1.1.8	Operating Time Cycle				
105517-1.1.15	Certifications				
105517-2	Acceptance Test Report	ccm 805		Part of ADP	
105517-3	Analysis Data & Analytical Models			CDR level data	
105517-3.1	Reports, Structural Analysis of GFE			CDR level data	
105517-3.2	Thermal Control Plan & Reports of GFE			CDR level data	
105517-3.4	Analysis and Analytical Models of GFE			CDR level data	
105517-3.5	Fracture Control Plan & Reports for GFE			CDR level data	
105517-6	Dimensions (Physical & shipping)			Update Quarterly Thereafter	
105517-7	Electronic Design Data (VMDB Content) [partial]				
105517-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	
105517-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105517-11B	Engineering Models	ADMIN		Project CDR	
105517-7.1.5	Engineering Change Data	ADMIN			
105517-7.1.6	Waiver and Deviations	ADMIN			
105517-32	Mass Properties	ADMIN		Quarterly	
105517-34	Volume	ADMIN		Quarterly	
105517-9	FMEA/CIL			Phase 1 - Delivered	
105517-9	FMEA/CIL			Phase 2 -11/1/95 (Hard)	
105517-9	FMEA/CIL			12/15/95 (Electronic)	
105517-9	FMEA/CIL			08/01/96 (Update)	
105517-11A	Hardware Drawings			[LO, TLEI,] Hardcopy in native format	
105517-12	Hardware Specifications			Only ICD & PIDS under ISS CM S684-10126	
105517-13	Hazard Report/System Description			Phase 1 - Delivered	
105517-13	Hazard Report/System Description			Phase 2 -Delivered	
105517-13	Hazard Report/System Description			Phase 3 - 10/01/97	
105517-14	Interface Control Documents			SSP 30256	
105517-16	Isometric Views-components & attach HW			Hardcopy: 10/15/95	
105517-17	Limited Life List			11/01/95 (Hard copy)	
105517-17	Limited Life List			12/15/95 (Electronic)	
105517-17	Limited Life List			08/01/96 (Update)	
105517-20	Operations Constraints			Update As Required	
105517-22	Qualification Test Plan				
105517-23	Qualification Test Procedures			Post CDR	
105517-24	Qualification Test Reports				
105517-26	Problem Reporting & Corrective Action				
105517-27	Reliability & Maintainability Prediction Report			11/01/95 (Hard copy)	
105517-27	Reliability & Maintainability Prediction Report			12/15/95 (Electronic)	
105517-27	Reliability & Maintainability Prediction Report			08/01/96 (Update)	
105517-28	Spec Traceability Report				
105517-28	Compliance Report	CCM-830			
105517-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
105518	PORTABLE FOOT RESTRAINT WORKSTATION STANCHION (PFRWS)	ccm 805		changed date	
105518-1	Acceptance Data Package	CCM-2752		changed date	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105518-1.1.1	Historical Log				
105518-1.1.2	Waiver/Deviation Record				
105518-1.1.3	Unexplained Anomalies Records				
105518-1.1.4	Shortages				
105518-1.1.5	Unplanned/Deferred Work				
105518-1.1.6	Preplanned/Assigned Work				
105518-1.1.7	Ident: As Designed/As-Built Listing				
105518-1.1.8	Operating Time Cycle				
105518-1.1.15	Certifications				
105518-2	Acceptance Test Report	ccm 805		Part of ADP	
105518-3	Analysis Data & Analytical Models			CDR level data	
105518-3.1	Reports, Structural Analysis of GFE			CDR level data	
105518-3.2	Thermal Control Plan & Reports of GFE			CDR level data	
105518-3.4	Analysis and Analytical Models of GFE			CDR level data	
105518-3.5	Fracture Control Plan & Reports for GFE			CDR level data	
105518-6	Dimensions (Physical & shipping)			Update Quarterly Thereafter	
105518-7	Electronic Design Data (VMDB Content) [partial]				
105518-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	
105518-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105518-7.1.3	Engineering Models			Quarterly	
105518-7.1.5	Engineering Change Data	ADMIN			
105518-7.1.6	Waiver and Deviations	ADMIN			
105518-32	Mass Properties	ADMIN			
105518-34	Volume	ADMIN		Quarterly	
105518-9	FMEA/CIL			Phase 1 - Delivered	
105518-9	FMEA/CIL			Phase 2 -11/1/95 (Hard)	
105518-9	FMEA/CIL			12/15/95 (Electronic)	
105518-9	FMEA/CIL			08/01/96 (Update)	
105518-11A	Hardware Drawings			[LO, TLEI,] Hardcopy in native format	
105518-12	Hardware Specifications			Only ICD & PIDS under ISS CM S684-10126	
105518-13	Hazard Report/System Description			Phase 1 - Delivered	
105518-13	Hazard Report/System Description			Phase 2 -Delivered	
105518-13	Hazard Report/System Description			Phase 3 - 10/01/97	
105518-14	Interface Control Documents			SSP 30256	
105518-16	Isometric Views-components & attach HW			Hardcopy: 10/15/95	
105518-17	Limited Life List			11/01/95 (Hard copy)	
105518-17	Limited Life List			12/15/95 (Electronic)	
105518-17	Limited Life List			08/01/96 (Update)	
105518-20	Operations Constraints			Update As Required	
105518-22	Qualification Test Plan				
105518-23	Qualification Test Procedures			Post CDR	
105518-24	Qualification Test Reports				
105518-26	Problem Reporting & Corrective Action				
105518-27	Reliability & Maintainability Prediction Report			11/01/95 (Hard copy)	
105518-27	Reliability & Maintainability Prediction Report			12/15/95 (Electronic)	
105518-27	Reliability & Maintainability Prediction Report			08/01/96 (Update)	
105518-28	Spec Traceability Report				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105518-28	Compliance Report				
105518-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
105527	TEMPORARY EQUIPMENT RESTRAINT AID (TERA)	ccm 805		changed date	
105527-4	Acceptance Data Package	GCM 2752		changed date	
105527-1.1.1	Historic Log				
105527-1.1.2	Waiver/Deviation Record				
105527-1.1.3	Unexplained Anomalies Records				
105527-1.1.4	Shortages				
105527-1.1.5	Unplanned/Deferred Work				
105527-1.1.6	Preplanned/Assigned Work				
105527-1.1.7	Ident: As Designed/As-Built Listing				
105527-1.1.8	Operating Time Cycle				
105527-1.1.15	Certifications				
105527-2	Acceptance Test Report	ccm 805		Part of ADP	
105527-3	Analysis Data & Analytical Models				
105527-3.1	Reports, Structural Analysis of GFE				
105527-3.2	Thermal Control Plan & Reports of GFE				
105527-3.4	Analysis and Analytical Models of GFE				
105527-3.5	Fracture Control Plan & Reports for GFE				
105527-6	Dimensions (Physical & shipping)			Update Quarterly Thereafter	
105527-7	Electronic Design Data (VMDB Content) [partial]				
105527-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	
105527-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105527-7.1.3	Engineering Models			Delivered	
105527-7.1.5	Engineering Change Data	ADMIN			
105527-7.1.6	Waiver and Deviations	ADMIN			
105527-32	Mass Properties	ADMIN		Quarterly	
105527-34	Volume	ADMIN		Quarterly	
105527-9	FMEA/CIL			Phase 1 - Delivered	
105527-9	FMEA/CIL			Phase 2 -11/1/95 (Hard)	
105527-9	FMEA/CIL			12/15/95 (Electronic)	
105527-9	FMEA/CIL			08/01/96 (Update)	
105527-11A	Hardware Drawings			[LO, TLEI,] Hardcopy in native format	
105527-12	Hardware Specifications			Only ICD & PIDS under ISS CM S684-10126	
105527-13	Hazard Report/System Description			Phase 1 - Delivered	
105527-13	Hazard Report/System Description			Phase 2 -Delivered	
105527-13	Hazard Report/System Description			Phase 3 - 10/01/97	
105527-14	Interface Control Documents			SSP 30256	
105527-16	Isometric Views-components & attach HW			Hardcopy: 10/15/95	
105527-17	Limited Life List			11/01/95 (Hard copy)	
105527-17	Limited Life List			12/15/95 (Electronic)	
105527-17	Limited Life List			08/01/96 (Update)	
105527-20	Operations Constraints			Update As Required	
105527-22	Qualification Test Plan				
105527-23	Qualification Test Procedures			Post CDR	
105527-24	Qualification Test Reports				
105527-26	Problem Reporting & Corrective Action				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105527-27	Reliability & Maintainability Prediction Report			11/01/95 (Hard copy)	
105527-27	Reliability & Maintainability Prediction Report			12/15/95 (Electronic)	
105527-27	Reliability & Maintainability Prediction Report			08/01/96 (Update)	
105527-28	Traceability Report	GCM-830			
105527-28	Compliance Report				
105527-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
105528	TETHER SHUTTLE	ccm-805		changed date	
105528-4	Acceptance Data Package	ccm-805		Separate ADP for each S/N-changed date	
105528-1.1.1	Historical Log				
105528-1.1.2	Waiver/Deviation Record				
105528-1.1.3	Unexplained Anomalies Records				
105528-1.1.4	Shortages				
105528-1.1.5	Unplanned/Deferred Work				
105528-1.1.6	Preplanned/Assigned Work				
105528-1.1.7	Ident: As Designed/As-Built Listing				
105528-1.1.8	Operating Time Cycle				
105528-1.1.15	Certifications				
105528-2	Acceptance Test Report	ccm-805		Part of ADP-changed date	
105528-3	Analysis Data & Analytical Models				
105528-3.1	Reports, Structural Analysis of GFE				
105528-3.2	Thermal Control Plan & Reports of GFE				
105528-3.4	Analysis and Analytical Models of GFE				
105528-3.5	Fracture Control Plan & Reports for GFE				
105528-6	Dimensions (Physical & Shipping)			Quarterly Updates	
105528-31	Indentured Parts List	ADMIN		Quarterly; part of Mass Properties	
105528-7.1.2	Engineering Drawings			Update as required Hardcopy native-format	
105528-7.1.3	Engineering Models			Update as required	
105528-7.1.5	Engineering Change Data	ADMIN			
105528-7.1.6	Waiver and Deviations	ADMIN			
105528-32	Mass Properties	ADMIN		Quarterly	
105528-34	Volume	ADMIN		Quarterly	
105528-9	FMEA/CIL			Phase 1 - Delivered; Phase 2 - 08/01/96	
105528-11A	Hardware Drawings			(LO, TLEI) - Only ICD & PIDS under ISS-CM Hardcopy, Native format	
105528-12	Hardware Specifications			S684-10126	
105528-13	Hazard Report/System Description			Phase 1 - Delivered	
105528-13	Hazard Report/System Description			Phase 2 - Delivered	
105528-13	Hazard Report/System Description			Phase 3 - 10/01/97	
105528-14	Interface Control Documents			SSP-30256	
105528-16	Isometric Views-Components & Attach HW			Initial Hardcopy 10/15/95	
105528-17	Limited Life List			Agreement contingent on 1-time memo-stating non-applicability	
105528-20	Operation Constraints			Update as required	
105528-22	Qualification Test Plan			CARD at CDR	
105528-23	Qualification Test Procedures			As required after CDR	
105528-24	Qualification Test Reports				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105528-26	Problem Reporting & Corrective Action				
105528-27	Reliability & Maintainability Prediction Report			Agreement contingent on 1 time memo-stating non-applicability	
105528-28	Spec.Traceability Report	GCM 830			
105528-28	Compliance Report				
105528-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
105546	OIU (INCLUDES SOFTWARE) (FEU)				
105545-1	Acceptance Data Package	GCM 2752		(AN ADP FOR FEU)	
105550	JEM CONTROL PROCESSOR S/W	CCM 172			
105550-1	Acceptance Data Package	GCM 2752			
105550-26	Problem Reporting & Corrective Action	CCM 172			
105568	SM CC FLIGHT SOFTWARE (TRR) (5A-9A)	CCM 172			
105568-1	Acceptance Data Package	GCM 2752			
105568-26	Problem Reporting & Corrective Action	CCM 172			
105569	SM CENTRAL COMPUTER S/W	GCM 830			
105569-1	Acceptance Data Package	CCM 830			
105569-26	Problem Reporting & Corrective Action	CCM 830			
105573	MPLM CSCI (INTERIM)	CCM 830			
105573-1	Acceptance Data Package	CCM 830			
105573-26	Problem Reporting & Corrective Action	CCM 830			
105587	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105587-1	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105587-1.1.1	Historical Log				
105587-1.1.2	Waiver/Deviation Record				
105587-1.1.3	Unexplained Anomalies Records				
105587-1.1.4	Shortages				
105587-1.1.5	Unplanned/Deferred Work				
105587-1.1.6	Preplanned/Assigned Work				
105587-1.1.7	Ident: As Designed/As-Built Listing				
105587-1.1.15	Certifications				
105587-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
105587-26	Problem Reporting & Corrective Action				
105588	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105588-1	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag,	
105588-1.1.1	Historical Log				
105588-1.1.2	Waiver/Deviation Record				
105588-1.1.3	Unexplained Anomalies Records				
105588-1.1.4	Shortages				
105588-1.1.5	Unplanned/Deferred Work				
105588-1.1.6	Preplanned/Assigned Work				
105588-1.1.7	Ident: As Designed/As-Built Listing				
105588-1.1.15	Certifications				
105588-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
105588-26	Problem Reporting & Corrective Action				
105589	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105589-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105589-1.1.1	Historical Log				
105589-1.1.2	Waiver/Deviation Record				
105589-1.1.3	Unexplained Anomalies Records				
105589-1.1.4	Shortages				
105589-1.1.5	Unplanned/Deferred Work				
105589-1.1.6	Preplanned/Assigned Work				
105589-1.1.7	Ident: As Designed/As-Built Listing				
105589-1.1.15	Certifications				
105589-2	Acceptance Test Report	ecm 1270		Part of ADP	
105589-26	Problem Reporting & Corrective Action				
105591	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105591-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105591-1.1.1	Historical Log				
105591-1.1.2	Waiver/Deviation Record				
105591-1.1.3	Unexplained Anomalies Records				
105591-1.1.4	Shortages				
105591-1.1.5	Unplanned/Deferred Work				
105591-1.1.6	Preplanned/Assigned Work				
105591-1.1.7	Ident: As Designed/As-Built Listing				
105591-1.1.15	Certifications				
105591-2	Acceptance Test Report	ecm 1270		Part of ADP	
105591-26	Problem Reporting & Corrective Action				
105592	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105592-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
105592-1.1.1	Historical Log				
105592-1.1.2	Waiver/Deviation Record				
105592-1.1.3	Unexplained Anomalies Records				
105592-1.1.4	Shortages				
105592-1.1.5	Unplanned/Deferred Work				
105592-1.1.6	Preplanned/Assigned Work				
105592-1.1.7	Ident: As Designed/As-Built Listing				
105592-1.1.15	Certifications				
105592-2	Acceptance Test Report	ecm 1270		Part of ADP	
105592-26	Problem Reporting & Corrective Action				
105593	HANDHOLD ASSY, SIDE MOUNTED, TALL-ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105593-1.1.1	Historical Log				
105593-1.1.2	Waiver/Deviation Record				
105593-1.1.3	Unexplained Anomalies Records				
105593-1.1.4	Shortages				
105593-1.1.5	Unplanned/Deferred Work				
105593-1.1.6	Preplanned/Assigned Work				
105593-1.1.7	Ident: As Designed/As-Built Listing				
105593-1.1.15	Certifications				
105593-2	Acceptance Test Report	ecm 1270		Part of ADP	
105593-26	Problem Reporting & Corrective Action				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105594	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105594-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP; (Weekend date correction)	
105594-1.1.1	Historical Log				
105594-1.1.2	Waiver/Deviation Record				
105594-1.1.3	Unexplained Anomalies Records				
105594-1.1.4	Shortages				
105594-1.1.5	Unplanned/Deferred Work				
105594-1.1.6	Preplanned/Assigned Work				
105594-1.1.7	Ident: As Designed/As-Built Listing				
105594-1.1.15	Certifications				
105594-2	Acceptance Test Report	ccm 1270		Part of ADP; (Weekend date correction)	
105594-26	Problem Reporting & Corrective Action				
105595	HANDHOLD ASSY, SIDE MOUNTED, TALL - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105595-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP; (Weekend date correction)	
105595-1.1.1	Historical Log				
105595-1.1.2	Waiver/Deviation Record				
105595-1.1.3	Unexplained Anomalies Records				
105595-1.1.4	Shortages				
105595-1.1.5	Unplanned/Deferred Work				
105595-1.1.6	Preplanned/Assigned Work				
105595-1.1.7	Ident: As Designed/As-Built Listing				
105595-1.1.15	Certifications				
105595-2	Acceptance Test Report	ccm 1270		Part of ADP; (Weekend date correction)	
105595-26	Problem Reporting & Corrective Action				
105596	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105596-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original	
105596-1.1.1	Historical Log				
105596-1.1.2	Waiver/Deviation Record				
105596-1.1.3	Unexplained Anomalies Records				
105596-1.1.4	Shortages				
105596-1.1.5	Unplanned/Deferred Work				
105596-1.1.6	Preplanned/Assigned Work				
105596-1.1.7	Ident: As Designed/As-Built Listing				
105596-1.1.15	Certifications				
105596-2	Acceptance Test Report	ccm 1270		Part of ADP; (Weekend date correction)	
105596-26	Problem Reporting & Corrective Action				
105597	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	ccm 805		changed date	
105597-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP); (Weekend date correction)	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105597-1.1.1	Historical Log				
105597-1.1.2	Waiver/Deviation Record				
105597-1.1.3	Unexplained Anomalies Records				
105597-1.1.4	Shortages				
105597-1.1.5	Unplanned/Deferred Work				
105597-1.1.6	Preplanned/Assigned Work				
105597-1.1.7	Ident: As Designed/As-Built Listing				
105597-1.1.15	Certifications				
105597-2	Acceptance Test Report	ccm 1270		Part of ADP; (Weekend date correction)	
105597-26	Problem Reporting & Corrective Action				
105598	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105598-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105598-1.1.1	Historical Log				
105598-1.1.2	Waiver/Deviation Record				
105598-1.1.3	Unexplained Anomalies Records				
105598-1.1.4	Shortages				
105598-1.1.5	Unplanned/Deferred Work				
105598-1.1.6	Preplanned/Assigned Work				
105598-1.1.7	Ident: As Designed/As-Built Listing				
105598-1.1.15	Certifications				
105598-2	Acceptance Test Report			Part of ADP	
105598-3	Analysis Data & Analytical Models			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105598-3.1	Reports, Structural Analysis of GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105598-3.2	Thermal Control Plan & Reports of GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105598-3.4	Analysis and Analytical Models of GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105598-3.5	Fracture Control Plan & Reports for GFE			PDR level/CDR level 12/15/95 Delivered to Marshall Horton	
105598-7	Electronic Design Data (VMDB Content) [partial]				
105598-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	
105598-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
105598-11B	Engineering Models	ADMIN			
105598-7.1.5	Engineering Change Data	ADMIN			
105598-7.1.6	Waiver and Deviations	ADMIN			
105598-32	Mass Properties	ADMIN		Quarterly	
105598-34	Volume	ADMIN		Quarterly	
105598-9	FMEA/CIL			Agreement contingent upon memo stating non-applicability	
105598-11A	Hardware Drawings			[LO, TLE] Hardcopy in native format	
105598-12	Hardware Specifications			Only ICD & PIDS under ISS CM. S684-10126	
105598-13	Hazard Report/System Description			Phase 1 - Delivered	
105598-13	Hazard Report/System Description			Phase 2 -Delivered	
105598-14	Interface Control Documents			SSP 30256	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105598-17	Limited Life List			Agreement contingent upon memo stating non-applicability	
105598-22	Qualification Test Plan			Delivered	
105598-23	Qualification Test Procedures			Post CDR	
105598-24	Qualification Test Reports				
105598-26	Problem Reporting & Corrective Action				
105598-27	Reliability and Maintainability Prediction Report			Agreement contingent upon memo stating non-applicability	
105598-28	Traceability Report	CCM 830			
105598-28	Compliance Report				
105599	HANDRAIL ASSY, SIDE MOUNTED, TALL -ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105599-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
105599-1.1.1	Historical Log				
105599-1.1.2	Waiver/Deviation Record				
105599-1.1.3	Unexplained Anomalies Records				
105599-1.1.4	Shortages				
105599-1.1.5	Unplanned/Deferred Work				
105599-1.1.6	Preplanned/Assigned Work				
105599-1.1.7	Ident: As Designed/As-Built Listing				
105599-1.1.15	Certifications				
105599-2	Acceptance Test Report			Part of ADP	
105599-26	Problem Reporting & Corrective Action				
105600	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	ccm 805		changed date	
105600-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP) changed date	
105600-1.1.1	Historical Log				
105600-1.1.2	Waiver/Deviation Record				
105600-1.1.3	Unexplained Anomalies Records				
105600-1.1.4	Shortages				
105600-1.1.5	Unplanned/Deferred Work				
105600-1.1.6	Preplanned/Assigned Work				
105600-1.1.7	Ident: As Designed/As-Built Listing				
105600-1.1.15	Certifications				
105600-2	Acceptance Test Report	ccm 1270		Part of ADP	
105600-26	Problem Reporting & Corrective Action				
105603	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105603-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
105603-1.1.1	Historical Log				
105603-1.1.2	Waiver/Deviation Record				
105603-1.1.3	Unexplained Anomalies Records				
105603-1.1.4	Shortages				
105603-1.1.5	Unplanned/Deferred Work				
105603-1.1.6	Preplanned/Assigned Work				
105603-1.1.7	Ident: As Designed/As-Built Listing				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105603-1.1.15	Certifications				
105603-2	Acceptance Test Report	ecm 1270		Part of ADP	
105603-26	Problem Reporting & Corrective Action				
105604	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105604-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
105604-1.1.1	Historical Log				
105604-1.1.2	Waiver/Deviation Record				
105604-1.1.3	Unexplained Anomalies Records				
105604-1.1.4	Shortages				
105604-1.1.5	Unplanned/Deferred Work				
105604-1.1.6	Preplanned/Assigned Work				
105604-1.1.7	Ident: As Designed/As-Built Listing				
105604-1.1.15	Certifications				
105604-2	Acceptance Test Report	ecm 1270		Part of ADP	
105604-26	Problem Reporting & Corrective Action				
105605	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
105605-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-	
105605-1.1.1	Historical Log				
105605-1.1.2	Waiver/Deviation Record				
105605-1.1.3	Unexplained Anomalies Records				
105605-1.1.4	Shortages				
105605-1.1.5	Unplanned/Deferred Work				
105605-1.1.6	Preplanned/Assigned Work				
105605-1.1.7	Ident: As Designed/As-Built Listing				
105605-1.1.15	Certifications				
105605-2	Acceptance Test Report	ecm 1270		Part of ADP	
105605-26	Problem Reporting & Corrective Action				
105606	MICROCONICAL FITTINGS (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105606-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105606-1.1.1	Historical Log				
105606-1.1.2	Waiver/Deviation Record				
105606-1.1.3	Unexplained Anomalies Records				
105606-1.1.4	Shortages				
105606-1.1.5	Unplanned/Deferred Work				
105606-1.1.6	Preplanned/Assigned Work				
105606-1.1.7	Ident: As Designed/As-Built Listing				
105606-1.1.15	Certifications				
105606-2	Acceptance Test Report			Part of ADP	
105606-26	Problem Reporting & Corrective Action				
105607	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		Delivered CHANGED NOMENCLATURE	
105607-4	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
105607-1.1.1	Historical Log				
105607-1.1.2	Waiver/Deviation Record				
105607-1.1.3	Unexplained Anomalies Records				
105607-1.1.4	Shortages				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105607-1.1.5	Unplanned/Deferred Work				
105607-1.1.6	Preplanned/Assigned Work				
105607-1.1.7	Ident: As Designed/As-Built Listing				
105607-1.1.15	Certifications				
105607-2	Acceptance Test Report			Part of ADP	
105607-26	Problem Reporting & Corrective Action				
105608	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105608-4	Acceptance Data Package	CCMM 2752		Separate ADP for each S/N	
105608-1.1.1	Historical Log				
105608-1.1.2	Waiver/Deviation Record				
105608-1.1.3	Unexplained Anomalies Records				
105608-1.1.4	Shortages				
105608-1.1.5	Unplanned/Deferred Work				
105608-1.1.6	Preplanned/Assigned Work				
105608-1.1.7	Ident: As Designed/As-Built Listing				
105608-1.1.15	Certifications				
105608-2	Acceptance Test Report			Part of ADP	
105608-26	Problem Reporting & Corrective Action				
105609	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105609-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105609-1.1.1	Historical Log				
105609-1.1.2	Waiver/Deviation Record				
105609-1.1.3	Unexplained Anomalies Records				
105609-1.1.4	Shortages				
105609-1.1.5	Unplanned/Deferred Work				
105609-1.1.6	Preplanned/Assigned Work				
105609-1.1.7	Ident: As Designed/As-Built Listing				
105609-1.1.15	Certifications				
105609-2	Acceptance Test Report			Part of ADP	
105609-26	Problem Reporting & Corrective Action				
105610	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105610-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105610-1.1.1	Historical Log				
105610-1.1.2	Waiver/Deviation Record				
105610-1.1.3	Unexplained Anomalies Records				
105610-1.1.4	Shortages				
105610-1.1.5	Unplanned/Deferred Work				
105610-1.1.6	Preplanned/Assigned Work				
105610-1.1.7	Ident: As Designed/As-Built Listing				
105610-1.1.15	Certifications				
105610-2	Acceptance Test Report			Part of ADP	
105610-26	Problem Reporting & Corrective Action				
105611	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105611-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105611-1.1.1	Historical Log				
105611-1.1.2	Waiver/Deviation Record				
105611-1.1.3	Unexplained Anomalies Records				
105611-1.1.4	Shortages				
105611-1.1.5	Unplanned/Deferred Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105611-1.1.6	Preplanned/Assigned Work				
105611-1.1.7	Ident: As Designed/As-Built Listing				
105611-1.1.15	Certifications				
105611-2	Acceptance Test Report			Part of ADP	
105611-26	Problem Reporting & Corrective Action				
105612	MICROCONICAL FITTINGS (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105612-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105612-1.1.1	Historical Log				
105612-1.1.2	Waiver/Deviation Record				
105612-1.1.3	Unexplained Anomalies Records				
105612-1.1.4	Shortages				
105612-1.1.5	Unplanned/Deferred Work				
105612-1.1.6	Preplanned/Assigned Work				
105612-1.1.7	Ident: As Designed/As-Built Listing				
105612-1.1.15	Certifications				
105612-2	Acceptance Test Report			Part of ADP	
105612-26	Problem Reporting & Corrective Action				
105613	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105613-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105613-1.1.1	Historical Log				
105613-1.1.2	Waiver/Deviation Record				
105613-1.1.3	Unexplained Anomalies Records				
105613-1.1.4	Shortages				
105613-1.1.5	Unplanned/Deferred Work				
105613-1.1.6	Preplanned/Assigned Work				
105613-1.1.7	Ident: As Designed/As-Built Listing				
105613-1.1.15	Certifications				
105613-2	Acceptance Test Report			Part of ADP	
105613-26	Problem Reporting & Corrective Action				
105614	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105614-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105614-1.1.1	Historical Log				
105614-1.1.2	Waiver/Deviation Record				
105614-1.1.3	Unexplained Anomalies Records				
105614-1.1.4	Shortages				
105614-1.1.5	Unplanned/Deferred Work				
105614-1.1.6	Preplanned/Assigned Work				
105614-1.1.7	Ident: As Designed/As-Built Listing				
105614-1.1.15	Certifications				
105614-2	Acceptance Test Report			Part of ADP	
105614-26	Problem Reporting & Corrective Action				
105615	MICROCONICAL FITTINGS (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105615-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105615-1.1.1	Historical Log				
105615-1.1.2	Waiver/Deviation Record				
105615-1.1.3	Unexplained Anomalies Records				
105615-1.1.4	Shortages				
105615-1.1.5	Unplanned/Deferred Work				
105615-1.1.6	Preplanned/Assigned Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105615-1.1.7	Ident: As Designed/As-Built Listing				
105615-1.1.15	Certifications				
105615-2	Acceptance Test Report			Part of ADP	
105615-26	Problem Reporting & Corrective Action				
105616	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		Delivered CHANGED NOMENCLATURE	
105616-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105616-1.1.1	Historical Log				
105616-1.1.2	Waiver/Deviation Record				
105616-1.1.3	Unexplained Anomalies Records				
105616-1.1.4	Shortages				
105616-1.1.5	Unplanned/Deferred Work				
105616-1.1.6	Preplanned/Assigned Work				
105616-1.1.7	Ident: As Designed/As-Built Listing				
105616-1.1.15	Certifications				
105616-2	Acceptance Test Report			Part of ADP	
105616-26	Problem Reporting & Corrective Action				
105617	MICROCONICAL FITTINGS (FLANGED)	CCM 379		CHANGED NOMENCLATURE	
105617-4	Acceptance Data Package	CCM2752		Separate ADP for each S/N	
105617-1.1.1	Historical Log				
105617-1.1.2	Waiver/Deviation Record				
105617-1.1.3	Unexplained Anomalies Records				
105617-1.1.4	Shortages				
105617-1.1.5	Unplanned/Deferred Work				
105617-1.1.6	Preplanned/Assigned Work				
105617-1.1.7	Ident: As Designed/As-Built Listing				
105617-1.1.15	Certifications				
105617-2	Acceptance Test Report			Part of ADP	
105617-26	Problem Reporting & Corrective Action				
105618	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		Delivered CHANGED NOMENCLATURE	
105618-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105618-1.1.1	Historical Log				
105618-1.1.2	Waiver/Deviation Record				
105618-1.1.3	Unexplained Anomalies Records				
105618-1.1.4	Shortages				
105618-1.1.5	Unplanned/Deferred Work				
105618-1.1.6	Preplanned/Assigned Work				
105618-1.1.7	Ident: As Designed/As-Built Listing				
105618-1.1.15	Certifications				
105618-2	Acceptance Test Report			Part of ADP	
105618-26	Problem Reporting & Corrective Action				
105619	MICROCONICAL FITTINGS (3/4 INCH HOLE)	CCM 379		Delivered CHANGED NOMENCLATURE	
105619-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105619-1.1.1	Historical Log				
105619-1.1.2	Waiver/Deviation Record				
105619-1.1.3	Unexplained Anomalies Records				
105619-1.1.4	Shortages				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105619-1.1.5	Unplanned/Deferred Work				
105619-1.1.6	Preplanned/Assigned Work				
105619-1.1.7	Ident: As Designed/As-Built Listing				
105619-1.1.15	Certifications				
105619-2	Acceptance Test Report			Part of ADP	
105619-26	Problem Reporting & Corrective Action				
105623	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		(Baseline GFDL typo #104623 corrected here to #105623) CHANGED NOMENCLATURE	
105623-1	Acceptance Data Package	CCM 2752		(Weekend date correction)	
105623-2	Acceptance Test Report	ccm 1270		(Weekend date correction)	
105623-26	Problem Reporting & Corrective Action				
105624	SIDE MOUNTED PASSIVE WIF ASSY	ccm 805		changed date	
105624-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP- changed date	
105624-2	Acceptance Test Report	ccm 1270		Part of ADP	
105624-26	Problem Reporting & Corrective Action				
105625	TOP MOUNTED PASSIVE WIF ASSY	ccm 805		changed date	
105625-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP;- (Weekend date correction) changed date	
105625-2	Acceptance Test Report	ccm 1270		Part of ADP; (Weekend date correction)	
105625-26	Problem Reporting & Corrective Action				
105626	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105626-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105626-2	Acceptance Test Report	ccm 1270		Part of ADP	
105626-26	Problem Reporting & Corrective Action				
105627	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105627-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105627-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
105627-26	Problem Reporting & Corrective Action				
105628	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105628-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105628-2	Acceptance Test Report	ccm 1270		Part of ADP	
105628-26	Problem Reporting & Corrective Action				
105629	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
105629-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
105629-2	Acceptance Test Report	ccm 1270		Part of ADP	
105629-26	Problem Reporting & Corrective Action				
105630	TOP MOUNTED PASSIVE WIF ASSY	ccm 805		changed date	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105630-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP- changed date	
105630-2	Acceptance Test Report	ccm 1270		Part of ADP	
105630-26	Problem Reporting & Corrective Action				
105631	SIDE MOUNTED PASSIVE WIF ASSY	ccm 805		changed date	
105631-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP- changed date	
105631-2	Acceptance Test Report	ccm 1270		Part of ADP	
105631-26	Problem Reporting & Corrective Action				
105633	FLT RELEASABLE GRAPPLE FIXTURE, AMMONIA TANK (FLT)				
105633-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
105634	FLT RELEASABLE GRAPPLE FIXTURE, RADIATOR ORU (FLT)				
105634-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
105635	SIDE WIRE ASSEMBLY - ON ORBIT INSTALLED (156")	CCM 379		CHANGED NOMENCLATURE	
105635-1	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105635-1.1.1	Historical Log				
105635-1.1.2	Waiver/Deviation Record				
105635-1.1.3	Unexplained Anomalies Records				
105635-1.1.4	Shortages				
105635-1.1.5	Unplanned/Deferred Work				
105635-1.1.6	Preplanned/Assigned Work				
105635-1.1.7	Ident: As Designed/As-Built Listing				
105635-1.1.9	Age-Sensitive/Time- Action Item				
105635-1.1.15	Certifications				
105635-2	Acceptance Test Report			Part of ADP	
105635-26	Problem Reporting & Corrective Action				
105636	SIDE WIRE ASSEMBLY - ON ORBIT INSTALLED (156")	CCM 379		CHANGED NOMENCLATURE	
105636-1	Acceptance Data Package	ccm 561		Separate ADP for each S/N	
105636-1.1.1	Historical Log	ccm 561			
105636-1.1.2	Waiver/Deviation Record	ccm 561			
105636-1.1.3	Unexplained Anomalies Records	ccm 561			
105636-1.1.4	Shortages	ccm 561			
105636-1.1.5	Unplanned/Deferred Work	ccm 561			
105636-1.1.6	Preplanned/Assigned Work	ccm 561			
105636-1.1.7	Ident: As Designed/As-Built Listing	ccm 561			
105636-1.1.9	Age-Sensitive/Time- Action Item	ccm 561			
105636-1.1.15	Certifications	ccm 561			
105636-2	Acceptance Test Report	ccm 561		Part of ADP	
105636-26	Problem Reporting & Corrective Action	ccm 561			
105645	HANDRAIL ASSEMBLY, OIH (24.00")	CCM 379		CHANGED NOMENCLATURE	
105645-1	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
105645-1.1.1	Historical Log				
105645-1.1.2	Waiver/Deviation Record				
105645-1.1.3	Unexplained Anomalies Records				
105645-1.1.4	Shortages				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105645-1.1.5	Unplanned/Deferred Work				
105645-1.1.6	Preplanned/Assigned Work				
105645-1.1.7	Ident: As Designed/As-Built Listing				
105645-1.1.15	Certifications				
105645-2	Acceptance Test Report			Part of ADP	
105645-26	Problem Reporting & Corrective Action				
105646	HANDRAIL ASSEMBLY, OIH (24.00")	CCM 379		CHANGED NOMENCLATURE	
105646-4	Acceptance Data Package	ccm 561		Separate ADP for each S/N	
105646-1.1.1	Historical Log	ccm 561			
105646-1.1.2	Waiver/Deviation Record	ccm 561			
105646-1.1.3	Unexplained Anomalies Records	ccm 561			
105646-1.1.4	Shortages	ccm 561			
105646-1.1.5	Unplanned/Deferred Work	ccm 561			
105646-1.1.6	Preplanned/Assigned Work	ccm 561			
105646-1.1.7	Ident: As Designed/As-Built Listing	ccm 561			
105646-1.1.15	Certifications	ccm 561			
105646-2	Acceptance Test Report	ccm 561		Part of ADP	
105646-26	Problem Reporting & Corrective Action	ccm 561			
105665	GO-NO GO GAUGES (GSE)				
105665-4	Acceptance Data Package [partial]	CCM 2752		Separate ADP for each S/N	
105665-1.1.1	Historical Log				
105665-1.1.2	Waiver/Deviation Record				
105665-1.1.3	Unexplained Anomalies Records				
105665-1.1.4	Shortages				
105665-1.1.5	Unplanned/Deferred Work				
105665-1.1.6	Preplanned/Assigned Work				
105665-1.1.7	Ident: As Designed/As-Built Listing				
105665-1.1.15	Certifications				
105675	PBA BRACKET (FLT)				
105675-4	Acceptance Data Package [partial]	CCM 2752			
105675-1.1.1	Historical Log				
105675-1.1.2	Waiver/Deviation Record				
105675-1.1.3	Unexplained Anomalies Record				
105675-1.1.4	Shortages				
105675-1.1.5	Unplanned/Deferred Work				
105675-1.1.6	Preplanned/Assigned Work				
105675-1.1.7	Ident: As Designed/As-Built Listing				
105675-1.1.8	Operating Time/Cycle				
105675-1.1.9	Age-Sensitive/Time-Action Item				
105675-1.1.10	Nonstandard Calibration				
105675-1.1.11	Repair Limitations				
105675-1.1.12	Pressure Vessel Data				
105675-1.1.14	Nonflight Hardware/Temporary Installation				
105675-1.1.15	Certifications				
105675-1.1.16	Material Safety Data Sheet				
105675-2	Acceptance Test Report				
105675-3.1	Reports, Structural Analysis of GFE			Provided by NS2. Interim on 11/1/95	
105675-3.1	Reports, Structural Analysis of GFE			Final	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105675-3.2	Thermal Control Plan & Reports for GFE			Interim on 11/1/95 Final	
105675-3.5	Fracture Control Plan & Reports for GFE			Provided by NS2. Interim on 11/1/95 Final	
105675-6	Dimensions (Physical and Shipping)			SSP 50104, PBA ICD; Data in VMDB 5/1/95	
105675-9	FMEA/CIL			CDR level data	
105675-13	Hazard Report/System Description			Phase 2-Data includes PBA & Bracket - Phase 3 Data includes PBA & Bracket	
105675-16	Isometric Views - Comp. & Attach HW				
105675-17	Limited Life List			Available at CDR	
105675-22	Qualification Test Plan			Certification plan in place at CDR. May Include RIDs.	
105675-23	Qualification Test Procedure				
105675-24	Qualification Test Report			Available 90 days post test	
105675-26	Problem Reporting & Corrective Action			Per data sheet as required	
105675-27	Reliability & Maintainability Predict. Rpt			CDR level data	
105675-28	Spec. Traceability & Compliance Report			Available @ PRR	
105675-29	Weight (including Wet Weight)			SSP50104, PBA ICD: Data in VMDB 5/1/95	
105676	PHYSICAL CHECK MOCKUP (MCK)			NO DATA REQ'D	
105677	PBA BRACKET (FLT) (NODE)				
105677-1	Acceptance Data Package [partial]	ccm-561			
105677-1.1.1	Historical Log	ccm-561			
105677-1.1.4	Shortages	ccm-561			
105677-1.1.5	Unplanned/Deferred Work	ccm-561			
105677-1.1.6	Preplanned/Assigned Work	ccm-561			
105677-1.1.7	Ident: As Designed/As-Built Listing	ccm-561			
105677-1.1.15	Certifications	ccm-561			
105679	MICROCONICAL FITTING (FLANGED)	ccm 805			
105679-1	Acceptance Data Package	GCM 2752			
105679-32	Mass Properties Report	ccm 805			
105680	MICROCONICAL FITTING (FLANGED)	ccm 805			
105680-1	Acceptance Data Package	GCM 2752			
105680-32	Mass Properties Report	ccm 805			
105684	GPS TEST SET (TSE)			Test Set 4	
105684-1	Acceptance Data Package	GCM 2752		Will be 911 tag; (Weekend date- correction)	
105684-30	Test Plan for GPS Standalone: SO Integra & Checkout Facility Integration & Checkout Facility	*SEIR for GPS Standalone ITS *Test Plan for GPS Standalone ITS SO		Huntington Beach Huntington Beach	
105686	VAX SW PRODUCT CONFIG. MGMT TOOL SET FROM USAF C-17 PROGRAM (FLT)			To be deleted	
105686-1.2.17	S/W Specification Documents			Content as defined & available from USAF	
105686-1.2.20	User's Guide or Syst. Operating Manual			Content as defined & available from USAF	
105688	PCS CSCI (ENG) (OLD 000020)			NO DATA REQUIRED	
105689	ROBOTIC WORKSTATION (FEU)				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105689-4	Software Interface Data				
105689-4.1	Software Attribute Data Table			To be resolved by PCM 239	
105689-4.2	Functional ICD Requirements			To be resolved by PCM 239	
105689-4.3	Input/Output Constraints			To be resolved by PCM 239	
105691	OIU PC I/F CARD				
105691-4	Acceptance Data Package	GCM 2752			
105692	PCS WITH PORT COMPUTER I/F (GDU)			Data limited to vendor-Provider Data on COTS Items	
105695	UHF HAT COUPLER	CCM 081			
105695-4	Acceptance Data Package	GCM 2752		Shuttle ADP format acceptable	
105695-13	Hazard Report/System Description			Phase 1 - PDR Level Phase 2 - CDR Level Phase 3 - Final Per NSTS22254, Rev B; Shuttle format acceptable	
105695-26	Problem Reporting & Corrective Action				
105701	GPS TEST KIT (TSE) TEST SET 3	ccm 1270		Test Set 3	
105701-4	Acceptance Data Package	ccm 1270		Will be 911 tag; (Weekend date-correction)	
105702	HANDHOLDS, TOP-MOUNTED	CCM 060		Delivered	
105702-4	Acceptance Data Package	GCM 2752		911 tag	
105702-26	Problem Reporting & Corrective Action				
105704	MICROCONICAL FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105704-4	Acceptance Data Package	GCM 2752		911 tag	
105704-26	Problem Reporting & Corrective Action				
105705	MICROCONICAL FITTING (3/4 INCH HOLE)	CCM 379		CHANGED NOMENCLATURE	
105705-4	Acceptance Data Package	GCM 2752		911 tag	
105705-26	Problem Reporting & Corrective Action				
105706	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105706-4	Acceptance Data Package	ccm 2752			
105706-32	Mass Properties Report	ccm 805			
105707	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105707-4	Acceptance Data Package	GCM 2752			
105707-32	Mass Properties Report	ccm 805			
105708	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105708-4	Acceptance Data Package	GCM 2752			
105708-32	Mass Properties Report	ccm 805			
105709	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105709-4	Acceptance Data Package	ccm 805			
105709-32	Mass Properties Report	ccm 805			
105710	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105710-4	Acceptance Data Package	GCM 2752			
105710-32	Mass Properties Report	ccm 805			
105711	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105711-4	Acceptance Data Package	GCM 2752			
105711-32	Mass Properties Report	ccm 805			
105712	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105712-4	Acceptance Data Package	GCM 2752			
105712-32	Mass Properties Report	ccm 805			
105713	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105713-1	Acceptance Data Package	CCM 2752			
105713-32	Mass Properties Report	ccm 805			
105714	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105714-1	Acceptance Data Package	CCM 2752			
105714-32	Mass Properties Report	ccm 805			
105717	FGB CSCI	CCM 172			
105717-1	Acceptance Data Package	CCM 2752			
105717-26	Problem Reporting & Corrective Action	CCM 172			
105722	SPM LAPTOP FOR APM ACTIVATION	CCM 172			
105722-1	Acceptance Data Package	CCM 2752			
105722-26	Problem Reporting & Corrective Action	CCM 172			
105729	SM GNC/TC S/W (TRR) (5A-9A)	CCM 172			
105729-1	Acceptance Data Package	CCM 2752			
105729-26	Problem Reporting & Corrective Action	CCM 172			
105730	SM CONTROL POST FLIGHT SOFTWARE (TRR)(5A-9A)	CCM 172			
105730-1	Acceptance Data Package	CCM 2752			
105730-26	Problem Reporting & Corrective Action	CCM 172			
105732	DMS-R CABLES (SM)	CCM 172			
105732-1	Acceptance Data Package	CCM 2752			
105732-26	Problem Reporting & Corrective Action	CCM 172			
105733	MSS OCS S/W (LAB)	CCM 172			
105733-1	Acceptance Data Package	CCM 2752			
105733-26	Problem Reporting & Corrective Action	CCM 172			
105738	HANDRAIL ASSEMBLY - OIH (12.00")	CCM 379		CHANGED NOMENCLATURE	
105738-1	Acceptance Data Package	CCM 2752			
105738-26	Problem Reporting & Corrective Action				
105739	HANDRAIL ASSEMBLY - OIH (12.00")	CCM 379		CHANGED NOMENCLATURE	
105739-1	Acceptance Data Package	ccm 561			
105739-26	Problem Reporting & Corrective Action	ccm 561			
105745	HEMISPHERICAL TCS RETROFLECTOR	CCM 132			
105745-1	Acceptance Data Package	CCM 2752		1.1.15, Certifications only; per Boeing, 911 tag acceptable; (Weekend date correction)	
105745-31	Indentured Parts List (IPL)	ADMIN			
105745-7.3.1	Mass Properties			Semi-annually thereafter; Weight only	
105745-11A	Drawings				
105745-13	Hazard Report/System Description			By Memo	
105745-26	Problem Reporting & Corrective Action				
105746	HEMISPHERICAL TCS RETROFLECTOR	CCM 132			
105746-1	Acceptance Data Package	CCM 2752		1.1.15, Certifications only; per Boeing, 911 tag acceptable	
105746-31	Indentured Parts List (IPL)	ADMIN			
105746-7.3.1	Mass Properties			Semi-annually thereafter; Weight only	
105746-11A	Drawings				
105746-13	Hazard Report/System Description			By Memo	
105746-26	Problem Reporting & Corrective Action				
105748	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105748-1	Acceptance Data Package	CCM 2752			
105748-26	Problem Reporting & Corrective Action				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105749	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105749-4	Acceptance Data Package	CCM 2752		911 tag; (Weekend date correction)	
105479-26	Problem Reporting & Corrective Action				
105750	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105750-4	Acceptance Data Package	CCM 2752		911 tag	
105479-26	Problem Reporting & Corrective Action				
105751	UHF EXTERNAL ANTENNA (LAB) (OLD #305896)	CCM 81			
105751-4	Acceptance Data Package [Full 1.1]	CCM 2752			
105751-2	Acceptance Test Report				
105751-6	Dimensions (Physical and Shipping)				
105751-7	Electronic Design Data				
105751-7.1.1	Indentured Parts List (P/N & S/N)	ADMIN		P/N Delivered; S/N Delivered at CDR	
105751-11A	Engineering Drawings	ADMIN		Delivered	
105751-11B	Engineering Models	ADMIN			
105751-7.1.5	Engineering Change Data	ADMIN			
105751-7.1.6	Waivers & Deviations	ADMIN			
105751-32	Mass Properties	ADMIN		Quarterly	
105751-9	FMEA/CIL			Per SSP 30234. Hardcopy synopsis 12/15/95	
105751-11A	Hardware Drawings			CDR (-) 60 days [TLEI]	
105751-12	Hardware Specifications			JSC 26783A. Update as required	
105751-13	Hazard Report/System Description			Per SSP30309 Phase 1 - Phase 1 Equip Phase 2 - CDR level Final	
105751-14	Interface Control Documents			Technically Approved Version	
105751-17	Limited Life List			Memo stating no Limited Life Items	
105751-22	Qualification Test Plan				
105751-23	Qualification Test Procedure				
105751-24	Qualification Test Report				
105751-26	Problem Reporting & Corrective Action				
105751-27	Reliability & Maintainability Prediction Report			Hardcopy synopsis 12/15/95	
105751-28	Spec. Traceability & Compliance Report			IDR #2 J-2	
105751-29	Weight (including Wet Weight)				
105752	PBA I/F QUICK DISCONNECT (Element Side) (NODE 1)	CCM 147		Delivered	
105752-4	Acceptance Data Package	CCM 2752		911 tag	
105752-2	Acceptance Test Report	SSCN 542 - ADMIN			
105752-3.1	Reports, Structural Analysis of GFE				
105752-3.5	Fracture Control Plan & Reports for GFE				
105752-7.3.1	Mass Properties (Weight)			Semi-annually thereafter	
105752-9	FMEA/CIL				
105752-11A	Drawings				
105752-13	Hazard Report/System Description				
105752-17	Limited Life List				
105752-24	Qualification Test Report				
105752-26	Problem Reporting & Corrective Action				
105752-27	Reliability & Maintainability Prediction Report				
105752-29	Weight			PDR, CDR	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105753	PBA I/F QUICK DISCONNECT (Element Side) (NODE 2)	CCM 147			
105753-1	Acceptance Data Package				
105753-2	Acceptance Test Report	SSCN 542 - ADMIN			
105753-3.1	Reports, Structural Analysis of GFE	ecm 561			
105753-3.5	Fracture Control Plan & Reports for GFE	ecm 561			
105753-7.3.1	Mass Properties (Weight)	ecm 561		Semi-annually thereafter	
105753-9	FMEA/CIL	ecm 561			
105753-11A	Drawings	ecm 561			
105752-13	Hazard Report/System Description	ecm 561			
105753-17	Limited Life List	ecm 561			
105753-24	Qualification Test Report	ecm 561			
105753-26	Problem Reporting & Corrective Action	ecm 561			
105753-27	Reliability & Maintainability Prediction Report	ecm 561			
105753-29	Weight	ecm 561			
105754	PAYLOAD GENERAL SUPPORT COMP	ecm 1270			
105754-1	Acceptance Data Package	ecm 1270			
105754-26	Problem Reporting & Corrective Action	ecm 1270			
105756	HANDHOLD, TOP-MOUNTED (PMA 2)	CCM 64A			
105756-1	Acceptance Data Package	CCM 2752		911 tag	
105756-26	Problem Reporting & Corrective Action				
105757	ACS MODING INDICATOR UNITS	Per CCM 106			
105757-1	Acceptance Data Package	CCM 2752			
105757-26	Problem Reporting & Corrective Action	Per CCM 106			
105758	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
105758-1	Acceptance Data Package	CCM 2752		911 tag	
105758-26	Problem Reporting & Corrective Action				
105762	HANDHOLD, TOP-MOUNTED (PMA 3)	CCM 64A			
105762-1	Acceptance Data Package	CCM 2752		911 tag	
105762-26	Problem Reporting & Corrective Action				
105765	APM SITE WITH TEST EXEC., NODE, AIM NODE, HCI PC & SERVER	CCM 172			
105765-1	Acceptance Data Package	CCM 2752			
105765-26	Problem Reporting & Corrective Action	CCM 172			
105768	JEM SIMULATOR KIT	CCM 172			
105768-1	Acceptance Data Package	CCM 2752			
105768-26	Problem Reporting & Corrective Action	CCM 172			
105769	JCP SIMULATOR DISPLAY/KEYBOARD	CCM 172			
105769-1	Acceptance Data Package	CCM 2752			
105769-26	Problem Reporting & Corrective Action	CCM 172			
105772	DIU FLIGHT SOFTWARE	CCM 172			
105772-1	Acceptance Data Package	CCM 2752			
105772-26	Problem Reporting & Corrective Action	CCM 172			
105773	DIU SIMULATOR KIT	CCM 172			
105773-1	Acceptance Data Package	CCM 2752			
105773-26	Problem Reporting & Corrective Action	CCM 172			
105774	DIU SIMULATOR KIT	CCM 172			
105774-1	Acceptance Data Package	CCM 2752			
105774-26	Problem Reporting & Corrective Action	CCM 172			
105775	SVF TO CONTROL CENTER COMPLEX	ecm 1270			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105775-1	Acceptance Data Package	ccm 1270			
105775-26	Problem Reporting & Corrective Action	ccm 1270			
105778	ACTIVE COUPLER-MOBILE TRANSPORTER	CCM 287		CHANGED FROM #105916	
105778-1	Acceptance Data Package	GCM 2752		CHANGED FROM #105916	
105778-26	Problem Reporting & Corrective Action	CCM 287		CHANGED FROM #105916	
105779	PASSIVE COUPLER	CCM 287		CHANGED FROM #105917	
105779-1	Acceptance Data Package	GCM 2752		CHANGED FROM #105917	
105779-26	Problem Reporting & Corrective Action	CCM 287		CHANGED FROM #105917	
105780	HANDRAIL ASSY, TOP MOUNTED - ISS (15.441")	ccm 805			
105780-1	Acceptance Data Package	GCM 2752			
105780-32	Mass Properties Report	ccm 805			
105781	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
105781-1	Acceptance Data Package	GCM 2752			
105781-32	Mass Properties Report	ccm 805			
105782	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	ccm 805			
105782-1	Acceptance Data Package	GCM 2752			
105782-32	Mass Properties Report	ccm 805			
105783	HANDRAIL ASSY, TOP-MOUNTED - ISS (15.441")	ccm 805			
105783-1	Acceptance Data Package	GCM 2752			
105783-32	Mass Properties Report	ccm 805			
105784	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
105784-1	Acceptance Data Package	GCM 2752			
105784-32	Mass Properties Report	ccm 805			
105785	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	ccm 805			
105785-1	Acceptance Data Package	GCM 2752			
105785-32	Mass Properties Report	ccm 805			
105786	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			
105786-1	Acceptance Data Package	GCM 2752			
105786-32	Mass Properties Report	ccm 805			
105790	HANDRAIL ASSY, TOP-MOUNTED - ISS (25/53")	ccm 805			
105790-1	Acceptance Data Package	GCM 2752			
105790-32	Mass Properties Report	ccm 805			
105791	HANDRAIL ASSY, TOP-MOUNTED - ISS (8.53")	ccm 805			
105791-1	Acceptance Data Package	GCM 2752			
105791-32	Mass Properties Report	ccm 805			
105792	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
105792-1	Acceptance Data Package	GCM 2752			
105792-32	Mass Properties Report	ccm 805			
105793	HANDRAIL ASSY, TOP-MOUNTED-ISS (22.625")	ccm 805			
105793-1	Acceptance Data Package	GCM 2752			
105793-32	Mass Properties Report	ccm 805			
105804	HANDRAIL ASSY, TOP-MOUNTED - ISS (22.625")	ccm 805			
105804-1	Acceptance Data Package	GCM 2752			
105804-32	Mass Properties Report	ccm 805			
105805	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
105805-1	Acceptance Data Package	GCM 2752			
105805-32	Mass Properties Report	ccm 805			
105851	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105851-1	Acceptance Data Package	GCM 2752			
105851-32	Mass Properties Report	ccm 805			
105852	HANDRAIL ASSY, TOP MOUNTED - ISS (6.15")	ccm 805			
105852-1	Acceptance Data Package	GCM 2752			
105852-32	Mass Properties Report	ccm 805			
105853	HANDRAIL ASSY, TOP-MOUNTED - ISS (8.53")	ccm 805			
105853-1	Acceptance Data Package	GCM 2752			
105853-32	Mass Properties Report	ccm 805			
105854	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			
105854-1	Acceptance Data Package	GCM 2752			
105854-32	Mass Properties Report	ccm 805			
105918	PORTABLE BREATHING APPARATUS WITH 30 FT. HOSE	SSCN 263 - ADMIN			
105918-1	Acceptance Data Package	GCM 2752			
105918-2	Acceptance Test Report	SSCN 263 - ADMIN			
105918-26	Problem Reporting & Corrective Action	SSCN 263 - ADMIN			
105919	CG3.1 (BUILD 4)	SSCN 263 - ADMIN			
105919-1	Acceptance Data Package	GCM 2752			
105919-2	Acceptance Test Report	SSCN 263 - ADMIN			
105919-26	Problem Reporting & Corrective Action	SSCN 263 - ADMIN			
105920	CG3.2 (BUILD 5)	SSCN 263 - ADMIN			
105920-1	Acceptance Data Package	ccm 1270			
105920-2	Acceptance Test Report	ccm 1270			
105920-26	Problem Reporting & Corrective Action	SSCN 263 - ADMIN			
105929	PFR WORKSITE I/F, SIDE-MOUNTED (NODE 1)	ccm 805			
105929-1	Acceptance Data Package	ccm 805			
105929-2	Acceptance Test Report	ccm 805			
105929-26	Problem Reporting & Corrective Action	ccm 805			
105937	GROUND SUPPORT RECONFIGURABLE APPLICATION	ccm 1270			
105937-1	Acceptance Data Package	ccm 1270			
105937-26	Problem Reporting & Corrective Action	ccm 1270			
105951	DMS-R SYSTEM S/W (FINAL)	CCM 172			
105951-1	Acceptance Data Package	GCM 2752			
105951-26	Problem Reporting & Corrective Action	CCM 172			
105955	DMS-R NON-COTS SITE CARDS (3-5 CARDS)	GCM 287			
105955-1	Acceptance Data Package	GCM 287			
105955-26	Problem Reporting & Corrective Action	CCM 287			
105961	DMS-R SITE S/W (FINAL)	CCM 172			
105961-1	Acceptance Data Package	GCM 2752			
105961-26	Problem Reporting & Corrective Action	CCM 172			
105962	DMS-R SITE S/W (FQT)	CCM 172			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

105962-4	Acceptance Data Package	CCM 2752			
105962-26	Problem Reporting & Corrective Action	CCM 172			
105963	DMS-R SITE S/W (EE)	ccm 287			
105963-4	Acceptance Data Package	ccm 287			
105963-26	Problem Reporting & Corrective Action	ccm 287			
105964	DMS-R SITE (SM TEST S/W) (FINAL)	CCM 172			
105964-4	Acceptance Data Package	CCM 2752			
105964-26	Problem Reporting & Corrective Action	CCM 172			
105965	DMS-R SITE (SM TEST S/W) (FQT)	CCM 172			
105965-4	Acceptance Data Package	CCM 2752			
105965-26	Problem Reporting & Corrective Action	CCM 172			
105966	DMS-R SITE (SM TEST S/W) (INTERIM)	CCM 172			
105966-4	Acceptance Data Package	CCM 2752			
105966-26	Problem Reporting & Corrective Action	CCM 172			
105967	SM MISSION DATABASE (FINAL)	CCM 172			
105967-4	Acceptance Data Package	CCM 2752			
105967-26	Problem Reporting & Corrective Action	CCM 172			
105999	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM	ccm 287			
105999-26	Problem Reporting & Corrective Action	ccm 287			
106000	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (15.441")	ccm 287			
106000-26	Problem Reporting & Corrective Action	ccm 287			
106001	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (15.441")	ccm 287			
106001-26	Problem Reporting & Corrective Action	ccm 287			
106002	SIDE MOUNTED PASSIVE WIF	ccm 287			
106002-26	Problem Reporting & Corrective Action	ccm 287			
106005	DEXTEROUS ROBOTIC TARGET	ccm 805			
106005-4	Acceptance Data Package	CCM 2752			
106005-13	Hazard Report System Description (FINAL)	ccm 805			
106005-26	Problem Reporting & Corrective Action	ccm 287			
106006	DEXTEROUS ROBOTIC TARGET	ccm 287			
106006-4	Acceptance Data Package	CCM 2752			
106006-26	Problem Reporting & Corrective Action	ccm 287			
106007	DEXTEROUS ROBOTIC TARGET	ccm 287			
106007-4	Acceptance Data Package	CCM 2752			
106007-26	Problem Reporting & Corrective Action	ccm 287			
106008	DEXTEROUS ROBOTIC TARGET	ccm 287			
106008-4	Acceptance Data Package	CCM 2752			
106008-26	Problem Reporting & Corrective Action	ccm 287			
106009	DEXTEROUS ROBOTIC TARGET	ccm 287			
106009-4	Acceptance Data Package	CCM 2752			
106009-26	Problem Reporting & Corrective Action	ccm 287			
106025	DMSREMDM (TYPE 2)	CCM 435			
106025-4	Acceptance Data Package	CCM 2752			
106025-26	Problem Reporting & Corrective Action	CCM 435			
106026	DMSREMDM (TYPE 2)	CCM 435			
106026-4	Acceptance Data Package	CCM 2752			
106026-26	Problem Reporting & Corrective Action	CCM 435			
106027	DMSREMDM (TYPE 2)	CCM 435			
106027-4	Acceptance Data Package	CCM 2752			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

106027-26	Problem Reporting & Corrective Action	CCM 435			
106028	DMSREMDM (TYPE 2)	CCM 435			
106028-1	Acceptance Data Package	CCM 2752			
106028-26	Problem Reporting & Corrective Action	CCM 435			
106029	CGS VERSION 4.0 - QUALIFIED	ccm 287			
106026-1	Acceptance Data Package	ccm 287			
106029-26	Problem Reporting & Corrective Action	ccm 287			
106036	ACTIVE COUPLER - MOBILE TRANSPORT	ccm 805			
106036-1	Acceptance Data Package	ccm 805			
106036-32	Mass Properties Report	ccm 805			
106037	PASSIVE COUPLER	ccm 805			
106037-1	Acceptance Data Package	CCM 2752			
106037-32	Mass Properties Report	ccm 805			
106043	AVU GSU WITH GSE	ccm 210 B			
106043-1	Acceptance Data Package	CCM 2752			
106044	MICROCONICAL FITTING (FLANGED)	ccm 805			
106044-1	Acceptance Data Package	CCM 2752			
106044-32	Mass Properties Report	ccm 805			
106045	HANDRAIL ASSY, TOP-MOUNTED - ISS (8.53")	CCM 805			
106045-1	Acceptance Data Package	CCM 805			
106045-32	Mass Properties Report	CCM 805			
106046	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
106046-1	Acceptance Data Package	CCM 2752			
106046-32	Mass Properties Report	ccm 805			
106047	MICROCONICAL FITTING (FLANGED)	ccm 805			
106047-1	Acceptance Data Package	CCM 2752			
106047-32	Mass Properties Report	ccm 805			
106048	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
106048-1	Acceptance Data Package	CCM 2752			
106048-32	Mass Properties Report	ccm 805			
106049	MICROCONICAL FITTING (3/4 INCH HOLE)	ccm 805			
106049-1	Acceptance Data Package	CCM 2752			
106049-32	Mass Properties Report	ccm 805			
106050	EQUIPMENT TETHER HOOKS	ccm 805			
106050-1	Acceptance Data Package	CCM 2752			
106050-32	Mass Properties Report	ccm 805			
106051	PROBE, LAUNCH - TERA	ccm 805			
106051-1	Acceptance Data Package	CCM 2752			
106051-32	Mass Properties	ccm 805			
106052	MTC ROBOTIC TARGET - 6B	ccm 805			
106052-1	Acceptance Data Package	CCM 2752			
106052-17	Limited Life List (paint/coating only)	ccm 805			
106052-32	Mass Properties	ccm 805			
106053	MTC ROBOTIC TARGET - 6B	ccm 805			
106053-1	Acceptance Data Package	CCM 2752			
106053-17	Limited Life List (paint/coating only)	ccm 805			
106053-32	Mass Properties	ccm 805			
106054	MTC ROBOTIC TARGET - 6B	CCM 2752			
106054-1	Acceptance Data Package	CCM 2752			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

106054-17	Limited Life List (paint/coating only)	CCM 2752			
106054-32	Mass Properties	CCM 2752			
106055	MTC ROBOTIC TARGET - 6B	ccm 805			
106055-1	Acceptance Data Package	CCM 2752			
106055-17	Limited Life List (paint/coating only)	ccm 805			
106055-32	Mass Properties	ccm 805			
106056	MTC ROBOTIC TARGET - 6B	CCM 2752			
106056-1	Acceptance Data Package	CCM 2752			
106056-17	Limited Life List (paint/coating only)	CCM 2752			
106056-32	Mass Properties	CCM 2752			
106057	H-HANDLE MASTER TOOL	ccm 805			
106057-1	Acceptance Data Package	CCM 2752			
106058	MICRO FIXTURE MTCT MOUNTING FIXTURE	ccm 805			
106058-1	Acceptance Data Package	CCM 2752			
106059	MICROCONICAL FITTING MTCT MOUNTING FIXTURE	ccm 805			
106059-1	Acceptance Data Package	CCM 2752			
106060	H HANDLE MTCT MOUNTING FIXTURE	ccm 805			
106060-1	Acceptance Data Package	CCM 2752			
106061	HANDRAIL ASSY, SIDE MOUNTED, TALL-ISS (25.53")	CCM 805			
106061-1	Acceptance Data Package	CCM 2752			
106061-32	Mass Properties	CCM 805			
106093	AMMONIA SERVICER OSE	ccm 896			
106093-1	Acceptance Data Package	CCM 2752			
106093-9	Failure Modes & Effect Analysis/Critical Items List	ccm 896			
106093-17	Limited Life List	ccm 896			
106093-27	Reliability & Maintainability Predictions Report	ccm 896			
106093-32	Mass Properties Report - Initial	ccm 896			
106093-32	Mass Properties Report - Update	ccm 896			
106093-32	Mass Properties Report - Final	ccm 896			
106093-33	Power/Thermal Report - Initial	ccm 896			
106093-33	Power/Thermal Report - Update	ccm 896			
106093-33	Power/Thermal Report - Final	ccm 896			
106093-34	Volume Report - Initial	ccm 896			
106093-34	Volume Report - Update	ccm 896			
106093-34	Volume Report - Final	ccm 896			
106094	ZERO - G SOFT RACK SHELL	ccm 879			
106094-1	Acceptance Data Package	CCM 2752			
106094-13	Hazard Reports/System Description - SMACR acceptable	ccm 879			
106094-32	Mass Properties	ccm 879			
106094-34	Volume Report	ccm 879			
106099	CTP SIMULATOR S/W	CCM 935			
	Additional Data Not Listed in SSP 50177	CCM 935			
	Version Description Document	CCM 935			
	CTP Simulator Users Guide	CCM 935			
	Cerificate for CTP Simulator H/W and S/W Upgrade	CCM 935			
106100	CLASS H BONDING STRAPS	ccm 911			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

106100-4	Acceptance Data Package	CCM 2752			
106109	MICROCONICAL FITTING (FLANGED)	ccm 640			
106109-4	Acceptance Data Package	CCM 2752			
106110	CIRCUIT INTERRUPT DEVICE	CCM 986			
106110-4	Acceptance Data Package	CCM 2752			
106110-9	Failure Modes & Effect Analysis/Critical Items List	CCM 986			
106110-11	Hardware Configuration	CCM 986			
106110-13	Hazard Reports/System Description - SMACR acceptable	CCM 986			
106110-17	Limited Life List	CCM 986			
106110-27	Reliability & Maintainability Predictions Report	CCM 986			
106110-32	Mass Properties Report	CCM 986			
106110-34	Volume Report	CCM 986			
106111	CIRCUIT INTERRUPT DEVICE	CCM 986			
106111-9	Failure Modes & Effect Analysis/Critical Items List	CCM 986			
106111-11	Hardware Configuration	CCM 986			
106111-13	Hazard Reports/System Description	CCM 986			
106111-17	Limited Life List	CCM 986			
106111-27	Reliability & Maintainability Predictions Report	CCM 986			
106128	SSMDM - 10E	ccm 1383			
106128-11	Hardware Drawings	ccm 1383			
106129	SSMDM - 10E	ccm 1383			
106129-11	Hardware Drawings	ccm 1383			
106130	SSMDM - 10E	ccm 1383			
106130-11	Hardware Drawings	ccm 1383			
106131	SSMDM - 10I	ccm 1383			
106131-11	Hardware Drawings	ccm 1383			
106132	SSMDM - 10I (SPARE)	CCM 1383			
106132-11	Hardware Drawings	CCM 1383			
106133	SSMDM - 10I	ccm 1383			
106133-11	Hardware Drawings	ccm 1383			
106136	SSMDM - 4E TYPE 8 (PIO 17-04, PIO 54)	ccm 1703			
106136-9	Failure Modes & Effect Analysis/Critical Items List	ccm 1703			
106136-11A	Hardware Drawings	ccm 1703			
106136-17	Limited Life List	ccm 1703			
106136-27	Reliability and Maintainability Prediction Report	ccm 1703			
106137	SSMDM-4E COVER (PPIO 17-15)	ccm 1703			
106137-9	Failure Modes & Effect Analysis/Critical Items List	ccm 1703			
106137-11A	Hardware Drawings	ccm 1703			
106137-17	Limited Life List	ccm 1703			
106137-27	Reliability and Maintainability Prediction Report	ccm 1703			
106138	SSMDM - 4E CHASSIS (PIO 17-17)	ccm 1703			
106138-9	Failure Modes & Effect Analysis/Critical Items List	ccm 1703			
106138-11A	Hardware Drawings	ccm 1703			
106138-17	Limited Life List	ccm 1703			
106138-27	Reliability and Maintainability Prediction Report	ccm 1703			
106139	APCU (FLIGHT)	ccm 2200			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

106139-1	Acceptance Data Package - ship with hardware	ccm 2200			
106140	APCU (FLIGHT)	ccm 2200			
106140-1	Acceptance Data Package - ship with hardware	ccm 2200			
106141	APCU (CITE)	ccm 2200			
106141-1	Acceptance Data Package - ship with hardware	ccm 2200			
106142	APCU (CITE)	ccm 2200			
106142-1	Acceptance Data Package - ship with hardware	ccm 2200			
106143	NODE 3 -1 SSMDM (16I TYPE 4)	ccm 1966			
106143-4	Acceptance Data Package - ship with hardware	CCM 2752			
106143-9	Failure Modes & Effect Analysis/Critical Items List	ccm 1966			
106143-13	Hazard Reports/System Description	ccm 1966			
106143-17	Limited Life List	ccm 1966			
106143-27	Reliability & Maintainability Predictions Report	ccm 1966			
106144	NODE 3 - 2 SSMDM (16I TYPE 4)	ccm 1966			
106144-4	Acceptance Data Package - ship with hardware	CCM 2752			
106144-9	Failure Modes & Effect Analysis/Critical Items List	ccm 1966			
106144-13	Hazard Reports/System Description	ccm 1966			
106144-17	Limited Life List	ccm 1966			
106144-27	Reliability & Maintainability Predictions Report	ccm 1966			
106145	VIDEO CAMERA SUPPORT ASSEMBLY KIT	ccm 2241			
106145-13	Hazard Reports/System Description	ccm 2241			
106146	W8200 CABLE KIT	ccm 2241			
106146-13	Hazard Reports/System Description	ccm 2241			
106160	MT/CETA ENERGY ABSORBER, PORT	CCM 3186			
106160-9	FMEA/CIL	CCM 3186			
106160-11A	Engineering Drawings	CCM 3186			
106160-13	Hazard Reports/System Description	CCM 3186			
106161	MT/CETA ENERGY ABSORBER, STARBOARD	CCM 3186			
106161-9	FMEA/CIL	CCM 3186			
106161-11A	Engineering Drawings	CCM 3186			
106161-13	Hazard Reports/System Description	CM 3186			
106163	HANDRAIL (TUS REELS)	CCM 3728			
106163-11A	Hardware Drawings	CCM 3728			
106164	HANDRAIL (ATCS: PUMP MOD ASSY)				
106164-11A	Hardware Drawings				
106165	HANDRAIL (ATCS: N2 TANKS)	CCM 3728			
106165-11A	Hardware Drawings	CCM 3728			
106166	HANDRAIL (S3&P1 SEGMENT)	CCM 3728			
106166-11A	Hardware Drawings	CCM 3728			
106168	HANDRAIL (S0 SEGMENT)	CCM 3728			
106168-11A	Hardware Drawings	CCM 3728			
106169	HANDRAIL (S0 SEGMENT)	CCM 3728			
106169-11A	Hardware Drawings	CCM 3728			
106170	HANDRAIL (S0 SEGMENT)	CCM 3728			
106170-11A	Hardware Drawings	CCM 3728			
106171	WIF, TOP-MOUNTED, PASSIVE	ccm 3728			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

106171-11A	Hardware Drawings	ccm 3728			
106172	WIF, SIDE-MOUNTED, PASSIVE	ccm 3728			
106172-11A	Hardware Drawings	ccm 3728			
106173	HANDRAIL (ATCS)	ccm 3728			
106173-11A	Hardware Drawings	ccm 3728			
106174	HANDRAIL (ATCS)	ccm 3728			
106174-11A	Hardware Drawings	ccm 3728			
106175	MICROCONICAL (SEGMENT P1)	ccm 3728			
106175-11A	Hardware Drawings	ccm 3728			
106176	MICROCONICAL (SO SEGMENT)	ccm 3728			
106176-11A	Hardware Drawings	ccm 3728			
106177	TARGET (S1 SEGMENT)	ccm 3728			
106177-11A	Hardware Drawings	ccm 3728			
106178	TARGET (P1 VIDEO STANCHION ASSY)	ccm 3728			
106178-11A	Hardware Drawings	ccm 3728			
106179	TARGET (P1 SEGEMENT)	ccm 3728			
106179-11A	Hardware Drawings	ccm 3728			
106180	TARGET (S3 SEGMENT)	ccm 3728			
106180-11A	Hardware Drawings	ccm 3728			
106181	FLIGHT ROBOTIC H-FIXTURE KIT	ccm 3728			
106181-11A	Hardware Drawings	ccm 3728			
106183	FIXTURE PART (WASHER)	ccm 3728			
106183-11A	Hardware Drawings	ccm 3728			
106184	FIXTURE PART (WASHER)	ccm 3728			
106184-11A	Hardware Drawings	ccm 3728			
106185	FIXTURE PART (BUSHING)	ccm 3728			
106185-11A	Hardware Drawings	ccm 3728			
106187	HANDRAIL (ATCS: PUMP MOD ASSY)	ccm 3728			
106187-11A	Hardware Drawings	ccm 3728			
106188	HANDRAIL (ATCS: PUMP MOD ASSY)	ccm 3728			
106188-11A	Hardware Drawings	ccm 3728			
106189	HANDRAIL (ATCS: PUMP MOD ASSY)	ccm 3728			
106189-11A	Hardware Drawings	ccm 3728			
106191	MICROCONICAL (S0 SEGMENT)	CCM 3728			
106191-11A	Hardware Drawings	CCM 3728			
106192	EVA KICK-LOAD WARNING LABEL (FOR 1F05101)	CCM 4886			
106192-11A	Hardware Drawings	CCM 4886			
106193	EVA KICK-LOAD WARNING LABEL (FOR 1F70141	CCM 4886			
106193-11A	Hardware Drawings	CCM 4886			
106194	EVA KICK-LOAD WARNING LABEL (FOR 1F70142)	CCM 4886			
106194-11A	Hardware Drawings	CCM 4886			
106195	EVA KICK-LOAD WARNING LABEL (FOR 1F95897)	CCM 4886			
106195-11A	Hardware Drawings	CCM 4886			
205213	FLIGHT RELEASABLE GRAPPLE FIXTURE (S5) (FLT)				
205213-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
205214	FLIGHT RELEASABLE GRAPPLE FIXTURE (S6) (FLT)	CCM 056			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205214-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
205263	PLASMA CATHODE UNIT (EGM)			NO DATA PROVIDED	
205264	Power Electronics Unit (BRDBD) (DEV)			NO DATA PROVIDED	
205265	FLIGHT RELEASABLE GRAPPLE FIXTURE (OSE) (FLT)				
205265-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
205671	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205671-1	Acceptance Data Package (Only 911 tag)			Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205671-2	Acceptance Test Report	ccm 1270		Part of ADP	
205671-26	Problem Reporting & Corrective Action				
205672	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205672-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205672-2	Acceptance Test Report	ccm 1270		Part of ADP	
205672-26	Problem Reporting & Corrective Action				
205676	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205676-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205676-2	Acceptance Test Report	ccm 1270		Part of ADP	
205676-26	Problem Reporting & Corrective Action				
205677	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205677-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205677-2	Acceptance Test Report	ccm 1270		Part of ADP	
205677-26	Problem Reporting & Corrective Action				
205678	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205678-1	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
205678-1.1.1	Historical Log				
205678-1.1.2	Waiver/Deviation Record				
205678-1.1.3	Unexplained Anomalies Records				
205678-1.1.4	Shortages				
205678-1.1.5	Unplanned/Deferred Work				
205678-1.1.6	Preplanned/Assigned Work				
205678-1.1.7	Ident: As Designed/As-Built Listing				
205678-1.1.15	Certifications				
205678-2	Acceptance Test Report	ccm 1270		Part of ADP	
205678-3	Analysis Data & Analytical Models				
205678-3.1	Reports, Structural Analysis of GFE				
205678-3.1	Reports, Structural Analysis of GFE				
205678-3.2	Thermal Control Plan & Reports of GFE				
205678-3.2	Thermal Control Plan & Reports of GFE				
205678-3.4	Analysis and Analytical Models of GFE				
205678-3.4	Analysis and Analytical Models of GFE				
2056788-3.5	Fracture Control Plan & Reports for GFE				
2056788-3.5	Fracture Control Plan & Reports for GFE				
205678-7	Electronic Design Data (VMDB Content) [partial]				
205678-31	Indentured Parts List	ADMIN		Quarterly;part of mass properties	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205678-7.1.2	Engineering Drawings			Update as required, hardcopy native format	
205678-11B	Engineering Models	ADMIN			
205678-7.1.5	Engineering Change Data	ADMIN			
205678-7.1.6	Waiver and Deviations	ADMIN			
205678-32	Mass Properties	ADMIN		Quarterly	
205678-34	Volume	ADMIN		Quarterly	
205678-9	FMEA/CIL			Agreement contingent on 1 time memo stating non-applicability	
205678-11A	Hardware Drawings			Only ICD & PIDS under CM hardcopy, native format	
205678-12	Hardware Specifications			S684-10126	
205678-13	Hazard Report/System Description			Delivered	
205678-13	Hazard Report/System Description			Delivered	
205678-13	Hazard Report/System Description				
205678-13	Hazard Report/System Description				
205678-14	Interface Control Documents			SSP 30256	
205678-17	Limited Life List			Agreement contingent on 1 time memo stating non-applicability	
205678-22	Qualification Test Plan			delivered at CDR	
205678-23	Qualification Test Procedures			As required after CDR	
205678-24	Qualification Test Reports			Delivered with hardware	
205678-26	Problem Reporting & Corrective Action				
205678-27	Reliability & Maintainability Prediction Report			Agreement contingent on 1 time memo stating non-applicability	
205678-28	Spec. Traceability Report				
205678-28	Compliance Report				
205679	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205679-1	Acceptance Data Package (Only 911 tag)			Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205679-2	Acceptance Test Report	ccm 1270		Part of ADP	
205679-26	Problem Reporting & Corrective Action				
205680	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205680-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205680-2	Acceptance Test Report	ccm 1270		Part of ADP	
205680-26	Problem Reporting & Corrective Action				
205684	FLIGHT RELEASABLE GRAPPLE FIXTURE (P6) (FLT)	CCM 056			
205684-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
205685	SIDE MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205685-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205685-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205685-26	Problem Reporting & Corrective Action				
205688	FLIGHT RELEASABLE GRAPPLE FIXTURE (P5) (FLT)	CCM 056			
205688-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
205689	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205689-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205689-2	Acceptance Test Report	ecm 1270		Part of ADP	
205689-26	Problem Reporting & Corrective Action				
205695	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205695-1	Acceptance Data Package (Only 911 tag)	GCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205695-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205695-26	Problem Reporting & Corrective Action				
205697	TOP MOUNTED PASSIVE WIF ASSY	CCM 379		CHANGED NOMENCLATURE	
205697-1	Acceptance Data Package (Only 911 tag)	GCM 2752		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
205697-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205697-26	Problem Reporting & Corrective Action				
205699	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
205699-1	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP)	
205699-1.1.1	Historical Log				
205699-1.1.2	Waiver/Deviation Record				
205699-1.1.3	Unexplained Anomalies Records				
205699-1.1.4	Shortages				
205699-1.1.5	Unplanned/Deferred Work				
205699-1.1.6	Preplanned/Assigned Work				
205699-1.1.7	Ident: As Designed/As-Built Listing				
205699-1.1.15	Certifications				
205699-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205699-26	Problem Reporting & Corrective Action				
205701	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205701-1	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205701-1.1.1	Historical Log				
205701-1.1.2	Waiver/Deviation Record				
205701-1.1.3	Unexplained Anomalies Records				
205701-1.1.4	Shortages				
205701-1.1.5	Unplanned/Deferred Work				
205701-1.1.6	Preplanned/Assigned Work				
205701-1.1.7	Ident: As Designed/As-Built Listing				
205701-1.1.15	Certifications				
205701-2	Acceptance Test Report	ecm 1270		Part of ADP	
205701-26	Problem Reporting & Corrective Action				
205702	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
205702-1	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205702-1.1.1	Historical Log				
205702-1.1.2	Waiver/Deviation Record				
205702-1.1.3	Unexplained Anomalies Records				
205702-1.1.4	Shortages				
205702-1.1.5	Unplanned/Deferred Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205702-1.1.6	Preplanned/Assigned Work				
205702-1.1.7	Ident: As Designed/As-Built Listing				
205702-1.1.15	Certifications				
205702-2	Acceptance Test Report	ecm-1270		Part of ADP	
205702-26	Problem Reporting & Corrective Action				
205703	HANDHOLD ASSY, SIDE MOUNTED, TALL - ISS (8.53")	ecm-805		CHANGED NOMENCLATURE	
205703-4	Acceptance Data Package [partial]	ecm-805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205703-1.1.1	Historical Log	ecm-805			
205703-1.1.2	Waiver/Deviation Record	ecm-805			
205703-1.1.3	Unexplained Anomalies Records	ecm-805			
205703-1.1.4	Shortages	ecm-805			
205703-1.1.5	Unplanned/Deferred Work	ecm-805			
205703-1.1.6	Preplanned/Assigned Work	ecm-805			
205703-1.1.7	Ident: As Designed/As-Built Listing	ecm-805			
205703-1.1.15	Certifications	ecm-805			
205703-2	Acceptance Test Report	ecm-805		Part of ADP	
205703-26	Problem Reporting & Corrective Action	ecm-805			
205704	HANDRAIL, ASSY, SIDE MOUNTED, TALL - ISS (25.53")	ecm-805			
205704-4	Acceptance Data Package	ecm-805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205704-1.1.1	Historical Log	ecm-805			
205704-1.1.2	Waiver/Deviation Record	ecm-805			
205704-1.1.3	Unexplained Anomalies Records	ecm-805			
205704-1.1.4	Shortages	ecm-805			
205704-1.1.5	Unplanned/Deferred Work	ecm-805			
205704-1.1.6	Preplanned/Assigned Work	ecm-805			
205704-1.1.7	Ident: As Designed/As-Built Listing	ecm-805			
205704-1.1.15	Certifications	ecm-805			
205704-2	Acceptance Test Report	ecm-805		Part of ADP	
205704-26	Problem Reporting & Corrective Action	ecm-805			
205705	HANDRAIL ASSY, TOP MOUNTED - ISS (8.625")	CCM 379		CHANGED NOMENCLATURE	
205705-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205705-1.1.1	Historical Log				
205705-1.1.2	Waiver/Deviation Record				
205705-1.1.3	Unexplained Anomalies Records				
205705-1.1.4	Shortages				
205705-1.1.5	Unplanned/Deferred Work				
205705-1.1.6	Preplanned/Assigned Work				
205705-1.1.7	Ident: As Designed/As-Built Listing				
205705-1.1.15	Certifications				
205705-2	Acceptance Test Report	ecm-1270		Part of ADP	
205705-26	Problem Reporting & Corrective Action				
205706	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (22.625")	CCM 379		CHANGED NOMENCLATURE	
205706-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205706-1.1.1	Historical Log				
205706-1.1.2	Waiver/Deviation Record				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205706-1.1.3	Unexplained Anomalies Records				
205706-1.1.4	Shortages				
205706-1.1.5	Unplanned/Deferred Work				
205706-1.1.6	Preplanned/Assigned Work				
205706-1.1.7	Ident: As Designed/As-Built Listing				
205706-1.1.15	Certifications				
205706-2	Acceptance Test Report	ecm 1270		Part of ADP	
205706-26	Problem Reporting & Corrective Action				
205708	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")	CCM 379		CHANGED NOMENCLATURE	
205708-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205708-1.1.1	Historical Log				
205708-1.1.2	Waiver/Deviation Record				
205708-1.1.3	Unexplained Anomalies Records				
205708-1.1.4	Shortages				
205708-1.1.5	Unplanned/Deferred Work				
205708-1.1.6	Preplanned/Assigned Work				
205708-1.1.7	Ident: As Designed/As-Built Listing				
205708-1.1.15	Certifications				
205708-2	Acceptance Test Report	ecm 1270		Part of ADP	
205708-26	Problem Reporting & Corrective Action				
205709	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205709-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205709-1.1.1	Historical Log				
205709-1.1.2	Waiver/Deviation Record				
205709-1.1.3	Unexplained Anomalies Records				
205709-1.1.4	Shortages				
205709-1.1.5	Unplanned/Deferred Work				
205709-1.1.6	Preplanned/Assigned Work				
205709-1.1.7	Ident: As Designed/As-Built Listing				
205709-1.1.15	Certifications				
205709-2	Acceptance Test Report	ecm 1270		Part of ADP	
205709-26	Problem Reporting & Corrective Action				
205710	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
205710-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205710-1.1.1	Historical Log				
205710-1.1.2	Waiver/Deviation Record				
205710-1.1.3	Unexplained Anomalies Records				
205710-1.1.4	Shortages				
205710-1.1.5	Unplanned/Deferred Work				
205710-1.1.6	Preplanned/Assigned Work				
205710-1.1.7	Ident: As Designed/As-Built Listing				
205710-1.1.15	Certifications				
205710-2	Acceptance Test Report	ecm 1270		Part of ADP	
205710-26	Problem Reporting & Corrective Action				
205711	HANDHOLD ASSY, SIDE MOUNTED, TALL - ISS (8.53")	ecm 805			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205711-1	Acceptance Data Package [partial]	ccm 805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205711-1.1.1	Historical Log	ccm 805			
205711-1.1.2	Waiver/Deviation Record	ccm 805			
205711-1.1.3	Unexplained Anomalies Records	ccm 805			
205711-1.1.4	Shortages	ccm 805			
205711-1.1.5	Unplanned/Deferred Work	ccm 805			
205711-1.1.6	Preplanned/Assigned Work	ccm 805			
205711-1.1.7	Ident: As Designed/As-Built Listing	ccm 805			
205711-1.1.15	Certifications	ccm 805			
205711-2	Acceptance Test Report	ccm 1270		Part of ADP	
205711-26	Problem Reporting & Corrective Action	ccm 805			
205712	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	ccm 805		CHANGED NOMENCLATURE	
205712-1	Acceptance Data Package [partial]	ccm 805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205712-1.1.1	Historical Log	ccm 805			
205712-1.1.2	Waiver/Deviation Record	ccm 805			
205712-1.1.3	Unexplained Anomalies Records	ccm 805			
205712-1.1.4	Shortages	ccm 805			
205712-1.1.5	Unplanned/Deferred Work	ccm 805			
205712-1.1.6	Preplanned/Assigned Work	ccm 805			
205712-1.1.7	Ident: As Designed/As-Built Listing	ccm 805			
205712-1.1.15	Certifications	ccm 805			
205712-2	Acceptance Test Report	ccm 805		Part of ADP	
205712-26	Problem Reporting & Corrective Action	ccm 805			
205713	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.625")	CCM 379		CHANGED NOMENCLATURE	
205713-1	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205713-1.1.1	Historical Log				
205713-1.1.2	Waiver/Deviation Record				
205713-1.1.3	Unexplained Anomalies Records				
205713-1.1.4	Shortages				
205713-1.1.5	Unplanned/Deferred Work				
205713-1.1.6	Preplanned/Assigned Work				
205713-1.1.7	Ident: As Designed/As-Built Listing				
205713-1.1.15	Certifications				
205713-2	Acceptance Test Report	ccm 1270		Part of ADP	
205713-26	Problem Reporting & Corrective Action				
205714	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (22.625")	CCM 379		CHANGED NOMENCLATURE	
205714-1	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205714-1.1.1	Historical Log				
205714-1.1.2	Waiver/Deviation Record				
205714-1.1.3	Unexplained Anomalies Records				
205714-1.1.4	Shortages				
205714-1.1.5	Unplanned/Deferred Work				
205714-1.1.6	Preplanned/Assigned Work				
205714-1.1.7	Ident: As Designed/As-Built Listing				
205714-1.1.15	Certifications				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205714-2	Acceptance Test Report	ecm 1270		Part of ADP	
205714-26	Problem Reporting & Corrective Action				
205716	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")	CCM 379		CHANGED NOMENCLATURE	
205716-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205716-1.1.1	Historical Log				
205716-1.1.2	Waiver/Deviation Record				
205716-1.1.3	Unexplained Anomalies Records				
205716-1.1.4	Shortages				
205716-1.1.5	Unplanned/Deferred Work				
205716-1.1.6	Preplanned/Assigned Work				
205716-1.1.7	Ident: As Designed/As-Built Listing				
205716-1.1.15	Certifications				
205716-2	Acceptance Test Report	ecm 1270		Part of ADP	
205716-26	Problem Reporting & Corrective Action				
205717	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
205717-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205717-1.1.1	Historical Log				
205717-1.1.2	Waiver/Deviation Record				
205717-1.1.3	Unexplained Anomalies Records				
205717-1.1.4	Shortages				
205717-1.1.5	Unplanned/Deferred Work				
205717-1.1.6	Preplanned/Assigned Work				
205717-1.1.7	Ident: As Designed/As-Built Listing				
205717-1.1.15	Certifications				
205717-2	Acceptance Test Report	ecm 1270		Part of ADP	
205717-26	Problem Reporting & Corrective Action				
205718	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205718-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205718-1.1.1	Historical Log				
205718-1.1.2	Waiver/Deviation Record				
205718-1.1.3	Unexplained Anomalies Records				
205718-1.1.4	Shortages				
205718-1.1.5	Unplanned/Deferred Work				
205718-1.1.6	Preplanned/Assigned Work				
205718-1.1.7	Ident: As Designed/As-Built Listing				
205718-1.1.15	Certifications				
205718-2	Acceptance Test Report	ecm 1270		Part of ADP	
205718-26	Problem Reporting & Corrective Action				
205719	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
205719-4	Acceptance Data Package-	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205719-1.1.1	Historical Log				
205719-1.1.2	Waiver/Deviation Record				
205719-1.1.3	Unexplained Anomalies Records				
205719-1.1.4	Shortages				
205719-1.1.5	Unplanned/Deferred Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205719-1.1.6	Preplanned/Assigned Work				
205719-1.1.7	Ident: As Designed/As-Built Listing				
205719-1.1.15	Certifications				
205719-2	Acceptance Test Report	ecm-1270		Part of ADP	
205719-26	Problem Reporting & Corrective Action				
205720	HANDHOLD ASSY, SIDE MOUNTED, TALL - ISS (8.53")	ecm-805			
205720-4	Acceptance Data Package [partial]	ecm-805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205720-1.1.1	Historical Log	ecm-805			
205720-1.1.2	Waiver/Deviation Record	ecm-805			
205720-1.1.3	Unexplained Anomalies Records	ecm-805			
205720-1.1.4	Shortages	ecm-805			
205720-1.1.5	Unplanned/Deferred Work	ecm-805			
205720-1.1.6	Preplanned/Assigned Work	ecm-805			
205720-1.1.7	Ident: As Designed/As-Built Listing	ecm-805			
205720-1.1.15	Certifications	ecm-805			
205720-2	Acceptance Test Report	ecm-1270		Part of ADP	
205720-26	Problem Reporting & Corrective Action	ecm-805			
205721	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	ecm-805			
205721-4	Acceptance Data Package	ecm-805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205721-1.1.1	Historical Log	ecm-805			
205721-1.1.2	Waiver/Deviation Record	ecm-805			
205721-1.1.3	Unexplained Anomalies Records	ecm-805			
205721-1.1.4	Shortages	ecm-805			
205721-1.1.5	Unplanned/Deferred Work	ecm-805			
205721-1.1.6	Preplanned/Assigned Work	ecm-805			
205721-1.1.7	Ident: As Designed/As-Built Listing	ecm-805			
205721-1.1.15	Certifications	ecm-805			
205721-2	Acceptance Test Report	ecm-805		Part of ADP	
205721-26	Problem Reporting & Corrective Action	ecm-805			
205722	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.626")	CCM 379		CHANGED NOMENCLATURE	
205722-4	Acceptance Data Package [partial]	GCM-2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205722-1.1.1	Historical Log				
205722-1.1.2	Waiver/Deviation Record				
205722-1.1.3	Unexplained Anomalies Records				
205722-1.1.4	Shortages				
205722-1.1.5	Unplanned/Deferred Work				
205722-1.1.6	Preplanned/Assigned Work				
205722-1.1.7	Ident: As Designed/As-Built Listing				
205722-1.1.15	Certifications				
205722-2	Acceptance Test Report	ecm-1270		Part of ADP	
205722-26	Problem Reporting & Corrective Action				
205723	HANDRAIL ASSEMBLY, TOP MOUNTED ISS (22.625")	CCM 379		CHANGED NOMENCLATURE	
205723-4	Acceptance Data Package	GCM-2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205723-1.1.1	Historical Log				
205723-1.1.2	Waiver/Deviation Record				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205723-1.1.3	Unexplained Anomalies Records				
205723-1.1.4	Shortages				
205723-1.1.5	Unplanned/Deferred Work				
205723-1.1.6	Preplanned/Assigned Work				
205723-1.1.7	Ident: As Designed/As-Built Listing				
205723-1.1.15	Certifications				
205723-2	Acceptance Test Report	ecm 1270		Part of ADP	
205723-26	Problem Reporting & Corrective Action				
205725	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.64")	CCM 379		CHANGED NOMENCLATURE	
205725-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205725-1.1.1	Historical Log				
205725-1.1.2	Waiver/Deviation Record				
205725-1.1.3	Unexplained Anomalies Records				
205725-1.1.4	Shortages				
205725-1.1.5	Unplanned/Deferred Work				
205725-1.1.6	Preplanned/Assigned Work				
205725-1.1.7	Ident: As Designed/As-Built Listing				
205725-1.1.15	Certifications				
205725-2	Acceptance Test Report	ecm 1270		Part of ADP	
205725-26	Problem Reporting & Corrective Action				
205726	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	
205726-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205726-1.1.1	Historical Log				
205726-1.1.2	Waiver/Deviation Record				
205726-1.1.3	Unexplained Anomalies Records				
205726-1.1.4	Shortages				
205726-1.1.5	Unplanned/Deferred Work				
205726-1.1.6	Preplanned/Assigned Work				
205726-1.1.7	Ident: As Designed/As-Built Listing				
205726-1.1.15	Certifications				
205726-2	Acceptance Test Report	ecm 1270		Part of ADP	
205726-26	Problem Reporting & Corrective Action				
205727	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205727-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205727-1.1.1	Historical Log				
205727-1.1.2	Waiver/Deviation Record				
205727-1.1.3	Unexplained Anomalies Records				
205727-1.1.4	Shortages				
205727-1.1.5	Unplanned/Deferred Work				
205727-1.1.6	Preplanned/Assigned Work				
205727-1.1.7	Ident: As Designed/As-Built Listing				
205727-1.1.15	Certifications				
205727-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205727-26	Problem Reporting & Corrective Action				
205728	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	CCM 379		CHANGED NOMENCLATURE	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205728-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205728-1.1.1	Historical Log				
205728-1.1.2	Waiver/Deviation Record				
205728-1.1.3	Unexplained Anomalies Records				
205728-1.1.4	Shortages				
205728-1.1.5	Unplanned/Deferred Work				
205728-1.1.6	Preplanned/Assigned Work				
205728-1.1.7	Ident: As Designed/As-Built Listing				
205728-1.1.15	Certifications				
205728-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205728-26	Problem Reporting & Corrective Action				
205729	HANDHOLD ASSY, SIDE MOUNTED, TALL - ISS (8.53")	-ccm 805			
205729-4	Acceptance Data Package [partial]	-ccm 805		Separate ADP for each S/N	
205729-1.1.1	Historical Log	-ccm 805			
205729-1.1.2	Waiver/Deviation Record	-ccm 805			
205729-1.1.3	Unexplained Anomalies Records	-ccm 805			
205729-1.1.4	Shortages	-ccm 805			
205729-1.1.5	Unplanned/Deferred Work	-ccm 805			
205729-1.1.6	Preplanned/Assigned Work	-ccm 805			
205729-1.1.7	Ident: As Designed/As-Built Listing	-ccm 805			
205729-1.1.15	Certifications	-ccm 805			
205729-2	Acceptance Test Report	-ccm 805		Part of ADP	
205729-3	Analysis Data & Analytical Models	-ccm 805		Delivered to Marshall Horton	
205729-3.1	Reports, Structural Analysis of GFE	-ccm 805			
205729-3.2	Thermal Control Plan & Reports of GFE	-ccm 805			
205729-3.4	Analysis and Analytical Models of GFE	-ccm 805			
205729-3.5	Fracture Control Plan & Reports for GFE	-ccm 805			
205729-7	Electronic Design Data (VMDB Content) [partial]	-ccm 805			
205729-34	Indentured Parts List	-ccm 805		Quarterly. Part of mass properties	
205729-7.1.2	Engineering Drawings	-ccm 805		Update as required. Hardcopy in native-format	
205729-11B	Engineering Models	-ccm 805		Update as required	
205729-7.1.5	Engineering Change Data	-ccm 805			
205729-7.1.6	Waiver and Deviations	-ccm 805			
205729-32	Mass Properties	-ccm 805		Quarterly	
205729-34	Volume	-ccm 805		Quarterly	
205729-9	FMEA/CIL	-ccm 805		Agreement contingent upon 1-time memo-stating non-applicability	
205729-11A	Hardware Drawings	-ccm 805		[LO, TLEI] Hardcopy in native format	
205729-12	Hardware Specifications	-ccm 805		Delivered	
205729-13	Hazard Report/System Description	-ccm 805		Phase 1 - Delivered	
205729-13	Hazard Report/System Description	-ccm 805		Phase 2 -Delivered	
205729-14	Interface Control Documents	-ccm 805		SSP 30256	
205729-22	Qualification Test Plan	-ccm 805			
205729-23	Qualification Test Procedures	-ccm 805			
205729-24	Qualification Test Reports	-ccm 805			
205729-26	Problem Reporting & Corrective Action	-ccm 805			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205729-27	Reliability & Maintainability Prediction Report	-ccm-805		Agreement contingent upon 1-time memo-stating non-applicability	
205729-28	Traceability & Compliance Report	-ccm-805			
205730	HANDRAIL ASSY, SIDE MOUNTED, TALL - ISS (25.53")	ccm-805			
205730-1	Acceptance Data Package	ccm-805		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205730-1.1.1	Historical Log	ccm-805			
205730-1.1.2	Waiver/Deviation Record	ccm-805			
205730-1.1.3	Unexplained Anomalies Records	ccm-805			
205730-1.1.4	Shortages	ccm-805			
205730-1.1.5	Unplanned/Deferred Work	ccm-805			
205730-1.1.6	Preplanned/Assigned Work	ccm-805			
205730-1.1.7	Ident: As Designed/As-Built Listing	ccm-805			
205730-1.1.15	Certifications	ccm-805			
205730-2	Acceptance Test Report	ccm-805		Part of ADP	
205730-26	Problem Reporting & Corrective Action	ccm-805			
205731	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.625")	CCM 379		CHANGED NOMENCLATURE	
205731-1	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP)	
205731-1.1.1	Historical Log				
205731-1.1.2	Waiver/Deviation Record				
205731-1.1.3	Unexplained Anomalies Records				
205731-1.1.4	Shortages				
205731-1.1.5	Unplanned/Deferred Work				
205731-1.1.6	Preplanned/Assigned Work				
205731-1.1.7	Ident: As Designed/As-Built Listing				
205731-1.1.15	Certifications				
205731-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205731-26	Problem Reporting & Corrective Action				
205732	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (22.625")	CCM 379		CHANGED NOMENCLATURE	
205732-1	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP)	
205732-1.1.1	Historical Log				
205732-1.1.2	Waiver/Deviation Record				
205732-1.1.3	Unexplained Anomalies Records				
205732-1.1.4	Shortages				
205732-1.1.5	Unplanned/Deferred Work				
205732-1.1.6	Preplanned/Assigned Work				
205732-1.1.7	Ident: As Designed/As-Built Listing				
205732-1.1.15	Certifications				
205732-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205732-26	Problem Reporting & Corrective Action				
205734	HANDRAIL ASSEMBLY, TOP MOUNTED, CUSTOM (47.635")	CCM 379		CHANGED NOMENCLATURE	
205734-1	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP)	
205734-1.1.1	Historical Log				
205734-1.1.2	Waiver/Deviation Record				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205734-1.1.3	Unexplained Anomalies Records				
205734-1.1.4	Shortages				
205734-1.1.5	Unplanned/Deferred Work				
205734-1.1.6	Preplanned/Assigned Work				
205734-1.1.7	Ident: As Designed/As-Built Listing				
205734-1.1.15	Certifications				
205734-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205734-26	Problem Reporting & Corrective Action				
205735	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")	CCM 379		CHANGED NOMENCLATURE	
205735-4	Acceptance Data Package			ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
205735-1.1.1	Historical Log				
205735-1.1.2	Waiver/Deviation Record				
205735-1.1.3	Unexplained Anomalies Records				
205735-1.1.4	Shortages				
205735-1.1.5	Unplanned/Deferred Work				
205735-1.1.6	Preplanned/Assigned Work				
205735-1.1.7	Ident: As Designed/As-Built Listing				
205735-1.1.15	Certifications				
205735-2	Acceptance Test Report	ecm 1270		Part of ADP	
205735-26	Problem Reporting & Corrective Action				
205736	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205736-4	Acceptance Data Package [partial]			ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
205736-1.1.1	Historical Log				
205736-1.1.2	Waiver/Deviation Record				
205736-1.1.3	Unexplained Anomalies Records				
205736-1.1.4	Shortages				
205736-1.1.5	Unplanned/Deferred Work				
205736-1.1.6	Preplanned/Assigned Work				
205736-1.1.7	Ident: As Designed/As-Built Listing				
205736-1.1.15	Certifications				
205736-2	Acceptance Test Report	ecm 1270		Part of ADP	
205736-26	Problem Reporting & Corrective Action				
205737	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")	CCM 379		CHANGED NOMENCLATURE	
205737-4	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
205737-1.1.1	Historical Log				
205737-1.1.2	Waiver/Deviation Record				
205737-1.1.3	Unexplained Anomalies Records				
205737-1.1.4	Shortages				
205737-1.1.5	Unplanned/Deferred Work				
205737-1.1.6	Preplanned/Assigned Work				
205737-1.1.7	Ident: As Designed/As-Built Listing				
205737-1.1.15	Certifications				
205737-2	Acceptance Test Report	ecm 1270		Part of ADP	
205737-26	Problem Reporting & Corrective Action				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205738	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205738-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
205738-1.1.1	Historical Log				
205738-1.1.2	Waiver/Deviation Record				
205738-1.1.3	Unexplained Anomalies Records				
205738-1.1.4	Shortages				
205738-1.1.5	Unplanned/Deferred Work				
205738-1.1.6	Preplanned/Assigned Work				
205738-1.1.7	Ident: As Designed/As-Built Listing				
205738-1.1.15	Certifications				
205738-2	Acceptance Test Report	ccm 1270		Part of ADP	
205738-26	Problem Reporting & Corrective Action				
205739	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205739-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
205739-1.1.1	Historical Log				
205739-1.1.2	Waiver/Deviation Record				
205739-1.1.3	Unexplained Anomalies Records				
205739-1.1.4	Shortages				
205739-1.1.5	Unplanned/Deferred Work				
205739-1.1.6	Preplanned/Assigned Work				
205739-1.1.7	Ident: As Designed/As-Built Listing				
205739-1.1.15	Certifications				
205739-2	Acceptance Test Report	ccm 1270		Part of ADP	
205739-26	Problem Reporting & Corrective Action				
205740	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.94")	CCM 379		CHANGED NOMENCLATURE	
205740-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original ADP)	
205740-1.1.1	Historical Log				
205740-1.1.2	Waiver/Deviation Record				
205740-1.1.3	Unexplained Anomalies Records				
205740-1.1.4	Shortages				
205740-1.1.5	Unplanned/Deferred Work				
205740-1.1.6	Preplanned/Assigned Work				
205740-1.1.7	Ident: As Designed/As-Built Listing				
205740-1.1.15	Certifications				
205740-2	Acceptance Test Report	ccm 1270		Part of ADP	
205740-26	Problem Reporting & Corrective Action				
205741	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205741-4	Acceptance Data Package [partial]	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
205741-1.1.1	Historical Log				
205741-1.1.2	Waiver/Deviation Record				
205741-1.1.3	Unexplained Anomalies Records				
205741-1.1.4	Shortages				
205741-1.1.5	Unplanned/Deferred Work				
205741-1.1.6	Preplanned/Assigned Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205741-1.1.7	Ident: As Designed/As-Built Listing				
205741-1.1.15	Certifications				
205741-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205741-26	Problem Reporting & Corrective Action				
205742	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (21.941")	CCM 379		CHANGED NOMENCLATURE	
205742-4	Acceptance Data Package	GCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
205742-1.1.1	Historical Log				
205742-1.1.2	Waiver/Deviation Record				
205742-1.1.3	Unexplained Anomalies Records				
205742-1.1.4	Shortages				
205742-1.1.5	Unplanned/Deferred Work				
205742-1.1.6	Preplanned/Assigned Work				
205742-1.1.7	Ident: As Designed/As-Built Listing				
205742-1.1.15	Certifications				
205742-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
205742-26	Problem Reporting & Corrective Action				
205744	AMMONIA SERVICER (GSE)	CCM 287		KSC Loaned, owned, operated &	
205744-4	Acceptance Data Package	GCM 2752			
205744-1.1.1	Historical Log				
205744-1.1.2	Waiver/Deviation Record			ACT/VAL per matrix	
205744-1.1.3	Unexplained Anomalies Record			Provided in applicable discrepancy reports	
205744-1.1.4	Shortages				
205744-1.1.5	Unplanned/Deferred Work			Applicable open DRs will be provided	
205744-1.1.6	Preplanned/Assigned Work				
205744-1.1.7	Ident: As Designed/As-Built Listing				
205744-1.1.9	Age-Sensitive/Time-Action Item				
205744-1.1.10	Nonstandard Calibration			Maintenance Schedule will be provided	
205744-1.1.12	Pressure Vessel Data			Submitted in 1.1.9	
205744-1.1.14	Nonflight Hardware/Temporary Installation			Submitted in 1.1.6	
205744-1.1.15	Certifications				
205744-1.1.16	Material Safety Data Sheet				
205744-2	Acceptance Test Report			ACT/VAL MATRIX	
205744-9	FMEA/CIL			Delivered	
205744-11A	Hardware Drawings			Delivered	
205744-12	Hardware Specifications			Delivered	
205744-13	Hazard Report/System Description			Delivered	
205744-14	Interface Control Documents			Delivered	
205744-17	Limited Life List			Provided as part of PM schedule To PG-2	
205745	FLIGHT RELEASABLE GRAPPLE FIXTURE (Z1) (FLT)				
205745-4	End Item Data Package (ADP)	GCM 2752		Consistent with Shuttle ADP requirements	
205745-2	Acceptance Test Report			Part of End Item Data Pkg (ADP)	
205745-9	FMEA/CIL			Delivered	
205745-13	Hazard Report/System Description			Shuttle format	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205745-24	Qualification Test Report			Already completed and available for review, not per DID	
205745-27	Reliability and Maintainability Prediction Report			Delivered	
205745-28	Specification Traceability & Compliance Rpt			Part of End Item Data Pkg (ADP)	
MISC	GF Capabilities & Characteristics			Ref: NSTS-21000-IDD-ISS Para. 14.4.1.1 and others	
205756	GO-NO GO GAUGES (GSE)	SSCN 263 - ADMIN			
205756-4	Acceptance Data Package [partial]	GCM 2752		Separate ADP for each S/N	
205756-1.1.1	Historical Log				
205756-1.1.2	Waiver/Deviation Record				
205756-1.1.3	Unexplained Anomalies Records				
205756-1.1.4	Shortages				
205756-1.1.5	Unplanned/Deferred Work				
205756-1.1.6	Preplanned/Assigned Work				
205756-1.1.7	Ident: As Designed/As-Built Listing				
205756-1.1.15	Certifications				
205784	PLASMA CATHODE UNIT (PCU) (QUAL)	SSCN 263 - ADMIN			
205784-4	Acceptance Data Package	GCM 2752			
205784-1.1.1	Historical Log				
205784-1.1.2	Waiver/Deviation Record				
205784-1.1.3	Unexplained Anomalies Record				
205784-1.1.5	Unplanned/Deferred Work				
205784-1.1.6	Preplanned/Assigned Work				
205784-1.1.7	Ident: As Designed/As Built Listing			Per PCU Top Assembly Drawing (IPD TBD)	
205784-1.1.8	Operating Time/Cycle				
205784-1.1.15	Certifications				
205784-2	Acceptance Test Report	SSCN 263 - ADMIN		Included in ADP	
205784-24	Qual Test Report			Informal Pre-qual test Report Data Acceptable	
205784-28	Spec. Traceability & Compliance Report			Hardcopy deliv. will be made to PG-2 for RTM and PVIS inputs with the Plasma contactor ORU data	
205785	PLASMA CATHODE UNIT (PCU) (FLT)	ADMIN			
205785-4	Acceptance Data Package	GCM 2752			
205785-1.1.1	Historical Log				
205785-1.1.2	Waiver/Deviation Record				
205785-1.1.3	Unexplained Anomalies Record				
205785-1.1.5	Unplanned/Deferred Work				
205785-1.1.6	Preplanned/Assigned Work				
205785-1.1.7	As Designed/As Built Listing			Per PCU Top Assembly Dwg	
205785-1.1.8	Operating Time/Cycle				
205785-1.1.15	Certifications				
205785-2	Acceptance Test Report			Included in ADP	
205785-11A	Hardware Drawings			Update as required	
205785-12	Inspection and Process Documents			6/15/1996	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205787	HANDHOLD ASSY, SIDE MOUNTED, TALL - ISS (8.53")	ccm 805			
205787-1	Acceptance Data Package	ccm 805			
205787-26	Problem Reporting & Corrective Action	ccm 805			
205788	HANDRAIL ASSEMBLY, TOP MOUNTED, - ISS (8.53")	CCM 379		CHANGED NOMENCLATURE	
205788-1	Acceptance Data Package	GCM 2752			
205788-26	Problem Reporting & Corrective Action				
205791	BATTERY ORU SIMULATOR ASSY	CCM 287		RD DIL #4142 deliv. 3/11/96; item will fly on STS-80 then loaner back to RD on 12/1/96 thru 1/15/97	
205791-1	Acceptance Data Package	GCM 287		Data indicating handling of item #205791 since RD delivered as DIL item	
205901	SOFT DOCK CETA	CCM 379	255	left off mod 255, per ccm 217	
205901-1	Acceptance Data Package	GCM 379	255	left off mod 255, per ccm 217	
205901-26	Problem Reporting & Corrective Action	CCM 379	255	left off mod 255, per ccm 217	
205904	RTD CABLES/ASSEMBLIES (20/30")	ccm 458			
205904-1	Acceptance Data Package	GCM 2752			
205904-9	FMEA/CIL	ccm 458			
205906	RTD CABLES SPARES/ASSEMBLIES (3/30")	ccm 458			
205906-1	Acceptance Data Package	GCM 2752			
205906-9	FMEA/CIL	ccm 458			
205908	RTD CABLES/ASSEMBLIES (36/30")	ccm 458			
205908-1	Acceptance Data Package	GCM 2752			
205908-9	FMEA/CIL	ccm 458			
205908-13	Hazard Report/System Description (SMACR Acceptable)	ccm 458			
205909	RTD CABLES SPARES/ASSEMBLIES (6/30")	ccm 458			
205909-1	Acceptance Data Package	GCM 2752			
205909-9	FMEA/CIL	ccm 458			
205910	RSU REMOTE ANTENNA CABLE FOR CARGO ELEMENT (2/25")	ccm 458			
205910-1	Acceptance Data Package	GCM 2752			
205910-9	FMEA/CIL	ccm 458			
205911	RSU REMOTE ANTENNA CABLE FOR CARGO ELEMENT (1/25")	ccm 458			
205911-1	Acceptance Data Package	GCM 2752			
205911-9	FMEA/CIL	ccm 458			
205912	RSU REMOTE ANTENNA CABLES FOR CARGO ELEMENT (5/15")	ccm 458			
205912-1	Acceptance Data Package	GCM 2752			
205912-9	FMEA/CIL	ccm 458			
205912-13	Hazard Reports/System Description - SMACR acceptable	ccm 458			
205918	RTD CABLES/ASSEMBLIES (4/50")	ccm 458			
205918-1	Acceptance Data Package	GCM 2752			
205918-9	FMEA/CIL	ccm 458			
205922	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
205922-1	Acceptance Data Package	GCM 2752			
205922-32	Mass Properties Report	GCM 2752			
205923	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	ccm 805			
205923-1	Acceptance Data Package	GCM 2752			
205923-32	Mass Properties Report	GCM 2752			
205924	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205924-1	Acceptance Data Package	GCM 2752			
205924-32	Mass Properties Report	ccm 805			
205925	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	ccm 805			
205925-1	Acceptance Data Package	GCM 2752			
205925-32	Mass Properties Report	ccm 805			
205926	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
205926-1	Acceptance Data Package	GCM 2752			
205926-32	Mass Properties Report	GCM 2752			
205927	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (25.53")	ccm 805			
205927-1	Acceptance Data Package	GCM 2752			
205927-32	Mass Properties Report	GCM 2752			
205928	HANDHOLD ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
205928-1	Acceptance Data Package	GCM 2752			
205928-32	Mass Properties Report	GCM 2752			
205929	HANDRAIL ASSY, SIDE MOUNTED, SHORT - ISS (8.53")	ccm 805			
205929-1	Acceptance Data Package	GCM 2752			
205929-32	Mass Properties Report	GCM 2752			
205930	HANDRAIL ASSY, TOP-MOUNTED - ISS (85.7")	ccm 805			
205930-1	Acceptance Data Package	GCM 2752			
205930-32	Mass Properties Report	ccm 805			
205931	HANDRAIL ASSY, TOP MOUNTED , EXTENDED - ISS	ccm 805			
205931-1	Acceptance Data Package	GCM 2752			
205931-32	Mass Properties Report	ccm 805			
205932	HANDRAIL ASSY, TOP MOUNTED , EXTENDED - ISS	ccm 805			
205932-1	Acceptance Data Package	GCM 2752			
205932-32	Mass Properties Report	ccm 805			
205933	SIDE MOUNTED PASSIVE WIF ASSY	ccm 805			
205933-1	Acceptance Data Package	GCM 2752			
205933-32	Mass Properties Report	ccm 805			
205935	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			
205935-1	Acceptance Data Package	GCM 2752			
205935-32	Mass Properties Report	ccm 805			
205936	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			
205936-1	Acceptance Data Package	GCM 2752			
205936-32	Mass Properties Report	ccm 805			
205938	HANDRAIL ASSY, TOP MOUNTED - ISS (25.53")	ccm 805			
205938-1	Acceptance Data Package	GCM 2752			
205938-32	Mass Properties Report	ccm 805			
205939	HANDRAIL ASSEMBLY, TOP MOUNTED - ISS (25.53")	ccm 805			
205939-1	Acceptance Data Package	GCM 2752			
205939-32	Mass Properties Report	ccm 805			
205940	HANDRAIL ASSY, TOP MOUNTED, EXTENDED - ISS	ccm 805			
205940-1	Acceptance Data Package	ccm 805			
205940-32	Mass Properties Report	ccm 805			
205941	HANDRAIL ASSY, TOP MOUNTED, EXTENDED - ISS	ccm 805			
205941-1	Acceptance Data Package	GCM 2752			
205941-32	Mass Properties Report	ccm 805			
205942	HANDRAIL ASSY, TOP MOUNTED - ISS (18/15")	ccm 805			
205942-1	Acceptance Data Package	GCM 2752			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205942-32	Mass Properties Report	ccm 805			
205943	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			
205943-1	Acceptance Data Package	GCM 2752			
205943-32	Mass Properties Report	ccm 805			
205944	HANDRAIL ASSY, TOP MOUNTED - ISS (25.53")	ccm 805			
205944-1	Acceptance Data Package	GCM 2752			
205944-32	Mass Properties Report	ccm 805			
205945	HANDRAIL ASSY, TOP-MOUNTED, EXTENDED - ISS	ccm 805			
205945-1	Acceptance Data Package	GCM 2752			
205945-32	Mass Properties Report	ccm 805			
205946	HANDRAIL ASSY, TOP-MOUNTED, EXTENDED - ISS	ccm 805			
205946-1	Acceptance Data Package	GCM 2752			
205946-32	Mass Properties Report	GCM 2752			
205947	HANDRAIL ASSY, TOP-MOUNTED, EXTENDED - ISS	ccm 805			
205947-1	Acceptance Data Package	GCM 2752			
205947-32	Mass Properties Report	GCM 2752			
205948	HANDRAIL ASSY, TOP-MOUNTED, EXTENDED - ISS	ccm 805			
205948-1	Acceptance Data Package	GCM 2752			
205948-32	Mass Properties Report	GCM 2752			
205949	HANDRAIL ASSY, TOP MOUNTED - ISS (18.15")	ccm 805			
205949-1	Acceptance Data Package	GCM 2752			
205949-32	Mass Properties Report	GCM 2752			
205950	HANDRAIL ASSY, TOP MOUNTED - ISS (8.53")	ccm 805			
205950-1	Acceptance Data Package	GCM 2752			
205950-32	Mass Properties Report	ccm 805			
205951	GAP SPANNER (50")	ccm 805			
205951-1	Acceptance Data Package	GCM 2752			
205951-32	Mass Properties Report	ccm 805			
205952	GAP SPANNER (50")	ccm 805			
205952-1	Acceptance Data Package	GCM 2752			
205952-32	Mass Properties Report	ccm 805			
205953	H-HANDLES MASTER TOOL	ccm 805			
205953-1	Acceptance Data Package	GCM 2752			
205954	MICRO FIXTURE MTCT MOUNTING FIXTURE	ccm 805			
205954-1	Acceptance Data Package	GCM 2752			
205955	MICROCONICAL FITTING MTCT MOUNTING FIXTURE	ccm 805			
205955-1	Acceptance Data Package	GCM 2752			
205956	H HANDLE MCTC MOUNTING FIXTURE	ccm 805			
205956-1	Acceptance Data Package	GCM 2752			
205963	STD FLIGHT RELEASABLE GRAPPLE FIXTURE	ccm 896			
205936-1	Acceptance Data Package	GCM 2752			
205936-13	Hazard Reports/System Description	ccm 896			
205963-32	Mass Properties Report	ccm 896			
205963-34	Power/Thermal Report	ccm 896			
205967	DDCU - HP RTD CABLES/ASSEMBLIES (2/30")	ccm 458			
205967-1	Acceptance Data Package	GCM 2752			
205967-9	FMEA/CIL	ccm 458			
205967-13	Hazard Reports/System Description - SMACR acceptable	ccm 458			
205968	DDCU - HP RTD CABLES/ASSEMBLIES (2/50")	ccm 458			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205968-4	Acceptance Data Package	GCM 2752			
205968-9	FMEA/CIL	ccm 458			
205968-13	Hazard Reports/System Description - SMACR acceptable	ccm 458			
205969	REMOTE ANTENNAS FOR Z1	ccm 458			
205969-4	Acceptance Data Package	GCM 2752			
205969-9	FMEA/CIL	ccm 458			
205969-13	Hazard Reports/System Description	ccm 458			
205969-17	Limited Life List	ccm 458			
205969-27	Reliability & Maintainability Prediction Report	ccm 458			
205971	RSU FOR Z1	ccm 458			
205971-4	Acceptance Data Package	GCM 2752			
205971-9	FMEA/CIL	ccm 458			
205971-13	Hazard Reports/System Description	ccm 458			
205971-17	Limited Life List	ccm 458			
205971-27	Reliability & Maintainability Prediction Report	ccm 458			
205972	REMOTE ANTENNAS FOR P6	ccm 458			
205972-4	Acceptance Data Package	GCM 2752			
205972-9	FMEA/CIL	ccm 458			
205972-13	Hazard Reports/System Description	ccm 458			
205972-17	Limited Life List	ccm 458			
205972-27	Reliability & Maintainability Prediction Report	ccm 458			
205974	RSU FOR P6	ccm 458			
205974-4	Acceptance Data Package	ccm 458			
205974-9	FMEA/CIL	ccm 458			
205974-13	Hazard Reports/System Description	ccm 458			
205974-17	Limited Life List	ccm 458			
205974-27	Reliability & Maintainability Prediction Report	ccm 458			
205977	CIRCUIT INTERRUPT DEVICE	CCM 986			
205977-4	Acceptance Data Package	GCM 986 GCM-2752			
205977-9	FMEA/CIL - initial	CCM 986			
205977-9	FMEA/CIL -final	CCM 986			
205977-13	Hazard Reports/System Description - initial	CCM 986			
205977-13	Hazard Reports/System Description - approved final	CCM 986			
205977-17	Limited Life List	CCM 986			
205977-27	Reliability & Maintainability Prediction Report	CCM 986			
205977-32	Mass Properties Report	CCM 986			
205977-34	Volume Report	CCM 986			
205978	CIRCUIT INTERRUPT DEVICE	CCM 986			
205978-4	Acceptance Data Package	GCM 2752			
205978-9	FMEA/CIL - initial	CCM 986			
205978-9	FMEA/CIL -final	CCM 986			
205978-13	Hazard Reports/System Description - initial	CCM 986			
205978-13	Hazard Reports/System Description - approved final	CCM 986			
205978-17	Limited Life List	CCM 986			
205978-27	Reliability & Maintainability Prediction Report	CCM 986			
205978-32	Mass Properties Report	CCM 986			
205978-34	Volume Report	CCM 986			
205979	CIRCUIT INTERRUPT DEVICE	CCM 986			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

205979-4	Acceptance Data Package	CCM 2752			
205979-9	FMEA/CIL - initial	CCM 986			
205979-9	FMEA/CIL -final	CCM 986			
205979-13	Hazard Reports/System Description - initial	CCM 986			
205979-13	Hazard Reports/System Description - approved final	CCM 986			
205979-17	Limited Life List	CCM 986			
205979-27	Reliability & Maintainability Prediction Report	CCM 986			
205979-32	Mass Properties Report	CCM 986			
205979-34	Volume Report	CCM 986			
205981	EVA BAYONET RECEPTACLE ASSY	CCM 896			
205981-4	Acceptance Data Package	CCM 2752			
205981-32	Mass Properties Report	CCM 896			
205981-34	Power/Thermal Report	CCM 896			
205983	TOP MOUNTED PASSIVE WIF ASSY	CCM 896			
205983-4	Acceptance Data Package	CCM 2752			
205983-32	Mass Properties Report	CCM 896			
205983-34	Power/Thermal Report	CCM 896			
205984	GAP SPANNER, 70'	CCM 896			
205984-4	Acceptance Data Package	CCM 2752			
205984-32	Mass Properties Report	CCM 896			
205984-34	Power/Thermal Report	CCM 896			
205985	HANDRAIL ASSY, TOP-MOUNTED, ISS (8.53")	CCM 896			
205985-4	Acceptance Data Package	CCM 2752			
205985-32	Mass Properties Report	CCM 896			
205985-34	Power/Thermal Report	CCM 896			
205986	HANDRAIL ASSY, TOP-MOUNTED, ISS (25.53")	CCM 896			
205986-4	Acceptance Data Package	CCM 2752			
205986-32	Mass Properties Report	CCM 896			
205986-34	Power/Thermal Report	CCM 896			
205987	HANDRAIL ASSY, TOP-MOUNTED, EXTENDED, ISS (8.53")	CCM 896			
205987-4	Acceptance Data Package	CCM 2752			
205987-32	Mass Properties Report	CCM 896			
205987-34	Power/Thermal Report	CCM 896			
205988	HANDRAIL ASSY, TOP-MOUNTED, ISS (18.15")	CCM 896			
205988-4	Acceptance Data Package	CCM 2752			
205988-32	Mass Properties Report	CCM 896			
205988-34	Power/Thermal Report	CCM 896			
206001	TIE WRAP	ccm 2138			
206001-4	Acceptance Data Package	CCM 2752			
206001-11A	Engineering Drawing	ccm 2138			
206001-13	SMACR Acceptable	ccm 2138			
206010	PDGF (INSTALL POST P6 DD 250)	ccm 2638			
206010-11A	Hardware Drawings	ccm 2638			
206010-13	Hazard Reports/System Description	ccm 2638			
206011	MOUNTING RING, PDGF	ccm 2638			
206011-11A	Hardware Drawings	ccm 2638			
206011-13	Hazard Reports/System Description	ccm 2638			
206023	DRILL JIG, MOUNTING RING, PDGF	ccm 2638			
206023-11A	Hardware Drawings	ccm 2638			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

206023-13	Hazard Reports/System Description	ccm 2638			
206025	EVA HANDRAIL	ccm 2575			
206025-11A	Hardware Drawings	ccm 2575			
206025-13	Hazard Report/System Description	ccm 2575			
206026	EVA HANDRAIL	ccm 2575			
206026-11A	Hardware Drawings	ccm 2575			
206026-13	Hazard Report/System Description	ccm 2575			
206027	EVA HANDRAIL	ccm 2575			
206027-11A	Hardware Drawings	ccm 2575			
206027-13	Hazard Report/System Description	ccm 2575			
206028	EVA HANDRAIL	ccm 2575			
206028-11A	Hardware Drawings	ccm 2575			
206028-13	Hazard Report/System Description	ccm 2575			
206077	HANDRAIL ASSY, TOP MOUNTED, EXT 25.53"	CCM 6172			
206077-11A	Hardware Drawings	CCM 6172			
206078	HANDRAIL ASSY, TOP MOUNTED, EXT 25.53"	CCM 6172			
206078-11A	Hardware Drawings	CCM 6172			
206079	WIF, TOP MOUNTED, PASSIVE	CCM 6172			
206079-11A	Hardware Drawings	CCM 6172			
206080	HANDRAIL ASSY, TOP MOUNTED, 21.941"	CCM 6172			
206080-11A	Hardware Drawings	CCM 6172			
206081	HANDRAIL ASSY, TOP MOUNTED, 8.53"	CCM 6172			
206081-11A	Hardware Drawings	CCM 6172			
206082	HANDRAIL ASSY, TOP MOUNTED, 18.15"	CCM 6172			
206082-11A	Hardware Drawings	CCM 6172			
206083	HANDRAIL ASSY, TOP MOUNTED, 18.15"	CCM 6172			
206083-11A	Hardware Drawings	CCM 6172			
206084	FRENCH HOOK	CCM 6172			
206084-11A	Hardware Drawings	CCM 6172			
206085	FRENCH HOOK	CCM 6172			
206085-11A	Hardware Drawings	CCM 6172			
206086	EVA WIRE TIRE	CCM 6172			
206086-11A	Hardware Drawings	CCM 6172			
206087	EVA WIRE TIRE	CCM 6172			
206087-11A	Hardware Drawings	CCM 6172			
206089	HANDHOLD ASSY, SIDE MOUNTED, TALL	CCM 6172			
206089-11A	Hardware Drawings	CCM 6172			
206090	HANDLE COMMON, 6"	CCM 6172			
206090-11A	Hardware Drawings	CCM 6172			
206091	WASHER	CCM 6172			
206091-11A	Hardware Drawings	CCM 6172			
206092	HANDRAIL ASSY, TOP MOUNTED, 22.625"	CCM 6172			
206092-11A	Hardware Drawings	CCM 6172			
305759	GRAPPLE FIXTURE, FRGF (HAB) (FLT)	CCM 1124			
305759-4	End Item Data Package (ADP)	CCM 1124		Consistent with Shuttle ADP requirements	
305764	PORTABLE BREATHING APARATUS WITH 30-FT HOSE (HAB) (FLT)	CCM 1124			
305764-4	Acceptance Data Package [partial]	CCM 1124			
305764-1.1.1	Historical Log	CCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

305764-1.1.4	Shortages	CCM 1124			
305764-1.1.5	Unplanned/Deferred Work	CCM 1124			
305764-1.1.6	Preplanned/Assigned Work	CCM 1124			
305764-1.1.7	Ident: As Designed/As-Built Listing	CCM 1124			
305764-1.1.15	Certifications	CCM 1124			
305764-2	Acceptance Test Report	SSCN 542 - ADMIN CCM- 1124			
305789	PDGF MOUNTING ASSEMBLY, UNIT 1	CCM 287			
305789-1	End Item Data Package (ADP)	CCM 2752		Consistent with Shuttle ADP requirements	
305789-2	Acceptance Test Report			Part of End Item Data Pkg (ADP)	
305789-7.1.1	Indentured Parts List			Delivered	
305789-7.3	Resources				
305789-12	Hardware Specifications			Preliminary Final	
305789-22	Qualification Test Plan			Delivered per MBS schedule	
305789-23	Qualification Test Procedures			Delivered per MBS schedule	
305789-24	Qualification Test Report			Delivered per MBS schedule	
305789-MISC	GF Capabilities & Characteristics			Ref: NSTS-21000-IDD-ISS Para. 14.4.1.1 and others.	
305789-28	Spec Traceability & Compliance Rpt	CCM 830		Part of End Item Data Pkg (ADP), Off- The Shelf	
305798	PORTABLE BREATHING APARATUS WITH 30-FT HOSE (LAB) (FLT)				
305798-1	Acceptance Data Package [partial]	CCM 2752			
305798-1.1.1	Historical Log				
305798-1.1.4	Shortages				
305798-1.1.5	Unplanned/Deferred Work				
305798-1.1.6	Preplanned/Assigned Work				
305798-1.1.7	Ident: As Designed/As-Built Listing				
305798-1.1.15	Certifications				
305798-2	Acceptance Test Report	SSCN 542 - ADMIN			
305826	PORTABLE BREATHING APPARATUS WITH 30-FT HOSE (NODE 1) (PRO)			NO DATA REQ'D	
305826-1	Acceptance Data Package	CCM 2752			
305826-2	Acceptance Test Report	SSCN 542 - ADMIN			
305865	SPECIAL TRANSPORT SYSTEM (SHIPPING CONTAINER) (NODE 2) (GSE)	sscn-885			
305865-1	Acceptance Data Package	sscn-885		Update ADP for each H/W delivery	
305890	SPACE-TO-SPACE STATION RADIO (FLT)				
305890-1	Acceptance Data Package [Full 1.1]	CCM 2752		As Applicable	
305890-2	Acceptance Test Report				
305890-3.6	Component Electrical Power Data			ICD SSP 42150 includes this data. Tech version to bedeviled 11/30/95	
305890-5	1553 Data Books				
305890-6	Dimensions (Physical and Shipping)				
305890-7	Electronic Design Data				
305890-7.1.1	Indentured Parts List (P/N & S/N)			S/N at CDR 9/96	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

305890-11A	Engineering Drawings (Hardcopy)	ADMIN		Initial drawings in ICD CDR Final at CDR	
305890-7.1.5	Engineering Change Data	ADMIN			
305890-7.1.6	Waivers & Deviations	ADMIN			
305890-7.3.1	Mass Properties			Update Quarterly	
305890-7.3.2	Power/Thermal	ADMIN		Update Quarterly	
305890-7.3.3	Volume	ADMIN		Update Quarterly	
305890-8	Fault Isolation/Repair Verification			Product per DID from ISS PO; Tech Data from GFE Project-initial 5/96 with final 12/96	
305890-9	FMEA/CIL			Hardcopy Synopsis with req'd Station terminology. Update synopsis as req'd at CDR	
305890-11A	Hardware Drawings			Per DID [TLEI]-Top Level Assembly	
305890-12	Hardware Specifications			Requirements contained in ICD. Update at CDR	
305890-13	Hazard Report/System Description			Phase 1 (PDR level) Phase 2 (CDR level) Phase 3- Final	
305890-14	Interface Control Documents			Technically Approved	
305890-15	IPCL				
305890-16	Isometric Views-components & attach HW				
305890-17	Limited Life List			12/01/95 Hardcopy synopsis to state no Limited Life Items	
305890-22	Qualification Test Plan				
305890-23	Qualification Test Procedure			Qual equivalent unit to PG3 for form, fit, prior to Qual being complete	
305890-24	Qualification Test Report			Full Qual. data will be provided.	
305890-26	Problem Reporting & Corrective Action				
305890-27	Reliability & Maintainability Prediction Report			Hardcopy synopsis based on engineering judgment	
305890-28	Spec. Traceability Report Compliance Report			IDR #2 J-2	
305890-29	Weight (including Wet Weight)				
305979	SPECIAL TRANSPORT SYSTEM (SHIPPING CONTAINER) (NODE 1) (GSE)	sscn-885			
305979-1	Acceptance Data Package	sscn-885		Update ADP for each H/W delivery	
306000	GRAPPLE FIXTURE, FRGF (LAB) (FLT)				
306000-1	End Item Data Package (ADP)	GCM-2752		Consistent with Shuttle ADP requirements	
306051	OIWIF SOCKET ASSY	GCM-1124			
306051-1	Acceptance Data Package (Only 911 tag)	GCM-1124		Separate 911 tag for each S/N; 911 tag to reference previously delivered ADP	
306051-2	Acceptance Test Report	GCM-1124		Part of ADP	
306051-26	Problem Reporting & Corrective Action	GCM-1124			
306054	PDGF MOUNTING ASSEMBLY, UNIT 2	GCM-1124			
306054-1	End Item Data Package (ADP)	GCM-1124		Consistent with Shuttle ADP requirements	
306068	SPECIAL TRANSPORT SYSTEM (SHIPPING CONTAINER) (HAB) (GSE)	GCM-1124			
306068-1	Acceptance Data Package	GCM-1124		Update ADP for each H/W delivery	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306070	SPECIAL TRANSPORT SYSTEM (SHIPPING CONTAINER) (LAB) (GSE)	sscn-885		Repeated use of item-	
306070-1	Acceptance Data Package	sscn-885		Per MSFC DRD NO. QA-004 & supplement to meet the intent of DID-1	
306070-13	Hazard Report/system Description	sscn-885		Per MSFC DRD No. SA-003 Prel System Hazard Analysis 11/15/95 Prel.Operation Hazard Analysis 2/28/96	
306094	H-HANDLE (ULC-STA)			NO DATA REQUIRED	
306140	OIWIF SOCKET ASSY	CCM-287			
306140-1	Acceptance Data Package (Only 911 tag)	CCM-287		Separate 911 tag for each S/N ; 911 tag to reference previously delivered ADP	
306140-2	Acceptance Test Report	CCM-287		Part of ADP	
306140-26	Problem Reporting & Corrective Action	CCM-287			
306146	UHF ANTENNA SIMULATOR (DVTM) (FEU)			NO DATA	
306160	GPS RECEIVER PROCESSOR (FLT)	CCM-591			
306160-1	Acceptance Data Package (Full 1.1)	CCM-591			
306160-2	Acceptance Test Report	CCM-591			
306160-3.1	Structural Analysis	CCM-591			
306160-3.2	Thermal Control Plan Report	CCM-591		Combination of multiple docs.	
306160-3.4	Analysis and Analytical Models	CCM-591			
306160-3.6	Component Electrical Power Data	CCM-591			
306160-3.7	Power Stability & Transient Models	CCM-591		Without content item # 12	
306160-4	Software Interface Data	CCM-591			
306160-4.1	Software Attributes Tables	CCM-591		To be resolved by PCM 239	
306160-4.2	Functional ICD requirements	CCM-591		To be resolved by PCM 239	
306160-4.4	Input/Output Constraints	CCM-591		To be resolved by PCM 239	
306160-5	1553 Data Requirements	CCM-591			
306160-6	Dimensions	CCM-591		Provided to ISS PO for VMDB 10/16/95	
306160-7	Electronic Design Data(VMD Content)	CCM-591		Update as required	
306160-7.1.1	Indentured Parts List	CCM-591		Update as required	
306160-11A	Engineering Drawings	CCM-591		[BD, ICD, LO, S, EDT, TLEI] Prepared per JSCM 8500 Update as required	
306160-11B	Engineering Models	CCM-591		Update as required, native electronic-format	
306160-7.1.5	Engineering Change Data	CCM-591			
306160-7.1.6	Waiver and Deviations	CCM-591			
306160-32	Mass Properties	CCM-591		Update Quarterly	
306160-33	Power/Thermal	CCM-591		Update Quarterly	
306160-34	Volume	CCM-591		Update Quarterly	
306160-7.3.6	Annual Resupply & Return Planning Data RPT	CCM-591		Update Quarterly	
306160-8	Fault Isolation/Repair Verification	CCM-591		Product per DID from ISS PO; Tech data from GFE project by 05/05/96 CHANGE-DATE	
306160-9	FMEA/CIL	CCM-591			
306160-11A	Hardware Drawings	CCM-591		(BD, ICD, LO, S, EDT, TLEI) prepared per JSCM 8500 Update as required	
306160-12	Hardware Specifications (PTRS)	CCM-591		CHANGE DATE	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306160-13	Hazard Report/System Description	CCM-591		Data pack includes (FMEA/CIL) hard copy	
306160-14	Interface Control Documents	CCM-591		Part 1 approved	
306160-15	Instrumentation Program & Control List	CCM-591			
306160-16	Isometric Views components & attach HW	CCM-591		Dwgs provided in electronic format	
306160-17	Limited Life List	CCM-591			
306160-20	Operational Constraints	CCM-591		CHANGE DATE	
306160-22	Qualification Test Plan	CCM-591		Prelim. QTP delivered at PDR	
306160-23	Qualification Test Procedure	CCM-591			
306160-24	Qualification Test Report	CCM-591			
306160-26	Problem Reporting & Corrective Action	CCM-591			
306160-27	Reliability & Maintainability Prediction Report	CCM-591		Hardcopy based on existing COTS data.	
306160-28	Spec. Traceability & Compliance Report	CCM-591			
306160-29	Weight (including wet Weight	CCM-591		Incorporated 10/16/95 into VMDB	
306176	GRAPPLE FIXTURE, FLIGHT RELEASABLE (AL) (FLT)				
306176-1	End Item Data Package (ADP)	CCM-2752		Consistent with Shuttle ADP requirements	
306177	SPECIAL TRANSPORT SYSTEM (SHIPPING CONTAINER) (AL) (GSE)	ssen-885			
306177-1	Acceptance Data Package	ssen-885		Update ADP for each H/W delivery	
306179	UMBILICAL INTERFACE ASSEMBLY	CCM 217		PDR: 12/15/95; CDR: 10/01/96, SAR: 9/01/97 NOMENCLATURE CHANGE	
306179-1	Acceptance Data Package	CCM-2752			
306179-1.1.1	Historical Log				
306179-1.1.2	Waiver/Deviation Record				
306179-1.1.3	Unexplained Anomalies Record				
306179-1.1.7	Ident: As Designed/As-Built Listing				
306179-1.1.9	Age-Sensitive/Time-Action Item				
306179-1.1.10	Nonstandard Calibration				
306179-1.1.12	Pressure Value Data				
306179-1.1.15	Certifications				
306179-1.1.16	Material Safety Data Sheet				
306179-2	Acceptance Test Report			Content is contained in the ADP	
306179-3.1	Reports, Structural Analysis of GFE			Analysis/Models available	
306179-3.4	Analysis and Analytical Models of GFE			Analysis/Models available	
306179-3.5	Fracture Control Plan & Reports for GFE				
306179-6	Dimensions (Physical and Shipping)			Initial submittal at PDR; updates at CDR & SAR	
306179-7	Electronic Design Data [partial]			Per PIA	
306179-7.1.1	Indentured Parts List	ADMIN		Update Quarterly	
306179-7.1.2	Engineering Drawings			[BD, ICD, EDT, TLEI & S as reqd] Electronic copy-Native Format	
306179-7.3.1	Mass Properties			Update Quarterly	
306179-7.3.3	Volume	ADMIN		Update Quarterly	
306179-8	Fault Isolation/Repair Verification			SAR	
306179-9	FMEA/CIL				
306179-10	Functional Flows			Info in HW System Operations Manual	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306179-11A	Hardware Drawings			Prelim DWGS-PDR; Updates-CDR (BD,ICD,S,EDT,TLEI) Electronic copy native format	
306179-12	Hardware Specifications (PTRS)			Submitted initial version 08/18/95	
306179-13	Hazard Report/System Description				
306179-14	Interface Control Documents			Initial version submitted 08/18/95	
306179-15	Instrumentation Program & Control List	CCM-830			
306179-16	Isometric Views-Components & Attach HW			ISO Views of Uninstalled ORU Only	
306179-17	Limited Life List				
306179-20	Operational Constraints			Info in HW System Operations Manual	
306179-21	Operational Sequence Diagrams			Info in HW System Operations Manual	
306179-22	Qualification Test Plan			Project CDR	
306179-23	Qualification Test Procedure			SAR	
306179-24	Qualification Test Report			SAR	
306179-26	Problem Reporting & Corrective Action				
306179-27	Reliability & Maintainability Predict. Rpt				
306179-28	Spec. Traceability Report			CDR (Part 1)	
306179-28	Compliance Report			SAR (Part 2)	
306179-29	Weight (including Wet Weight)			Initial submittal at PDR; updates at CDR & SAR	
306180	POWER SUPPLY ASSEMBLY (PSA)	CCM 217		PDR: 12/15/95; CDR:10/01/96; SAR: 9/1/97 NOMENCLATURE CHANGE	
306180-4	Acceptance Data Package	CCM-2752		PDR: 12/15/95; CDR:10/01/96; SAR: 9/1/97	
306180-1.1.1	Historical Log				
306180-1.1.2	Waiver/Deviation Record				
306180-1.1.3	Unexplained Anomalies Record				
306180-1.1.7	Ident: As Designed/As-Built Listing				
306180-1.1.9	Age-Sensitive/Time-Action Item				
306180-1.1.10	Nonstandard Calibration				
306180-1.1.15	Certifications				
306180-1.1.16	Material Safety Data Sheet				
306180-1.2.1	Notes and Comments				
306180-1.2.2	Waiver Deviation Records				
306180-1.2.3	Unexplained A+B3191nomalies Records				
306180-1.2.7	Program Listing				
306180-1.2.9	User's Guide or System Operating Manual				
306180-1.2.10	Certifications				
306180-2	Acceptance Test Report			Content in ADP	
306180-3.1	Reports, Structural Analysis of GFE			Analysis/Model available	
306180-3.4	Analysis and Analytical Models of GFE			Analysis/Model available	
306180-3.5	Fracture Control Plan & Reports for GFE				
306180-6	Dimensions (Physical and Shipping)			Initial submittal at PDR; updates at CDR & SAR	
306180-7	Electronic Design Data [partial]			Per PIA	
306180-31	Indentured Parts List	ADMIN		Update Quarterly	
306180-7.1.2	Engineering Drawings			[BD, ICD, EDT, TLEI & S as reqd] Update Quarterly	
306180-32	Mass Properties	ADMIN		Update Quarterly	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306180-34	Volume	ADMIN			
306180-8	Fault Isolation/Repair Verification			SAR	
306180-9	FMEA/CIL				
306180-10	Functional Flows			Info in HW Systems Operations Manual	
306180-11A	Hardware Drawings			Prelim DWGS-PDR; Updates-CDR (BD, ICD, LO, S, EC. TLEI) Electronic copy-native format	
306180-12	Hardware Specifications (PTRS)			Initial version submitted 8/18/95	
306180-13	Hazard Report/System Description				
306180-14	Interface Control Documents			Initial version submitted 08/18/95	
306180-16	Isometric Views -Components & Attach HW			ISO view of uninstalled ORU only	
306180-17	Limited Life List			Info in HW System Operations Manual	
306180-20	Operational Constraints				
306180-21	Operational Sequence Diagrams			Info in HW System Operations Manual	
306180-22	Qualification Test Plan			Project CDR	
306180-23	Qualification Test Procedure			SAR	
306180-24	Qualification Test Report			SAR	
306180-26	Problem Reporting & Corrective Action				
306180-27	Reliability & Maintainability Predict. Rpt				
306180-28	Spec. Traceability Report			CDR (Part 1)	
306180-28	Compliance Report			SAR (Part 2)	
306180-29	Weight (including Wet Weight)			Initial submittal at PDR; updates CDR & SAR	
306183	EMU DON/DOFF ASSEMBLY	CCM 217		PDR: 12/15/95, CDR:10/01/96, SAR: 09/01/97 (CCM 217 changes nomenclature from MAAP to EDDA)	
306183-1	Acceptance Data Package	CCM 2752			
306183-1.1.1	Historical Log				
306183-1.1.2	Waiver/Deviation Record				
306183-1.1.3	Unexplained Anomalies Record				
306183-1.1.7	Ident: As Designed/As-Built Listing				
306183-1.1.9	Age-Sensitive/Time-Action Item				
306183-1.1.15	Certifications				
306183-1.1.16	Material Safety Data Sheet				
306183-2	Acceptance Test Report			Content contained in ADP	
306183-3.1	Reports, Structural Analysis of GFE			Analysis /models available	
306183-3.4	Analysis and Analytical Models of GFE			Analysis /models available	
306183-3.5	Fracture Control Plan & Reports for GFE				
306183-6	Dimensions (Physical and Shipping)			Initial submittal at PDR; updates CDR & SAR	
306183-7	Electronic Design Data [partial]			Per PIA	
306183-31	Indentured Parts List	ADMIN		Update Quarterly	
306183-11A	Engineering Drawings	ADMIN		[BD, ICD, EDT, TLEI & S as reqd]	
306183-32	Mass Properties	ADMIN		Update Quarterly	
306183-34	Volume	ADMIN		Update Quarterly	
306183-8	Fault Isolation/Repair Verification			SAR	
306183-9	FMEA/CIL				
306183-10	Functional Flows	CCM 830		Info in HW Systems Operations Manual	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306183-11A	Hardware Drawings			Prelim DWGS-PDR; Updates-CDR (BD, ICD, LO, S, EC. TLEI) Electronic copy native format	
306183-12	Hardware Specifications(PTRS)			Initial version submitted 8/18/95	
306183-13	Hazard Report/System Description				
306183-14	Interface Control Documents			Initial version submitted 08/18/95	
306183-16	Isometric Views-Component & Attach HW			ISO view of uninstalled ORU only	
306183-17	Limited Life List				
306183-22	Qualification Test Plan			Project CDR	
306183-23	Qualification Test Procedure			SAR	
306183-24	Qualification Test Report			SAR	
306183-26	Problem Reporting & Corrective Action				
306183-27	Reliability & Maintainability Predict. Rpt				
306183-28	Spec. Traceability Report			CDR (Part 1)	
306183-28	Compliance Report			SAR (Part 2)	
306183-29	Weight (including Wet Weight)			Initial submittal at PDR; updates CDR & SAR	
306185	PORTABLE BREATHING MASK WITH 30-FT HOSE (A/L) (FLT)				
306185-1	Acceptance Data Package (partial)	GCM 2752			
306185-1.1.1	Historical log				
306185-1.1.4	Shortages				
306185-1.1.5	Unplanned/Deferred Work				
306185-1.1.6	Preplanned/Assigned Work				
306185-1.1.7	Ident: As Designed/As-Built Listing				
306185-1.1.15	Certification				
306185-2	Acceptance Test Report	SSCN 542 - ADMIN			
306201	TETHER REEL BOX (A/L)	GCM 287			
306201-1	Acceptance Data Package	GCM 287		Available data in native format will be provided; Shuttle In-use HW.	
306201-1.1.1	Historical Log	GCM 287			
306201-1.1.2	Waiver/Deviation Record	GCM 287			
306201-1.1.3	Unexplained Anomalies Records	GCM 287			
306201-1.1.4	Shortages	GCM 287			
306201-1.1.5	Unplanned/Deferred Work	GCM 287			
306201-1.1.6	Preplanned/Assigned Work	GCM 287			
306201-1.1.7	Ident: As Designed/As-Built Listing	GCM 287			
306201-1.1.15	Certifications	GCM 287			
306201-2	Acceptance Test Report	GCM 287		Part of ADP	
306201-3	Analysis Data & Analytical Models	GCM 287		REFERENCE EXISTING SHUTTLE-DOCUMENTATION -3 THRU -3.5	
306201-3.1	Reports, Structural Analysis of GFE	GCM 287			
306201-3.2	Thermal Control Plan & Reports of GFE	GCM 287			
306201-3.4	Analysis and Analytical Models of GFE	GCM 287			
306201-3.5	Fracture Control Plan & Reports for GFE	GCM 287			
306201-7	Electronic Design Data (VMDB Content) [partial]	GCM 287			
306201-31	Indentured Parts List	GCM 287		Part of mass properties	
306201-7.1.5	Engineering Change Data	GCM 287			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306201-7.1.6	Waiver and Deviations	CCM 287			
306201-32	Mass Properties	ADMIN MOD-422/CCM 287		First delivery - TBD	
306201-34	Volume	ADMIN MOD-422/CCM 287		First delivery - TBD	
306201-9	FMEA/CIL	CCM 287		Agreement contingent on 1 time memo-stating non-applicability	
306201-11A	Hardware Drawings	CCM 287		(LO,TLEI) hardcopy native format Only-ICD & PIDS under ISS CM	
306201-12	Hardware Specifications	CCM 287		S684-10126	
306201-13	Hazard Report/System Description	CCM 287		Sharp edge hazard and kick loads verified	
306201-14	Interface Control Documents	CCM 287		SSP 30256	
306201-22	Qualification Test Plan	CCM 287		Exiting Shuttle documentation shall be-delivered	
306201-23	Qualification Test Procedures	CCM 287		Exiting Shuttle documentation shall be-delivered	
306201-24	Qualification Test Reports	CCM 287		Exiting Shuttle documentation shall be-delivered	
306201-26	Problem Reporting & Corrective Action	CCM 287			
306201-27	Reliability & Maintainability Prediction Report	CCM 287		Agreement contingent on 1 time memo-stating non-applicability	
306201-28	Spec. Traceability & Compliance Report	CCM 287			
306202	TOP MOUNTED PASSIVE WIF ASSY	CCM 379			
306202-1	Acceptance Data Package (Only 911 tag)	CCM 2752		Separate 911 tag for each S/N; 911 tag-to reference previously delivered ADP	
306202-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
306202-26	Problem Reporting & Corrective Action				
306203	HANDRAIL ASSEMBLY, TOP MOUNTED-ISS (25.53")	CCM 379			
306203-1	Acceptance Data Package	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter (911 tag to reference original-ADP)	
306203-1.1.1	Historical Log				
306203-1.1.2	Waiver/Deviation Record				
306203-1.1.3	Unexplained Anomalies Records				
306203-1.1.4	Shortages				
306203-1.1.5	Unplanned/Deferred Work				
306203-1.1.6	Preplanned/Assigned Work				
306203-1.1.7	Ident: As Designed/As-Built Listing				
306203-1.1.15	Certifications				
306203-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
306203-26	Problem Reporting & Corrective Action				
306205	IN-FLIGHT REFILL UNIT (IRU)	CCM 217		PDR: 12/15/95; CDR: 10/01/96; SAR 9/01/97 NOMENCLATURE CHANGE	
306205-1	Acceptance Data Package	CCM 2752			
306205-1.1.1	Historical Log				
306205-1.1.2	Waiver/Deviation Record				
306205-1.1.3	Unexplained Anomalies Record				
306205-1.1.7	Ident: As Designed/As-Built Listing				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306205-1.1.9	Age-Sensitive/Time-Action Items				
306205-1.1.10	Nonstandard Calibration				
306205-1.1.15	Certifications				
306205-1.1.16	Material Safety Data Sheet				
306205-1.2.1	Notes and Comments				
306205-1.2.2	Waiver Deviation records				
306205-1.2.3	Unexplained Anomalies Records				
306205-1.2.7	Program Listing				
306205-1.2.9	User's Guide or System Operating Manual				
306205-1.2.10	Certifications				
306205-2	Acceptance Test Report			Content contained in ADP	
306205-3.1	Reports, Structural Analysis of GFE			Analysis/models available	
306205-3.4	Analysis and Analytical Models of GFE			Analysis/models available	
306205-3.5	Fracture Control Plan & Reports for GFE				
306205-6	Dimensions (Physical and Shipping)			Initial submittal at PDR; updates CDR & SAR	
306205-7	Electronic Design Data [partial]			Per PIA	
306205-31	Indentured Parts List	ADMIN		Update Quarterly	
306205-7.1.2	Engineering Drawings			[BD, ICD, EDT, TLEI & S as reqd] Electronic copy -native format	
306205-32	Mass Properties	ADMIN		Update Quarterly	
306205-34	Volume	ADMIN		Update Quarterly	
306205-8	Fault Isolation/Repair Verification			SAR	
306205-9	FMEA/CIL				
306205-10	Functional Flows			Info in HW System Operations Manual	
306205-11A	Hardware Drawings			Prelim DWGS-PDR; Updates-CDR (BD,ICD,LO,S,EC.TLEI) Electronic copy native format	
306205-12	Hardware Specifications(PTRS)			Initial version submitted 8/18/95	
306205-13	Hazard Report/System Description				
306205-14	Interface Control Documents			Initial version submitted 08/18/95	
306205-16	Isometric Views-Comp & Attach HW			ISO view of uninstalled ORU only	
306205-17	Limited Life List				
306205-20	Operational Constraints			Info in HW System Operations Manual	
306205-21	Operational Sequence Diagrams			Info in HW System Operations Manual	
306205-22	Qualification Test Plan			Project CDR	
306205-23	Qualification Test Procedure			SAR	
306205-24	Qualification Test Report			SAR	
306205-26	Problem Reporting & Corrective Action				
306205-27	Reliability & Maintainability Predict. Rpt				
306205-28	Spec. Traceability Report				
306205-28	Compliance Report				
306205-29	Weight (including Wet Weight)			Initial submittal at PDR; updates CDR & SAR	
306212	CONTINGENCY WASTE WATER COLLECTION BAG (FLT)	ADMIN			
306212-7	Electronic Design Data [partial]			Update Quarterly	
306212-7.1.1	Indentured Parts List	ADMIN			
306212-11A	Eng Drawings	ADMIN			
306212-7.3.1	Mass Properties(Weight, Moments & Products of Inertia)	ADMIN			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306212-7.3.3	Volume (Length, Width, Height)	ADMIN			
306212-12	Hardware Specification			Update as required	
306223	GPS TEST SET (SIM)	CCM-591		Test Set # 2; SIM changes (JSC EV)	
306223-1	Acceptance Data Package - No Data Required	CCM-591		Will be 911 tag	
306223-30	Test Plan for GPS Standalone:	CCM-591			Huntsville Huntsville
	Lab Qualification Test Facility				
	Qualification Test Facility				
306224	EVA TOOL STOWAGE DEVICE ASSY, A/L	CCM 379			
306224-1	Acceptance Data Package [partial]	CCM-2752		Separate ADP for each S/N	
306224-1.1.1	Historical Log				
306224-1.1.2	Waiver/Deviation Record				
306224-1.1.3	Unexplained Anomalies Records				
306224-1.1.4	Shortages				
306224-1.1.5	Unplanned/Deferred Work				
306224-1.1.6	Preplanned/Assigned Work				
306224-1.1.7	Ident: As Designed/As-Built Listing				
306224-1.1.8	Operating Time Cycle				
306224-1.1.14	Non-flight HW/Temporary Installation				
306224-1.1.15	Certifications				
306224-2	Acceptance Test Report			Part of ADP, CDR level data	
306224-3	Analysis Data & Analytical Models				
306224-3.1	Reports, Structural Analysis of GFE				
306224-3.2	Thermal Control Plan & Reports of GFE				
306224-3.4	Analysis and Analytical Models of GFE				
306224-3.5	Fracture Control Plan & Reports for GFE				
306224-6	Dimensions (Physical & shipping)			Update Quarterly Thereafter	
306224-7	Electronic Design Data (VMDB Content) [partial]				
306224-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	
306224-7.1.2	Engineering Drawings			Update as required; Hardcopy in native format	
306224-11B	Engineering Models	ADMIN		Update as required	
306224-7.1.5	Engineering Change Data	ADMIN			
306224-7.1.6	Waiver and Deviations	ADMIN			
306224-32	Mass Properties	ADMIN		Quarterly	
306224-34	Volume	ADMIN		Quarterly	
306224-9	FMEA/CIL			Phase 1 - Delivered Phase 2 - 08/01/96 (Electronic)	
306224-11A	Hardware Drawings			[LO,TLEI] Hardcopy in native format	
306224-12	Hardware Specifications			Only ICD & PIDS under ISS CM. S684-10126	
306224-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 -Delivered	
306224-14	Interface Control Documents			SSP 30256	
306224-16	Isometric Views			Initial Hardcopy: 11/15/95	
306224-22	Qualification Test Plan				
306224-23	Qualification Test Procedures			Post CDR	
306224-24	Qualification Test Reports				
306224-26	Problem Reporting & Corrective Action				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306224-27	Reliability & Maintainability Prediction Report			Phase 1 - Delivered Phase 2 -08/01/96 (Electronic)	
306224-28	Spec Traceability Report	GCM 830			
306224-28	Compliance Report				
306224-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
306236	HANDRAIL ASSEMBLY -OIH (24.00")	GCM 1124			
306236-1	Acceptance Data Package	GCM 1124		Separate ADP for each S/N	
306236-1.1.1	Historical Log	GCM 1124			
306236-1.1.2	Waiver/Deviation Record	GCM 1124			
306236-1.1.3	Unexplained Anomalies Records	GCM 1124			
306236-1.1.4	Shortages	GCM 1124			
306236-1.1.5	Unplanned/Deferred Work	GCM 1124			
306236-1.1.6	Preplanned/Assigned Work	GCM 1124			
306236-1.1.7	Ident: As Designed/As-Built Listing	GCM 1124			
306236-1.1.15	Certifications	GCM 1124			
306236-2	Acceptance Test Report	GCM 1124		Part of ADP	
306236-26	Problem Reporting & Corrective Action	GCM 1124			
306237	HANDRAIL, ASSEMBLY - OIH (24.00")	GCM 1124			
306237-1	Acceptance Data Package	GCM 1124		Separate ADP for each S/N	
306237-1.1.1	Historical Log	GCM 1124			
306237-1.1.2	Waiver/Deviation Record	GCM 1124			
306237-1.1.3	Unexplained Anomalies Records	GCM 1124			
306237-1.1.4	Shortages	GCM 1124			
306237-1.1.5	Unplanned/Deferred Work	GCM 1124			
306237-1.1.6	Preplanned/Assigned Work	GCM 1124			
306237-1.1.7	Ident: As Designed/As-Built Listing	GCM 1124			
306237-1.1.15	Certifications	GCM 1124			
306237-2	Acceptance Test Report	GCM 1124		Part of ADP	
306237-26	Problem Reporting & Corrective Action	GCM 1124			
306238	SLIDE ASSEMBLY - ON ORBIT INSTALLED (290")	GCM 1124			
306238-1	Acceptance Data Package	GCM 1124		Separate ADP for each S/N	
306238-1.1.1	Historical Log	GCM 1124			
306238-1.1.2	Waiver/Deviation Record	GCM 1124			
306238-1.1.3	Unexplained Anomalies Records	GCM 1124			
306238-1.1.4	Shortages	GCM 1124			
306238-1.1.5	Unplanned/Deferred Work	GCM 1124			
306238-1.1.6	Preplanned/Assigned Work	GCM 1124			
306238-1.1.7	Ident: As Designed/As-Built Listing	GCM 1124			
306238-1.1.9	Age Sensitive/Time Action Item	GCM 1124			
306238-1.1.15	Certifications	GCM 1124			
306238-2	Acceptance Test Report	GCM 1124		Part of ADP	
306238-26	Problem Reporting & Corrective Action	GCM 1124			
306239	HANDRAIL, ASSEMBLY - OIH (24.00")	CCM 379			
306239-1	Acceptance Data Package	GCM 2752		Separate ADP for each S/N	
306239-1.1.1	Historical Log				
306239-1.1.2	Waiver/Deviation Record				
306239-1.1.3	Unexplained Anomalies Records				
306239-1.1.4	Shortages				
306239-1.1.5	Unplanned/Deferred Work				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306239-1.1.6	Preplanned/Assigned Work				
306239-1.1.7	Ident: As Designed/As-Built Listing				
306239-1.1.15	Certifications				
306239-2	Acceptance Test Report			Part of ADP	
306239-26	Problem Reporting & Corrective Action				
306240	HANDRAIL, ASSEMBLY - OIH (24.00")	CCM 379			
306240-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
306240-1.1.1	Historical Log				
306240-1.1.2	Waiver/Deviation Record				
306240-1.1.3	Unexplained Anomalies Records				
306240-1.1.4	Shortages				
306240-1.1.5	Unplanned/Deferred Work				
306240-1.1.6	Preplanned/Assigned Work				
306240-1.1.7	Ident: As Designed/As-Built Listing				
306240-1.1.15	Certifications				
306240-2	Acceptance Test Report			Part of ADP	
306240-3	Analysis Data & Analytical Models			PDR level/CDR level 12/15/95	
306240-3.1	Reports, Structural Analysis of GFE			PDR level/CDR level 12/15/95	
306240-3.2	Thermal Control Plan & Reports of GFE			PDR level/CDR level 12/15/95	
306240-3.4	Analysis and Analytical Models of GFE			PDR level/CDR level 12/15/95	
306240-3.5	Fracture Control Plan & Reports for GFE			PDR level/CDR level 12/15/95	
306240-6	Dimensions (Physical & shipping)			Updated Quarterly Thereafter	
306240-7	Electronic Design Data (VMDB Content) [partial]				
306240-7.1.1	Indentured Parts List			Quarterly. Part of mass properties	
306240-7.1.2	Engineering Drawings			Update as required. Hardcopy in native format	
306240-7.1.3	Engineering Models			Update as required	
306240-7.1.5	Engineering Change Data	ADMIN			
306240-7.1.6	Waiver and Deviations	ADMIN			
306240-7.3.1	Mass Properties			Quarterly	
306240-7.3.3	Volume	ADMIN		Quarterly	
306240-7.3.4	Crew time for Assembly	ADMIN			
306240-7.3.5	Crew Time for Maintenance	ADMIN		Project GDR	
306240-7.3.6	Annual Resupply & Return Planning Data Rpt	ADMIN			
306240-9	FMEA/CIL			Phase 1 - Delivered Phase 2 - 11/01/95 (Hardcopy) 12/15/95 (Electronic)	
306240-11A	Hardware Drawings			[LO, TLEI]. Hardcopy in native format	
306240-12	Hardware Specifications			Only ICD & PIDS under ISS CM S684-10126	
306240-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 -Delivered	
306240-14	Interface Control Documents			SSP 30256	
306240-16	Isometric Views-Components & Attach HW			Initial Hardcopy: 11/15/95	
306240-17	Limited Life List			Agreement contingent upon 1-time memo stating non-applicability	
306240-22	Qualification Test Plan				
306240-23	Qualification Test Procedures			Post CDR	
306240-24	Qualification Test Reports				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306240-26	Problem Reporting & Corrective Action				
306240-27	Reliability & Maintainability Prediction Report			Agreement contingent upon 1-time memo stating non-applicability	
306240-28	Traceability Report				
306240	Compliance Report				
306240-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
306241	SLIDE ASSEMBLY - ON ORBIT INSTALLED (290")	CCM 379			
306241-4	Acceptance Data Package	CCM 2752		Separate ADP for each S/N	
306241-1.1.1	Historical Log				
306241-1.1.2	Waiver/Deviation Record				
306241-1.1.3	Unexplained Anomalies Records				
306241-1.1.4	Shortages				
306241-1.1.5	Unplanned/Deferred Work				
306241-1.1.6	Preplanned/Assigned Work				
306241-1.1.7	Ident: As Designed/As-Built Listing				
306241-1.1.9	Age Sensitive/Time Action Item				
306241-1.1.10	Nonstandard Calibration				
306241-1.1.15	Certifications				
306241-2	Acceptance Test Report			Part of ADP	
306241-3	Analysis Data & Analytical Models			DATA DELIVERED TO MARSHALL HORTON (DIDs -3 through -3.5)	
306241-3.1	Reports, Structural Analysis of GFE				
306241-3.2	Thermal Control Plan & Reports of GFE				
306241-3.4	Analysis and Analytical Models of GFE				
306241-3.5	Fracture Control Plan & Reports for GFE				
306241-6	Dimensions (Physical & shipping)			Update Quarterly thereafter	
306241-7	Electronic Design Data (VMDB Content) [partial]				
306241-7.1.1	Indentured Parts List			Quarterly; part of mass properties	
306241-7.1.2	Engineering Drawings			Update as required. Hardcopy native format	
306241-7.1.5	Engineering Change Data	ADMIN			
306241-7.1.6	Waiver and Deviations	ADMIN			
306241-7.3.1	Mass Properties			Quarterly	
306241-7.3.3	Volume	ADMIN		Quarterly	
306241-7.3.4	Crew time for Assembly	ADMIN			
306241-7.3.5	Crew Time for Maintenance	ADMIN			
306241-7.3.6	Annual Resupply & Return Planning Data Rpt	ADMIN			
306241-8	Fault Isolation/Repair Verification				
306241-9	FMEA/CIL				
306241-11A	Hardware Drawings			Only ICD & PIDS under ISS CM (LO,TLEI) Hardcopy native format	
306241-12	Hardware Specifications			S684-10126	
306241-13	Hazard Report/System Description			Phase 1 - Delivered Phase 2 - Delivered	
306241-14	Interface Control Documents			SSP 30256	
306241-16	Isometric Views- comp & attach HW			Initial Hardcopy 10/15/95	
306241-17	Limited Life List				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306241-22	Qualification Test Plan			Cert. & Acceptance Requirements Doc.delivered at CDR	
306241-23	Qualification Test Procedures			As Required after CDR	
306241-24	Qualification Test Reports			Delivered with Hardware	
306241-26	Problem Reporting & Corrective Action				
306241-27	Reliability & Maintainability Prediction Report				
306241-28	Spec. Traceability Report	CCM-830			
306241	Compliance Report				
306241-29	Weight (Including Wet Weight)			Updated Quarterly Thereafter	
306260	PCS CSCI (ENGINEERING)			NO DATA REQUIRED	
306261	PCS CSCI (EARLY)			NO DATA REQUIRED	
306268	PORTABLE COMPUTER (FEU)	CCM-563			
306268-1.1.5	Unplanned/Deferred Work	CCM-563		Capabilities/Limitations	
306268-1.1.6	Preplanned/Assigned Work	CCM-563			
306268-1.1.7	Ident: As Designed/As-Built Listing	CCM-563		Name, P/N, S/N	
306269	PORTABLE COMPUTER I/F ADAPTER (FEU)	CCM-563			
306269-1.1.5	Unplanned/Deferred Work	CCM-563		Capabilities/Limitations	
306269-1.1.6	Preplanned/Assigned Work	CCM-563			
306269-1.1.7	Ident: As Designed/As-Built Listing	CCM-563		Name, P/N, S/N	
306270	PCS LAPTOP, MIL-STD 1553B CARD ASSEMBLY				
306270-1	Acceptance Data Package	CCM-2752			
306270-1.1.1	Historical Log				
306270-1.1.2	Waiver/Deviation Record				
306270-1.1.3	Unexplained Anomalies Record				
306270-1.1.4	Shortages				
306270-1.1.5	Unplanned/Deferred Work				
306270-1.1.6	Preplanned/Assigned Work				
306270-1.1.7	Ident: As Designed/As-Built Listing				
306270-1.1.11	Repair Limitations				
306270-1.1.15	Certifications				
306270-1.1.16	Material Safety Data Sheet				
306270-2	Acceptance Test Report			Part of ADP	
306270-5	1553 Data Requirements			After COTS selection, Applicable only to para. 5.1,5.2 and 5.3.	
306270-6	Dimensions (Physical and Shipping)			Prelim Data into VMDB by 10/24/95	
306270-7	Electronic Design Data			Per PIA in work	
306270-7.1.1	Indentured Parts List			Delivered	
306270-11A	Engineering Drawings	ADMIN		Update at CDR (8/96)	
306270-32	Mass Properties	ADMIN		Quarterly update	
306270-33	Power/Thermal	ADMIN		Quarterly update	
306270-34	Volume	ADMIN		Quarterly update	
306270-8	Fault Isolation/Repair Verification				
306270-9	FMEA/CIL				
306270-11A	Hardware Drawings				
306270-12	Hardware Specifications (PTRS)				
306270-13	Hazard Report/System Description			Prelim; Syst. Description/Hazard List; Final: PCS Description/Hazard Causes and Controls	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306270-14	Interface Control Document			Interface Rqmts Incor. with specification.	
306270-16	Isometric Views - Comp. & Attach HW			Part of H/W drawings	
306270-17	Limited Life List			PDR 2/96, CDR 9/96	
306270-20	Operational Constraints				
306270-22	Qualification Test Plan				
306270-23	Qualification Test Procedure				
306270-24	Qualification Test Report				
306270-26	Problem Reporting & Corrective Action			Start with testing	
306270-28	Spec. Traceability Report				
306270	Compliance Report				
306270-29	Weight (including Wet Weight)			Prelim Data into VMDB by 10/24/95	
306271	PORTABLE COMPUTER I/F ADAPTER (FLT)				
306271-4	Acceptance Data Package	GCM 2752			
306271-1.1.1	Historical Log				
306271-1.1.2	Waiver/Deviation Record				
306271-1.1.3	Unexplained Anomalies Record				
306271-1.1.4	Shortages				
306271-1.1.5	Unplanned/Deferred Work				
306271-1.1.6	Preplanned/Assigned Work				
306271-1.1.7	Ident: As Designed/As-Built Listing				
306271-1.1.11	Repair Limitations				
306271-1.1.15	Certifications				
306271-1.1.16	Material Safety Data Sheet				
306271-2	Acceptance Test Report			Part of ADP	
306271-6	Dimensions (Physical and Shipping)			Prelim Data into VMDB by 10/24/95	
306271-7	Electronic Design Data			Per PIA in work	
306271-7.1.1	Indentured Parts List			Delivered	
306271-11A	Engineering Drawings	ADMIN		Update at CDR (8/96)	
306271-32	Mass Properties	ADMIN		Quarterly update	
306271-33	Power/Thermal	ADMIN		Quarterly update	
306271-34	Volume	ADMIN		Quarterly update	
306271-8	Fault Isolation/Repair Verification				
306271-9	FMEA/CIL				
306271-11A	Hardware Drawings				
306271-12	Hardware Specifications (PTRS)				
306271-13	Hazard Report/System Description			Prelim; Syst. Description/Hazard List; Final: PCS Description/Hazard Causes	
306271-16	Isometric Views - Comp. & Attach HW			Part of H/W drawings	
306271-17	Limited Life List			PDR 2/96, CDR 9/96	
306271-20	Operational Constraints	GCM 830			
306271-22	Qualification Test Plan				
306271-23	Qualification Test Procedure				
306271-24	Qualification Test Report				
306271-26	Problem Reporting & Corrective Action			Start with testing	
306271-28	Spec. Traceability Report	Compliance Report			
306271-29	Weight (including Wet Weight)			Prelim Data into VMDB by 10/24/95	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306293	PCS CSCI (INTERIM)			TO BE DELETED	
306294	PCS CSCI (5A/6A FQT)			CCM 563	
306294-1	Acceptance Data Package			CCM 2752	
306294-1.2.1	Historical Log				
306294-1.2.2	Wavier Deviation Records				
306294-1.2.3	Unexplained Anomalies Records				
306294-1.2.4	Unplanned/Deferred Work				
306294-1.2.5	Preplanned/Deferred Work				
306294-1.2.6	S/W Specification Doc				
306294-1.2.7	Program Listing				
306294-1.2.9	User Guide or System Operating Manual				
306294-1.2.10	Certifications				
306294-4	Software Interface Data				
306294-4.1	S/W Attribute Tables			To be resolved by PCM 239	
306294-4.2	Functional ICD Requirement			To be resolved by PCM 239	
306294-4.4	Input/Output Constraints			To be resolved by PCM 240	
306294-15	IP&CL			To be resolved by PCM 239	
306295	PCS CSCI (END ITEM)	CCM 563			
306295-1	Acceptance Data Package	CCM 563			
306295-1.2.1	Historical Log	CCM 563			
306295-1.2.2	Wavier Deviation Records	CCM 563			
306295-1.2.3	Unexplained Anomalies Records	CCM 563			
306295-1.2.4	Unplanned/Deferred Work	CCM 563			
306295-1.2.5	Preplanned/Deferred Work	CCM 563			
306295-1.2.6	S/W Specification Doc	CCM 563			
306295-1.2.7	Program Listing	CCM 563			
306295-1.2.9	User Guide or System Operating Manual	CCM 563			
306295-1.2.10	Certifications	CCM 563			
306296	ESE&T STOWAGE TOOLS	ADMIN		NASA Loads Tools Into Tool Box	
306296-1	Acceptance Data Package [partial]	ccm 1270		Separate ADP for each S/N. Tool Boards - ISS ADP. Tools - Shuttle ADP acceptable	
306296-1.1.1	Historical Log				
306296-1.1.2	Waiver/Deviation Record				
306296-1.1.3	Unexplained Anomalies Records				
306296-1.1.4	Shortages				
306296-1.1.5	Unplanned/Deferred Work				
306296-1.1.6	Preplanned/Assigned Work				
306296-1.1.7	Ident: As Designed/As-Built Listing				
306296-1.1.15	Certifications				
306296-2	Acceptance Test Report	ccm 1270		Part of ADP	
306296-3	Analysis Data & Analytical Models			For Tool Boards Only, CDR level data	
306296-3.1	Reports, Structural Analysis of GFE				
306296-3.2	Thermal Control Plan & Reports of GFE				
306296-3.4	Analysis and Analytical Models of GFE				
306296-3.5	Fracture Control Plan & Reports for GFE				
306296-7	Electronic Design Data (VMDB Content) [partial]				
306296-31	Indentured Parts List	ADMIN		Quarterly. Part of mass properties	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306296-7.1.2	Engineering Drawings(Developmental HW only)			Update as required. Hardcopy in native format	
306296-7.1.5	Engineering Change Data	ADMIN			
306296-7.1.6	Waiver and Deviations	ADMIN			
306296-32	Mass Properties	ADMIN		Quarterly	
306296-34	Volume	ADMIN		Quarterly	
306296-7.10	Parts Selection and Control				
306296-9	FMEA/CIL (Tool Boards Only)			Phase 1 - Delivered Phase 2 -08/01/96	
306296-11A	Hardware Drawings			[TLEI] Hardcopy in native format	
306296-12	Hardware Specifications			Only ICD & PIDS under ISS CM. S684-10126	
306296-13	Hazard Report/System Description (Tool Boards Only)	ecm 1270		Phase 1 - Delivered Phase 2 -Delivered Phase 3 -- 09/01/97	
306296-14	Interface Control Documents			SSP 30256	
306296-22	Qualification Test Plan				
306296-23	Qualification Test Procedures			Post CDR	
306296-24	Qualification Test Reports				
306296-26	Problem Reporting & Corrective Action				
306296-27	Reliability & Maintainability Prediction Report (Tool Boards Only)	ecm 1270		08/01/96 - Phase 2	
306296-28	Spec. Traceability Report Compliance Report				
306297	PBA BRACKETS (HAB) (FLT)	GCM 1124			
306297-1	Acceptance Data Package [partial]	GCM 1124			
306297-1.1.1	Historical Log	GCM 1124			
306297-1.1.4	Shortages	GCM 1124			
306297-1.1.5	Unplanned/Deferred Work	GCM 1124			
306297-1.1.6	Preplanned/Assigned Work	GCM 1124			
306297-1.1.7	Ident: As Designed/As-Built Listing	GCM 1124			
306297-1.1.15	Certifications	GCM 1124			
306298	PBA BRACKETS (LAB) (FLT)				
306298-1	Acceptance Data Package [partial]	GCM 2752			
306298-1.1.1	Historical Log				
306298-1.1.4	Shortages				
306298-1.1.5	Unplanned/Deferred Work				
306298-1.1.6	Preplanned/Assigned Work				
306298-1.1.7	Ident: As Designed/As-Built Listing				
306298-1.1.15	Certifications				
306299	PBA BRACKETS (A/L) (FLT)				
306299-1	Acceptance Data Package [partial]	GCM 2752			
306299-1.1.1	Historical Log				
306299-1.1.4	Shortages				
306299-1.1.5	Unplanned/Deferred Work				
306299-1.1.6	Preplanned/Assigned Work				
306299-1.1.7	Ident: As Designed/As-Built Listing				
306299-1.1.15	Certifications				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306305	ROBOTIC WORKSTATION (FLT)			RWS-SOW-DRD-XXX = Robotic W'kstation St'ment of Work Data Requirements Description	
306305-4	Acceptance Data Package [HW & SW]	GCM 2752		DRD-063	
306305-1.1.1	Historical Log			DRD-015	
306305-1.1.2	Waiver/Deviation Record				
306305-1.1.3	Unexplained Anomalies Record				
306305-1.1.4	Shortages				
306305-1.1.5	Unplanned/Deferred Work				
306305-1.1.6	Preplanned/Assigned Work				
306305-1.1.7	Ident: As Designed/As-Built Listing				
306305-1.1.8	Operating Time/Cycle				
306305-1.1.9	Age-Sensitive/Time-Action Item				
306305-1.1.10	Nonstandard Calibration				
306305-1.1.11	Repair Limitations				
306305-1.1.12	Pressure Vessel Data				
306305-1.1.14	Nonflight Hardware/Temporary Installation				
306305-1.1.15	Certifications				
306305-1.1.16	Material Safety Data Sheet				
306305-1.2.1	Notes and Comments				
306305-1.2.2	Waiver Deviation Records				
306305-1.2.3	Unexplained Anomalies Records				
306305-1.2.4	Unplanned/Deferred Work				
306305-1.2.5	Preplanned/Assigned Work				
306305-1.2.6	S/W Specification Documents			DRD-012 & -007	
306305-1.2.7	Program Listing				
306305-1.2.8	Version Description Document			DRD-055	
306305-1.2.9	User's Guide or System Operating Manual			DRD-064	
306305-1.2.10	Certifications				
306305-2	Acceptance Test Report			Part of ADP; Assumes 306305 RWS (FLT) delivery date of 5/10/97	
306305-3	Analysis Data & Analytical Models				
306305-3.4	Analysis and Analytical Models of GFE (Items a1,a2, and a3)			Deliverables are defined in RWS DRD-004	
306305-3.6	Component Electrical Power Data			RWS DRD-004	
306305-5	1553 Data Requirements			ACTION ITEM 2	
306305-6	Dimensions (Physical & shipping)			Prelim. Data DRD-048 11/30/95, Update as required	
306305-7	Electronic Design Data (VMDB Content)				
306305-7.1.1	Indentured Part List			Quarterly update	
306305-7.1.2	Engineering Drawings			Update as required per PIA	
306305-7.1.5	Engineering Change Data				
306305-7.1.6	Waiver & Deviations				
306305-7.3.1	Mass Properties			Quarterly update	
306305-7.3.2	Power/Thermal			Quarterly update	
306305-7.3.3	Volume	ADMIN		Quarterly update. Report Starting in 11/95	
306305-8	Fault Isolation/Repair Verification			DRD-023 Prelim, Update as required	
306305-9	FMEA/CIL			DRD-035	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306305-10	Functional Flows			DRD-064 Prelim data due on 11/96	
306305-11A	Hardware Drawings per PIA			(BD, LO, S, TLEI) additional drawings per DRD-031 DRD-031	
306305-12	Hardware Specifications			RQMTS U.S. capabilities delivered in DRD-004	
306305-13	Hazard Report/System Description			DRD-036	
306305-14	Interface Control Documents				
306305-15	Instrumentation Program & Control List			ACTION ITEM 2	
306305-16	Isometric Views - Comp. & Attach HW			DRD-023 and 031 Prelim., Update as required DRD-023 and 031 Prelim., Update as required	
306305-17	Limited Life List			DRD-004	
306305-20	Operational Constraints			Draft Data Included in User's Manual (DRD 064)	
306305-22	Qualification Test Plan			(Flt) Delivery date of 05/01/97 Assumes 306305 Robotic Workstation	
306305-23	Qualification Test Procedures			(Flt) Delivery date of 05/01/97 Assumes 306305 Robotic Workstation	
306305-24	Qualification Test Reports			(Flt) Delivery date of 05/01/97 Assumes 306305 Robotic Workstation	
306305-26	Problem Reporting & Corrective Action				
306305-27	Reliability & Maintainability Prediction Report			DRD-025	
306305-28	Spec. Traceability & Compliance Report			IDR #3; Assumes 306305 Robotic Workstation (Flt) delivery date of 05/01/97	
306305-29	Weight (Including Wet Weight)			Prelim Data (DRD 048) 11/30/95; update as required	
306306	GO-NO GO GAUGES (GSE)	SSCN 263 - ADMIN			
306306-4	Acceptance Data Package [partial]	CCM 2752		Separate ADP for each S/N	
306306-1.1.1	Historical Log				
306306-1.1.2	Waiver/Deviation Record				
306306-1.1.3	Unexplained Anomalies Records				
306306-1.1.4	Shortages				
306306-1.1.5	Unplanned/Deferred Work				
306306-1.1.6	Preplanned/Assigned Work				
306306-1.1.7	Ident: As Designed/As-Built Listing				
306306-1.1.15	Certifications				
306307	UHF HAT COUPLERS (GSE)	CCM 081		GFE #306307 and associated GFD deleted	
306308	SERVICING & PERFORMANCE CHECKOUT EQUIPMENT MAINTENANCE KIT (OLD #AAA9) (FLT)	ecm 1270		PDR:12/15/95; CDR:10/01/96; SAR: 9/01/97	
306308-4	Acceptance Data Package	ecm 1270			
306308-1.1.1	Historical Log	ecm 1270			
306308-1.1.2	Waiver/Deviation Record	ecm 1270			
306308-1.1.3	Unexplained Anomalies Record	ecm 1270			
306308-1.1.7	Ident: As Designed/As-Built Listing	ecm 1270			
306308-1.1.9	Age-Sensitive/Time-Action Item	ecm 1270			
306308-1.1.10	Nonstandard Calibration	ecm 1270			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306308-1.1.15	Certifications	ecm 1270			
306308-1.1.16	Material Safety Data Sheet	ecm 1270			
306308-2	Acceptance Test Report	ecm 1270		Contained in the ADP	
306308-3.1	Reports, Structural Analysis of GFE	ecm 1270		Analysis/Models available	
306308-3.4	Analysis and Analytical Models of GFE	ecm 1270		Analysis/Models available	
306308-3.5	Fracture Control Plan & Reports for GFE	ecm 1270			
306308-6	Dimensions (Physical and Shipping)	ecm 1270		Initial submittal at PDR; updates CDR & SAR	
306308-7	Electronic Design Data [partial]	ecm 1270		Per PIA	
306308-31	Indentured Parts List	ecm 1270- ADMIN		Update Quarterly	
306308-11A	Engineering Drawings	ADMIN		[BD, ICD, EDT, TLEI & S as reqd] Electronic copy-native format	
306308-32	Mass Properties	ADMIN		Update Quarterly Update Quarterly	
306308-34	Volume	ADMIN			
306308-8	Fault Isolation/Repair Verification	ecm 1270		SAR	
306308-9	FMEA/CIL	ecm 1270			
306308-10	Functional Flows	ecm 1270		Info in HW Systems Operations Manual	
306308-11A	Hardware Drawings	ecm 1270		Prelim DWGS-PDR; Updates-CDR- (BD,ICD,LO,S,EC,TLEI)	
306308-12	Hardware Specifications (PTRS)	ecm 1270		Initial version submitted 08/18/95	
306308-13	Hazard Report/System Description	ecm 1270			
306308-14	Interface Control Documents	ecm 1270		Initial version submitted 08/18/95	
306308-15	Instrumentation Program & Control List	ecm 1270 CCM- 830			
306308-17	Limited Life List	ecm 1270			
306308-20	Operational Constraints	ecm 1270 CCM- 830		Info in HW System Operations Manual	
306308-21	Operational Sequence Diagrams	ecm 1270 CCM- 830		Info in HW System Operations Manual	
306308-22	Qualification Test Plan	ecm 1270		Project GDR	
306308-23	Qualification Test Procedure	ecm 1270		SAR	
306308-24	Qualification Test Report	ecm 1270		SAR	
306308-26	Problem Reporting & Corrective Action	ecm 1270			
306308-27	Reliability & Maintainability Predict. Rpt	ecm 1270			
306308-28	Spec. Traceability Report Compliance Report	ecm 1270		CDR (Part1) SAR (Part 2)	
306308-29	Weight (including Wet Weight)	ecm 1270		Initial submittal at PDR; updates CDR & SAR	
306309	EMU SUPPORT EQUIPMENT (AL)	ecm 1270			
306309-1	Acceptance Data Package [partial]	ecm 1270		Cert. Shuttle HW from NASA inventory, intended for soft stowage in A/L. No Doc- other than shipping doc will be provided.	
306309-1.1.15	Certifications	ecm 1270			
306309-2	Acceptance Test Report	ecm 1270			
306309-7	Electronic Design Data (VMDB Contents) [partial]	ecm 1270			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306309-34	Indentured Parts List	ecm 1270- ADMIN			
306309-7.3.1	Mass Properties	ecm 1270		Delivered	
306309-34	Volume	ecm 1270- ADMIN			
306309-22	Qualification Test Plan	ecm 1270			
306309-23	Qualification Test Procedures	ecm 1270			
306309-24	Qualification Test Report	ecm 1270			
306309-28	Spec Traceability Report & Compliance Report	ecm 1270			
306313	HANDRAIL ASSEMBLY, TOP-MOUNTED-ISS (8.53")	ccm 1270 CCM 379			
306313-4	Acceptance Data Package [partial]	CCM 2752		ADP for each P/N to each PG; 911 tag, thereafter to reference original ADP	
306313-1.1.1	Historical Log				
306313-1.1.2	Waiver/Deviation Record				
306313-1.1.3	Unexplained Anomalies Records				
306313-1.1.4	Shortages				
306313-1.1.5	Unplanned/Deferred Work				
306313-1.1.6	Preplanned/Assigned Work				
306313-1.1.7	Ident: As Designed/As-Built Listing				
306313-1.1.15	Certifications				
306313-2	Acceptance Test Report	per EA4-98-023		Part of ADP	
306313-26	Problem Reporting & Corrective Action				
306314	BATTERY STOWAGE ASSEMBLY (BSA)	CCM 217		PDR:12/15/95;CDR:10/01/96; SAR: 9/01/97 NOMENCALTURE CHANGE	
306314-4	Acceptance Data Package	CCM 2752			
306314-1.1.1	Historical Log				
306314-1.1.2	Waiver/Deviation Record				
306314-1.1.3	Unexplained Anomalies Record				
306314-1.1.7	Ident: As Designed/As-Built Listing				
306314-1.1.9	Age-Sensitive/Time-Action Item				
306314-1.1.10	Nonstandard Calibration				
306314-1.1.15	Certifications				
306314-1.1.16	Material Safety Data Sheet				
306314-2	Acceptance Test Report			Should be part of ADP	
306314-3.1	Reports, Structural Analysis of GFE				
306314-3.4	Analysis and Analytical Models of GFE			Analysis/Models available	
306314-3.5	Fracture Control Plan & Reports for GFE			Analysis/Models available	
306314-6	Dimensions (Physical and Shipping)			Initial submittal at PDR; updates CDR & SAR	
306314-7	Electronic Design Data [partial]			Per PIA	
306314-31	Indentured Parts List	ADMIN		Update Quarterly	
306314-11A	Engineering Drawings	ADMIN		[BD, ICD, EDT, TLEI & S as reqd] Electronic copy-native format	
306314-32	Mass Properties	ADMIN		Update Quarterly	
306314-34	Volume	ADMIN		Update Quarterly Update Quarterly	
306314-8	Fault Isolation/Repair Verification			SAR	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306314-9	FMEA/CIL				
306314-10	Functional Flows			Info in HW Systems Operations Manual	
306314-11A	Hardware Drawings			Prelim DWGS-PDR; Updates-CDR (BD,ICD,LO,S,EC,TLEI)	
306314-12	Hardware Specifications (PTRS)			Initial version submitted 08/18/95	
306314-13	Hazard Report/System Description				
306314-14	Interface Control Documents			Initial version submitted 08/18/95	
306314-17	Limited Life List				
306314-16	Isometric Views-Component & Attach HW			ISO View of uninstalled ORU only	
306314-20	Operational Constraints			Info in HW System Operations Manual	
306314-21	Operational Sequence Diagrams			Info in HW System Operations Manual	
306314-22	Qualification Test Plan			Project CDR	
306314-23	Qualification Test Procedure			SAR	
306314-24	Qualification Test Report			SAR	
306314-26	Problem Reporting & Corrective Action				
306314-27	Reliability & Maintainability Predict. Report				
306314-28	Spec Traceability Report	Compliance Report		CDR (Part 1) SAR (Part 2)	
306314-29	Weight (including Wet Weight)			Initial submittal at PDR; updates CDR & SAR	
306316	GPS RECEIVER PROCESSOR (QUL)			1-Mo loan; developed and returned with H/W; could be a 911 tag for ADP	
306316-4	Acceptance Data Package	GCM 2752			
306316-1.1.1	Historical Log				
306316-1.1.2	Waiver/Deviation Record				
306316-1.1.3	Unexplained Anomalies Record				
306316-1.1.7	Ident: As Designed/As-Built Listing				
306316-1.1.15	Certifications				
306316-26	Problem Reporting & Corrective Action				
306318	TRACE CONTAMINANT CONTROL SIMULATION COMPUTER PROGRAM (FLT)				
306318-1.2.20	User's Guide			Provider content/format	
306320	INTEGRATED CHcS RACK LAB			To be deleted per PCM 120	
306321	INTEGRATED CHcS RACK HAB - No Data			To be deleted per PCM 120	
306331	ISPR-5	CCM 189			
306331-4	Acceptance Data Package	GCM 2752			
306331-26	Problem Reporting & Corrective Action				
306332	PACKED TRAY SET (TRAY 1)	ccm 1270			
306332-4	Acceptance Data Package	ccm 1270			
306332-32	Mass Properties - Weight only	ccm 1270		Weight - 1 time delivery	
306332-26	Problem Reporting & Corrective Action	ccm 1270			
306333	HANDRAIL ASSEMBLY, TOP-MOUNTED - ISS (8.53")	CCM 287			
306333-4	Acceptance Data Package	GCM 2752			
306333-26	Problem Reporting & Corrective Action				
306334	GROUND-INSTALLED 24" TOP-MOUNTED HANDHOLD (FOR LCA) LAB	CCM 287			
306334-4	Acceptance Data Package	CCM 287			
306334-26	Problem Reporting & Corrective Action	CCM 287			
306348	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY	CCM 379		ADP-911 tag was delivered with the H/W	
306348-4	Acceptance Data Package	GCM 2752		Delivered	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306348-3.1	Reports, Structural Analysis of GFE			Final	
306348-7.3.1	Mass Properties			Final	
306348-26	Problem Reporting & Corrective Action				
306349	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY	CCM 379			
306349-1	Acceptance Data Package	GCM 2752		911 tag	
306349-26	Problem Reporting & Corrective Action				
306350	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY	CCM 379			
306350-1	Acceptance Data Package	GCM 2752		911 tag	
306350-26	Problem Reporting & Corrective Action				
306351	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY	CCM 379			
306351-1	Acceptance Data Package	GCM 2752		911 tag	
306351-26	Problem Reporting & Corrective Action				
306352	ON-ORBIT INSTALLED WIF ADAPTER PLATE ASSY	GCM 1124			
306352-1	Acceptance Data Package	GCM 1124		911 tag	
306352-26	Problem Reporting & Corrective Action	GCM 1124			
306355	ARIS ISPR KIT LAB, 5A	SSCN 1289			
306355-1	Acceptance Data Package	GCM 2752			
306355-26	Problem Reporting & Corrective Action				
306356	ARIS KIT 2 - EXPRESS	sscn 1289			
306356-1	Acceptance Data Package	GCM 2752			
306357	ARIS KIT 3 - EXPRESS	SSCN 1289			
306357-1	Acceptance Data Package	GCM 2752			
306357-26	Problem Reporting & Corrective Action				
306358	ARIS KIT 4 - EXPRESS	sscn 1289			
306358-1	Acceptance Data Package	GCM 2752			
306359	ARIS KIT 5 - ISPR	SSCN 1289			
306359-1	Acceptance Data Package	GCM 2752			
306359-26	Problem Reporting & Corrective Action				
306360	ARIS KIT 6 - ISPR	SSCN 1289			
306360-1	Acceptance Data Package	GCM 2752			
306360-26	Problem Reporting & Corrective Action				
306361	ARIS KIT 7 - ISPR	ccm 5477			
306361-1	Acceptance Data Package	ccm 5477			
306361-26	Problem Reporting & Corrective Action	ccm 5477			
306362	ARIS KIT 8 - ISPR	SSCN 1289			
306362-1	Acceptance Data Package	GCM 2752			
306362-26	Problem Reporting & Corrective Action				
306363	ARIS KIT 9 - ISPR	SSCN 1289			
306363-1	Acceptance Data Package	GCM 2752			
306363	Hardware Drawings	ccm 4097			
306363-26	Problem Reporting & Corrective Action				
306370	ISPR-4	CCM 074			
306370-1	Acceptance Data Package	GCM 2752			
306370-26	Problem Reporting & Corrective Action				
306371	ISPR-4	CCM 074			
306371-1	Acceptance Data Package	GCM 2752			
306371-26	Problem Reporting & Corrective Action				
306372	ISPR-4	CCM 074			
306372-1	Acceptance Data Package	GCM 2752			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306372-26	Problem Reporting & Corrective Action				
306373	ISPR-4	CCM 074			
306373-1	Acceptance Data Package	GCM 2752			
306373-26	Problem Reporting & Corrective Action				
306374	ISPR-4	CCM 074			
306374-1	Acceptance Data Package	GCM 2752			
306374-26	Problem Reporting & Corrective Action				
306375	ISPR-4	CCM 074			
306375-1	Acceptance Data Package	GCM 2752			
306375-26	Problem Reporting & Corrective Action				
306376	ISPR-4	CCM 074			
306376-1	Acceptance Data Package	GCM 2752			
306376-26	Problem Reporting & Corrective Action				
306377	ISPR-4	CCM 074			
306377-1	Acceptance Data Package	GCM 2752			
306377-26	Problem Reporting & Corrective Action				
306378	ISPR-4	CCM 074			
306378-1	Acceptance Data Package	GCM 2752			
306378-26	Problem Reporting & Corrective Action				
306385	ISPR-5	CCM 074			
306385-1	Acceptance Data Package	GCM 2752			
306385-26	Problem Reporting & Corrective Action				
306386	REME 1313 HARDWARE				
306386-1	Acceptance Data Package	ccm 1270			
306386-26	Problem Reporting & Corrective Action				
306403	MAR COOLING MODULE (MCM) MC621-0089-0001	CCM 189		ALLOCATED TO 11/1/96	
306403-1	Acceptance Data Package	ccm 1270			
306403-26	Problem Reporting & Corrective Action				
306405	PBA I/F QUICK DISCONNECT (ELEMENT SIDE) (LAB)	CCM 147			
306405-1	Acceptance Data Package	GCM 2752			
306405-9	FMEA/CIL				
306405-11A	Hardware Drawings				
306405-17	Limited Life List				
306405-24	Qualification Test Report				
306405-26	Problem Reporting & Corrective Action				
306405-27	Reliability & Maintainability Prediction Report				
306405-29	Weight				
306406	PBA I/F QUICK DISCONNECT (AIRLOCK)	CCM 147			
306406-1	Acceptance Data Package	GCM 2752			
306406-9	FMEA/CIL				
306406-11A	Hardware Drawings				
306406-17	Limited Life List				
306406-24	Qualification Test Report				
306406-26	Problem Reporting & Corrective Action				
306406-27	Reliability & Maintainability Prediction Report				
306406-29	Weight				
306407	PBA I/F QUICK DISCONNECT (HAB)	CCM 1124 CCM-147			
306407-1	Acceptance Data Package	GCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306407-9	FMEA/CIL	GCM 1124			
306407-11A	Hardware Drawings	GCM 1124			
306407-17	Limited Life List	GCM 1124			
306407-24	Qualification Test Report	GCM 1124			
306407-26	Problem Reporting & Corrective Action	GCM 1124			
306407-27	Reliability & Maintainability Prediction Report	GCM 1124			
306407-29	Weight	GCM 1124			
306423	MANPACK RADIO	ccm 1270			
306423-1	Acceptance Data Package	ccm 1270			
306423-26	Problem Reporting & Corrective Action	ccm 1270			
306427	ROBOTIC WORKSTATION (RWS)	Per CCM 210			
306427-1	Acceptance Data Package	GCM 2752			
306427-26	Problem Reporting & Corrective Action	Per CCM 210			
	Additional Data Not Listed in SSP 50177:	Per CCM 210			
	Installation and Assembly Procedures for RWS	Per CCM 210 B			
	Acceptance Test Procedures	Per CCM 210 B			
306429	ARTIFICIAL VISION UNIT (AVU)	Per CCM 210			
306429-1	Acceptance Data Package	GCM 2752			
306429-9	FMEA/CIL	per ccm 326			
306429-9	FMEA/CIL	per ccm 326			
306429-17	Limited Life List	per ccm 326			
306429-17	Limited Life List	per ccm 326			
306429-27	Reliability & Maintainability Prediction Report	per ccm 326			
306429-27	Reliability & Maintainability Prediction Report	per ccm 326			
306429-26	Problem Reporting & Corrective Action	Per CCM 210			
	Additional Data Not Listed in SSP 50177:	Per CCM 210			
	Installation and Assembly Procedures for AVU	Per CCM 210 B			
	Acceptance Test Procedures	Per CCM 210 B			
	CSA Data certifying correct target locations properly loaded into the vision system flight processor, with correct biases correctly applied. This is the operational software load for AVU.	per ccm 326			
	As-Run test procedures for NASA SVS Target installation and ground survey	per ccm 326			
	Converted ground survey data showing that SVS Target locations comply with required locations in SSP 50228, SSP 42121, or ICD-B-21309	per ccm 326			
306436	MICROCONICAL FITTING (3/4 INCH HOLE)				
306436-1	Acceptance Data Package	GCM 2752			
306436-26	Problem Reporting & Corrective Action				
306513	SLIDEWIRE ADAPTOR PLATE	GCM 1124			
306513-1	Acceptance Data Package	GCM 1124			
306513-26	Problem Reporting & Corrective Action	GCM 1124			
306515	SLIDEWIRE ADAPTOR PLATE	SSCN 263 - ADMIN			
306515-1	Acceptance Data Package	GCM 2752			
306515-26	Problem Reporting & Corrective Action	SSCN 263 - ADMIN			
306522	BODY MASS MEASUREMENT	GCM 1124			
306522-1	Acceptance Data Package - Initial	GCM 1124			
306522-1	Acceptance Data Package - Update	GCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306522-1	Acceptance Data Package - Final	GCM 1124			
306522-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306522-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306522-11A	Engineering Drawings	GCM 1124			
306522-7.1.6	Waivers and Deviations	GCM 1124			
306522-7.10	Parts Selection and Control	GCM 1124			
306522-36	Electrical Power and Thermal Consumption	GCM 1124			
306522-32	Mass Properties	GCM 1124			
306522-33	Power/Thermal	GCM 1124			
306522-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306522-12	Specifications	GCM 1124			
306522-13	Hazard Reports/System Description	GCM 1124			
306522-14	Interface Control Documents	GCM 1124			
306522-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306523	DEFIBRILLATOR	per ccm 996			
306523-1	Acceptance Data Package - Initial	per ccm 996			
306523-1	Acceptance Data Package - Update	per ccm 996			
306523-1	Acceptance Data Package - Final	per ccm 996			
306523-3.4	Analyses and Analytical Models of GFE (at CDR)	per ccm 996			
306523-3.4	Analyses and Analytical Models of GFE (at PDR)	per ccm 996			
306523-11A	Engineering Drawings	per ccm 996			
306523-7.1.6	Waivers and Deviations	per ccm 996			
306523-7.10	Parts Selection and Control	per ccm 996			
306523-36	Electrical Power and Thermal Consumption	per ccm 996			
306523-32	Mass Properties	per ccm 996			
306523-7.3.2	Power/Thermal	per ccm 996			
306523-9	Failure Modes & Effects Analysis & Critical Items Lists	per ccm 996			
306523-12	Specifications	per ccm 996			
306523-13	Hazard Reports/System Description	per ccm 996			
306523-14	Interface Control Documents	per ccm 996		SSP 42014. DELIVERED	
306523-29	Weight (including wet weight)	per ccm 996			
	Additional data not listed in SSP 50177	per ccm 996			
	Integrated Logistics Plan & Analysis Reports	per ccm 996			
306524	INCUBATOR	GCM 1124			
306524-1	Acceptance Data Package - Initial	GCM 1124			
306524-1	Acceptance Data Package - Update	GCM 1124			
306524-1	Acceptance Data Package - Final	GCM 1124			
306524-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306524-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306524-11A	Engineering Drawings	GCM 1124			
306524-7.1.6	Waivers and Deviations	GCM 1124			
306524-7.10	Parts Selection and Control	GCM 1124			
306524-36	Electrical Power and Thermal Consumption	GCM 1124			
306524-32	Mass Properties	GCM 1124			
306524-33	Power/Thermal	GCM 1124			
306524-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306524-12	Specifications	GCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306524-13	Hazard Reports/System Description	GCM 1124			
306524-14	Interface Control Documents	GCM 1124			
306524-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306525	ION SELECTIVE ELECTRODE ASSEMBLY	GCM 1124			
306525-1	Acceptance Data Package - Initial	GCM 1124			
306525-1	Acceptance Data Package - Update	GCM 1124			
306525-1	Acceptance Data Package - Final	GCM 1124			
306525-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306525-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306525-11A	Engineering Drawings	GCM 1124			
306525-7.1.6	Waivers and Deviations	GCM 1124			
306525-7.10	Parts Selection and Control	GCM 1124			
306525-36	Electrical Power and Thermal Consumption	GCM 1124			
306525-32	Mass Properties	GCM 1124			
306525-33	Power/Thermal	GCM 1124			
306525-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306525-12	Specifications	GCM 1124			
306525-13	Hazard Reports/System Description	GCM 1124			
306525-14	Interface Control Documents	GCM 1124			
306525-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306526	METABOLIC BAS ANALYZER	GCM 1124			
306526-1	Acceptance Data Package - Initial	GCM 1124			
306526-1	Acceptance Data Package - Update	GCM 1124			
306526-1	Acceptance Data Package - Final	GCM 1124			
306526-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306526-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306526-11A	Engineering Drawings	GCM 1124			
306526-7.1.6	Waivers and Deviations	GCM 1124			
306526-7.10	Parts Selection and Control	GCM 1124			
306526-36	Electrical Power and Thermal Consumption	GCM 1124			
306526-32	Mass Properties	GCM 1124			
306526-33	Power/Thermal	GCM 1124			
306526-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306526-12	Specifications	GCM 1124			
306526-13	Hazard Reports/System Description	GCM 1124			
306526-14	Interface Control Documents	GCM 1124			
306526-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306527	MICROBIAL SAFETY CABINET	GCM 1124			
306527-1	Acceptance Data Package - Initial	GCM 1124			
306527-1	Acceptance Data Package - Update	GCM 1124			
306527-1	Acceptance Data Package - Final	GCM 1124			
306527-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306527-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306527-7.1.2	Engineering Drawings	GCM 1124			
306527-7.1.6	Waivers and Deviations	GCM 1124			
306527-7.10	Parts Selection and Control	GCM 1124			
306527-7.13	Electrical Power and Thermal Consumption	GCM 1124			
306527-7.3.1	Mass Properties	GCM 1124			
306527-7.3.2	Power/Thermal	GCM 1124			
306527-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306527-12	Specifications	GCM 1124			
306527-13	Hazard Reports/System Description	GCM 1124			
306527-14	Interface Control Documents	GCM 1124			
306527-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306528	MICROSCOPE/CAMERA	GCM 1124			
306528-1	Acceptance Data Package - Initial	GCM 1124			
306528-1	Acceptance Data Package - Update	GCM 1124			
306528-1	Acceptance Data Package - Final	GCM 1124			
306528-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306528-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306528-11A	Engineering Drawings	GCM 1124			
306528-7.1.6	Waivers and Deviations	GCM 1124			
306528-7.10	Parts Selection and Control	GCM 1124			
306528-36	Electrical Power and Thermal Consumption	GCM 1124			
306528-32	Mass Properties	GCM 1124			
306528-33	Power/Thermal	GCM 1124			
306528-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306528-12	Specifications	GCM 1124			
306528-13	Hazard Reports/System Description	GCM 1124			
306528-14	Interface Control Documents	GCM 1124			
3062528-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306529	RESISTIVE EXERCISE DEVICE/VIBRATION ISOLATION DEVICE	GCM 1124			
306529-1	Acceptance Data Package - Initial	GCM 1124			
306529-1	Acceptance Data Package - Update	GCM 1124			
306529-1	Acceptance Data Package - Final	GCM 1124			
306529-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306529-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306529-11A	Engineering Drawings	GCM 1124			
306529-7.1.6	Waivers and Deviations	GCM 1124			
306529-7.10	Parts Selection and Control	GCM 1124			
306529-36	Electrical Power and Thermal Consumption	GCM 1124			
306529-32	Mass Properties	GCM 1124			
306529-33	Power/Thermal	GCM 1124			
306529-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306529-12	Specifications	GCM 1124			
306529-13	Hazard Reports/System Description	GCM 1124			
306529-14	Interface Control Documents	GCM 1124			
306529-29	Weight (including wet weight)	GCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306530	ROWER VIBRATION ISOLATION DEVICE	GCM 1124			
306530-1	Acceptance Data Package - Initial	GCM 1124			
306530-1	Acceptance Data Package - Update	GCM 1124			
306530-1	Acceptance Data Package - Final	GCM 1124			
306530-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306530-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306530-11A	Engineering Drawings	GCM 1124			
306530-7.1.6	Waivers and Deviations	GCM 1124			
306530-7.10	Parts Selection and Control	GCM 1124			
306530-36	Electrical Power and Thermal Consumption	GCM 1124			
306530-32	Mass Properties	GCM 1124			
306530-33	Power/Thermal	GCM 1124			
306530-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306530-12	Specifications	GCM 1124			
306530-13	Hazard Reports/System Description	GCM 1124			
306530-14	Interface Control Documents	GCM 1124			
306530-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306531	SLIDE STRAINING APPARATUS	GCM 1124			
306531-1	Acceptance Data Package - Initial	GCM 1124			
306531-1	Acceptance Data Package - Update	GCM 1124			
306531-1	Acceptance Data Package - Final	GCM 1124			
306531-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306531-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306531-11A	Engineering Drawings	GCM 1124			
306531-7.1.6	Waivers and Deviations	GCM 1124			
306531-7.10	Parts Selection and Control	GCM 1124			
306531-36	Electrical Power and Thermal Consumption	GCM 1124			
306531-32	Mass Properties	GCM 1124			
306531-33	Power/Thermal	GCM 1124			
306531-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306531-12	Specifications	GCM 1124			
306531-13	Hazard Reports/System Description	GCM 1124			
306531-14	Interface Control Documents	GCM 1124			
306531-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306532	SPECTROPHOTOMETER	GCM 1124			
306532-1	Acceptance Data Package - Initial	GCM 1124			
306532-1	Acceptance Data Package - Update	GCM 1124			
306532-1	Acceptance Data Package - Final	GCM 1124			
306532-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306532-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306532-11A	Engineering Drawings	GCM 1124			
306532-7.1.6	Waivers and Deviations	GCM 1124			
306532-7.10	Parts Selection and Control	GCM 1124			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306532-36	Electrical Power and Thermal Consumption	GCM 1124			
306532-32	Mass Properties	GCM 1124			
306532-33	Power/Thermal	GCM 1124			
306532-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306532-12	Specifications	GCM 1124			
306532-13	Hazard Reports/System Description	GCM 1124			
306532-14	Interface Control Documents	GCM 1124			
306532-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306533	TOTAL ORGANIC CARBON ANALYZER	GCM 1124			
306533-1	Acceptance Data Package - Initial	GCM 1124			
306533-1	Acceptance Data Package - Update	GCM 1124			
306533-1	Acceptance Data Package - Final	GCM 1124			
306533-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306533-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306533-11A	Engineering Drawings	GCM 1124			
306533-7.1.6	Waivers and Deviations	GCM 1124			
306533-7.10	Parts Selection and Control	GCM 1124			
306533-36	Electrical Power and Thermal Consumption	GCM 1124			
306533-32	Mass Properties	GCM 1124			
306533-33	Power/Thermal	GCM 1124			
306533-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306533-12	Specifications	GCM 1124			
306533-13	Hazard Reports/System Description	GCM 1124			
306533-14	Interface Control Documents	GCM 1124			
306533-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306535	RESISTIVE EXERCISE DEVICE	GCM 1124			
306535-1	Acceptance Data Package - Initial	GCM 1124			
306535-1	Acceptance Data Package - Update	GCM 1124			
306535-1	Acceptance Data Package - Final	GCM 1124			
306535-3.4	Analyses and Analytical Models of GFE (at CDR)	GCM 1124			
306535-3.4	Analyses and Analytical Models of GFE (at PDR)	GCM 1124			
306535-11A	Engineering Drawings	GCM 1124			
306535-7.1.6	Waivers and Deviations	GCM 1124			
306535-7.10	Parts Selection and Control	GCM 1124			
306535-36	Electrical Power and Thermal Consumption	GCM 1124			
306535-32	Mass Properties	GCM 1124			
306535-33	Power/Thermal	GCM 1124			
306535-9	Failure Modes & Effects Analysis & Critical Items Lists	GCM 1124			
306535-12	Specifications	GCM 1124			
306535-13	Hazard Reports/System Description	GCM 1124			
306535-14	Interface Control Documents	GCM 1124			
306535-29	Weight (including wet weight)	GCM 1124			
	Additional data not listed in SSP 50177	GCM 1124			
	Integrated Logistics Plan & Analysis Reports	GCM 1124			
306536	VOLATILE ORGANIC ANALYZER	ecm 996			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306536-1	Acceptance Data Package -- Initial	ecm-996			
306536-1	Acceptance Data Package -- Update	ecm-996			
306536-1	Acceptance Data Package -- Final	ecm-996			
306536-3.4	Analyses and Analytical Models of GFE (at CDR)	ecm-996			
306536-3.4	Analyses and Analytical Models of GFE (at PDR)	ecm-996			
306536-11A	Engineering Drawings	ecm-996			
306536-7.1.6	Waivers and Deviations	ecm-996			
306536-7.10	Parts Selection and Control	ecm-996			
306536-36	Electrical Power and Thermal Consumption	ecm-996			
306536-32	Mass Properties	ecm-996			
306536-7.3.2	Power/Thermal	ecm-996			
306536-9	Failure Modes & Effects Analysis & Critical Items Lists	ecm-996			
306536-12	Specifications	ecm-996			
306536-13	Hazard Reports/System Description	ecm-996			
306536-14	Interface Control Documents	ecm-996		SSP 42014. DELIVERED	
306536-29	Weight (including wet weight)	ecm-996			
	Additional data not listed in SSP 50177	ecm-996			
	Integrated Logistics Plan & Analysis Reports	ecm-996			
306544	METOX REGENERATOR	CCM 272			
306544-1	Acceptance Data Package	CCM 2752			
306544-31	Indentured Parts List	CCM 272			
306544-32	Mass Properties	CCM 272			
306544-33	Power/Thermal Report	CCM 272			
306544-11A	Hardware Drawings	CCM 272			
306544-14	Interface Control Documents	CCM 272			
306544-9	FMEA/CIL (CDR 7/96-Data Already Developed)	CCM 272			
306544-9	FMEA/CIL	CCM 272			
306544-17	Limited Life List (CDR 7/96-Data Already Developed)	CCM 272			
306544-17	Limited Life List	CCM 272			
306544-27	Reliability & Maintainability Prediction Report (CDR 7/96-Data Already Developed)	CCM 272			
306544-27	Reliability & Maintainability Prediction Report	CCM 272			
306544-13	Hazard Reports/System Description (CDR 7/96 - Data Already Developed)	CCM 272			
306544-13	Hazard Reports/System Description	CCM 272			
306552	EMU COMMUNICATIONS SET	ecm-1270-CCM-136			
306552-1	Acceptance Data Package	ecm-1270			
306552-26	Problem Reporting & Corrective Action	ecm-1270			
306553	ORLAN-M SPACE SUIT COMMUNICATIONS SET	CCM 136			
306553-1	Acceptance Data Package	CCM 2752			
306553-26	Problem Reporting & Corrective Action				
306555	MANUAL BERTHING MECHANISM (MBM)	CCM 290			
306555-1	Acceptance Data Package	CCM 2752			
306555-26	Problem Reporting & Corrective Action	CCM 290			
306557	GPS RECEIVER PROCESSOR (LAB)	CCM 310			
306557-1	Acceptance Data Package	CCM 2752			
306557-2	Acceptance Test Report	CCM 310			
306558	GPS RECEIVER PROCESSOR (LAB)	CCM 591			
306558-1	Acceptance Data Package	CCM 591			
306558-2	Acceptance Test Report	CCM 591			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306559	MICROCONICAL TORQUE MULTPLIER	CCM 290			
306559-4	Acceptance Data Package	CCM 2752			
306559-26	Problem Reporting & Corrective Action	CCM 290			
306560	PISTOL GRIP TOOL	CCM 290			
306560-4	Acceptance Data Package	CCM 2752			
306560-26	Problem Reporting & Corrective Action	CCM 290			
306561	SOCKET SET	CCM 290			
306561-4	Acceptance Data Package	CCM 2752			
306561-26	Problem Reporting & Corrective Action	CCM 290			
306562	WORKSITE INTERFACE (WIF'S)	CCM 290			
306562-4	Acceptance Data Package	CCM 2752			
306562-26	Problem Reporting & Corrective Action	CCM 290			
306563	A/L METOX CANNISTER	CCM 272			
306563-4	Acceptance Data Package	CCM 2752			
306563-31	Indentured Parts List	CCM 272			
306563-32	Mass Properties	CCM 272			
306563-33	Power/Thermal	CCM 272			
306563-11A	Hardware Drawings	CCM 272			
306563-14	Interface Control Documents	CCM 272			
306563-9	FMEA/CIL (CDR 7/96-Data Already Developed)	CCM 272			
306563-9	FMEA/CIL	CCM 272			
306563-17	Limited Life List (CDR 7/96 - data already developed)	CCM 272			
306563-17	Limited Life List	CCM 272			
306563-27	Reliability and Maintainability Prediction Report (CDR 7/96 - Data Already Developed)	CCM 272			
306563-27	Reliability and Maintainability Prediction Report	CCM 272			
306563-13	Hazard Report/System Description (SMACR Format Acceptable)	CCM 272			
306563-13	Hazard Report/System Description	CCM 272			
306571	VSC MOUNTING KIT, UNIT 1	CCM 287			
306571-4	Acceptance Data Package	CCM 2752			
306571-13	Hazard Report/System Description	CCM 287			
306571-13	Hazard Report/System Description	CCM 287			
306571-26	Problem Reporting & Corrective Action				
306573	PDGF ORU ASSEMBLY, UNIT 1	CCM 287			
306573-4	Acceptance Data Package	CCM 2752			
306573-13	Hazard Report/System Description	CCM 287			
306573-13	Hazard Report/System Description	CCM 287			
306573-26	Problem Reporting & Corrective Action				
306574	PDGF CONNECTOR SAVER SET, UNIT 1	CCM 287			
306574-4	Acceptance Data Package	CCM 2752			
306574-13	Hazard Report/System Description	ccm 1270			
306574-13	Hazard Report/System Description	ccm 1270			
306574-26	Problem Reporting & Corrective Action				
306575	PDGF EXTERNAL HARNESS, UNIT 1	CCM 287			
306575-4	Acceptance Data Package	CCM 2752			
306575-13	Hazard Report/System Description	CCM 287			
306575-13	Hazard Report/System Description	CCM 287			
306575-26	Problem Reporting & Corrective Action				
306576	PDGF ORU ASSEMBLY, UNIT 2	CCM 287			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306576-4	Acceptance Data Package	CCM 2752			
306576-26	Problem Reporting & Corrective Action	CCM 287			
306577	PDGF MOUNTING ASSEMBLY, UNIT 2	CCM 287			
306577-4	Acceptance Data Package	CCM 2752			
306577-26	Problem Reporting & Corrective Action	CCM 287			
306578	PDGF CONNECTOR SAVER SET, UNIT 2	CCM 287			
306578-4	Acceptance Data Package	CCM 2752			
306578-26	Problem Reporting & Corrective Action	CCM 287			
306579	VSC MOUNTING KIT, UNIT 2	CCM 287			
306579-4	Acceptance Data Package	CCM 2752			
306579-26	Problem Reporting & Corrective Action	CCM 287			
306580	PDGF EXTERNAL HARENESS, UNIT 2	CCM 287			
306580-4	Acceptance Data Package	CCM 2752			
306580-26	Problem Reporting & Corrective Action	CCM 287			
306584	REMOTE SENSING UNIT (RSU) KIT	ccm 1270			
306584-4	Acceptance Data Package	ccm 1270			
306584-6	Dimensions (Physical and Shipping) (INITIAL)	ccm 1270			
306584-6	Dimensions (Physical and Shipping) (FINAL)	ccm 1270			
306584-32	Mass Properties	ccm 1270			
306584-16	Isometric View-Components & Attaching H/W (INITIAL)	ccm 1270			
306584-16	Isometric View-Components & Attaching H/W (FINAL)	ccm 1270			
306584-29	Weight (including wet weight)	ccm 1270			
	Additional Data Not Listed in SSP 50177:	ccm 1270			
	Installation & Assembly Procedures for RSU	ccm 1270			
306586	ECOMM RF FEEDTHROUGH PLATE COAXIAL CONNECTOR PART #MC414-0669-0001	ccm 399			
306586-4	Acceptance Data Package	CCM 2752			
306586-9	FMEA/CIL	ccm 399			
306586-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306586-26	Problem Reporting & Corrective Action	ccm 399			
306587	ECOMM RF FEED THROUGH PLATE COAXIAL CONNECTOR PART # MC 414-0669-0001	ccm 399			
306587-4	Acceptance Data Package	CCM 2752			
306587-9	FMEA/CIL	ccm 399			
306587-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306587-26	Problem Reporting & Corrective Action	ccm 399			
306589	ECOMM ECOM SOCKET - PART # SDG33107100-001	ccm 399			
306589-4	Acceptance Data Package	CCM 2752			
306589-9	FMEA/CIL	ccm 399			
306589-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306589-26	Problem Reporting & Corrective Action	ccm 399			
306590	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR PART # NLS5H1435PSC	ccm 399			
306590-4	Acceptance Data Package	CCM 2752			
306590-9	FMEA/CIL	ccm 399			
306590-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306590-26	Problem Reporting & Corrective Action	ccm 399			
306591	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR PART # NLS5H1435PSC	ccm 399			
306591-4	Acceptance Data Package	CCM 2752			
306591-9	FMEA/CIL	ccm 399			
306591-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306590-26	Problem Reporting & Corrective Action	ccm 399			
306592	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR PART #NLS5H1635PS	ccm 399			
306592-4	Acceptance Data Package	GCM 2752			
306592-9	FMEA/CIL	ccm 399			
306592-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306592-26	Problem Reporting & Corrective Action	ccm 399			
306593	ECOMM FEEDTHROUGH PLATE CIRCULAR CONNECTOR PART #NLS5H1635PS	ccm 399			
306593-4	Acceptance Data Package	GCM 2752			
306593-9	FMEA/CIL	ccm 399			
306593-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306593-26	Problem Reporting & Corrective Action	ccm 399			
306594	ECOMM HATCH TO ANTENNA CABLE SETS	ccm 399			
306594-4	Acceptance Data Package	GCM 2752			
306594-9	FMEA/CIL	ccm 399			
306594-13	Hazard Report/System Description - SMACR Acceptable	ccm 399			
306594-26	Problem Reporting & Corrective Action	ccm 399			
306595	ECOMM HATCH TO ANTENNA CABLE SETS				
306595-4	Acceptance Data Package	GCM 2752			
306595-9	FMEA/CIL				
306595-13	Hazard Report/System Description - SMACR Acceptable				
306595-26	Problem Reporting & Corrective Action				
306597	CONNECTOR	CCM 272			
306597-4	Acceptance Data Package	GCM 2752			
306598	BACKSHELL	CCM 272			
306598-4	Acceptance Data Package	GCM 2752			
306599	CONTACTS	CCM 272			
306599-4	Acceptance Data Package	GCM 2752			
306600	SEAL PLUGS	CCM 272			
306600-4	Acceptance Data Package	GCM 2752			
306610	SPACE INTEGRATED GPS/INS (SIGI)	CCM 591			
306610-4	Acceptance Data Package	GCM 2752			
306610-9	FMEA/CIL	CCM 591			
306610-13	Hazard Report/System Description	CCM 591		Approved Phase 3	
306610-17	Limited Life List	CCM 591			
306610-27	Reliability and Maintainability Prediction Report	CCM 591			
306610-32	Mass Properties - initial	CCM 591			
306610-32	Mass Properties - final	CCM 591			
306610-33	Power/Thermal Report - initial	CCM 591			
306610-33	Power/Thermal Report - final	CCM 591			
306610-34	Volume Report - initial	CCM 591			
306610-34	Volume Report - final	CCM 591			
306611	SPACE INTEGRATED GPS/INS (SIGI)	CCM 591			
306611-4	Acceptance Data Package	GCM 2752			
306611-9	FMEA/CIL	CCM 591			
306611-13	Hazard Report/System Description	CCM 591		Approved Phase 3	
306611-17	Limited Life List	CCM 591			
306611-27	Reliability and Maintainability Prediction Report	CCM 591			
306611-32	Mass Properties - initial	CCM 591			
306611-32	Mass Properties - final	CCM 591			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306611-33	Power/Thermal Report - initial	CCM 591			
306611-33	Power/Thermal Report - final	CCM 591			
306611-34	Volume Report - initial	CCM 591			
306611-34	Volume Report - final	CCM 591			
306615	UMBILICAL RESTRAINT BRACKETS	CCM 642			
306615-4	Acceptance Data Package	GCM 2752			
306615-13	SMACR Acceptable	CCM 642			
306615-26	Problem Reporting & Corrective Action	CCM 642			
306615-32	Mass Properties	CCM 642			
306616	UMBILICAL VELCRO RESTRAINTS	CCM 642			
306616-4	Acceptance Data Package	GCM 2752			
306616-13	SMACR Acceptable	CCM 642			
306616-26	Problem Reporting & Corrective Action	CCM 642			
306616-32	Mass Properties	CCM 642			
306617	UMBILICAL STRAIN RELIEF ATTACH POINTS	CCM 642			
306617-4	Acceptance Data Package	GCM 2752			
306617-13	SMACR Acceptable	CCM 642			
306617-26	Problem Reporting & Corrective Action	CCM 642			
306617-32	Mass Properties	CCM 642			
306618	AIRLOCK	ccm 1270			
306618-4	Acceptance Data Package	ccm 1270			
306618-13	SMACR Acceptable	ccm 1270			
306618-26	Problem Reporting & Corrective Action	ccm 1270			
306618-32	Mass Properties	ccm 1270			
306618-34	Volume	ccm 1270			
306619	QUARTER TURN FASTENER	CCM 642			
306619-4	Acceptance Data Package	GCM 2752			
306619-13	SMACR Acceptable	CCM 642			
306619-26	Problem Reporting & Corrective Action	CCM 642			
306619-32	Mass Properties	CCM 642			
306623	PCS FLIGHT SOFTWARE	CCM 438			
306623-4	Acceptance Data Package	GCM 2752			
306623-13	SMACR Acceptance	CCM 438			
	Additional Data Not Listed in SSP 50177:	CCM 438			
	JEM PDR DATA PACKAGE	CCM 438			
	JEM CDR DATA PACKAGE	CCM 438			
	APM PDR DATA PACKAGE	CCM 438			
	APD CDR DATA PACKAGE	CCM 438			
	JEM EF PDR DATA PACKAGE	CCM 438			
	JEM EF CDR DATA PACKAGE	CCM 438			
306642	SHUTTLE PRESSURE EQUALIZATION VALVE	CCM 719			
306642-4	Acceptance Data Package	GCM 2752			
306642-13	Hazard Reports/System Description (SMACR Acceptable)	CCM 719			
306642-32	Mass Properties Report (One time delivery for actual)	CCM 719			
306646	PDGF SADDLE BRACKET/CONNECTOR I/F ASSY	ccm 1344			
306646-4	Acceptance Data Package	GCM 2752			
306646-13	SMACR Acceptable/Final	ccm 1344			
306646-17	Limited Life List	ccm 1344			
306646-32	Mass Properties - final	ccm 1344			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306646-34	Volume Report - final	ccm 1344			
306647	PDGF HARNESS ASSY	ccm 1344			
306647-1	Acceptance Data Package	CCM 2752			
306647-13	SMACR Acceptable/Final	ccm 1344			
306647-17	Limited Life List	ccm 1344			
306647-32	Mass Properties - final	ccm 1344			
306647-34	Volume Report - final	ccm 1344			
306648	HANDRAIL, CUSTOM, 21.941 IN.	CCM 1118			
306648-1	Acceptance Data Package	CCM 2752			
306648-13	Hazard Reports/System Description (SMACR Acceptable/Final)	CCM 1118			
306648-32	Mass Properties	CCM 1118			
306648-34	Volume Report	CCM 1118			
306649	12" ON ORBIT INSTL. HANDRAIL	CCM 1118			
306649-1	Acceptance Data Package	CCM 2752			
306649-32	Mass Properties	CCM 1118			
306649-34	Volume Report	CCM 1118			
306650	24" ON-ORBIT INSTL HANDRAIL	CCM 1118			
306650-1	Acceptance Data Package	CCM 2752			
306650-32	Mass Properties	CCM 1118			
306650-34	Volume Report	CCM 1118			
306651	TOP MOUNTED WIF PASSIVE HALF	CCM 1118			
306651-1	Acceptance Data Package	CCM 2752			
306651-32	Mass Properties	CCM 1118			
306651-34	Volume Report	CCM 1118			
306652	SIDE MOUNTED WIF PASSIVE HALF	CCM 1118			
306652-1	Acceptance Data Package	CCM 2752			
306652-32	Mass Properties	CCM 1118			
306652-34	Volume Report	CCM 1118			
306653	QUARTER TURN ASSY	CCM 1118			
306653-1	Acceptance Data Package	CCM 2752			
306653-13	Hazard Reports/System Description (SMACR Acceptable)	CCM 1118			
306653-17	Limited Life List	CCM 1118			
306653-32	Mass Properties	CCM 1118			
306653-34	Volume Report	CCM 1118			
306654	NUT PLATE	CCM 1118			
306654-1	Acceptance Data Package	CCM 2752			
306654-32	Mass Properties	CCM 1118			
306654-34	Volume Report	CCM 1118			
306655	LATCH PLATE	CCM 1118			
306655-1	Acceptance Data Package	CCM 2752			
306655-32	Mass Properties	CCM 1118			
306655-34	Volume Report	CCM 1118			
306656	WIRE TIE				
306656-1	Acceptance Data Package	ccm 1270		911 tag	
306658	OXYGEN RECHARGE COMPRESSOR ASSEMBLY (ORCA)	ccm 657			
306658-1	Acceptance Data Package	CCM 2752			
306658-2	Acceptance Test Report	ccm 657			
306658-3.5	Fracture Control Plan & Reports for GFE	ccm 657			
306658-3.7	GFE Power Stability & Transient Models	ccm 657			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306658-9	FMEA/CILs	ccm 657			
306658-11	Hardware Configuration	ccm 657			
306658-12	Hardware Specifications (PTRS) (JSC 38819)	ccm 657			
306658-13	Hazard Report/System Description	ccm 657			
306658-14	Interface Control Document (JSC 38829)	ccm 657			
306658-22	Qualification Test Plan	ccm 657			
306658-23	Qualification Test Procedure	ccm 657			
306658-24	Qualification Test Report	ccm 657			
306658-27	Reliability and Maintainability Prediction Report	ccm 657			
306658-28	Spec. Traceability Report	ccm 657			
306658-32	Mass Properties	ccm 657			
306658-33	Power/Thermal	ccm 657			
306658-34	Volume	ccm 657			
306658-36	Electrical Power & Thermal Consumption	ccm 657			
306659	SIGI "PIGTAIL"	ccm 1559			
306659-4	Acceptance Data Package	GCM 2752			
306659-9	FMEA/CILs	ccm 1559			
306659-11	Hardware Configuration	ccm 1559			
306659-13	Hazard Requirements/System Description	ccm 1559			
306659-17	Limited Life List	ccm 1559			
306659-26	Problem Reporting & Corrective Action (PRACA)	ccm 1559			
306659-27	Reliability and Maintainability Prediction Report	ccm 1559			
306659-31	Indentured Parts List	ccm 1559			
306659-32	Mass Properties Reports	ccm 1559			
306676	ARIS KIT 10 - ISPR	ccm 5477			
306676-9	FMEA/CILs	ccm 5477			
306676-13	Hazard Requirements/System Description	ccm 5477			
306676-17	Limited Life List	ccm 5477			
306676-27	Reliability and Maintainability Prediction Report	ccm 5477			
306677	ARIS KIT 10 - ISPR	ccm 5477			
306677-9	FMEA/CILs	ccm 5477			
306677-13	Hazard Requirements/System Description	ccm 5477			
306677-17	Limited Life List	ccm 5477			
306677-27	Reliability and Maintainability Prediction Report	ccm 5477			
306679	KNEE BRACES FOR MPLM 1	ccm 1866			
306679-4	Acceptance Data Package	GCM 2752			
306679-11A	Engineering Drawings	ccm 1866			
306710	WIF	ccm 2000			
306710-4	Acceptance Data Package	GCM 2752			
306710-11A	Engineering Drawings	ccm 2000			
306711	WIF ADAPTER PLATE	ccm 2000			
306711-4	Acceptance Data Package	GCM 2752			
306711-11A	Engineering Drawings	ccm 2000			
306712	ARIS RACK 10	ccm 5477			
306712-9	FMEA/CILs	ccm 5477			
306712-13	Hazard Requirements/System Description	ccm 5477			
306712-17	Limited Life List	ccm 5477			
306712-27	Reliability and Maintainability Prediction Report	ccm 5477			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306713	ARIS RACK 11	ecm 5477			
306713-9	FMEA/CILs	ecm 5477			
306713-13	Hazard Requirements/System Description	ecm 5477			
306713-17	Limited Life List	ecm 5477			
306713-27	Reliability and Maintainability Prediction Report	ecm 5477			
306714	SPACER	ecm 2000			
306714-4	Acceptance Data Package	ecm 2000			
306714-11A	Engineering Drawings	ecm 2000			
306715	GH1-01248 HATCH OPERATIONS KIT 1G (S/N 001004)	ccm 2160			
306715-4	Acceptance Data Package	GCM 2752		Ship with End Item	
306715-11A	Hardware Drawings	ccm 2160			
306715-13	Hazard Report/System Description	ccm 2160			
306716	CUPOLA SCRATCH PANE FRAMES KIT	ccm 2199			
306716-4	Acceptance Data Package	GCM 2752			
306717	GH1-01248 HATCH OPERATIONS KIT 1G (S/N 000002)	ccm 2160			
306717-1	Acceptance Data Package	ccm 2160		Ship with End Item	
306717-11A	Hardware Drawings	ccm 2160			
306717-13	Hazard Report/System Description	ccm 2160			
306718	GH1-01248 HATCH OPERATIONS KIT 1G (S/N 000001)	ccm 2160			
306718-4	Acceptance Data Package	GCM 2752		Ship with End Item	
306718-11A	Hardware Drawings	ccm 2160			
306718-13	Hazard Report/System Description	ccm 2160			
306719	OXYGEN RECHARGE COMPRESSOR ASSEMBLY (ORCA)	ccm 2482			
306719-4	Acceptance Data Package	GCM 2752			
306720	POSITIVE PRESSURE RELIEF ASSY	ccm 2453			
306720-4	Acceptance Data Package	GCM 2752			
306720-11A	Hardware Drawings	ccm 2452			
306720-13	Hazard Report/System Description	ccm 2452			
306721	POSITIVE PRESSURE RELIEF ASSY	ccm 2452			
306721-4	Acceptance Data Package	GCM 2752			
306721-11A	Hardware Drawings	ccm 2452			
306721-13	Hazard Report/System Description	ccm 2452			
306722	POSITIVE PRESSURE RELIEF ASSY	ccm 2452			
306722-4	Acceptance Data Package	GCM 2752			
306722-11A	Hardware Drawings	ccm 2452			
306722-13	Hazard Report/System Description	ccm 2452			
306723	POSITIVE PRESSURE RELIEF ASSY	ccm 2452			
306723-4	Acceptance Data Package	GCM 2752			
306723-11A	Hardware Drawings	ccm 2452			
306723-13	Hazard Report/System Description	ccm 2452			
306724	CUUPOLA SCRATCH PANE FRAME KITS, STA	ccm 2199			
306724-4	Acceptance Data Package	GCM 2752			
306753	LAUNCH RESTRAINT FASTENER	ccm 2825			
306753-11A	Hardware Drawings	ccm 2825			
306754	HANDRAIL (UNIQUE), 12"	ccm 2825			
306754-11A	Hardware Drawings	ccm 2825			
306754-13	Hazard Report/System Description	ccm 2825			
306757	PREBREATHE HOSE ASSEMBLY (PHA) QD	ccm 2821			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306757-9	FMEA/CIL	ccm 2821			
306757-11A	Engineering Drawings	ccm 2821			
306757-13	Hazard Reports/System Description	ccm 2821			
306757-17	Limited Life List	ccm 2821			
306757-27	Reliability and Maintainability Prediction Report	ccm 2821			
306757-31	Indentured Parts List	ccm 2821			
306769	MASS SIMULATOR ASSEMBLY	CCM 2865			
306769-3.5.3	Engineering Drawings - 45 days before DR 1	CCM 2865			
306778	WINDOW FRAMES - STA	ccm 3020			
306778-11A	Engineering Drawings	ccm 3020			
306778-13	Hazard Reports/System Description	ccm 3020			
306779	WINDOW FRAMES - FLT	ccm 3020			
306779-9	FMEA/CIL	ccm 3020			
306779-11A	Engineering Drawings	ccm 3020			
306779-13	Hazard Reports/System Description	ccm 3020			
306779-17	Limited Life List	ccm 3020			
306779-27	Reliability and Maintainability Prediction Report	ccm 3020			
306780	A/L CREWLOCK WALL BRACKET KIT (SDG33111446-001 & -003)	ccm 3204			
306780-11A	Hardware Drawings	ccm 3204			
306780-13	Hazard Report/System Description	ccm 3204			
306780-32	Mass Properties	ccm 3204			
306781	WINDOW FRAME, SPARE	ccm 3020			
306781-11A	Hardware Drawings	ccm 3020			
306781-13	Hazard Report/System Description	ccm 3020			
306783	FLUID PUMPING UNIT (FPU)	ccm 3205			
306783-9	FMEA/CILS	ccm 3205			
306783-11A	Hardware Drawings	ccm 3205			
306783-13	Hazard Reports/System Description	ccm 3205			
306783-17	Limited Life List	ccm 3205			
306783-27	Reliability and Maintainability Prediction Report	ccm 3205			
306783-32	Mass Properties Reports	ccm 3205			
306783-34	Volume Report	ccm 3205			
306806	NPRV (STBD ENCONCONE)	ccm 3060			
306806-9	FMEA CIL	ccm 3060			
306806-11A	Hareware Drawings	ccm 3060			
306806-17	Limited Life List	ccm 3060			
306806-27	Reliability and Maintainability Prediction Report	ccm 3060			
306807	NPRV (PORT ENDCONE)	ccm 3060			
306807-9	FMEA CIL	ccm 3060			
306807-11A	Hareware Drawings	ccm 3060			
306807-17	Limited Life List	ccm 3060			
306807-27	Reliability and Maintainability Prediction Report	ccm 3060			
306808	PPRV (STBD ENDCONE)	ccm 3060			
306808-9	FMEA CIL	ccm 3060			
306808-11A	Hareware Drawings	ccm 3060			
306808-17	Limited Life List	ccm 3060			
306808-27	Reliability and Maintainability Prediction Report	ccm 3060			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306809	PPRV (PORT ENDCONE	ccm 3060			
306809-9	FMEA CIL	ccm 3060			
306809-11A	Hareware Drawings	ccm 3060			
306809-17	Limited Life List	ccm 3060			
306809-27	Reliability and Maintainability Prediction Report	ccm 3060			
306810	PBA QD'S	ccm 3060			
306810-9	FMEA CIL	ccm 3060			
306810-11A	Hareware Drawings	ccm 3060			
306810-17	Limited Life List	ccm 3060			
306810-27	Reliability and Maintainability Prediction Report	ccm 3060			
306811	PUMP MOTOR	ccm 3060			
306811-9	FMEA CIL	ccm 3060			
306811-11A	Hareware Drawings	ccm 3060			
306811-17	Limited Life List	ccm 3060			
306811-27	Reliability and Maintainability Prediction Report	ccm 3060			
306812	MICROBIAL CHECK VALVE	ccm 3060			
306812-9	FMEA CIL	ccm 3060			
306812-11A	Hareware Drawings	ccm 3060			
306812-17	Limited Life List	ccm 3060			
306812-27	Reliability and Maintainability Prediction Report	ccm 3060			
306813	CREW QUARTERS RACK (HAB 103)	ccm 3060			
306813-9	FMEA CIL	ccm 3060			
306813-11A	Hareware Drawings	ccm 3060			
306813-17	Limited Life List	ccm 3060			
306813-27	Reliability and Maintainability Prediction Report	ccm 3060			
306813-32	Mass Properties	ccm 3060			
306813-33	Power/Thermal	ccm 3060			
306814	CREW QUARTERS RACK (HAB 102)	ccm 3060			
306814-9	FMEA CIL	ccm 3060			
306814-11A	Hareware Drawings	ccm 3060			
306814-17	Limited Life List	ccm 3060			
306814-27	Reliability and Maintainability Prediction Report	ccm 3060			
306814-32	Mass Properties	ccm 3060			
306814-33	Power/Thermal	ccm 3060			
306815	CREW QUARTERS RACK (HAB 1Z3)	ccm 3060			
306815-9	FMEA CIL	ccm 3060			
306815-11A	Hareware Drawings	ccm 3060			
306815-17	Limited Life List	ccm 3060			
306815-27	Reliability and Maintainability Prediction Report	ccm 3060			
306815-32	Mass Properties	ccm 3060			
306815-33	Power/Thermal	ccm 3060			
306816	CREW QUARTERS RACK (HAB 1Z3)	ccm 3060			
306816-9	FMEA CIL	ccm 3060			
306816-11A	Hareware Drawings	ccm 3060			
306816-17	Limited Life List	ccm 3060			
306816-27	Reliability and Maintainability Prediction Report	ccm 3060			
306816-32	Mass Properties	ccm 3060			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306816-33	Power/Thermal	ccm 3060			
306817	ZSR RACK (HAB 106)	ccm 3060			
306817-9	FMEA CIL	ccm 3060			
306817-11A	Hareware Drawings	ccm 3060			
306817-17	Limited Life List	ccm 3060			
306817-27	Reliability and Maintainability Prediction Report	ccm 3060			
306818	ZSR RACK (HAB 105)	ccm 3060			
306818-9	FMEA CIL	ccm 3060			
306818-11A	Hareware Drawings	ccm 3060			
306818-17	Limited Life List	ccm 3060			
306818-27	Reliability and Maintainability Prediction Report	ccm 3060			
306819	ZSR RACK (HAB 1D6)	ccm 3060			
306819-9	FMEA CIL	ccm 3060			
306819-11A	Hareware Drawings	ccm 3060			
306819-17	Limited Life List	ccm 3060			
306819-27	Reliability and Maintainability Prediction Report	ccm 3060			
306820	ZSR RACK (HAB 1D4)	ccm 3060			
306820-9	FMEA CIL	ccm 3060			
306820-11A	Hareware Drawings	ccm 3060			
306820-17	Limited Life List	ccm 3060			
306820-27	Reliability and Maintainability Prediction Report	ccm 3060			
306821	SECOND TVIS RACK	ccm 3060			
306821-9	FMEA CIL	ccm 3060			
306821-11A	Hareware Drawings	ccm 3060			
306821-17	Limited Life List	ccm 3060			
306821-27	Reliability and Maintainability Prediction Report	ccm 3060			
306821-32	Mass Properties	ccm 3060			
306821-33	Power/Thermal	ccm 3060			
306822	ZSR (GALLEY) RACK (HAB 1Z6)	ccm 3060			
306822-9	FMEA CIL	ccm 3060			
306822-11A	Hareware Drawings	ccm 3060			
306822-17	Limited Life List	ccm 3060			
306822-27	Reliability and Maintainability Prediction Report	ccm 3060			
306822-32	Mass Properties	ccm 3060			
306822-33	Power/Thermal	ccm 3060			
306823	ZSR (GALLEY) RACK (HAB 1Z5)	ccm 3060			
306823-9	FMEA CIL	ccm 3060			
306823-11A	Hareware Drawings	ccm 3060			
306823-17	Limited Life List	ccm 3060			
306823-27	Reliability and Maintainability Prediction Report	ccm 3060			
306823-32	Mass Properties	ccm 3060			
306823-33	Power/Thermal	ccm 3060			
306824	CHeCS #1 RACK	ccm 3060			
306824-9	FMEA CIL	ccm 3060			
306824-11A	Hareware Drawings	ccm 3060			
306824-17	Limited Life List	ccm 3060			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306824-27	Reliability and Maintainability Prediction Report	ccm 3060			
306824-32	Mass Properties	ccm 3060			
306824-33	Power/Thermal	ccm 3060			
306825	CHeCS #1 RACK	ccm 3060			
306825-9	FMEA CIL	ccm 3060			
306825-11A	Hardware Drawings	ccm 3060			
306825-17	Limited Life List	ccm 3060			
306825-27	Reliability and Maintainability Prediction Report	ccm 3060			
306825-32	Mass Properties	ccm 3060			
306825-33	Power/Thermal	ccm 3060			
306826	SCAR RACK	ccm 3060			
306826-9	FMEA CIL	ccm 3060			
306826-11A	Hardware Drawings	ccm 3060			
306826-17	Limited Life List	ccm 3060			
306826-27	Reliability and Maintainability Prediction Report	ccm 3060			
306827	CHeCS #2 RACK	ccm 3060			
306827-9	FMEA CIL	ccm 3060			
306827-11A	Hardware Drawings	ccm 3060			
306827-17	Limited Life List	ccm 3060			
306827-27	Reliability and Maintainability Prediction Report	ccm 3060			
306827-32	Mass Properties	ccm 3060			
306827-33	Power/Thermal	ccm 3060			
306828	ZSR CHeCS #61	ccm 3060			
306828-9	FMEA CIL	ccm 3060			
306828-11A	Hardware Drawings	ccm 3060			
306828-17	Limited Life List	ccm 3060			
306828-27	Reliability and Maintainability Prediction Report	ccm 3060			
306828-32	Mass Properties	ccm 3060			
306828-33	Power/Thermal	ccm 3060			
306829	REFRIGERATOR/FREEZER RACK (HAB 1D1)	ccm 3060			
306829-9	FMEA CIL	ccm 3060			
306829-11A	Hardware Drawings	ccm 3060			
306829-17	Limited Life List	ccm 3060			
306829-27	Reliability and Maintainability Prediction Report	ccm 3060			
306829-32	Mass Properties	ccm 3060			
306829-33	Power/Thermal	ccm 3060			
306830	REFRIGERATOR/FREEZER RACK (HAB 1N3)	ccm 3060			
306830-9	FMEA CIL	ccm 3060			
306830-11A	Hardware Drawings	ccm 3060			
306830-17	Limited Life List	ccm 3060			
306830-27	Reliability and Maintainability Prediction Report	ccm 3060			
306830-32	Mass Properties	ccm 3060			
306830-33	Power/Thermal	ccm 3060			
306831	REFRIGERATOR/FREEZER RACK (HAB 1N1)	ccm 3060			
306831-9	FMEA CIL	ccm 3060			
306831-11A	Hardware Drawings	ccm 3060			
306831-17	Limited Life List	ccm 3060			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306831-27	Reliability and Maintainability Prediction Report	ccm 3060			
306831-32	Mass Properties	ccm 3060			
306831-33	Power/Thermal	ccm 3060			
306832	WARDROOM TABLE	ccm 3060			
306832-9	FMEA CIL	ccm 3060			
306832-11A	Hardware Drawings	ccm 3060			
306832-17	Limited Life List	ccm 3060			
306832-27	Reliability and Maintainability Prediction Report	ccm 3060			
306832-32	Mass Properties	ccm 3060			
306832-33	Power/Thermal	ccm 3060			
306869	KBAR CAPTURE MECHANISM	ccm 4370			
306869-11A	Hardware Drawings	ccm 4370			
306869	KBAR CAPTURE MECHANISM	ccm 4370			
306869-11A	Hardware Drawings	ccm 4370			
306872	PCU HANDRAILS	ccm 3072			
306872-11A	Engineering Drawings	ccm 3072			
306872-32	Mass Properties	ccm 3072			
306872-34	Volume Report	ccm 3072			
306873	GAS CAN HANDRAILS	ccm 3072			
306873-11A	Engineering Drawings	ccm 3072			
306874	BCDU HANDRAILS	ccm 3072			
306874-11A	Engineering Drawings	ccm 3072			
306875	UTA HANDRAILS	ccm 3072			
306875-11A	Engineering Drawings	ccm 3072			
306876	FHRC HANDRAILS	ccm 3072			
306876-11A	Engineering Drawings	ccm 3072			
306877	DDCU-CP HANDRAILS	ccm 3072			
306877-11A	Engineering Drawings	ccm 3072			
306878	MBSU-CP HANDRAILS	ccm 3072			
306878-11A	Engineering Drawings	ccm 3072			
306879	PUMP MODULE HANDRAILS	ccm 3072			
306879-11A	Engineering Drawings	ccm 3072			
306880	CMG HANDRAILS	ccm 3072			
306880-11A	Engineering Drawings	ccm 3072			
306881	BATTERY HANDRAILS	ccm 3072			
306881-11A	Engineering Drawings	ccm 3072			
306882	MT/ULS REEL HANDRAILS	ccm 3072			
306882-11A	Engineering Drawings	ccm 3072			
306883	LDU HANDRAILS	ccm 3072			
306883-11A	Engineering Drawings	ccm 3072			
306884	KU BAND HANDRAILS	ccm 3072			
306884-11A	Engineering Drawings	ccm 3072			
306885	PVR HANDRAILS	ccm 3072			
306885-11A	Engineering Drawings	ccm 3072			
306886	PCU HANDRAILS	ccm 3072			
306886-11A	Engineering Drawings	ccm 3072			
306887	GAS CAN HANDRAILS	ccm 3072			
306887-11A	Engineering Drawings	ccm 3072			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306888	BCDU HANDRAILS	ccm 3072			
306888-11A	Engineering Drawings	ccm 3072			
306889	UTA HANDRAILS	ccm 3072			
306889-11A	Engineering Drawings	ccm 3072			
306890	FHRC HANDRAILS	ccm 3072			
306890-11A	Engineering Drawings	ccm 3072			
306891	DDCU-CP HANDRAILS	ccm 3072			
306891-11A	Engineering Drawings	ccm 3072			
306892	MBSU-CP HANDRAILS	ccm 3072			
306892-11A	Engineering Drawings	ccm 3072			
306893	PUMP MODULE HANDRAILS	ccm 3072			
306893-11A	Engineering Drawings	ccm 3072			
306894	CMG HANDRAILS	ccm 3072			
306894-11A	Engineering Drawings	ccm 3072			
306895	BATTERY HANDRAILS	ccm 3072			
306895-11A	Engineering Drawings	ccm 3072			
306896	MT/ULS REEL HANDRAILS	ccm 3072			
306896-11A	Engineering Drawings	ccm 3072			
306897	LDU HANDRAILS	ccm 3072			
306897-11A	Engineering Drawings	ccm 3072			
306898	KU BAND HANDRAILS	ccm 3072			
306898-11A	Engineering Drawings	ccm 3072			
306899	PVR HANDRAILS	ccm 3072			
306899-11A	Engineering Drawings	ccm 3072			
306902	UOP (LAB - X1)	ccm 5389			
306902-11A	Engineering Drawings	ccm 5389			
306903	UOP (LAB - X2)	ccm 5389			
306903-11A	Engineering Drawings	ccm 5389			
306904	UOP (LAB - X3)	ccm 5389			
306904-11A	Engineering Drawings	ccm 5389			
306905	UOP (LAB - X4)	ccm 5389			
306905-11A	Engineering Drawings	ccm 5389			
306906	UOP (MSS CUPOLA)	ccm 5389			
306906-11A	Engineering Drawings	ccm 5389			
306907	UOP (LAB)	ccm 5389			
306907-11A	Engineering Drawings	ccm 5389			
306908	UOP (NODE 1)	ccm 5389			
306908-11A	Engineering Drawings	ccm 5389			
306909	UOP (LAB - X1)	ccm 5389			
306909-11A	Engineering Drawings	ccm 5389			
306910	UOP (LAB - X4)	ccm 5389			
306910-11A	Engineering Drawings	ccm 5389			
306911	UOP (NODE 1)	ccm 5389			
306911-11A	Engineering Drawings	ccm 5389			
307018	UOP (AIRLOCK)	ccm 5389			
307018-11A	Engineering Drawings	ccm 5389			
306912	SAPA #1&2 TARGET	ccm 3072			
306912-11A	Engineering Drawings	ccm 3072			
306913	SAPA #1&2 HANDRAILS	ccm 3072			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306913-11A	Engineering Drawings	ccm 3072			
306914	SAPA #1&2 HANDRAIL PIN	ccm 3072			
306914-11A	Engineering Drawings	ccm 3072			
306915	SAPA #1&2 HANDRAIL PIN	ccm 3072			
306915-11A	Engineering Drawings	ccm 3072			
306916	SAPA #1&2 HANDRAILS	ccm 3072			
306916-11A	Engineering Drawings	ccm 3072			
306917	PCU HANDRAILS	ccm 3072			
306917-11A	Engineering Drawings	ccm 3072			
306918	PCU HANDRAIL PIN	ccm 3072			
306918-11A	Engineering Drawings	ccm 3072			
306919	PCU HANDRAILS PIN	ccm 3072			
306919-11A	Engineering Drawings	ccm 3072			
306920	PCU MTC TARGET	ccm 3072			
306920-11A	Engineering Drawings	ccm 3072			
306921	SAPA #3 HANDRAILS	ccm 3072			
306921-11A	Engineering Drawings	ccm 3072			
306922	SAPA #3 HANDRAIL PIN	ccm 3072			
306922-11A	Engineering Drawings	ccm 3072			
306923	SAPA #3 HANDRAIL PIN	ccm 3072			
306923-11A	Engineering Drawings	ccm 3072			
306924	SAPA #3 HANDRAILS	ccm 3072			
306924-11A	Engineering Drawings	ccm 3072			
306925	SAPA #4 MTC TARGET	ccm 3072			
306925-11A	Engineering Drawings	ccm 3072			
306926	SAPA #4 HANDRAILS	ccm 3072			
306926-11A	Engineering Drawings	ccm 3072			
306927	SAPA #4 HANDRAILS	ccm 3072			
306927-11A	Engineering Drawings	ccm 3072			
306928	SAPA #4 HANDRAILS	ccm 3072			
306928-11A	Engineering Drawings	ccm 3072			
306929	SAPA #4 HANDRAILS	ccm 3072			
306929-11A	Engineering Drawings	ccm 3072			
306930	SAPA #5 MTC TARGET	ccm 3072			
306930-11A	Engineering Drawings	ccm 3072			
306931	SAPA #5 HANDRAILS	ccm 3072			
306931-11A	Engineering Drawings	ccm 3072			
306932	SAPA #5 HANDRAIL PIN	ccm 3072			
306932-11A	Engineering Drawings	ccm 3072			
306933	SAPA #5 HANDRAIL PIN	ccm 3072			
306933-11A	Engineering Drawings	ccm 3072			
306934	SAPA #5 HANDRAIL	ccm 3072			
306934-11A	Engineering Drawings	ccm 3072			
306935	SAPA #6 MTC TARGET	ccm 3072			
306935-11A	Engineering Drawings	ccm 3072			
306936	SAPA #6 HANDRAILS	ccm 3072			
306936-11A	Engineering Drawings	ccm 3072			
306937	SAPA #6 HANDRAIL PIN	ccm 3072			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306937-11A	Engineering Drawings	ccm 3072			
306938	SAPA #6 HANDRAIL PIN	ccm 3072			
306938-11A	Engineering Drawings	ccm 3072			
306939	SAPA #6 HANDRAILS	ccm 3072			
306939-11A	Engineering Drawings	ccm 3072			
306940	BCDU HANDRAILS	ccm 3072			
306940-11A	Engineering Drawings	ccm 3072			
306941	BCDU HANDRAIL PIN	ccm 3072			
306941-11A	Engineering Drawings	ccm 3072			
306942	BCDU HANDRAIL PIN	ccm 3072			
306942-11A	Engineering Drawings	ccm 3072			
306943	UTA HANDRAILS	ccm 3072			
306943-11A	Engineering Drawings	ccm 3072			
306944	UTA HANDRAIL PIN	ccm 3072			
306944-11A	Engineering Drawings	ccm 3072			
306945	UTA HANDRAIL PIN	ccm 3072			
306945-11A	Engineering Drawings	ccm 3072			
306946	FHRC HANDRAILS	ccm 3072			
306946-11A	Engineering Drawings	ccm 3072			
306947	FHRC HANDRAIL PIN	ccm 3072			
306947-11A	Engineering Drawings	ccm 3072			
306948	FHRC HANDRAILS PIN	ccm 3072			
306948-11A	Engineering Drawings	ccm 3072			
306952	LWAPA #5 MTC TARGET	ccm 3072			
306952-11A	Engineering Drawings	ccm 3072			
306953	LWAPA #5 HANDRAILS	ccm 3072			
306953-11A	Engineering Drawings	ccm 3072			
306954	LWAPA #5 HANDRAIL PIN	ccm 3072			
306954-11A	Engineering Drawings	ccm 3072			
306955	LWAPA #5 HANDRAIL PIN	ccm 3072			
306955-11A	Engineering Drawings	ccm 3072			
306956	LWAPA #5 HANDRAILS	ccm 3072			
306956-11A	Engineering Drawings	ccm 3072			
306960	LWAPA #6 MTC TARGET	ccm 3072			
306960-11A	Engineering Drawings	ccm 3072			
306961	LWAPA #6 HANDRAILS	ccm 3072			
306961-11A	Engineering Drawings	ccm 3072			
306962	LWAPA #6 HANDRAIL PIN	ccm 3072			
306962-11A	Engineering Drawings	ccm 3072			
306963	LWAPA #6 HANDRAIL PIN	ccm 3072			
306963-11A	Engineering Drawings	ccm 3072			
306964	LWAPA #6 HANDRAILS	ccm 3072			
306964-11A	Engineering Drawings	ccm 3072			
306965	PUMP MODULE HANDRAILS	ccm 3072			
306965-11A	Engineering Drawings	ccm 3072			
306966	PUMP MODULE HANDRAIL PIN	ccm 3072			
306966-11A	Mass Properties	ccm 3072			
306966-32	Engineering Drawings	ccm 3072			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306967	PUMP MODULE HANDRAIL PIN	ccm 3072			
306967-11A	Mass Properties	ccm 3072			
306967-32	Engineering Drawings	ccm 3072			
306968	LAPA #1 MTC TARGET	ccm 3072			
306968-11A	Engineering Drawings	ccm 3072			
306969	LAPA #1 HANDRAILS	ccm 3072			
306969-11A	Engineering Drawings	ccm 3072			
306970	LAPA #1 HANDRAIL PIN	ccm 3072			
306970-11A	Engineering Drawings	ccm 3072			
306971	LAPA #1 HANDRAIL PIN	ccm 3072			
306971-11A	Engineering Drawings	ccm 3072			
306972	LAPA #1 HANDRAILS	ccm 3072			
306972-11A	Engineering Drawings	ccm 3072			
306973	CMG HANDRAILS	ccm 3072			
306973-11A	Engineering Drawings	ccm 3072			
306974	CMG HANDRAIL PIN	ccm 3072			
306974-11A	Engineering Drawings	ccm 3072			
306975	CMG HANDRAIL PIN	ccm 3072			
306975-11A	Engineering Drawings	ccm 3072			
306976	LWAPA #1 MTC TARGET	ccm 3072			
306976-11A	Engineering Drawings	ccm 3072			
306977	LWAPA #1 HANDRAILS	ccm 3072			
306977-11A	Engineering Drawings	ccm 3072			
306978	LWAPA #1 HANDRAIL PIN	ccm 3072			
306978-11A	Engineering Drawings	ccm 3072			
306979	LWAPA #1 HANDRAIL PIN	ccm 3072			
306979-11A	Engineering Drawings	ccm 3072			
306980	LWAPA #1 HANDRAIL	ccm 3072			
306980-11A	Engineering Drawings	ccm 3072			
306981	BATTERY HANDRAILS	ccm 3072			
306981-11A	Engineering Drawings	ccm 3072			
306982	BATTERY HANDRAIL PIN	ccm 3072			
306982-11A	Engineering Drawings	ccm 3072			
306983	BATTERY HANDRAIL PIN	ccm 3072			
306983-11A	Engineering Drawings	ccm 3072			
306984	MAPA #1 MTC TARGET	ccm 3072			
306984-11A	Engineering Drawings	ccm 3072			
306985	MAPA #1 HARDRAILS	ccm 3072			
306985-11A	Engineering Drawings	ccm 3072			
306986	MAPA #1 HANDRAIL PIN	ccm 3072			
306986-11A	Engineering Drawings	ccm 3072			
306987	MAPA #1 HANDRAIL PIN	ccm 3072			
306987-11A	Engineering Drawings	ccm 3072			
306988	MAPA #1 HANDRAIL	ccm 3072			
306988-11A	Engineering Drawings	ccm 3072			
306989	MT/ULS HANDRAILS	ccm 3072			
306989-11A	Engineering Drawings	ccm 3072			
306990	MT/ULS HANDRAIL PIN	ccm 3072			
306990-11A	Engineering Drawings	ccm 3072			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

306991	MT/ULS HANDRAIL PIN	ccm 3072			
306991-11A	Engineering Drawings	ccm 3072			
306992	LWAPA #3 MRC TARGET	ccm 3072			
306992-11A	Engineering Drawings	ccm 3072			
306993	LWAPA # HANDRAILS	ccm 3072			
306993-11A	Engineering Drawings	ccm 3072			
306994	LWAPA #3 HANDRAIL PIN	ccm 3072			
306994-11A	Engineering Drawings	ccm 3072			
306995	LWAPA #3 HANDRAIL PIN	ccm 3072			
306995-11A	Engineering Drawings	ccm 3072			
306996	LWAPA #4 MTC TARGET	ccm 3072			
306996-11A	Engineering Drawings	ccm 3072			
306997	LDU HANDRAILS	ccm 3072			
306997-11A	Engineering Drawings	ccm 3072			
306998	LDU HANDRAIL PIN	ccm 3072			
306998-11A	Engineering Drawings	ccm 3072			
306999	LDU HANDRAIL PIN	ccm 3072			
306999-11A	Engineering Drawings	ccm 3072			
307000	LWAPA #4 MTC TARGET	ccm 3072			
307000-11A	Engineering Drawings	ccm 3072			
307001	LWAPA #4 HANDRAILS	ccm 3072			
307001-11A	Engineering Drawings	ccm 3072			
307002	LWAPA #4 HANDRAIL PIN	ccm 3072			
307002-11A	Engineering Drawings	ccm 3072			
307003	LWAPA #4 HANDRAIL PIN	ccm 3072			
307003-11A	Engineering Drawings	ccm 3072			
307004	LWAPA #4 HANDRAILS	ccm 3072			
307004-11A	Engineering Drawings	ccm 3072			
307005	KU BAND HANDRAILS	ccm 3072			
307005-11A	Engineering Drawings	ccm 3072			
307006	KU BAND PIN	ccm 3072			
307006-11A	Engineering Drawings	ccm 3072			
307007	KU BAND PIN	ccm 3072			
307007-11A	Engineering Drawings	ccm 3072			
307008	LWAPA #2 MTC TARGET	ccm 3072			
307008-11A	Engineering Drawings	ccm 3072			
307009	LWAPA #2 HANDRAILS	ccm 3072			
307009-11A	Engineering Drawings	ccm 3072			
307010	LWAPA #2 HANDRAIL PIN	ccm 3072			
307010-11A	Engineering Drawings	ccm 3072			
307011	LWAPA #2 HANDRAILS PIN	ccm 3072			
307011-11A	Engineering Drawings	ccm 3072			
307012	LWAPA #2 HANDRAILS	ccm 3072			
307012-11A	Engineering Drawings	ccm 3072			
307013	PVR HANDRAILS	ccm 3072			
307013-11A	Engineering Drawings	ccm 3072			
307014	PVR PIN	ccm 3072			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

307014-11A	Engineering Drawings	ccm 3072			
307015	PVR PIN	ccm 3072			
307015-11A	Engineering Drawings	ccm 3072			
307016	PVR HANDRAILS	ccm 3072			
307016-11A	Engineering Drawings	ccm 3072			
307019	PUSHROD PROTECTIVE COVERS	ccm 5897			
307019-32	Mass Properties	ccm 5897			
307019-34	Volume Report	ccm 5897			
307024	BRACKET, AFT CLOSEOUT	ccm 5477			
307024-11A	Engineering Drawings	ccm 5477			
307025	BRACKET, SUPPORT FACEPLATE	ccm 5477			
307025-11A	Engineering Drawings	ccm 5477			
307028	CMG HANDRAILS	ccm 3072			
307028-11A	Engineering Drawings	ccm 3072			
307029	CMG HANDRAILS	ccm 3072			
307029-11A	Engineering Drawings	ccm 3072			
307030	KU BAND HANDRAILS	ccm 3072			
307030-11A	Engineering Drawings	ccm 3072			
307031	KU BAND HANDRAILS	ccm 3072			
307031-11A	Engineering Drawings	ccm 3072			
307032	KU BAND HANDRAILS	ccm 3072			
307032-11A	Engineering Drawings	ccm 3072			
307033	SSPF BASE ASSEMBLY	ccm 5477			
307033-11A	Engineering Drawings	ccm 5477			
307034	SSPF BASE ASSEMBLY	ccm 5477			
307034-11A	Engineering Drawings	ccm 5477			
307035	UPPER STRUCTURE ASSEMBLY	ccm 5477			
307035-11A	Engineering Drawings	ccm 5477			
307036	UPPER STRUCTURE ASSEMBLY	ccm 5477			
307036-11A	Engineering Drawings	ccm 5477			
307037	HANDRAIL ASSEMBLY (MBSU)	CCM 6180			
307037-11A	Engineering Drawings	CCM 6180			
307038	HANDRAIL ASSEMBLY (MBSU)	CCM 6180			
307038-11A	Engineering Drawings	CCM 6180			
307060	EVA HANDRAIL ASSY	CCM 6180			
307060-11A	Engineering Drawings	CCM 6180			
307061	EVA HANDRAIL ASSY	CCM 6180			
307061-11A	Engineering Drawings	CCM 6180			
307062	EVA HANDRAIL ASSY	CCM 6180			
307062-11A	Engineering Drawings	CCM 6180			
307063	HANDRAIL	CCM 6180			
307063-11A	Engineering Drawings	CCM 6180			
307064	PIN	CCM 6180			
307064-11A	Engineering Drawings	CCM 6180			
307065	PIN	CCM 6180			
307065-11A	Engineering Drawings	CCM 6180			
405053	RETRO REFLECTOR	CCM 512			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

405053-1	Acceptance Data Package	CCM 2752			
405053-13	SMACR Acceptance	CCM 512			
405053-26	Problem Reporting & Corrective Action	CCM 512			
405054	CROSS ON-STICK SHUTTLE DOCKING TARGETS	ecm 1270			
405054-1	Acceptance Data Package	ecm 1270			
405054-13	SMACR Acceptance	ecm 1270			
405054-26	Problem Reporting & Corrective Action	ecm 1270			
405055	PERSONAL COMPUTER WITH PENTIUM PROCESSOR	CCM 512			
405055-1	Acceptance Data Package	CCM 512			
405055-13	SMACR Acceptance	CCM 512			
405055-26	Problem Reporting & Corrective Action				
405056	LASER PRINTER	CCM 512			
405056-1	Acceptance Data Package	CCM 512			
405056-13	SMACR Acceptance	CCM 512			
405056-26	Problem Reporting & Corrective Action	CCM 512			
XXXX	GROUND SEGMENT CI #ISSA 09A (DATA ONLY)				
	DID #28 - INITIAL (GSSRVCM)				
	DID #28 - FINAL	CCM 773		1 A/R	
-	DID #28 - FINAL	CCM 773		2A	
	DID #28 - FINAL	CCM 773		1R	
	DID #28 - FINAL	CCM 773		2A.1	
	DID #28 - FINAL	CCM 773		3A	
	DID #28 - FINAL	CCM 773		2R	
	DID #28 - FINAL	CCM 773		4A	
	DID #28 - FINAL	CCM 773		5A	
	DID #28 - FINAL	CCM 773		6A	
	DID #28 - FINAL	CCM 773		7A	
	DID #28 - FINAL	CCM 773		4R	
	DID #28 - FINAL	CCM 773		UF-1	
	DID #28 - FINAL	CCM 773		8A	
	DID #28 - FINAL	CCM 773		UF-2	
	DID #28 - FINAL	CCM 773		9A	
	DID #28 - FINAL	CCM 773		9A	
	DID #28 - FINAL	CCM 773		9A.1	
	DID #28 - FINAL	CCM 773		11A	
	DID #28 - FINAL	CCM 773		12A	
	DID #28 - FINAL	CCM 773		3R	
	DID #28 - FINAL	CCM 773		0	
	DID #28 - FINAL	CCM 773		13A	
	DID #28 - FINAL	CCM 773		10A	
	DID #28 - FINAL	CCM 773		1J/A	
	DID #28 - FINAL	CCM 773		1J	
	DID #28 - FINAL	CCM 773		UF3	
	DID #28 - FINAL	CCM 773		UF4	
	DID #28 - FINAL	CCM 773		2J/A	
	DID #28 - FINAL	CCM 773		9R.1	
	DID #28 - FINAL	CCM 773		9R.2	
	DID #28 - FINAL	CCM 773		14A	
	DID #28 - FINAL	CCM 773		UF5	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID #28 - FINAL	CCM 773		20A	
	DID #28 - FINAL	CCM 773		8R	
	DID #28 - FINAL	CCM 773		1E	
	DID #28 - FINAL	CCM 773		10R	
	DID #28 - FINAL	CCM 773		17A	
	DID #28 - FINAL	CCM 773		11R	
	DID #28 - FINAL	CCM 773		12R	
	DID #28 - FINAL	CCM 773		18A	
	DID #28 - FINAL	CCM 773		19A	
	DID #28 - FINAL	CCM 773		15A	
	DID #28 - FINAL	CCM 773		UF6	
	DID #28 - FINAL	CCM 773		UF7	
	DID #28 - FINAL	CCM 773		16A	
	DID 3.4.19 - OVERALL THERMAL MATHEMATICAL MODELS PASSIVE MODELS OF MBS IN- CARGO ELEMENT CONFIGURATION	CCM 1240			
	DID 3.14.9 - OVERALL THERMAL MATHEMATICAL MODELS PASSIVE THERMAL MODELS- OF MBS ON-ORBIT, DEPLOYED CONFIGURATION	CCM 1240			
	NODE 2	CCM 561			
	DID 3.2.1 - PROGRAM SCHEDULES	CCM 561			
	DID 3.5.6 - INTERFACE DATA - SSP 41171 PART 1	CCM 561			
	DID 3.5.6 - INTERFACE DATA - SSP 41174 PART 2	CCM 561			
	DID 3.5.6 - INTERFACE DATA SSP 41150	CCM 561			
	DID 3.5.6 - INTERFACE DATA SSP 41151	CCM 561			
	DID 3.5.6 - INTERFACE DATA SSP 42000	CCM 561			
	DID 3.5.6 - INTERFACE DATA SSP 42001	CCM 561			
	DID 3.5.6 - INTERFACE DATA - NSTS XXXX NODE 2 TO SHUTTLE ICD	CCM 561			
	DID 3.5.6 - INTERFACE DTA - SSP XXXXX NODE 2 FLIGHT H/W TO LLS GSE ICD	CCM 561			
	DID 3.5.1 - ENGINEERING CAD MODELS (INITIAL)	CCM 561			
	DID 3.5.1 - ENGINEERING CAD MODESL (UPDATE) - 6 MONTH INCREMENTAL UPDATE IF APPLICABLE	CCM 561			
	DID 3.5.3 - ENGINEERING DRAWINGS - 45 DAYS BEFORE DR 1	CCM 561			
	DID 3.5.3 - ENGINEERING DRAWINGS - 45 DAYS BEFORE DR 1	CCM 561			
	DID 3.5.4C - INDENTURED PARTS LIST REPORT-INITIAL QUARTERLY: UPDATES ON 1ST IN FEBRUARY, MAY, AUGUST, AND NOVEMBER.	CCM 561			
	DID 3.5.5B - CONNECTIVITY DATA	CCM 561			
	DID 3.5.5B - CONNECTIVITY DATA - UPDATE	CCM 561			
	DID 3.5.5B - CONNECTIVITY DATA - UPDATE	CCM 561			
	DID 3.5.5B - CONNECTIVITY DATA - UPDATE	CCM 561			
	DID 3.1.7 - ENGINEERING CHANGE DATA	CCM 561			
	DID 3.5.10C - POWER/THERMAL CONNECTIVITY REPORT	CCM 561			
	PART A INITIAL SUBMITTAL	CCM 561			
	PART A SUBSEQUENT SUBMITTAL	CCM 561			
	PART A SUBSEQUENT SUBMITTAL	CCM 561			
	DID 3.5.10C - POWER/THERMAL CONNECTIVITY REPORT	CCM 561			
	PART B INITIAL SUBMITTAL	CCM 561			
	PART B SUBSEQUENT SUBMITTAL	CCM 561			
	PART B SUBSEQUENT SUBMITTAL	CCM 561			
	DID 3.5.10A - VOLUME REPORT	CCM 561			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	INITIAL - 30 DAYS PRIOR TO DRI	CCM 561			
	UPDATES - SEMI-ANNUAL	CCM 561			
	UPDATES - SEMI-ANNUAL	CCM 561			
	UPDATES - SEMI-ANNUAL	CCM 561			
	UPDATES - SEMI-ANNUAL	CCM 561			
	DID 3.4.15 - LOADS & DYNAMICS ANALYSES MATH MODEL REQUIREMENTS	CCM 561			
	DAC MODELS	CCM 561			
	DAC MODELS	CCM 561			
	DAC MODELS	CCM 561			
	VAC MODELS	CCM 561			
	DETAILED DYNAMIC MODEL	CCM 561			
	DID 3.4.20 - FRACTURE/IMPACT DAMAGE CONTROL (CRITICAL ITEMS LIST)	CCM 561			
	DID 3.4.20 - FRACTURE/IMPACT DAMAGE CONTROL (CRITICAL ITEMS LIST)	CCM 561			
	DID 3.4.20 - FRACTURE/IMPACT DAMAGE CONTROL (CONTROL SUMMARY REPORTS)	CCM 561			
	DID 3.4.20 - FRACTURE/IMPACT DAMAGE CONTROL (CONTROL SUMMARY REPORTS)	CCM 561			
	DID 3.4.18 - METEOROID/DEBRIS PROTECTION DATA	CCM 561			
	DID 3.4.18 - METEOROID/DEBRIS PROTECTION DATA	CCM 561			
	DID 3.4.18 - METEOROID/DEBRIS PROTECTION DATA	CCM 561			
	DID 3.4.18 - METEOROID/DEBRIS PROTECTION DATA	CCM 561			
	DID 3.4.18 - METEOROID/DEBRIS PROTECTION DATA	CCM 561			
	DID 3.4.1 - MICROGRAVITY/VIBROACOUSTIC PERFORMANCE	CCM 561			
	INITIAL MODELS (FINITE & STATISTICAL)	CCM 561			
	UPDATED MODELS (FINITE & STATISTICAL)	CCM 561			
	UPDATED MODELS (FINITE & STATISTICAL)	CCM 561			
	VERIFIED MODELS (FINITE)	CCM 561			
	VERIFIED MODELS (STATISTICAL)	CCM 561			
	INITIAL DISTURBANCE DATA	CCM 561			
	UPDATED DISTURBANCE DATA	CCM 561			
	VERIFIED DISTURBANCE DATA	CCM 561			
	COMPLIANCE ASSESSMENTS	CCM 561			
	COMPLIANCE ASSESSMENTS	CCM 561			
	COMPLIANCE ASSESSMENTS	CCM 561			
	DID 3.4.19 - OVERALL THERMAL MATHEMATICAL MODELS	CCM 561			
	DID 3.1.2 - ATMOSPHERE PRESSURE ANALYSIS	CCM 561			
	DID 3.1.2 - ATMOSPHERE PRESSURE ANALYSIS	CCM 561			
	DID 3.1.3 - INTERNAL CONTAMINATION ANALYSIS	CCM 561			
	DID 3.1.3 - INTERNAL CONTAMINATION ANALYSIS OFF-GAS TEST DATA	CCM 561			
	DID 3.1.4 - ATMOSPHERE CONDITION ANALYSIS THC DATA	CCM 561			
	VENTILATION DATA	CCM 561			
	VENTILATION DATA	CCM 561			
	IMV PRESSURE LOSS DATA	CCM 561			
	IMV PRESSURE LOSS DATA	CCM 561			
	DID 3.1.5 - RESPONSE TO EMERGENCY CONDITIONS ANALYSIS	CCM 561			
	DID 3.1.5 - RESPONSE TO EMERGENCY CONDITIONS ANALYSIS	CCM 561			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID 3.1.6 - WATER ANALYSIS	CCM 561			
	DID 3.1.6 - WATER ANALYSIS	CCM 561			
	DID 3.1.6 - WATER ANALYSIS	CCM 561			
	DID 3.4.13 - COMMUNICATION & TRACKING HARDWARE DATA	CCM 561			
	DID 3.4.13 - COMMUNICATION & TRACKING HARDWARE DATA	CCM 561			
	DID 3.4.13 - COMMUNICATION & TRACKING HARDWARE DATA	CCM 561			
	DID 3.4.13 - COMMUNICATION & TRACKING HARDWARE DATA	CCM 561			
	DID 3.4.21 - POWER STABILITY & TRANSIENT MODELS	CCM 561			
	DID 3.4.21 - POWER STABILITY & TRANSIENT MODELS	CCM 561			
	DID 3.4.21 - POWER STABILITY & TRANSIENT MODELS	CCM 561			
	DID 3.6.8 - ACOUSTIC NOISE SOURCE DATA	CCM 561			
	DID 3.6.8 - ACOUSTIC NOISE SOURCE DATA	CCM 561			
	DID 3.6.9 - EXTERNAL CONTAMINATION	CCM 561			
	DID 3.6.9 - EXTERNAL CONTAMINATION	CCM 561			
	DID 3.6.10 - IONIZING RADIATION ANALYSIS	CCM 561			
	DID 3.6.10 - IONIZING RADIATION ANALYSIS	CCM 561			
	DID 3.6.11 - EME CONTROL PLAN	CCM 561			
	DID 3.6.12 - EMC TEST REPORT	CCM 561			
	DID 3.6.13 - EME DESIGN ANALYSIS REPORT - INITIAL	CCM 561			
	DID 3.6.13 - EME DESIGN ANALYSIS REPORT - UPDATE	CCM 561			
	DID 3.6.14 - EMI TEST REPORTS	CCM 561			
	DID 3.13.1 - SYSTEM DESCRIPTION AND SAFETY HAZARD REPORTS	CCM 561			
	3.13.2 - INTERFACE SAFETY DATA	CCM 561			
	3.13.5 - MAINTAINABILITY CREW TIME ALLOCATION/PREDICTION REPORTS	CCM 561			
	DID 3.13.5 - MAINTAINABILITY CREW TIME ALLOCATION/PREDICTION REPORTS	CCM 561			
	3.13.7A - FAULT DETECTION, ISOLATION REPORT AND RECOVERY	CCM 561			
	3.13.3 - FAILURE MODES & EFFECTS ANALYSIS/CRITICAL ITEMS LIST REPORTS	CCM 561			
	3.13.3 - FAILURE MODES & EFFECTS ANALYSIS/CRITICAL ITEMS LIST REPORTS	CCM 561			
	DID 3.13.8 - LIMITED-LIFE ITEMS DATA	CCM 561			
	DID 3.13.8 - LIMITED-LIFE ITEMS DATA	CCM 561			
	DID 3.6.1 - EEE PARTS PROBLEM NOTIFICATION	CCM 561			
	DID 3.6.2 - APPROVED EEE PARTS & SUPPLIERS	CCM 561			
	INITIAL - DR1 + 3	CCM 561			
	FINAL	CCM 561			
	DID 3.6.4 - MATERIALS IDENTIFICATION USAGE LIST (MIUL) REFLECTING AS-BUILT CONDITION AT FAR + 3 MONTHS	CCM 561			
	DID 3.6.5 - MATERIALS USAGE AGREEMENTS (MUAS) REFLECTING AS-BUILT CONDITION AT FAR + 3 MONTHS	CCM 561			
	DID 3.1.9 - MDM CONNECTIVITY	CCM 561			
	INITIAL	CCM 561			
	30 DAYS PRIOR TO DR1	CCM 561			
	30 DAYS PRIOR TO DR2	CCM 561			
	FAR	CCM 561			
	UPDATES AS APPLICABLE BETWEEN REVIEWS	CCM 561			
	DID 3.1.1B - TEST AND VERIFICATION DATA	CCM 561			
	(1) REQUIREMENT TRACEABILITY & COMPLIANCE DATA	CCM 561			
	(2) INTEGRATION, VERIFICATION & TEST SCHEDULES	CCM 561			
	(3) INTEGRATION, VERIFICATION & TEST PLANNING DATA	CCM 561			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	(3) INTEGRATION, VERIFICATION & TEST PLANNING DATA	CCM 561			
	(3) INTEGRATION, VERIFICATION & TEST PLANNING DATA	CCM 561			
	(3) INTEGRATION, VERIFICATION & TEST PLANNING DATA	CCM 561			
	(4) SUBSYSTEM VERIFICATION PLANS	CCM 561			
	(4) SUBSYSTEM VERIFICATION PLANS	CCM 561			
	(4) SUBSYSTEM VERIFICATION PLANS	CCM 561			
	(4) SUBSYSTEM VERIFICATION PLANS	CCM 561			
	(5) HARDWARE TEST/DEMONSTRATION SPECIFICATIONS & PROCEDURES	CCM 561			
	(6) SOFTWARE TEST/DEMONSTRATION SPECIFICATIONS & PROCEDURES	CCM 561			
	(7) VERIFICATION REPORTS	CCM 561			
	(8) SIMULATOR DEVELOPMENT REQUIREMENTS	CCM 561			
	(9) OTHER DATA - 30 DAYS PRIOR TO DR 1	CCM 561			
	(9) OTHER DATA - UPDATES	CCM 561			
	DID 3.5.2 - ELEMENTS/STAGE BASELINE CONFIG DATA	CCM 561			
	DID 3.1.10 - WAIVERS AND DEVIATIONS	CCM 561			
	3.5.7C - WEIGHTS & MASS PROPERTIES REPORT - INITIAL	CCM 561			
	DID 3.5.7C - WEIGHTS & MASS PROPERTIES REPORT - UPDATES	CCM 561			
	VSC MOUNTING BRACKET	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	PDGF MOUNTING RING BOLTS	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	PDGF WASHER, CRES.	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	PDGF SELF-LOCKING NUTS	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	LAUNCH RESTRAINT BRACKET (PDGF HARNESS)	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	PDGF CONNECTOR SAVER SET	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	PDGF INTERFACE GAUGE TOOL	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	FRGF DRILL JIG	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	FRDF BOLTS	CCM 640			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 640			
	DID 41 - ENGINEERING DRAWINGS (REVISION TO ACBM INSTALLATION ON NODE 2- BERTHING PLATE ONLY	CCM 950			
	DID 3.12.9 - FOR FLIGHT 10A	CCM 2245			
	MPLM	CCM 1446			
	DID 3.5.1 - ENGINEERING CAD MODELS	CCM 1446			
	WIRELESS VIDEO SYSTEM	CCM 955			
	DID 1 - ACCEPTANCE DATA PACKAGE	CCM 955			
	DID 9 - FMEA/GIL	CCM 955			
	DID 13 - PHASE II: HAZARD REPORTS/SYSTEM DESCRIPTION	CCM 955			
	DID 13 - PHASE III APPROVED: HAZARD REPORTS/SYSTEM DESCRIPTION	CCM 955			
	DID 17 - LIMITED LIFE LIST	CCM 955			
	DID 27 - RELIABILITY AND MAINTAINABILITY PREDICTION REPORT	CCM 955			
	DID 32 - MASS PROPERTIES REPORT	CCM 955			
	DID 33 - POWER/THERMAL REPORT	CCM 955			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID 34 - VOLUME REPORT	CCM 955			
	CREW RESCUE VEHICLE (CRV) Flight 18A (March 2003)	ccm 580			
	DID # 12 - ELEMENT/END-ITEM SPECIFICATION - FINAL	ccm 580		CDR	
	DID # 14 - INTERFACE DATA - SSP XXXXX CRV to USOS (Node 3) ICD - FINAL	ccm 580		PDR	
	DID # 14 - INTERFACE DATA - SSP XXXXX Flight Hardware to LLS GSE ICD	ccm 580		PDR	
	DID # 40 - ENGINEERING 3/D CAD MODELS (INITIAL)	ccm 580		PDR	
	DID # 40 - FINAL AS-DESIGNED ENGINEERING CAD MODEL	ccm 580		L -15 MONTHS	
	DID # 40- ENGINEERING DRAWINGS-45 DAYS BEFORE DR1	ccm 580		45 DAYS BEFORE DR1	
	DID # 40 - ENGINEERING DRAWINGS-45 DAYS BEFORE DR2	ccm 580		45 DAYS BEFORE DR2	
	DID # 31 - INDENTURED PARTS LIST REPORT	ccm 580		CDR	
	INITIAL	ccm 580		L -44 MONTHS	
	UPDATES as applicable	ccm 580		1ST OF FEB, MAY, AUGUST AND NOV	
	DID # 43 - CONNECTIVITY DATA	ccm 580		L -24 MONTHS	
	DID # 43 - CONNECTIVITY DATA - UPDATE	ccm 580		L -6 MONTHS	
	DID #45 - POWER/THERMAL/CONNECTIVITY REPORT	ccm 580		DR1	
	PART A INITIAL SUBMITTAL	ccm 580			
	PART A VERIFIED DATA SUBMITTAL WITHIN 30 DAYS AFTER TEST	ccm 580			
	PART B INITIAL SUBMITTAL	ccm 580			
	PART B VERIFIED DATA SUBMITTAL WITHIN 30 DAYS AFTER TEST	ccm 580			
	DID #46 - VOLUME REPORT	ccm 580		Twice Yearly Starting 2/1/00	
	INITIAL - 30 DAYS PRIOR TO DR 1	ccm 580		30 DAYS BEFORE DR 1	
	VERIFIED DATA SUBMITTAL WITHIN 30 DAYS AFTER TEST	ccm 580			
	DID #3.1Rev A - REPORTS STRUCTURAL ANALYSIS OF GFE	ccm 580			
	INITIAL - AT DR 1	ccm 580		DR 1	
	UPDATE - AT DR 2	ccm 580		DR 2	
	UPDATE - AT FRR	ccm 580		FRR	
	DID #47 - LOADS & DYNAMICS ANALYSES MATH MODEL REQUIREMENTS	ccm 580		3/1/99 and yearly (DAC)	
	DID #47 - VAC MODELS	ccm 580		L-10 MONTHS	
	DETAILED DYNAMIC MODEL	ccm 580		L-9 MONTHS	
	DID #48 - FRACTURE/IMPACT DAMAGE CONTROL	ccm 580		COFR 1	
	(CRITICAL ITEMS LIST)	ccm 580		30 DAYS PRIOR TO DR1	
	DID #48 - FRACTURE/IMPACT DAMAGE CONTROL	ccm 580			
	(CRITICAL ITEMS LIST)	ccm 580		30 DAYS PRIOR TO DR2	
	DID #48 - FRACTURE/IMPACT DAMAGE CONTROL	ccm 580			
	(CONTROL SUMMARY REPORTS)	ccm 580		AT QUALIFICATION REVIEWS	
	DID #48 - FRACTURE/IMPACT DAMAGE CONTROL	ccm 580			
	(CONTROL SUMMARY REPORTS)	ccm 580		FRR	
	DID #49 - METEOROID/DEBRIS PROTECTION DATA	ccm 580		30 DAYS PRIOR TO DR1	
	DID #49 - METEOROID/DEBRIS PROTECTION DATA	ccm 580		30 DAYS PRIOR TO FRR	
	DID #49 - METEOROID/DEBRIS PROTECTION DATA	ccm 580		30 DAYS PRIOR TO FAR	
	DID #50 - MICROGRAVITY PERFORMANCE	ccm 580			
	INITIAL MODELS (FINITE & STATISTICAL)	ccm 580		SRR	
	VERIFIED MODELS (FINITE)	ccm 580		L - 12	
	VERIFIED MODELS (STATISTICAL)	ccm 580		L - 12	
	INITIAL DISTRUBANCE DATA	ccm 580		PDR	
	VERIFIED DISTURBANCE DATA	ccm 580		L - 18	
	COMPLIANCE ASSESSMENTS	ccm 580		CDR	
	DID #52- OVERALL THERMAL MATHEMATICAL MODELS	ccm 580		CDR	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID #3.1.2 - ATMOSPHERE PRESSURE ANALYSIS	ccm 580		30 DAYS PRIOR DR1	
	DID #3.1.2 - ATMOSPHERE PRESSURE ANALYSIS	ccm 580		30 DAYS PRIOR DR2	
	DID #3.1.3 - INTERNAL CONTAMINATION ANALYSIS	ccm 580		DR2	
	OFF-GAS TEST DATA	ccm 580		L - 18	
	DID #3.1.4 - CONDITION ATMOSPHERE ANALYSIS	ccm 580			
	VENTILATION DATA	ccm 580		30 DAYS PRIOR TO DR2	
	IMV PRESSURE LOSS DATA	ccm 580		30 DAYS PRIOR TO DR2	
	DID #3.1.5 - RESPONSE TO EMERGENCY CONDITIONS ANALYSIS	ccm 580		30 DAYS PRIOR TO DR2	
	DID #57 - ECLS ARCHITECTURE	ccm 580		DR1	
	DID #57 - ECLS ARCHITECTURE	ccm 580		DR2	
	DID #3.4.21 - POWER STABILITY & TRANSIENT MODELS - TBD	ccm 580		CDR	
	DID #3.6.8 - ACOUSTIC NOISE SOURCE DATA	ccm 580		DR2 -90 DAYS	
	DID #3.6.9 - EXTERNAL CONTAMINATION	ccm 580		DR2 -90 DAYS	
	DID #3.6.10 - IONIZING RADIATION ANALYSIS	ccm 580		DR1 -90 DAYS	
	DID #3.6.10 - IONIZING RADIATION ANALYSIS	ccm 580		DR2 -90 DAYS	
	DID #3.6.11 - EME CONTROL PLAN	ccm 580		DR1	
	DID #3.6.12 - EMC TEST REPORT	ccm 580		60 Days after completion of each test	
	DID #3.6.13 - EME DESIGN ANALYSIS REPORT-INITIAL	ccm 580		DR1	
	DID #3.1 - GROUND-BASED & IN-TRANSIT ENVIRONMENTS	ccm 580		DR1 - 90 DAYS	
	DID #3.1 - GROUND-BASED & IN-TRANSIT ENVIRONMENTS	ccm 580		DR2 -90 DAYS	
	DID #3.13.1 - SYSTEM DESCRIPTION AND SAFETY HAZARD REPORTS	ccm 580		45 DAYS PRIOR TO ELEMENT PHASED SAFETY REVIEWS	
	DID #3.13.2 - INTERFACE SAFETY DATA	ccm 580		90 PRIOR TO PRIME INTEGRATED SAFETY REVIEW	
	DID #26- PROBLEM/FAILURE REPORTS	ccm 580		AS REQUIRED	
	DID #3.13.10 - ACCEPTANCE DATA PACKAGE	ccm 580		ACCEPTANCE	
	DID #3.13.4 - RELIABILITY AND MAINTAINABILITY SOURCE DATA	ccm 580		127 DAYS PRIOR TO APPLICABLE SIR	
	DID #3.13.5 - MAINTAINABILITY CREW TIME ALLOCATION/PREDICTION REPORTS	ccm 580		127 Days Prior to SIR	
	DID #3.13.5 - MAINTAINABILITY CREW TIME ALLOCATION/PREDICTION REPORTS	ccm 580		127 Days Prior to COFr	
	DID #3.13.7A - FAULT DETECTION, ISOLATION REPORT & RECOVERY	ccm 580		(AR - 30 DAYS	
	DID #3.13.3 - FAILURE MODES & EFFECTS ANALYSIS/CRITICAL ITEMS LIST RPTS	ccm 580		127 DAYS PRIOR TO APPLICABLE SIR	
	DEFIBRILATOR	ccm 996			
	DID 1 - Acceptance Data Package	ccm 996			
	DID 3.1 - Reports, Structural Analysis of GFE	ccm 996			
	DID 3.3 - Volume	ccm 996			
	DID 3.4 - Analyses and Analytical Models of GFE	ccm 996			
	DID 9 - FMEA/CIL	ccm 996			
	DID 12 - Specifications	ccm 996			
	DID 24 - Qualification Test Report	ccm 996			
	DID 29 - Weight (including wet weight)	ccm 996			
	DID 33 - Power/Thermal	ccm 996			
	DID 35 - Performance and Characteristic Data	ccm 996			
	Additional data not listed in SSP 50177:	ccm 996			
	EMI Test Report	ccm 996			
	VOLATILE ORGANIC ANALYZER	ccm 996			
	DID 1 - Acceptance Data Package	ccm 996			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID 3.1 - Reports, Structural Analysis of GFE	ecm-996			
	DID 3.3 - Volume	ecm-996			
	DID 3.4 - Analyses and Analytical Models of GFE	ecm-996			
	DID 9 - FMEA/CIL	ecm-996			
	DID 12 - Specifications	ecm-996			
	DID 24 - Qualification Test Report	ecm-996			
	DID 29 - Weight (including wet weight)	ecm-996			
	DID 33 - Power/Thermal	ecm-996			
	DID 35 - Performance and Characteristic Data	ecm-996			
	Additional data not listed in SSP 50177:	ecm-996			
	EMI Test Report	ecm-996			
	ISOLATED INTERIM RESISTIVE EXERCISER DEVICE/VIBRATION ISOLATION SYSTEM (I-IRED/VIS)	ecm-1590			
	DID 1 - Acceptance Data Package	ecm-1590			
	DID 32 - Mass Properties Report	ecm-1590			
	DID 32 - Mass Properties Report	ecm-1590			
	INTERIM RESISTIVE EXERCISER DEVICE (IRED)				
	DID 1 - Acceptance Data Package	ecm-1590			
	DID 32 - Mass Properties Report	ecm-1590			
	DID 34 - Volume	ecm-1590			
	WARDROOM OUTFITTING	CCM-665			
	DID 1 - Acceptance Data Package	CCM-665			
	DID 3.4 - Analyses and Analytical Models of GFE	CCM-665			
	DID 4 - Software Interface Data	CCM-665			
	DID 5 - 1553 Data Requirements	CCM-665			
	DID 10 - Functional Flows	CCM-665			
	DID 12 - Specifications	CCM-665			
	DID 14 - Interface Control Documents	CCM-665			
	DID 27 - Reliability and Maintainability Prediction Report	CCM-665			
	DID 32 - Mass Properties	CCM-665			
	DID 33 - Power/Thermal	CCM-665			
	DID 35 - Performance and Characteristics Data	CCM-665			
	DID 36 - Electrical Power and Thermal Consumption	CCM-665			
	ADDITIONAL DATA NOT LISTED IN SSP 50177:	CCM-665			
	LOGISTICS SUPPORT ANALYSIS RECORDS	CCM-665			
	SOURCE DATA AND DOCUMENTATION	CCM-665			
	ILLUSTRATED PARTS BREAKDOWN	CCM-665			
	GALLEY RACK	CCM-665			
	DID 1 - Acceptance Data Package	CCM-665			
	DID 3.4 - Analyses and Analytical Models of GFE	CCM-665			
	DID 4 - Software Interface Data	CCM-665			
	DID 5 - 1553 Data Requirements	CCM-665			
	DID 10 - Functional Flows	CCM-665			
	DID 12 - Specifications	CCM-665			
	DID 14 - Interface Control Documents	CCM-665			
	DID 27 - Reliability and Maintainability Prediction Report	CCM-665			
	DID 32 - Mass Properties	CCM-665			
	DID 33 - Power/Thermal	CCM-665			
	DID 35 - Performance and Characteristics Data	CCM-665			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID 36 – Electrical Power and Thermal Consumption	CCM 665			
	ADDITIONAL DATA NOT LISTED IN SSP 50177:	CCM 665			
	LOGISTICS SUPPORT ANALYSIS RECORDS	CCM 665			
	SOURCE DATA AND DOCUMENTATION	CCM 665			
	ILLUSTRATED PARTS BREAKDOWN	CCM 665			
	WASTE MANAGEMENT COMPARTMENT	CCM 665			
	DID 1 – Acceptance Data Package	CCM 665			
	DID 3.4 – Analyses and Analytical Models of GFE	CCM 665			
	DID 4 – Software Interface Data	CCM 665			
	DID 5 – 1553 Data Requirements	CCM 665			
	DID 10 – Functional Flows	CCM 665			
	DID 12 – Specifications	CCM 665			
	DID 14 – Interface Control Documents	CCM 665			
	DID 27 – Reliability and Maintainability Prediction Report	CCM 665			
	DID 32 – Mass Properties	CCM 665			
	DID 33 – Power/Thermal	CCM 665			
	DID 35 – Performance and Characteristics Data	CCM 665			
	DID 36 – Electrical Power and Thermal Consumption	CCM 665			
	ADDITIONAL DATA NOT LISTED IN SSP 50177:	CCM 665			
	LOGISTICS SUPPORT ANALYSIS RECORDS	CCM 665			
	SOURCE DATA AND DOCUMENTATION	CCM 665			
	ILLUSTRATED PARTS BREAKDOWN	CCM 665			
	FULL BODY CLEANSING COMPARTMENT	CCM 665			
	DID 1 – Acceptance Data Package	CCM 665			
	DID 3.4 – Analyses and Analytical Models of GFE	CCM 665			
	DID 4 – Software Interface Data	CCM 665			
	DID 5 – 1553 Data Requirements	CCM 665			
	DID 10 – Functional Flows	CCM 665			
	DID 12 – Specifications	CCM 665			
	DID 14 – Interface Control Documents	CCM 665			
	DID 27 – Reliability and Maintainability Prediction Report	CCM 665			
	DID 32 – Mass Properties	CCM 665			
	DID 33 – Power/Thermal	CCM 665			
	DID 35 – Performance and Characteristics Data	CCM 665			
	DID 36 – Electrical Power and Thermal Consumption	CCM 665			
	ADDITIONAL DATA NOT LISTED IN SSP 50177:	CCM 665			
	LOGISTICS SUPPORT ANALYSIS RECORDS	CCM 665			
	SOURCE DATA AND DOCUMENTATION	CCM 665			
	ILLUSTRATED PARTS BREAKDOWN	CCM 665			
	CREW QUARTERS	CCM 665			
	DID 1 – Acceptance Data Package	CCM 665			
	DID 3.4 – Analyses and Analytical Models of GFE	CCM 665			
	DID 4 – Software Interface Data	CCM 665			
	DID 5 – 1553 Data Requirements	CCM 665			
	DID 10 – Functional Flows	CCM 665			
	DID 12 – Specifications	CCM 665			
	DID 14 – Interface Control Documents	CCM 665			
	DID 27 – Reliability and Maintainability Prediction Report	CCM 665			
	DID 32 – Mass Properties	CCM 665			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID 33 - Power/Thermal	CCM 665			
	DID 35 - Performance and Characteristics Data	CCM 665			
	DID 36 - Electrical Power and Thermal Consumption	CCM 665			
	ADDITIONAL DATA NOT LISTED IN SSP 50177:	CCM 665			
	LOGISTICS SUPPORT ANALYSIS RECORDS	CCM 665			
	SOURCE DATA AND DOCUMENTATION	CCM 665			
	ILLUSTRATED PARTS BREAKDOWN	CCM 665			
	STAGE 1R - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 1P - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2P - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 3P - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 4P - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2R - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2S - RUSSIA ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A - NASA LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.1 - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.1 - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.1 - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	STAGE 2A.1 - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.2 - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.2 - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.2 - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 2A.2 - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 3A - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 3A - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 3A - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 3A - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 3A - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 4A - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 4A - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 4A - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 7A - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 7A - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 7A - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 7A - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A.1 - NASA SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A.1 - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A.1 - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 5A.1 - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 6A - NASA - SVS TARGET LOCATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 6A - NASA - LAUNCH STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 6A - NASA - ON-ORBIT STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 6A - NASA - RETURN STOWAGE DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	STAGE 6A - CSA - ON-ORBIT INSTALLATION DRAWINGS	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	DID 3.5.3 - Engineering Drawings	ccm 1622			
	P6 LABEL INSTALLATION DRAWING	CCM 3568			
	DID 11A - Hardware Drawings				
	EXTERNAL NODE 3 SHELL	CCM 2879			
	DID 3.5.3 - Engineering Drawings	CCM 2879			
	ADDITIONAL DATA NOT LISTED IN SSP 50177:	SSCN 8846			
	R-ECLSS Hardware Deliverables List	SSCN 8846		4/1/2005	
	R-ECLSS Project Data Requirements Document	SSCN 8846		4/1/2005	
	(ECLSS-FD21-004)	SSCN 8846			

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

R-ECLSS Data Management Plan (SLS-JA21-0001)	SSCN 8846	3/28/2005
WPA/OGA Quality Plan (WP/OGA-004)	SSCN 8846	4/1/2005
R-ECLSS FCA/PCA Plan (ECLS-FD21-016)	SSCN 8846	4/1/2005
R-ECLSS FCA/PCA Data Packs	SSCN 8846	When Developed
OGS Performance Analysis (ECLSS -OGS-005 OGS)	SSCN 8846	4/1/2005
WRS Performance Analysis (ECLSS -WRS-005)	SSCN 8846	4/1/2005
Rack and component Hazard Analysis	SSCN 8846	9/9/2005
Rack and vendor analysis	SSCN 8846	5/2/2005
Safety and Mission Assurance Plan(ECLSS-FD21-005)	SSCN 8846	5/2/2005
Approved MIUL's and MUA's (when developed)	SSCN 8846	When Developed
Fracture Control Plan (MSFC-Plan-3071)	SSCN 8846	4/1/2005
Strength and Fatigue Analysis Reports (847DE-006)	SSCN 8846	4/1/2006
Rack Contamination Release Data	SSCN 8846	9/9/2005
Rack Ionization Radiation Data	SSCN 8846	9/9/2005
Maintenance hazard analysis	SSCN 8846	1/3/2006
Ops Concept Document (ECLSS-FD21-014)	SSCN 8846	9/15/2005
Preflight Imaging Plan (ECLSS-FD21-015)	SSCN 8846	9/15/2005
Software Development Plan (SVHSER-18756)	SSCN 8846	3/28/2005
WPA, OGA, UPA Detailed Software Design	SSCN 8846	3/28/2005
Specifications	SSCN 8846	
WPA, OGA, UPA Software Test Descriptions	SSCN 8846	3/28/2005
UPA Software Design Specification	SSCN 8846	9/1/2005
(SVSHER-22336-01)	SSCN 8846	
OGA Software Design Specification	SSCN 8846	9/1/2005
UPA Software Design Specification (SLS-UPA-001)	SSCN 8846	(by 9/15/05)
Software/System Acceptance Test Report	SSCN 8846	When Developed
R-ECLSS Software User Manuals	SSCN 8846	6/28/2005
WPA, OGA, UPA Instrumentation Program and Command	SSCN 8846	3/28/2005
Lists	SSCN 8846	
R-ECLSS hardware and firmware drawings	SSCN 8846	4/1/2005
Firmware Commands	SSCN 8846	4/1/2005
EEE Parts Control Plan (MSFC-JA21-004)	SSCN 8846	4/1/2005
Voltage, current, signal type, and temp range for	SSCN 8846	4/1/2005
each wire at the connection at the interface panel	SSCN 8846	
WRS Electrical Power and Energy Management Report	SSCN 8846	9/15/2005
(SLS-WRS-007)	SSCN 8846	
OGS Electrical Power and Energy Management Report	SSCN 8846	9/15/2005
(SLS-OGS-007)	SSCN 8846	
WRS Specification (MSFC-Spec-2841)	SSCN 8846	9/15/2005
WPA Specification (MSFC-Spec-3024)	SSCN 8846	9/15/2005
UPA Specification (MSFC-Spec-3036)	SSCN 8846	9/15/2005
OGS Specification (MSFC-STD-2840)	SSCN 8846	9/15/2005
Specification (MSFC-STD-2821)	SSCN 8846	9/15/2005
OGA Specification (MSFC-Spec-3025)	SSCN 8846	9/15/2005
WRS,OGA,UPA Requirements Traceability Assessments	SSCN 8846	4/1/2005
Node 3 PIDS (SSP 50318)	SSCN 8846	9/15/2005
WRS Rack 1 to Node 3 ICD (SSP 50315)	SSCN 8846	9/15/2005
WRS Rack 2 to Node 3 ICD (SSP 50314)	SSCN 8846	9/15/2005
ORS Rack 3 to Node 3 ICD (SSP 50316)	SSCN 8846	9/15/2005

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	WRS1 to Node 3 ICD (SSP 50315)	SSCN 8846		9/15/2005	
	WRS2 to Node 3 ICD (SSP 50314)	SSCN 8846		9/15/2005	
	OGS to Node 3 ICD (SSP 50316)	SSCN 8846		9/15/2005	
	WPA to Rack 1 ICD (ICD-3-60076)	SSCN 8846		9/15/2005	
	WPA to Rack 2 ICD (ICD-3-60077)	SSCN 8846		9/15/2005	
	UPA to Rack 2 ICD (ICD-3-60077)	SSCN 8846		9/15/2005	
	OGA to Rack 3 ICD (ICD-3-60075)	SSCN 8846		9/15/2005	
	WRS Rack 1 Assy (96M11540)	SSCN 8846		9/15/2005	
	WRS Rack 3 Assy (96M11800)	SSCN 8846		9/15/2005	
	OGS Rack 3 Assy (96M11500)	SSCN 8846		9/15/2005	
	Integrated Racks Test Plan (PLAN-TEST-ECLSS-300)	SSCN 8846		9/15/2005	
	WRS1 Integrated Rack Schematic (96M12592)	SSCN 8846		9/15/2005	
	WRS2 Integrated Rack Schematic (96M12593)	SSCN 8846		9/15/2005	
	OGS Integrated Rack Schematic (97M11796)	SSCN 8846		9/15/2005	
	Rack Thermal analysis	SSCN 8846		1/7/2005	
	Rack Thermal test procedures	SSCN 8846		1/7/2005	
	Rack Thermal test reports	SSCN 8846		1/7/2005	
	Power Consumption Report	SSCN 8846		1/7/2005	
	Mass Properties Report	SSCN 8846		1/7/2005	
	Rack Thermal loads (by ViPER)	SSCN 8846		10/7/2005	
	Rack delta P vs Flowrate data	SSCN 8846		10/7/2005	
	Rack component heat loads/power consumption	SSCN 8846		10/7/2005	
	Rack and component mass	SSCN 8846		10/7/2005	
	Rack design info w/operational modes	SSCN 8846		10/7/2005	
	Rack fluid leakage data	SSCN 8846		10/7/2005	
	Acoustic test data	SSCN 8846		10/7/2005	
	Preliminary WRS FMEA/CIL	SSCN 8846		12/13/2004	
	Preliminary OGS FMEA/CIL	SSCN 8846		12/13/2004	
	Updated WRS FMEA/CIL	SSCN 8846		2/28/2005	
	Updated OGS FMEA/CIL	SSCN 8846		7/1/2005	
	Final Node 3 WRS FMEA worksheets	SSCN 8846		3/1/2006	
	Final Node 3 OGS FMEA worksheets	SSCN 8846		12/1/2005	
	WRS FMEA work sheets (not reviewed by design)	SSCN 8846		2/14/2005	
	OGS FMEA work sheets (not reviewed by design)	SSCN 8846		2/14/2005	
	Limited Life Data	SSCN 8846		2/14/2005	
	Initial Reliability and Maintainability Predictions	SSCN 8846		2/14/2005	
	Final Node 3 Reliability Predictions	SSCN 8846		9/21/2005	
	Final Node 3 Maintainability Predictions	SSCN 8846		9/21/2005	
	WRS Verification Data	SSCN 8846		3/1/2006	
	OS Verification Data	SSCN 8846		3/1/2006	
	All WRS Rack, component, spec waivers, deviations, and/or exceptions	SSCN 8846		3/1/2006	
	All ORS Rack, component, spec waivers, deviations, and/or exceptions			12/1/2005	
	C-SA-08, R&M Allocations, Assessments and Analyses Report from the Cargo Mission Contract (NNJ04AA03C)		S/A 1394		

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	Interface loads data at the CBM to element interfaces and at the CBM to CBM interfaces	SSCN 9763B	S/A 1460	Directive approval + 5 months, according to SSP 50793 Appendix F Section 3.4.1	
	Interface loads data at the USOS hatch to element interfaces	SSCN 9763B	S/A 1460	Directive approval + 5 months, according to SSP 50793 Appendix F Section 3.4.1	
	Interface loads data at the Cupola window panes	SSCN 9763B	S/A 1460	Directive approval + 5 months, according to SSP 50793 Appendix F Section 3.4.1	
	ACYK Flight Ground Handling and Maintenance Procedures	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	ACYK Ground Safety Data Package	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	ACYK Operations and Maintenance Manual	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	Final ACYK Maintainability Data	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	Final ACYK Failure Modes Summary Report	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	ACYK EME Characteristics and Test Report	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	Logistics and Maintenance Analysis Data for Habitability Hardware (TOCA, MERLIN, Crew Quarters, Water Dispenser).	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	Certificate of ACYK Verification Closure	SSCN 10030	S/A 1488	JSC/OB - Need date is: 8/27/2007	
	ACYK Verification Closure Notices	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	ACYK Verification and Certification Plan	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	AYCK Non-Conformances Report	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	ACYK Launch Configuration and Constraints Document	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	ACYK Qualification and Flight Hardware Comparison	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	ACYK Qualification Hardware Fit Check Report	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	NASA SRP ACYK Approval	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	NASA MSWG ACYK Approval	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	NASA R&M ACYK Approval	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	NASA Structural Engineering ACYK Approval	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	NASA Operational Nomenclature ACYK Approval	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	ACYK Shipping Documents and Passports	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	ACYK UMS Interface Definition	SSCN 10030	S/A 1488	JSC/OB - Need date is: 10/1/2007	
	HRF Performance Data, Acoustics Data, Fan Hazard Reports, and FMEAs	SSCN 10030	S/A 1488	JSC/OB - Need date is: 6/1/2007	
	ACTEX Filter Interface Definition, Hazard Reports, and FMEAs	SSCN 10030	S/A 1488	JSC/OB - Need date is: 6/1/2007	
	Sabatier Safety Data Package	SSCN 10507	S/A 1495	JSC/OB - Need date is: tbd	
	OSE Time Consistent Loads (Max/Min controlled snare loads)	SSCN 11012	S/A 1498	MDA - Need date is: 3/17/2008	
	Integrated assembly drawings and/or Computer-Aided Design (CAD) models of the integrated VIS rack assembly	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	
	Integrated assembly drawings and/or Computer-Aided Design (CAD) models of the treadmill and other components integrated in the rack assembly	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	
	Detailed structural drawings and/or Computer-Aided Design (CAD) models of any structural elements that stiffen/strengthen the rack structure	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	
	Structural Finite Element Models (FEMs) of the treadmill and other components integrated in the rack assembly	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	
	Mass properties reports for the integrated VIS rack assembly, including individual rack-mounted component assemblies mass, cg, and mass moments of inertia data	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	
	Design loads data for all flight events	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	
	Forcing function data and/or interface loads data at the treadmill-to-rack structure interfaces during on-orbit operations	SSCN 10318	S/A 1509	8/15/07 (initial) CDR-60d (CDR) final verif-90d final)	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Russian IPCL Delivery	SSCN 10436	S/A 1534	tbd - Need date is: 2/15/2008	
SW ICD I/F B/T CCS to RSA and CCS to CSA	SSCN 10436	S/A 1534	tbd - Need date is: 2/15/2008	
MRM1 Data for Engr Configuration	SSCN 10436	S/A 1534	tbd - Need date is: 2/15/2008	
Receptacle Part Numbers and Drawings for the Space X Vestibule	SSCN 11040	S/A 1556	tbd - Need date is: 5/1/2009	
Alenia Assessment of WHC in Node 3	SSCN 11259	S/A 1556	tbd - Need date is: 11/15/2008	
Data to Replace TBDs in SSP-41178-41 Dragon-INT SW ICD	SSCN 10829	S/A 1570	Need date is: 12/10/2008	
Data to Replace TBDs in SSP-41175-37 CCS-CUCU SW ICD	SSCN 10829	S/A 1570	Need date is: 12/10/2008	
IP&CL Standard-In including Emergency Caution and Warning - SpaceX Submittal Complete	SSCN 10829	S/A 1570	Need date is: 04/01/2008	
RF Coupler Interface and Physical Envelope Definition	SSCN 10829	S/A 1570	Need date is: 04/18/2008	
CUCU Mating Connectors Definition	SSCN 10829	S/A 1570	Need date is: 04/18/2008	
DVOs from SpaceX/NASA Subsystems to HS/I for Stage Test (Dragon and CUCU)	SSCN 10829	S/A 1570	Need date is: 02/01/2009	
SDIL to SpaceX ICD inputs complete with no TBDs	SSCN 10829	S/A 1570	Need date is: 08/01/2008	
Hardware Level Hazard Analysis for CUCU and Dragon to support the integration of CUCU into ISS	SSCN 10829	S/A 1570	Need date is: 12/09/2008	
Hardware Level FMEA/CILs for CUCU and Dragon to support the integration of CUCU into ISS	SSCN 10829	S/A 1570	Need date is: 12/09/2008	
SpaceX Preliminary CUCU Radio Design Documents	SSCN 10829	S/A 1570	Need date is: 07/25/2008	
CUCU On-Orbit Configuration Drawing to support PDR	SSCN 10829	S/A 1570	Need date is: 07/30/2008	
Preliminary Dragon Mil-Std- 1553 Topology	SSCN 10829	S/A 1570	Need date is: 08/11/2008	
SpaceX EMI/EMC Test Procedures for Review Prior to Test	SSCN 10829	S/A 1570	Need date is: 12/15/2008	
SpaceX CUCU CDR quality Radio Design Documents to support integrated EMI analysis	SSCN 10829	S/A 1570	Need date is: 12/15/2008	
Payload Verification Data (EXPRESS Rack Compatibility Analysis) Submittal due	SSCN 10829	S/A 1570	Need date is: 01/23/2009	
GN&C Profiles and Trajectories provided to support PPL development by L-18 months	SSCN 10829	S/A 1570	Need date is: 10/15/2008	
SpaceX As-Run EMI/EMC Test Procedures, Test Data, and Test Report	SSCN 10829	S/A 1570	Need date is: 03/01/2009	
NASA provide wiring data for Channelization Analysis for CUCU	SSCN 10829	S/A 1570	Need date is: 12/10/2008	
NASA provide wiring data for Channelization Analysis for Dragon by L-6 months	SSCN 10829	S/A 1570	Need date is: 10/15/2008	
Labels for Modkit Hardware	SSCN 10829	S/A 1570	Need date is: 01/23/2009	
RF Coverage Analysis - Ready for Review	SSCN 10829	S/A 1570	Need date is: 12/22/2008	
Power Flux Density - Ready for Review	SSCN 10829	S/A 1570	Need date is: 12/22/2008	
Robotic Workstation Overlays for Stage Testing	SSCN 10829	S/A 1570	Need date is: 09/30/2009	
Payload Verification Data (EXPRESS CoC) Submittal due to PLDS	SSCN 10829	S/A 1570	Need date is: 03/06/2009	
Critical design level 1553 topology data for Dragon and CUCU	SSCN 10829	S/A 1570	Need date is: 10/23/2008	
Need connector layout for routing to support FIT check	SSCN 10829	S/A 1570	Need date is: 09/05/2008	
Identify Data Flow Changes in White Sands to go directly to HOU (not thru POIC)	SSCN 10829	S/A 1570	Need date is: 09/05/2008	
Provide height of RF Coupler to support FIT Check	SSCN 10829	S/A 1570	Need date is: 09/05/2008	
RMAD format defined to support Cycle 49 IPCL	SSCN 10829	S/A 1570	Need date is: 10/01/2008	
Power Up & Activation Diagrams/Schematics/Drawings for CUCU	SSCN 10829	S/A 1570	Need date is: 01/05/2009	
Detailed Drawings/Schematics of CUCU needed to support installation procedure development	SSCN 10829	S/A 1570	Need date is: 01/05/2009	
SpaceX As-Run CUCU & RF (UHF) related Test Procedures, Test Data, Test Report as well as nonconformance issue and resolutions.	SSCN 10829	S/A 1570	Need date is: 01/05/2009	
SpaceX future As-Run CUCU & RF (UHF) related Test Procedures, Test Data, Test Report as well as nonconformance issue and resolutions.	SSCN 10829	S/A 1570	Need date is: Near real time but no later than 1 month post test completion	
SSRMS Payload Power Electrical Model		S/A 1583	Need date: 7/1/2009	
Modified CHT-50 Operational Instructions		S/A 1583	Need date: 7/1/2009	
Modified CHT-50 Interfacing Schematics		S/A 1583	Need date: 7/1/2009	
Production Design Drawing for terminated 1553 Data Bus Channel A Flight Harness that mates to FGB PDGF Harness (with Parts List, Wiring Diagram, and test Requirements)	SSCN 11348	S/A 1589	Need date: 9/1/2009	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Production Design Drawing for terminated 1553 Data Bus Channel B Flight Harness htat mates to FGB PDGF Harness (with Parts List, Wiring Diagram, and test Requiremtents)	SSCN 11348	S/A 1589	Need date: 09/01/2009	
Passport for terminated 1553 Data Bus Channel A Flight Harness (including acceptance test results)	SSCN 11348	S/A 1589	Need Date: 11/04/2009	
Passport for terminated 1553 Data Bus Channel B Flight Harness (including acceptance test results)	SSCN 11348	S/A 1589	Need Date: 11/04/2009	
Passport or Certifications for the Test Harness/Harnesses (Since they Mate to Flight Hardware) data mating pair	SSCN 11348	S/A 1589	Need Date: 11/04/2009	
Passport or Flight Certifications for Stand Alone Russian EVA Connector Pairs	SSCN 11348	S/A 1589	Need Date: 11/04/2009	
Interface definition data for Low Impact Docking System and ICCS boxes. Hole pattern, electrical interfaces, lifting points, CEV docking loads, etc	SSCN 11734	S/A 1590	Need Date: 08/01/2009	
Triple Data Encryption Standard Unit (TDU)	SSCN 11372	S/A 1595	30 days prior to launch	
TDU Radiation Testing Final Reports/Results	SSCN 11372	S/A 1595	12/15/2008	12/15/2008
Test Keys	SSCN 11372	S/A 1595	As required	
Cygnus wirelist data at OSC System CDR timeframe	SSCN 11431	S/A 1599	10/19/2009	10/19/2009
Cygnus wirelist data at L-6 months	SSCN 11431	S/A 1599	9/1/2010	
Cygnus Mil-Std 1553 Topology Data at OSC System CDR Timeframe	SSCN 11431	S/A 1599	10/19/2009	10/19/2009
Cygnus Mil-Std 1553 as Built Topology Data at L-6 Months	SSCN 11431	S/A 1599	9/1/2010	
Orbital IP&CL	SSCN 11431	S/A 1599	2/18/2009	2/18/2009
ISS flight/usage plan through CY 2028, including (all events are to be provided on a per year basis unless otherwise noted): A) Assembly Complete Configuration: Identification of one assembly complete configuration to use for analysis. B) Payload Berthings C) Attitude Maneuvers D) CMG Desaturations E) US Thruster Only Control Periods average duration/per year F) Debris Avoidance Maneuvers G) Vehicle Approaches: For all vesting vehicles. Progress, Soyuz, ATV, CEV, COTS, HTV. For all ports. SM aft, MLM nadir, MRM2 zenith, PMA2, PMA3, etc. H) Docked Vehicle Times: Time each visiting vehicle would be at each specific port. I) Vehicle dockings and un-dockings: Nominal and Off-Nominal J) Vehicle Proximity Operations: Nominal and Off-Nominal K) ISS Exercise: All United States and International Partners exercise plans (standard) L) Intravehicular Activities: Push off and landing (standard) M) Extravehicular Activities: Number of EVA's, EVA Quick Grabs, EVA Orbital Replaceable Unit (ORU's) Handlings (standard). N) SSRMS Operations: Including emergency stop (standard). O) Mobile Transporter Operations: Including emergency stop (standard) P) Motor Accumulated Revolutions roll over events Q) Propellant Usage Table: Reference Design Analysis Cycle8 (DAC-8), required for determining attitude maneuvers, reboosts, attitude hold periods, etc on a yearly basis. R) Flight Attitudes: Attitudes and Beta Angle regimes S) SARJ: Concurrence that both SARJ units will be assumed to rotate using a nominal, as-designed, rotation sequence (i.e. the SARJ will not be locked or off-pointed from the nominal sun-facing angle, as determined by its orbital true anomaly position). T) Beta Gimbal Assemblies: Concurrence that all BGA units will be assumed to rotate using a nominal, as-designed, pointing scheme (i.e. BGA's will be oriented to match the beta angle only).	SSCN 11686	S/A 1604	12/30/2009	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Receptacle Part Numbers and Drawings for the Cygnus Vehicle (Connector call out and specifics, such as size, type, keying, etc for use in verifying connections in the vestibule between Cygnus & Node 2)	SSCN 11558	S/A 1605	NLT Launch minus 6 months	
Thermal models	SSCN 11558	S/A 1605	NLT Launch minus 6 months	
EME Test Data	SSCN 11558	S/A 1605	12/1/2009	
Acoustics Test Plans	SSCN 11558	S/A 1605	Launch minus 6 months	
Acoustics Test procedures	SSCN 11558	S/A 1605	Launch minus 5 months	
Data Analysis Reports from the FINAL Acoustics Test	SSCN 11558	S/A 1605	Launch minus 3 months	
3D CAD Model	SSCN 11558	S/A 1605	Launch minus 12 months	
VAC level Cygnus FE model	SSCN 11558	S/A 1605	Launch minus 45 weeks	
Cygnus berthing geometry data (FRGF locations, SSRMS base location and joint angles, etc.)	SSCN 11558	S/A 1605	Launch minus 45 weeks	
VAC level Cygnus proximity operations jet firing histories	SSCN 11558	S/A 1605	Launch minus 45 weeks	
Thruster flowfield model solutions	SSCN 11558	S/A 1605	Launch minus 45 weeks	
Total "docked" vehicle mass, moments and products of inertia	SSCN 11558	S/A 1605	Launs minus 6 weeks	
Test Correlated Cygnus finite element math model	SSCN 11558	S/A 1605	Launch minus 11 months	
Mass properties (each instrument): Mass, Dimensions, CG IV TEPC	SSCN 11404	S/A 1609	2/15/2010	
EMI/EMC Test Data IV TEPC	SSCN 11404	S/A 1609	12/15/2010	
Materials Offgassing Data IV TEPC	SSCN 11404	S/A 1609	12/15/2010	
Safety Data Pack IV TEPC	SSCN 11404	S/A 1609	2/15/2010	
Thermal Analysis IV TEPC	SSCN 11404	S/A 1609	2/15/2010	
Power Surge and Output Quality Analyses IV TEPC	SSCN 11404	S/A 1609	2/15/2010	
Kickload Analysis IV TEPC	SSCN 11404	S/A 1609	2/15/2010	
IV TECP Engineering Drawings	SSCN 11404	S/A 1609	2/15/2010	
IPCL IV TEPC	SSCN 11404	S/A 1609	1/4/2010	
HTV interface requirements for transported cargo	SSCN 12124	S/A 1624	2/4/2010	
SpaceX Dragon interface requirements for transported cargo	SSCN 12124	S/A 1624	2/4/2010	
Unique Requirements Specification for the Advanced Recycle Filter Tank Assembly	SSCN 11625	S/A 1628	3/26/2010	7/22/2010
Water Recovery System (WRS) - 2 CAD Models	SSCN 11625	S/A 1628	6/19/2009	6/19/2009
EXPRESS Rack 8 KSC Integration/Test Data (as required to closeout integrated ER8 verification)	SSCN 12158	S/A 1629	6/1/2010	6/1/2010
Design dimensions for the CPDI per NASA supplied IDD	SSCN 11885	S/A 1637	5/30/2010	5/30/2010
Definition of all active interfaces per NASA supplied IDD	SSCN 11885	S/A 1637	5/30/2010	5/30/2010
Approach and departure corridors, and ISS keep out zones	SSCN 11885	S/A 1637	5/24/2010	5/24/2010
Docking vehicle mass range and docking velocities and misalignment conditions prior to and at contact	SSCN 11885	S/A 1637	5/24/2010	5/24/2010
Docking interface loads per NASA supplied IDD	SSCN 11885	S/A 1637	5/24/2010	5/24/2010
Location, orientation and types of connectors at the docking interface (identify those mated at docking and those mated post-docking) per NASA supplied IDD	SSCN 11885	S/A 1637	5/24/2010	5/24/2010
Minimum acceptable leakage at sealed CDA to docked vehicle interface	SSCN 11885	S/A 1637	5/15/2010	5/15/2010

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Range of pressurization / depressurization required for the VV interface	SSCN 11885	S/A 1637	5/15/2010	5/15/2010
Accuracy of pressurization and pressure remaining at separation	SSCN 11885	S/A 1637	5/15/2010	5/15/2010
Maximum dew point of air returned from docked vehicle	SSCN 11885	S/A 1637	5/15/2010	5/15/2010
Low-temperature coolant transfer rate (if LTL water required)	SSCN 11885	S/A 1637	5/15/2010	5/15/2010
28V power amperage	SSCN 11885	S/A 1637	5/15/2010	5/15/2010
ILIDS Avionics Design Review Packages	SSCN 11885	S/A 1637	4/15/2010	4/15/2010
ILIDS avionics components specification, including EMAs, magnet striker plates, load cells, umbilicals, limit switches	SSCN 11885	S/A 1637	4/15/2010	4/15/2010
Description/drawings of LIDS Emulator/Host Emulator racks	SSCN 11885	S/A 1637	6/30/2010	6/30/2010
Blind mate connector specification	SSCN 11885	S/A 1637	5/5/2010	5/5/2010
Access to ILIDS CAD models	SSCN 11885	S/A 1637	4/15/2010	4/15/2010
ILIDS IDD initial draft	SSCN 11885	S/A 1637	4/15/2010	4/15/2010
Operational sequence flowchart for active side of the docking mechanism	SSCN 11885	S/A 1637	4/15/2010	4/15/2010
Low impact docking system Models: -Best available CAD models of iLIDS soft capture system (SCS) contact and actuation features (rings, guides, magnets, striker plates, sensors, electro-mechanical actuators -SCS mechanical properties used for NASA LIDS docking simulation (load ring/load cell stiffness and performance characteristics, actuator position sensors, electro-magnet force properties, striker plate range of motion, material properties of contact elements (rings and guides)) -Stewart platform (6-leg) control and drive train properties used for NASA LIDS docking simulation (leg control laws, motor/actuator performance data, max/min electro-mechanical actuator stroke)	SSCN 11885	S/A 1637	5/30/2010	5/30/2010
Low impact docking system Models: -Best available CAD models of iLIDS hard capture system (HCS) contact and mechanical latching features (ring, seals, alignment pins/sockets, pushers, active/passive structural hooks, sensors) -HCS mechanical properties used for NASA LIDS docking simulation (seal material and geometry, material properties of contact elements (ring, pin/socket, structural hooks), pusher load/stroke, structural hook drive train/actuation performance characteristics)	SSCN 11885	S/A 1637	7/1/2010	7/1/2010
WHC Hygiene Cover Mod Procedure	SSCN 12377	S/A 1674	12/17/2010	
WRS2 Rack Hazard Analysis Report (MSFC data item)	SSCN 11625	Revised directive signed 09/01/2010	1/7/2011	
TRPU Specifications	SSCN 12169	S/A 1645	6/1/2010	6/1/2010
TRPU Data Description	SSCN 12169	S/A 1645	7/19/2010	7/19/2010
TRPU Ethernet Capture Files	SSCN 12169	S/A 1645	7/19/2010	
Grapple Bar to Flight Support Equipment (FSE) Interface Control Agreement (ICA)	SSCN 12281	S/A 1647	11/30/2010	11/30/2010
Dragon launch environments: Coupled Loads Analysis (CLA), Random Vibration, Shock, Acoustics, Thermal, and other environments SpaceX will define	SSCN 12281	S/A 1647	11/30/2010	11/30/2010
CAD, thermal, and structured models of Grapple Bar Integrated Assembly	SSCN 12281	S/A 1647	7/1/2011	10/27/2010
Dragon preflight and post flight jet firing histories, payload materials data and operational temperatures, payload operational timelines and tasks, and MSS camera operational timelines	SSCN 12281	S/A 1647	10/31/2011	5/9/2013
Compression Test Procedure for Boeing review prior to test (Plastazote only)	SSCN 12275	S/A 1648	7/2/2010	6/24/2010
Compression Test Data in the format per the Boeing test plan (Plastazote only)	SSCN 12275	S/A 1648	7/7/2010	9/23/2010

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Component Level Vibration Test Procedure(s) for Boeing review prior to test	SSCN 12275	S/A 1648	7/23/2010	7/25/2010
Compression Test Procedure for Boeing review prior to test (all foams)	SSCN 12275	S/A 1648	7/30/2010	6/24/2010
Component Level Vibration Test Data in the format per the Boeing test plan	SSCN 12275	S/A 1648	8/2/2010	7/30/2010
Compression Test Data in the format per the Boeing test plan (all foams)	SSCN 12275	S/A 1648	8/9/2010	9/23/2010
3-D model of LIDS active soft capture system in *.ASM (WF3) format that describes the following: -soft capture ring assembly with integrated components (magnets, sensors, etc.); -geometry of drive mechanisms; -geometry of lock-down mechanisms with all components (with kinematic envelope of moving parts); -ring position in transport configuration, extended configuration, ring motion envelope; -kinematic model of the LIDS ring with a user's instruction for clearance analysis; -installation of cables with cable dimensions, -location of electrical umbilicals; -information on the structural mounting (dimensions, materials, torque parameters).	SSCN 12168	S/A 1648	4/15/2010	4/15/2010
3-D model of LIDS passive soft capture system in *.ASM (WF3) format that describes the following: -geometry of lock-down mechanisms with all components; -information on the structural mounting (dimensions, materials, torque parameters).	SSCN 12168	S/A 1648	4/15/2010	4/15/2010
Seal elevation above the interface mating plane.	SSCN 12168	S/A 1648	4/15/2010	4/15/2010
CAD model of the Robotic ReFueling Dexterous Demonstration (R2D2)	SSCN 12465	S/A 1685	10/18/2010	10/18/2010
Strcutural model of the Robotic ReFueling Dexterous Demonstration (R2D2)	SSCN 12465	S/A 1685	11/15/2010	11/15/2010
Thermal model of the Robotic ReFueling Dexterous Demonstration (R2D2)	SSCN 12465	S/A 1685	10/8/2010	10/8/2010
Mass properties of the Robotic ReFueling Dexterous Demonstration (R2D2)	SSCN 12465	S/A 1685	10/29/2010	10/29/2010
Structural Model of the LMC	SSCN 12465	S/A 1685	10/8/2010	10/8/2010
19A Flight Integration Data	SSCN 12465	S/A 1685	10/18/2010	10/18/2010
FSE Data	SSCN 12465	S/A 1685	10/1/2010	10/1/2010
Configuration Audit Reports (CAR) for Lightweight MPESS Carrier hardware under Cargo Mission Contract design authority	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Computer Aided Design (CAD) models (original pro-e format is acceptable) for Lightweight MPESS Carrier hardware under Cargo Mission Contract design authority	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Full fidelity structural models (Nasa STRuctural ANalysis (NASTRAN) bulk data) for Lightweight MPESS Carrier hardware under Cargo Mission Contract design authority	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Structural analysis reports for Lightweight MPESS Carrier hardware under Cargo Mission Contract design authority	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Full fidelity thermal models (Thermal Radiation Analyzer System (TRASYS), Systems Improved Numerical Differencing Analyzer (SINDA), Thermal desktop, etc) for Lightweight MPESS Carrier hardware under Cargo Mission Contract design authority.	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Configuration Audit Reports (CAR) for Pump Module Flight Support Equipment	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Computer Aided Design (CAD) models (original pro-e format is acceptable) for Pump Module Flight Support Equipment	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Full fidelity structural models (Nasa STRuctural ANalysis (NASTRAN) bulk data) for Pump Module Flight Support Equipment	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Structural analysis reports for Pump Module Flight Support Equipment	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Full fidelity thermal models (Thermal Radiation Analyzer System (TRASYS), Systems Improved Numerical Differencing Analyzer (SINDA), Thermal desktop, etc) for Pump Module Flight Support Equipment	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Configuration Audit Reports (CAR) for Ammonia Tank Assembly Flight Support Equipment for the LMC	SSCN 12466	S/A 1679	10/1/2010	10/1/2010

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Computer Aided Design (CAD) models (original pro-e format is acceptable) for Ammonia Tank Assembly Flight Support Equipment for the LMC	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Full fidelity structural models (Nasa STRuctural ANalysis (NASTRAN) bulk data) for Ammonia Tank Assembly Flight Support Equipment for the LMC	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Structural analysis reports for Ammonia Tank Assembly Flight Support Equipment for the LMC	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Full fidelity thermal models (Thermal Radiation Analyzer System (TRASYS), Systems Improved Numerical Differencing Analyzer (SINDA), Thermal desktop, etc) for Ammonia Tank Assembly Flight Support Equipment	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Lightweight MPRESS Carrier Interface Control Document, Interface Description Document, and any other LMC requirements to be defined by Goddard Space Flight Center for the cargo	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Computer Aided Design (CAD) models of the Robotic Refueling Dexterous Demonstration (R2D2)	SSCN 12466	S/A 1679	10/1/2010	10/1/2010
Structural models of the Robotic Refueling Dexterous Demonstration (R2D2)	SSCN 12466	S/A 1679	10/29/2010	10/29/2010
Full fidelity thermal models (Thermal Radiation Analyzer System (TRASYS), Systems Improved Numerical Differencing Analyzer (SINDA), Thermal desktop, etc) of the Robotic Refueling Dexterous Demonstration (R2D2)	SSCN 12466	S/A 1679	10/12/2010	10/12/2010
SGG33114901-401 Translation Aids & Attachments – Location Coding	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33114902-401 Label Installation – WIFs and MDPS Panels	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33114956-401 Label Instl, Fluid and Avionics Lines – Node 2	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33114957-401 Label Installation, EVA – Fixed MLI	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33115346-401 Label Installation, EVA – Removable MLI	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33119417-401 Translation Aids & Attachments – Location Coding	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33119418-401 Label Installation – WIFs and MDPS Panels	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33119419-401 Label Instl, Fluid and Avionics Lines – Node 3	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33119420-401 Label Installation, EVA – Fixed MLI	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
SGG33119421-401 Label Installation, EVA – Removable MLI	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Node 2 Test Reports	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Node 2 Worksite Analysis Reports	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Node 2 Verification Documents	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Node 3 Test Reports	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Node 3 Worksite Analysis Reports	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Node 3 Verification Documents	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
PMM Worksite Analysis Reports	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
PMM Test Reports	SSCN 12508	S/A 1693	10/11/2010	10/11/2010
Unique Requirements Specification for the Advanced Recycle Filter Tank Assembly	SSCN 11625	S/A 1694	3/26/2010	7/22/2010
Water Recovery System (WRS) - 2 CAD Models	SSCN 11625	S/A 1694	3/26/2010	6/19/2009
WRS2 Rack Hazard Analysis Report (MSFC data item)	SSCN 11625	S/A 1694	1/31/2011	
Task 1 Product Support: Build, Analysis, and Certification: Acceptance Data Package or Parts Tag (includes C of Cs)	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 1 Product Support: Non-conformances: Discrepancy Reports, FIARs, IFIs, PRACAs	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 1 Product Support: Non-conformances: Waivers, Deviations, Exceptions, NCRs	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 1 Product Support: Shipping, Miscellaneous: Shipping Documents	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 1 Product Support: Shipping, Miscellaneous: Maintenance / Preventative Maintenance Plans	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 1 Product Support: Shipping, Miscellaneous: Lessons Learned Report	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 2 R&M: SLS-WRS-005, ISS Regenerative ECLSS Water Recovery Subsystem Maintainability Analysis	SSCN 12423	S/A 1704	2/7/2011	2/15/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Task 2 R&M: MSFC WRS Regen ECLSS Limited Life Item Report	SSCN 12423	S/A 1704	2/7/2011	2/15/2011
Task 2 R&M: ECLSS-WRS-002, ISS Regenerative ECLSS Water Recovery System Failure Modes and Effects Analysis/Critical Items List	SSCN 12423	S/A 1704	2/7/2011	2/15/2011
Task 3 ECLSS: DA Compressor Assembly maintenance and assembly manual	SSCN 12423	S/A 1704	4/4/2011	5/11/2011
Task 3 ECLSS: DA Compressor Assembly test procedures	SSCN 12423	S/A 1704	4/4/2011	5/11/2011
Task 3 ECLSS: FCPA Hub Assembly maintenance and assembly manual	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 3 ECLSS: FCPA Hub Assembly test procedures	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 4 Software: Software Unique Documentation: Software Development Plan for UPA	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 4 Software: Software Unique Documentation: Software Requirements Specification for UPA	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 4 Software: Software Unique Documentation: Software Architecture Description for UPA	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 4 Software: Software Unique Documentation: Software Design Document for UPA	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 4 Software: Software Unique Documentation: Version Description Document for UPA	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 4 Software: Software Unique Documentation: Software Test Plan for UPA	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 4 Software: Software Unique Documentation: Software Test Description document for UPA	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 4 Software: Software Unique Documentation: Software Users Manual for UPA	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 4 Software: Software Unique Documentation: Identification of all applicable software configuration management process/applications used for configuration controlling the UPA flight software during development	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 4 Software: Software Unique Documentation: Identification/description of formal software verification and acceptance environments for UPA	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 5 EPS/EME: Product Definition Documentation (and Verification): Verification and Validation Document (V&VD)	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 5 EPS/EME: Product Definition Documentation (and Verification): Interface Control Documents (ICDs)	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 5 EPS/EME: Product Definition Documentation (and Verification): End Item Specification	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 5 EPS/EME: Product Definition Documentation (and Verification): Engineering Drawings	SSCN 12423	S/A 1704	2/7/2011	3/17/2011
Task 5 EPS/EME: Product Definition Documentation (and Verification): Signed VCNs related to electrical systems	SSCN 12423	S/A 1704	2/7/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Design Analysis Reports	SSCN 12423	S/A 1704	2/14/2011	3/17/2011
Task 5 EPS/EME: Build, Analysis, and Certification: TPSs / VWARS / Router / GMIPs / Qualification & Acceptance Procedures	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Power quality test procedure	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Power quality test reports	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Electromagnetic Effects test procedures	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Electromagnetic Effects test Reports	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Electromagnetic Effects Analysis reports	SSCN 12423	S/A 1704	2/14/2011	3/17/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Certification Data Package w/ GCAR	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Build, Analysis, and Certification: Acceptance Data Package or Parts Tag (includes C of Cs)	SSCN 12423	S/A 1704	2/14/2011	5/11/2011
Task 5 EPS/EME: Non-conformances: Waivers, Deviations, Exceptions, NCRs related to electrical issues	SSCN 12423	S/A 1704	2/21/2011	5/11/2011
CMC-FRAM-00001-ATR	SSCN 12546	S/A 1706	2/18/2011	2/23/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

CDA Concept of Operations Summary and Grapple Fixture Location Definition. MaAGIK Report for action CAI-45	SSCN 12568	S/A 1696	1/4/2011	1/4/2011
JSC_64519 Crew Quarters Radiation Test Report.pdf	SSCN 12569	S/A 1697	1/1/2011	1/1/2011
CQ-07-155 A, CQ Drawing Tree, 9-6-07.xls	SSCN 12569	S/A 1697	1/1/2011	1/1/2011
CQ Electrical Assemblies.xlsx	SSCN 12569	S/A 1697	1/1/2011	1/1/2011
ESCG-6200-07-QPA-DOC-0010	SSCN 12569	S/A 1697	1/1/2011	1/1/2011
ESCG-4430-08-EES-MEMO-0009	SSCN 12569	S/A 1697	1/1/2011	1/1/2011
Mobile transporter relay box assembly (MTRA) box mass including all cable assemblies	SSCN 12608	S/A 1717	1/1/2012	
MTRA Dimensions	SSCN 12608	S/A 1717	1/1/2012	
MTRA Final Cable lengths	SSCN 12608	S/A 1717	5/17/2011	8/11/2011
MTRA Final Cable routing	SSCN 12608	S/A 1717	5/17/2011	8/18/2011
Final As-built MTRA box wire lists (1553, power, fiber)	SSCN 12608	S/A 1717	NET Jan 2012 HTV 3 L-6 months	
Draft As-built MTRA wire lists (1553, power, fiber)	SSCN 12608	S/A 1717	NET Jan 2012 HTV 3 L-12 months	
MT Relay Box and Cabling 3D CAD Models	SSCN 12608	S/A 1717	NET Jan 2012 HTV 3 L-12 months	
CSA MTRA TCTIs and INCs (or CSA equivalent)	SSCN 12608	S/A 1717	NET Jan 2012 HTV 3 L-12 months	
Preliminary Requirements Definition for ISS Integration of BAM	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Preliminary Requirement Definition Effort for Advanced Technology Demonstration	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Preliminary GFE Hardware Required for Integration	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Preliminary Concept of Operation	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Updated Requirements Definition for ISS Integration of BAM	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Updated Requirement Definition Effort for Advanced Technology Demonstration	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Updated GFE Hardware Required for Integration	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
Updated Concept of Operation	SSCN 12616	S/A 1697	1/4/2011	1/4/2011
NOFBX thruster data - engine performance characteristics: thrust, propellant mass flow rate, Isp (specific impulse) for pulse widths selected for ISS demonstration (steady-state and short pulses), chamber pressure, maximum exhaust velocity, nozzle area ratio, nozzle exit diameter, nozzle length, catalyst bed mass loss during mission (if used in this design).	SSCN 12634	S/A 1722	4/22/2011	5/16/2011
NOFBX thruster data - propellant composition, including trace contaminants and non-volatile residue (NVR) levels.	SSCN 12634	S/A 1722	4/22/2011	5/16/2011
NOFBX thruster data - catalyst composition and density (if catalyst is used).	SSCN 12634	S/A 1722	3/18/2011	3/18/2011
NOFBX thruster data - catalyst particle releases: particle sizes (if catalyst is used).	SSCN 12634	S/A 1722	3/18/2011	3/18/2011
NOFBX thruster data - plume models (including heating rates) for NOFBX thruster covering gas, liquid, and two-phase flow propellant combustion regimes.	SSCN 12634	S/A 1722	4/22/2011	5/16/2011
NOFBX mission scenario: NOFBX thruster firing sequences for ISS flight experiment: firing timelines including individual firing durations and time between firing events.	SSCN 12634	S/A 1722	4/22/2011	5/16/2011
NOFBX engine location on ISS: Columbus SOX FRAM.	SSCN 12634	S/A 1722	3/18/2011	3/18/2011
NOFBX thruster plume direction vectors to be evaluated: 1. Aligned with approximate ISS center-of-gravity (Increment 26 - TBC) 2. ISS +X direction (ram direction)	SSCN 12634	S/A 1722	3/18/2011	3/18/2011
NASA JSC EG3 Aerosciences CFD (computational fluid dynamics) support: plume model development (including heating rates to ISS structure) covering multiphase modes of operation (operation under gas, liquid and gas-liquid propellant).	SSCN 12634	S/A 1722	4/22/2011	5/16/2011
7.2 Foot Per Second (FPS) and 6.0 FPS contingency landing sink rate forcing functions for Design Coupled Loads Analysis (DCLA)	SSCN 12689	S/A 1715	1/31/2011	1/31/2011
7.2 Foot Per Second (FPS) and 6.0 FPS contingency landing sink rate forcing functions for Verification Loads Analysis (VLA) Cycle 2	SSCN 12689	S/A 1715	3/16/2011	3/16/2011
ICM (3D Model of Latchable Grapple Fixture) from MDA.	SSCN 12719	S/A 1728	5/20/2011	5/26/2011
DLA Thermal Cover Kit Launch Bag part number	SSCN 12673	S/A 1733	8/26/2011	9/7/2011
DLA Thermal Cover EVA Bag part number	SSCN 12673	S/A 1733	8/26/2011	8/26/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

HTV interface clocking and orientation at Node 2 Zenith	SSCN 12693	S/A 1736	8/15/2011	6/17/2011
COTS interface clocking and orientation at Node 2 Zenith	SSCN 12693	S/A 1736	8/15/2011	8/15/2011
SpaceX Vehicle CB Model with passive FRAM attachment points	SSCN 12820	S/A 1745	7/20/2011	7/13/2011
Multipurpose Laboratory Module (MLM) material operating temperatures	SSCN 12852	S/A 1751	12/20/2010	12/20/2010
Draft BEAM Concept of Operations	SSCN 12845	S/A 1760	9/9/2011	9/9/2011
Program-approved USOS to MLM interface power quality requirements.	SSCN 10395	S/A 1769	6/28/2011	6/28/2011
Russian labeling information for unterminated cable ends	SSCN 10395	S/A 1769	6/10/2011	6/10/2011
Russian Segment cable lengths	SSCN 10395	S/A 1769	6/10/2011	6/10/2011
Electrical circuit schematic drawings, time-domain and frequency-domain test data, and validated SABER- or SPICE-compatible computer models for the DDCU-R and CHT. The following shall be included in DDCU-R and CHT schematics supplied to Boeing EPS: 1) All filters, 2) All passive components, 3) All active components, 4) Equivalent load impedances (magnitude and phase), 5) Operating conditions and modes, 6) Load variations. 7) Description of how the DDCU-R and CHT operates	SSCN 10395	S/A 1769	6/3/2011	6/3/2011
Initial Antenna Pointing Angles	SSCN 12443	S/A 1771	2/28/2011	2/28/2011
Initial External Wireless Coverage Analysis	SSCN 12443	S/A 1771	11/17/2010	11/17/2010
Initial External Wireless Frequency Analysis	SSCN 12443	S/A 1771	11/17/2010	11/17/2010
Final Integrated End to End system performance analysis from Internal Lab WAP to Payload Devices	SSCN 12443	S/A 1771	2/9/2011	2/9/2011
NTIA Frequency Approval	SSCN 12443	S/A 1771	3/25/2012	
Final Antenna Pointing Angles	SSCN 12443	S/A 1771	4/1/2011	4/1/2011
Final External Wireless Coverage Analysis	SSCN 12443	S/A 1771	4/1/2011	4/1/2011
Final External Wireless Frequency Analysis	SSCN 12443	S/A 1771	4/1/2011	4/1/2011
Definition of plume data format for candidate Hall thrusters (i.e., format of Jet Propulsion Laboratory (JPL) data for 4.5kW commercial Hall thrusters)	SSCN 12948	S/A 1776	10/10/2011	11/3/2011
Characterization of exhaust plume constituents (neutrals, ions and electrons) for Hall thrusters	SSCN 12948	S/A 1776	10/10/2011	11/3/2011
Density distribution model of constituents within plume (axisymmetric or 3D model) for Hall thrusters	SSCN 12948	S/A 1776	10/10/2011	11/3/2011
Velocity distribution model of constituents within plume (direction/magnitude) for Hall thrusters	SSCN 12948	S/A 1776	10/10/2011	11/3/2011
Electron temperature distribution model of electrons within plume of Hall thrusters	SSCN 12948	S/A 1776	10/10/2011	11/3/2011
Plume model for expected Hall thruster firing combinations (i.e., firings of 1,2,3,4,5 or 6 thrusters)	SSCN 12948	S/A 1776	10/10/2011	11/17/2011
Hall thruster current distribution between current to cathode and anode	SSCN 12948	S/A 1776	10/10/2011	11/17/2011
Hall thruster sputter yield models for materials of concern for ISS	SSCN 12948	S/A 1776	10/10/2011	11/17/2011
Characterization of "sputtered" boron nitride as a contamination source (distribution in the plume of Hall thruster).	SSCN 12948	S/A 1776	10/10/2011	11/17/2011
Yearly duty cycle (on-time hours) for Hall thruster operations	SSCN 12948	S/A 1776	10/10/2011	8/31/2011
Geometric configuration data for new Russian modules (Science Power Modules, SPM) SPM geometric dimensions (module, truss and solar arrays)	SSCN 12948	S/A 1776	10/10/2011	8/31/2011
ISS attitude at +/- 75 degree solar beta for defined analysis cases	SSCN 12948	S/A 1776	10/10/2011	8/31/2011
BGA biasing files as applicable (i.e., +/- 75 degree solar beta)	SSCN 12948	S/A 1776	10/10/2011	8/31/2011
SARJ lock angles as applicable (i.e., +/- 75 degree solar beta)	SSCN 12948	S/A 1776	10/10/2011	11/17/2011
Xenon storage and regulation: Operating ranges of inlet/outlet pressure and temperature	SSCN 12948	S/A 1776	10/10/2011	10/10/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Xenon storage and regulation: Xenon storage pressure as a function of cumulative on time for the operating temperature range	SSCN 12948	S/A 1776	10/10/2011	10/10/2011
Xenon storage and regulation: Nominal, min and max operating pressure, temperature, flow rate, current and voltage for all the components as applicable: Nominal, min and max operating pressure, temperature, flow rate, current and voltage for all the components as applicable	SSCN 12948	S/A 1776	10/10/2011	10/10/2011
Loads data (magnitude, direction, location, and uncertainties) the JOTI will impart on the ORUs	SSCN 12931	S/A 1780	11/7/2011	11/7/2011
JOTI materials list of all vacuum-exposed materials with a minimum surface area of 100in ² (excluding inorganic materials) with material location, vacuum-exposed surface area, min/max operating temperature, and composition/manufacturer	SSCN 12931	S/A 1780	11/7/2011	11/29/2011
JOTI & JEM-EF TRASYS/SINDA thermal models and sufficient documentation to properly configure the models for any necessary operational scenario	SSCN 12931	S/A 1780	1/9/2012	6/1/2012
Preliminary ORU thermal assessment results	SSCN 12931	S/A 1780	JOTI PDR-2 weeks	
Concept of Operations including estimated ORU R&R times	SSCN 12931	S/A 1780	JOTI PDR-2 weeks	11/22/2011
Draft Concept of Operations	SSCN 12957	S/A 1784	11/10/2011	11/16/2011
Concept of Operations (under NASA Configuration Management)	SSCN 12957	S/A 1784	12/16/2011	
Representative Visiting Vehicle Trajectories	SSCN 12957	S/A 1784	11/10/2011	
Representative Visiting Vehicle 3D Models	SSCN 12957	S/A 1784	12/16/2011	
Johnson Space Center (JSC) led Reliability, Safety and Risk Mitigation Assessment Final Report	SSCN 12202	S/A 1792	11/15/2011	11/15/2011
Glenn Research Center (GRC) led Low Earth Orbit (LEO) cycle life testing data	SSCN 12202	S/A 1792	Monthly status and December annual report	
Cell Safety Characterization Test Reports	SSCN 12202	S/A 1792	3 weeks prior to cell down-select, 06/25/12	6/6/2012
Robotics engineering design for robotic concept development	SSCN 12202	S/A 1792	1/31/2012 for any post SRR changes	1/31/2012
MAGIK assessments, kinematic assessments, and kinematic issue resolution	SSCN 12202	S/A 1792	3/1/2012 for SDR, 12/1/2012 for PDR, and 7/1/2013 for CDR. Final on 10/1/2014	
NTIA Frequency Approval	SSCN 12443	S/A 1771	3/25/2012	
Documentation of the format and setup of the FPMU video stream to serve as a reference for the process of providing the FPMU video stream from NASA JSC Bldg 8 to the Boeing (BAB) bldg in a compatible format.	SSCN 13073	S/A 1811	3/1/2012	
As required, NASA IRD, notably JSC TV Bldg 8 to provide the FPMU video stream (e.g., Ku-band downlinked FPMU video stream) to Boeing.	SSCN 13073	S/A 1811	As required	
Loads induced on QD by Bale Control Tool	SSCN 12939	S/A 1808	11/16/2012	11/29/2012
Standard Cygnus thruster firing histories for Node2 zenith release and departure (per Cynus DID RPOC_ORB_03)	SSCN 12961	S/A 1886	10/1/2012	
Enhanced Cygnus Structural Dynamics Finite element Model	SSCN 12961	S/A 1886	10/1/2012	
Enhanced Cygnus thruster firing histories for Node2 zenith release and departure (per Cygnus DID RPOC_ORB_03)	SSCN 12961	S/A 1886	10/1/2012	
HTV thruster firing histories for nadir release (per DID 3.4.12 HTV External Contamination) or confirmation that existing jet firing histories DN1-X.csv are applicable for expected ISS attitude and release point. (Note: ISS attitude affects the HTV release point. Current jet firing histories for nominal HTV departure cover ISS RPY attitudes of [0,0,0] and [0,-15,0].	SSCN 12961	S/A 1886	12/1/2012	
Geometric model for Enhanced Cygnus	SSCN 12961	S/A 1886	10/1/2012	
Enhanced Cygnus configuration on the Zenith port	SSCN 12961	S/A 1886	10/1/2012	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Enhanced Cygnus thruster locations and orientations per DID RPOC_ORB_03 COTS Thruster Firing and Trajectory Data	SSCN 12961	S/A 1886	10/1/2012	9/26/2012
Updated Thruster Characterization Data for Enhanced Cygnus as defined in DID RPOC_ORB_03 COTS Thruster Firing and Trajectory Data (if applicable).	SSCN 12961	S/A 1886	10/1/2012	
Identification of Dragon external surfaces / hardware that are sensitive to external contamination & plume erosion (primarily surfaces with thin / optical costings).	SSCN 12961	S/A 1886	2/15/2012	6/22/2012
Identification of Cygnus external surfaces / hardware that are sensitive to external contamination & plume erosion (primarily surfaces with thin / optical costings).	SSCN 12961	S/A 1886	10/1/2012	
Identification of Enhanced Cygnus external surfaces / hardware that are sensitive to external contamination & plume erosion (primarily surfaces with thin / optical costings).	SSCN 12961	S/A 1886	10/1/2012	
Updated HTV material operating temperatures for the zenith location (applies to non-metallic, vacuum-exposed materials per HTV DID 3.4.12)	SSCN 12961	S/A 1886	9/15/2012	
HTV material test samples to support ASTM E1559 outgassing testing if needed due to increased operating temperature.	SSCN 12961	S/A 1886	10/31/2012	
Durations for HTV at the nadir vs. zenith port.	SSCN 12961	S/A 1886	2/15/2012	2/15/2012
Standard Cygnus material list with updated operating temperatures for the zenith location (applies to non-metallic, vacuum-exposed materials per DID ENV-ORB-01)	SSCN 12961	S/A 1886	10/1/2012	
Standard Cygnus configuration on the Zenith port.	SSCN 12961	S/A 1886	10/1/2012	
Standard Cygnus material test samples to support ASTM E1559 outgassing testing if needed due to increased operating temperature.	SSCN 12961	S/A 1886	10/1/2012	
Durations for Standard Cygnus at the nadir vs. zenith port.	SSCN 12961	S/A 1886	10/1/2012	
Enhanced Cygnus materials list with operating temperatures for the nadir and zenith locations (applies to non-metallic, vacuum-exposed materials per DID ENV-ORB-01)	SSCN 12961	S/A 1886	10/1/2012	
Enhanced Cygnus configuration on the Nadir and Zenith ports.	SSCN 12961	S/A 1886	10/1/2012	
Enhanced Cygnus material test samples to support ASTM E1559 outgassing testing if needed due to material changes.	SSCN 12961	S/A 1886	10/1/2012	
Durations for enhanced Cygnus at the nadir vs. zenith port.	SSCN 12961	S/A 1886	10/1/2012	
SSRMS robotics procedures for the Demate-to-Release operations for Orbital Standard Cygnus motion from Node 2 zenith to the new zenith release position	SSCN 12961	S/A 1886	3/1/2013	
Robotics timeline (RTL) files for Orbital Standard Cygnus motion from Node 2 zenith to the new zenith release position	SSCN 12961	S/A 1886	3/1/2013	
Standard Cygnus mass property 31-body ACP files for release form Node2 Zenith port; specifically, ACP files for: 1) body 31 representing the vehicle at the new notional nadir release position 2) all 31 bodies except bodies 29 and 31 (equivalent of Rev AG Step 16 will be sufficient) 3) bodies 29 and 31 for this vehicle on Node 2 nadir and Node 2 zenith ports 4) bodies 1 and 6 for SSRMS holding the vehicle at the new notional nadir release position	SSCN 12961	S/A 1886	3/1/2013	
SSRMS robotics procedures for the Demate-to-Release operations for HTV3 motion from Node 2 zenith to the new notional nadir release position	SSCN 12961	S/A 1886	3/17/2012	4/18/2012
SSRMS robotics procedures for the Demate-to-Release operations for Orbital Enhanced Cygnus motion from Node 2 zenith to the new zenith release position	SSCN 12961	S/A 1886	4/1/2013	
Robotics timeline (RTL) files for HTV3 motion from Node 2 zenith to the new notional nadir release position	SSCN 12961	S/A 1886	3/17/2012	4/18/2012
Robotics timeline (RTL) files for Orbital Enhanced Cygnus motion from Node 2 zenith to the new notional nadir release position	SSCN 12961	S/A 1886	3/1/2013	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

HTV mass property 31-body ACP files for release form Node2 Zenith port; specifically, ACP files for: 1) body 31 representing the vehicle at the new notional nadir release position 2) all 31 bodies except bodies 29 and 31 (equivalent of Rev AG Step 16 will be sufficient) 3) bodies 29 and 31 for this vehicle on Node 2 nadir and Node 2 zenith ports 4) bodies 1 and 6 for SSRMS holding the vehicle at the new notional nadir release position	SSCN 12961	S/A 1886	2/15/2012	2/15/2012
Orbital Enhanced Cygnus mass property 31-body ACP files for release form Node2 Zenith port; specifically, ACP files for: 1) body 31 representing the vehicle at the new notional nadir release position 2) all 31 bodies except bodies 29 and 31 (equivalent of Rev AG Step 16 will be sufficient) 3) bodies 29 and 31 for this vehicle on Node 2 nadir and Node 2 zenith ports 4) bodies 1 and 6 for SSRMS holding the vehicle at the new notional nadir release position	SSCN 12961	S/A 1886	3/1/2013	
Traffic Model	SSCN 12833	S/A 1818	2/29/2012	
Resolution of TBDs and TBRs in JSC 66202, Section 4.0, Load Requirements (ISS Power Inverter to 120VAC 60Hz Loads IDD)	SSCN 12443 Credit	Letter BG-12-035	3/7/2012	3/28/2012
FSW, simulation models and associated configuration data for the SDIL MLM component	SSCN 12638	S/A 1817	7/30/2012	9/19/2012
FSW, simulation models and associated configuration data for the SDIL Service Module (including all related simulation models)	SSCN 12638	S/A 1817	4/26/2013	
Workstation OS and other associated system software	SSCN 12638	S/A 1817	4/26/2013	
Acceptance Data Package for MLM	SSCN 12638	S/A 1817	9/28/2012	9/28/2012
Acceptance Data Package for Service Module	SSCN 12638	S/A 1817	9/27/2013	
CASEO Concept of Operations	SSCN 12209	S/A 1825	3/1/2011	3/1/2011
CASEO Project Technical Requirements Specification	SSCN 12209	S/A 1825	3/1/2011	3/1/2011
CASEO Physical and Operational Envelope Requirements	SSCN 12209	S/A 1825	3/1/2011	3/1/2011
Preliminary Thermal Data for CASEO CDR: 1. Thermal Flow Rates, Pressure Drops, and Heat Loads 2. Intake & Exhaust locations and dimensions w/temp range 3. Emissivity data for all exterior surfaces	SSCN 12209	S/A 1825	11/15/2011	11/15/2011
Integration data for CASEO CDR: 1. CASEO Stress Analysis & Fracture Control Report; Provides CASEO's Maximum Interface Loads for Seat Track Attachment 2. Acoustics - Noise Control Plan w/model & prediction of Noise level in all operational scenarios 3. Acoustics - Test Data: 3.a - Octave-band SPL measured @ 2' for continuous noise 3.b - Octave-band SPL, frequency, & duration measured @ 2' for intermittent noise 4. R&M - R&M Prediction Report 5. R&M - FMEA/CIL per SSP 30234 (Ph II Pkg) 6. R&M - Limited Life Items List 7. Safety - Hazard Report (Ph II Pkg)	SSCN 12209	S/A 1825	12/1/2011	12/1/2011
Acoustic - Engineering Data, Including Separator Module: 1. Octave-band SPL measured @ 2' for Continuous Noise 2. Octave-band SPL frequency & duration for intermittent noise 3. Prediction Model for Noise Levels in all known operational scenarios & configurations, include noise abatement solutions	SSCN 12209	S/A 1825	4/30/2012	4/30/2012
CASEO Mass Properties	SSCN 12209	S/A 1825	12/15/2011	12/15/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	CASEO Electrical Characteristics	SSCN 12209	S/A 1825	12/15/2011	12/15/2011
	Sequence of Assembly for CASEO Installation: 1. Outline format; includes illustrations, diagrams and tools required, Preliminary.	SSCN 12209	S/A 1825	2/17/2012	2/17/2012
	Sequence of Assembly for CASEO Installation & Operation: 1. Outline format; including illustrations/diagrams and tools, (Updated details) Final.	SSCN 12209	S/A 1825	7/31/2012	
	CASEO Qualification and Characterization Data, - Pre-qualification test data: 1. Touch Temperature Data, Est. 2. Updated Acoustic Model 3. Updated CASEO Electrical Characterization Data 4. HFIT Assessment, Preliminary 5. List of Proposed Requirement Exceptions & Deviations 6. Micro-gravity Data, Est. 7. Power Quality Test Plan & Request for Deviations/Waivers 8. EME Test Plan & Request for Deviations/Waivers	SSCN 12209	S/A 1825	6/15/2012	
	CASEO Envelope and Interface Drawings: CASEO External Configuration, Intra-Module Interface Design, Installed Configuration, As-Designed	SSCN 12209	S/A 1825	5/17/2012	
	Safety and R&M Packages, Draft: Include Separator Module Data. 1. Update to Phase II Data packages	SSCN 12209	S/A 1825	5/17/2012	
	CASEO Qualification and Characterization Data, Final 1. Power Quality Test Data 2. EME Test Data 3. Acoustic Test Data 4. Thermal and Airflow Test Data 5. External Surface Emissivity Data 6. Touch Temperature Data 7. HFIT Assessment 8. CASEO Installed Mass 9. O2 Product Gas Test Data 10. CASEO PTRS (As-Delivered) 11. List of Exceptions & Deviations 12. Micro-Gravity Test Data	SSCN 12209	S/A 1825	2/1/2013	
	Safety and R&M packages, Final 1. CASEO FMEA/CIL Data Package 2. CASEO Safety Analysis Report/Hazard Report with SVTL (list of open work)	SSCN 12209	S/A 1825	2/1/2013	
	CASEO Envelope and Interface Drawings, As-Built version, Final 1. CASEO External Configuration, Intra-Module Interface Design, Installed Configuration, As-built Version (Final)	SSCN 12209	S/A 1825	4/1/2013	
528-20870-2	Hose Adapter and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

528-20870-5	US/RSA-A Hose and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-20870-6	US/RSA-B Hose and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED42100926-305/-306	Microbial Check Valve and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED48101607-306 & -307	Contingency Water Dispenser and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10108-20045-04	3102 Yellow/Yellow (Y/Y) Assy. and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-20870-01	Yellow/Red Hose and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10108-20175-01	3102 Yel/3142 Red Adapter Assy and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-21022-1	Iodine Removal Hose Assy and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-21026-1	Actex (ACTIVATED CARBON/ION EXCHANGE) Hose Assembly and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10108-20043-01	Blue/Blue Hose (Shuttle Only) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED39123946-301	Contingency Waste Water Dump Line Filter (CWWDLF) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10108-10089-02	CWC Contingency Hose Assy and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED39121808-302	Flexible Wand Extender and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SEG33105020-301/-303	ISS Quick Don Mask Assembly (Contained in the PBA Kit) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105002	Portable Breathing Apparatus Kit (PBA) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105050-301/-303	Mount Assembly, Cylinder, PBA, PEP and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105312-301	Quick Disconnect Assy, ECLSS, PBA, PEP and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105312-303	Quick Disconnect Assy, ECLSS, PBA, PEP and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105316-301/-303	Mask Holder Assembly, PBA, PEP and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SJG33104995-301/303/-305	Extension Hose/Tee Kit (-303/-305) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SJG33112241-301	Pre-breathe Hose Assy Kit and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SJG33112747-301	Pre-breathe Hose Spares Kit and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105010-301	RDR/CYL ASSY, Oxygen, PBA, PEP and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012
SEG33105030-301	HARNESS ASSY, PBA, PEP and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	4/24/2012

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

SED16101310 - 311	Hand Held Microphone (HHM) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED16101310-705	HHM Interface Cable, ISS and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
3278890-507 & -508	Color Television Camera (CTVC) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED39129292-302	Lens Shield Assembly and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-20986-1	Microbial Removal Assy, SORG (2) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-20986-2	Microbial Removal Filter Assy (Shuttle Only) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
528-21023	Shuttle Supply Water Hose Assy and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10108-20044-02	Red/Red Hose (Shuttle Only) and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10132-10032-04	Shuttle Only CWC and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
10108-10047-03	PHS Hose Assembly and All Sub Assemblies	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
SED11100288-304	Supply Water Dump Line Purge Adapter	SSCN 12870	S/A 1829	3/30/12 (USA) 4/13/12 (EC)	
	Current Version of all Project Technical Requirements Specification (PTRS)	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Verification and Validation Document (V&VD)	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Interface Control Documents (ICDs)	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all End Item Specification	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Design Analysis Reports	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all TPSs / VWARS / Router / GMIPs / Qualification & Acceptance Procedures	SSCN 12870	S/A 1829	3/30/2012	
	Current Version of all Safety Data Package / RASER	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Ground Safety Analysis Report	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all FCA/PCA and SAR (System Acceptance Review)	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Certification Data Package w/ GCAR	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Acceptance Data Package or Parts Tag (includes C of Cs)	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all FIARs, IFIs, PRACAs	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Discrepancy Reports	SSCN 12870	S/A 1829	3/30/2012	
	Current Version of all Waivers, Deviations, Exceptions, NCRs	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Shipping Documents	SSCN 12870	S/A 1829	3/30/2012	
	Current Version of all Sustaining Engineering Plan	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Maintenance / Preventative Maintenance Plans	SSCN 12870	S/A 1829	4/13/2012	
	Current Version of all Lessons Learned Report	SSCN 12870	S/A 1829	4/13/2012	
528-20584-1	VACHS HOSE TEST FIXTURE And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
528-20817-1	SORG WATER SUPPLY CONSOLE And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
528-20824-1	SORG SUPPLY ADAPTER HOSE ASSY. And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
528-20924-1	HOSE ASSEMBLY, MCV TEST FIXTURE And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
528-20928-1	HOSE ASSY, QD TO RUSSIAN MALE CONN. And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
SED38109405	N2 PRESSURIZATION PANEL II And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
SED38107393	LCVG FLUSHING FIXTURE And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
	UCD/CWC Leakage Test Fixture And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

	MCV Press Assembly And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
	Microbial Check Valve Test Panel And All Sub Assemblies	SSCN 12870	S/A 1829	3/30/2012	
	ELC Payload Contamination Source Data	SSCN 13105	S/A 1840	Preliminary at L-24-months and Final at L-7.5 months	
	Identify planned storage location(s) for Ammonia Leak Locator.	SSCN 13269	S/A 1852	8/1/2012	8/1/2012
	Identify ATCS systems where lead detection will be used. (For example, P6/S6 are likely out-of-reach.)	SSCN 13269	S/A 1852	8/1/2012	
	Identify any specific components of ATCS loops that are to be neglected from leak detection scans. (For example, the interface heat exchangers of the EATCS are buried under MM/OD shields and stuck on the ends of modules mounted together.)	SSCN 13269	S/A 1852	8/1/2012	8/1/2012
	Identify the range of leak rates to be used in the study. (Previously defined leak rate range was 1 – 50 lbm/day.)	SSCN 13269	S/A 1852	8/1/2012	8/1/2012
	Identify any leak types/models to be excluded from study.	SSCN 13269	S/A 1852	8/1/2012	8/1/2012
	Identify ground test facilities available and capabilities for vacuum testing of simulated ammonia leaks.	SSCN 13269	S/A 1852	8/1/2012	8/1/2012
	CO2 Rack Fire Extinguishment Test Plan	SSCN 13190	S/A 1856	6/29/2012	6/29/2012
	MAGIK assessments of SPDM Specific Requirements for the following: OTCM Clearance Envelope; Target Viewing; Eva Contingency Release Access; Single End Effectors Operations; Straight Line In Motion; Manipulator Clearance; Equipment-to Worksite Visual Cues; Equipment to Worksite Visual Cue Accuracy; Robotic Vision System Compatibility as defined in Attachment "A" of CR 13232.	SSCN 13232	S/A 1857	9/1/2012	
	Resolution of TBDs and TBRs in JSC 66202, Section 4.0, Load Requirements (ISS Power Inverter to 120VAC 60Hz Loads IDD)	SSCN 12443	S/A 1854	3/7/2012	3/7/2012
	RAD Software ICD Inputs	SSCN 13235	S/A 1866	10/31/2012	11/19/2012
	RAD IPCL Data	SSCN 13235	S/A 1866	10/3/2013	10/22/2012
	RAD SDR Data Package	SSCN 13235	S/A 1866	8/1/2012	10/22/2012
	GFE/CFE C2V2 Comm Unit mock-up	SSCN 12639	S/A 1860	5/24/2013	
	IP&CL Standard-In including Emergency Caution and Warning	SSCN 12639	S/A 1860	4/4/2012	4/4/2012
	C2V2 Comm Unit Mating connector definition and physical envelope Definition	SSCN 12639	S/A 1860	7/2/2013	
	DVO's from NASA subsystems to HS/I for Stage test and integration test	SSCN 12639	S/A 1860	9/2/2013	
	Hardware Level Hazard Analysis for C2V2 Comm Unit to support the integration of C2V2 into ISS	SSCN 12639	S/A 1860	6/7/2013	
	Hardware level FEMA/CILs for C2V2 Comm Unit to support the integration of C2V2 into ISS	SSCN 12639	S/A 1860	6/7/2013	
	C2V2 Comm Unit On orbit configuration drawing	SSCN 12639	S/A 1860	6/7/2013	
	C2V2 Comm Unit As-Run EMI/EMC test Data and Test Report	SSCN 12639	S/A 1860	6/6/2014	
	C2V2 Comm Unit wiring data for 1553 and power channelization	SSCN 12639	S/A 1860	6/1/2013	
	C2V2 Comm Unit Labels for Mod Kit Hardware	SSCN 12639	S/A 1860	6/7/2013	
	RF Coverage Analysis	SSCN 12639	S/A 1860	6/7/2013	
	Connector Layout to support FIT check to mock up	SSCN 12639	S/A 1860	1/7/2013	
	Power up and Activation Diagrams/Schematics/Drawings and Data for C2V2 Comm Unit	SSCN 12639	S/A 1860	1/7/2013	
	Detailed Drawings/Schematics of C2V2 Comm Unit needed to support installation procedure development	SSCN 12639	S/A 1860	6/7/2013	
	C2V2 Comm Unit Users Guide	SSCN 12639	S/A 1860	6/7/2013	
	C2V2 RF ICD	SSCN 12639	S/A 1860	6/7/2013	
	MSFC Generated EXPRESS Payload Functional Interface Test Procedure (As Run Version for each Payload Integrated with STELLA)	SSCN 13175	S/A 1848	As Available for each Payload Functional Testing Schedule	
	SpaceX connector pinout and related interface documentation	SSCN 13204	S/A 1887	NASA OD to provide documentation to ensure that our cable pinout and that of the SpaceX vehicle match up properly	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Multi Purpose Crew Vehicle MCA requirements, document # HSSSI 71-0329	SSCN 13384	S/A 1896	10/22/2012	10/19/2012
Final SpX-3 Dragon trunk materials list detailing materials identification, location of application, vacuum exposed surface area, ASTM E1559 outgassing rate data	SSCN 13366	S/A 1899	10/19/2012	11/15/2012
Final SpX-3 pre-mated and mated operating temperature data for Dragon trunk materials detailing nominal operational temperature range (maximum and minimum), percentage of time spent below 30°C, between 30° and 60°C and between 60°C and maximum operating temperature.	SSCN 13366	S/A 1899	10/19/2012	11/15/2012
ASTM E1559 outgassing rate test data for new SpX-3 Dragon trunk materials tested at their maximum operating temperature (nominal maximum), +60°C and +30°C. Tests will be performed per ASTM E1559 method B with minimum test duration of 144 hours, utilizing four Thermally controlled Quartz Crystal Microbalances (TQCMs) receivers set at 80K, -40°C, -10°C and +25°C and include Quartz Crystal Microbalance Thermogravimetric Analysis (QTGA).	SSCN 13366	S/A 1899	11/16/2012	
Final SpX-3 Geometric configuration of integrated payload/cargo complement in the Dragon trunk	SSCN 13366	S/A 1899	10/19/2012	
Characterization of Dragon separation contamination sources: thruster/pyro operational timelines, geometry and directions, plume/exhaust composition, plume and particle dispersion model	SSCN 13366	S/A 1899	10/19/2012	
SpX-3 payloads/cargo/flight support equipment materials list detailing materials identification, location of application, vacuum exposed surface area, ASTM E1559 outgassing rate data	SSCN 13366	S/A 1899	10/19/2012	
Preliminary pre-mated and mated operating temperature data for payloads/cargo/flight support equipment materials detailing nominal operational temperature range (maximum and minimum), percentage of time spent below 30°C, between 30° and 60°C and between 60°C and maximum operating temperature.	SSCN 13366	S/A 1899	10/19/2012	
Preliminary Dragon trunk materials list detailing materials identification, location of application, vacuum exposed surface area, ASTM E1559 outgassing rate data	SSCN 13366	S/A 1899	Launch-18 months	
Preliminary pre-mated and mated operating temperature data for Dragon trunk materials (from Generic Thermal Handbook) detailing nominal operational temperature range (maximum and minimum), percentage of time spent below 30°C, between 30° and 60°C and between 60°C and maximum operating temperature.	SSCN 13366	S/A 1899	Launch-18 months	
Preliminary geometric configuration of integrated payload/cargo complement in the Dragon trunk	SSCN 13366	S/A 1899	Launch-18 months	
Preliminary payloads/cargo/flight support equipment materials list detailing materials identification, location of application, vacuum exposed surface area, ASTM E1559 outgassing rate data	SSCN 13366	S/A 1899	Launch-18 months	
Preliminary pre-mated and mated operating temperature data for payloads/cargo/flight support equipment materials detailing nominal operational temperature range (maximum and minimum), percentage of time spent below 30°C, between 30° and 60°C and between 60°C and maximum operating temperature.	SSCN 13366	S/A 1899	Launch-18 months	
Final Dragon trunk materials list detailing materials identification, location of application, vacuum exposed surface area, ASTM E1559 outgassing rate data	SSCN 13366	S/A 1899	Launch-10 months	
Final pre-mated and mated operating temperature data for Dragon trunk materials (from Mission MRAD) detailing nominal operational temperature range (maximum and minimum), percentage of time spent below 30°C, between 30° and 60°C and between 60°C and maximum operating temperature.	SSCN 13366	S/A 1899	Launch-10 months	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

ASTM E1559 outgassing rate test data for new SpX-3 Dragon trunk materials tested at their maximum operating temperature (nominal maximum), +60°C and +30°C. Tests will be performed per ASTM E1559 method B with minimum test duration of 144 hours, utilizing four Thermally controlled Quartz Crystal Microbalances (TQCMs) receivers set at 80K, -40°C, -10°C and +25°C and include Quartz Crystal Microbalance Thermogravimetric Analysis (QTGA).	SSCN 13366	S/A 1899	Launch-10 months	
Final geometric configuration of integrated payload/cargo complement in the Dragon trunk	SSCN 13366	S/A 1899	Launch-10 months	
Characterization of Dragon separation contamination sources: thruster/pyro operational timelines, geometry and directions, plume/exhaust composition, plume and particle dispersion model	SSCN 13366	S/A 1899	Launch-10 months	
Final payloads/cargo/flight support equipment materials list detailing materials identification, location of application, vacuum exposed surface area, ASTM E1559 outgassing rate data	SSCN 13366	S/A 1899	Launch-10 months	
Final pre-mated and mated operating temperature data for payloads/cargo/flight support equipment materials detailing nominal operational temperature range (maximum and minimum), percentage of time spent below 30°C, between 30° and 60°C and between 60°C and maximum operating temperature.	SSCN 13366	S/A 1899	Launch-10 months	
Methodology to make DMSD from Trimethylsilanol	SSCN 13322	S/A 1907	11/5/2012	4/18/2011
DMSD Removal Evaluation Report	SSCN 13322	S/A 1907	11/5/2012	6/13/2012
Sample Analyses from Single Column and 1/10th Scale Tests for DMSD	SSCN 13322	S/A 1907	7/16/2013	
C2V2 Comm Unit Operating Conditions & Modes - preliminary @ PDR	SSCN 12639	Letter 12-015531R1 S/A 1999	11/27/2012	11/27/2012
C2V2 Comm Unit Load Variation Characteristics - preliminary @ PDR	SSCN 12639	Letter 12-015531R1 S/A 1999	11/27/2012	11/27/2012
C2V2 Comm Unit Interface Schematics - Preliminary	SSCN 12639	Letter 12-015531R1 S/A 1999	11/28/2012	11/28/2012
NASA PIDS Baseline - Released	SSCN 12639	Letter 12-015531R1 S/A 1999	11/30/2012	11/30/2012
Preliminary Hardware level FMEA/CILs for C2V2 Comm Unit to support integration of C2V2 into ISS	SSCN 12639	S/A 1999	2/1/2013	2/1/2013
C2V2 Comm Unit B2 Specification (NASA Vendor)	SSCN 12639	Letter 12-015531R1 S/A 1999	2/8/2013	2/8/2013
Comm Unit Connector Types and Orientations, Pins and Part Numbers	SSCN 12639	Letter 12-015531R1 S/A 1999	2/8/2013	2/8/2013
Preliminary Comm Unit Interface Dimensions, Models and Mounting Details	SSCN 12639	Letter 12-015531R1 S/A 1999	2/8/2013	2/8/2013
Mass and Center of Gravity values for Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
Interface Points at Comm Unit to Shelf attachment	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013

**Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71**

NAS15-10000
MOD 2031

Documentation on Galvanic Corrosion Issues for Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
Documentation identifying any metallic materials that will interface with planned cable connector to the Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
C2V2 Comm Unit Thermal Models - Preliminary	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
C2V2 Comm Unit Power Models - Preliminary	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
C2V2 Comm Unit Structural Models - Preliminary	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
C2V2 Comm Unit CAD Models - Preliminary	SSCN 12639	Letter 12-015531R1 S/A 1999	2/11/2013	2/11/2013
CAA CAD Model - Preliminary Release 1	SSCN 12639	S/A 1999	5/9/2013	5/9/2013
CAA Structural Models - Preliminary Release 1	SSCN 12639	S/A 1999	6/5/2013	
CAA Thermal Models - Preliminary Release 1	SSCN 12639	S/A 1999	6/5/2013	7/5/2013
Preliminary Hardware level FMEA/CILs for CAA to support the integration of CAA into ISS Release 1	SSCN 12639	S/A 1860 Letter 12-015531R1 S/A 1999	6/5/2013	
CAA CAD Model - CDR Quality	SSCN 12639	S/A 1999	8/14/2013	
CAA Structural Models - CDR Quality	SSCN 12639	S/A 1999	8/14/2013	8/2/2013
CAA Thermal Models - CDR Quality	SSCN 12639	S/A 1999	8/14/2013	8/14/2013
Preliminary Hardware level FMEA/CILs for CAA to support the integration of CAA into ISS - CDR Quality	SSCN 12639	S/A 1999	8/14/2013	8/14/2013
Integrated MTBF Analysis Report for CAA	SSCN 12639	Letter 12-015531R1 S/A 1999	8/14/2013	
CDR Quality Drawings/Schematics of CAA needed to support installation procedure development	SSCN 12639	S/A 1999	9/19/2013	
Crew Consensus Report of CAA NBL Run	SSCN 12639	S/A 1999	9/30/2013	
Hardware Level Hazard Analysis (Phase III) for C2V2 Comm Unit to support the integration of C2V2 into ISS	SSCN 12639	S/A 1999	11/1/2013	
Safety Data Package or RAESR - CAA (Risk Assessment Executive Summary Report)	SSCN 12639	Letter 12-015531R1 S/A 1999	11/7/2013	
C2V2 Comm Unit On Orbit configuration drawing	SSCN 12639	S/A 1999	11/26/2013	
Final Comm Unit Interface Dimensions and Mounting Details	SSCN 12639	Letter 12-015531R1 S/A 1999	11/26/2013	
Integrated MTBF Analysis Report for Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	12/11/2013	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Characterization DVOs from NASA subsystems to HS/I for Stage test and integration test	SSCN 12639	S/A 1999	1/3/2014	
C2V2 Comm Unit Operating Conditions & Modes - Final @ CDR + 2 weeks (NASA Vendor)	SSCN 12639	Letter 12-015531R1 S/A 1999	1/3/2014	
Power up and Activation Diagrams/Drawings and/or Data for C2V2 Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	1/3/2014	
Final Hardware level FMEA/CILs for C2V2 Comm Unit to support the integration of C2V2 into ISS	SSCN 12639	S/A 1999	1/15/2014	
Safety Data Package or RAESR - C2V2 Comm Unit (Risk Assessment Executive Summary Report)	SSCN 12639	Letter 12-015531R1 S/A 1999	2/14/2014	
C2V2 Comm Unit As-Run Test Data and Test Report	SSCN 12639	Letter 12-015531R1 S/A 1999	3/31/2014	
Identification of any Special Packaging, Handling, Shipping and Transportation Instructions for Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	4/1/2014	
Identification of any preventive maintenance either on the ground or on-orbit for Comm Unit	SSCN 12639	Letter 12-015531R1 S/A 1999	4/1/2014	
RF Coverage Analysis	SSCN 12639	Letter 12-015531R1 S/A 1999	6/1/2014	
C2V2 Comm Unit Load Variation Characteristics - Final @ 2 weeks prior to Qual Unit PQ Testing	SSCN 12639	Letter 12-015531R1 S/A 1999	6/16/2014	
CAA Schematics - Final (NASA Vendor)	SSCN 12639	Letter 12-015531R1 S/A 1999	10/14/2014	
Final Hardware level FMEA/CILs for CAA to support the integration of CAA into ISS	SSCN 12639	Letter 12-015531R1 S/A 1999	10/14/2014	
C2V2 Comm Unit ADP (copy)	SSCN 12639	Letter 12-015531R1 S/A 1999	10/27/2014	
CAA As-Run Test Data and Test Report	SSCN 12639	Letter 12-015531R1 S/A 1999	10/28/2014	
CAA ADP (copy)	SSCN 12639	Letter 12-015531R1 S/A 1999	10/28/2014	
Configuration data and details of the assets to be connected to the OCA Ku up/downlink for JSL team to use to configure and test the Edge Router configuration files. Includes: IP addresses for ground segment used for configuration changes, such as routes on iPEHG or ER. Traffic Types (multicast etc...)	SSCN 13351	SA-1919	2/1/2013	6/13/2013

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Configuration drawings for ground systems and addressing information, including ground systems used for testing between SCTF and MSFC.	SSCN 13351	SA-1919	2/1/2013	6/13/2013
Required configuration changes to ITR, such as eFDP updates and documentation changes.	SSCN 13351	SA-1919	2/1/2013	6/13/2013
List of any new protocols used, such as for DTN protocol stacks. List of proposed applications: remote desktop, telnet, FTP, DTN, video, audio, IP phone, etc...	SSCN 13351	SA-1919	2/1/2013	6/13/2013
The JPL developed CFDP software/library provided as C source code (requires new builds per environment)	SSCN 13351	SA-1919	3/1/2013	4/24/2013
Windows compiler (MinGW) and other based services for unrestricted capability	SSCN 13351	SA-1919	3/1/2013	4/24/2013
System Security: Current requirements and implementation restrictions imposed on Payloads systems using this capability necessary to meet overall NASA and federal IT security requirements for the ISS.	SSCN 13351	SA-1919	3/1/2013	6/13/2013
Process, requirements, and design documents for the Program Scientist Toolbox software	SSCN 12837	S/A 1944	9/17/2012	9/17/2012
Process, requirements, and design documents for the Flex Chart software	SSCN 12837	S/A 1944	7/26/2012	7/26/2012
Process, requirements, and design documents for the User Operations Panel (UOP) Resource Requirements software	SSCN 12837	S/A 1944	9/17/2012	9/17/2012
ISS IT server standards, requirements, and policies	SSCN 12837	S/A 1944	7/26/2012	7/26/2012
ISS IT Security/Firewall standards, requirements, and policies	SSCN 12837	S/A 1944	7/26/2012	7/26/2012
ISS IT software system and code standards, requirements, and policies	SSCN 12837	S/A 1944	7/26/2012	7/26/2012
67C-Y-20-442, PIU Adaptor Instruction Manual	SSCN 12916	S/A 1947	5/31/2013	
Specify the PMA-2 orientation (clocking).	SSCN 13047	S/A 1943	2/15/2012	2/15/2012
Simplified Dragon Thermal Model in TRASYS & SINDA formats	SSCN 13047	S/A 1943	2/15/2012	2/15/2012
Space X Dragon attitudes and flight orientation data	SSCN 13047	S/A 1943	2/15/2012	2/15/2012
CAD (BEAM) for Express/Best Available models to support PDR/CDR (including FSE that will integrate it to the SpaceX Vehicle)	SSCN 13121	S/A 1959	12/2/2013	
CAD models (Preliminary design, pre-inflated and inflated versions, including FSE that will integrate it to the SpaceX Vehicle) to support procedure building/test.	SSCN 13121	S/A 1959	9/3/2013	
CAD models (final design, as -built, pre-inflated and inflated versions, including FSE that will integrate it to the SpaceX Vehicle	SSCN 13121	S/A 1959	11/15/2014	
Mass properties and aerodynamic information contained in the Blue Book published by the NASA/JSC CAMMP org	SSCN 13121	S/A 1959	11/15/2014	
IMV Duct Drawings	SSCN 13121	S/A 1959	6/1/2014	
UOP Power Cable Drawing	SSCN 13121	S/A 1959	6/1/2014	
SSC to BEAM bulkhead cable drawings	SSCN 13121	S/A 1959	6/1/2014	
BEAM bulkhead drawing with feedthrough information	SSCN 13121	S/A 1959	6/1/2014	
Vestibule LAN cable drawings	SSCN 13121	S/A 1959	6/1/2014	
BEAM IMV Duct drawings	SSCN 13121	S/A 1959	9/1/2014	
BEAM Interior drawing(s) showing size and location of IMV vents	SSCN 13121	S/A 1959	12/1/2014	
RFI Tranceiver EMI test results	SSCN 13121	S/A 1959	9/1/2014	
RF data transmitter specifications	SSCN 13121	S/A 1959	9/1/2014	
Preliminary Contaminant Source Data	SSCN 13121	S/A 1959	1/3/2014	
Updated Contaminant Source Data	SSCN 13121	S/A 1959	6/1/2014	
Final Contaminant Source Data	SSCN 13121	S/A 1959	12/1/2014	
BEAM outer shell drawing showing tether loop locations	SSCN 13121	S/A 1959	12/1/2014	
BEAM back bulkhead drawing showing handrail location	SSCN 13121	S/A 1959	12/1/2014	
Interior drawings showing translation aids	SSCN 13121	S/A 1959	12/1/2014	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Phase 1 Bigelow Inflated thermal model	SSCN 13121	S/A 1959	5/1/2013	12/1/2012
Bulkhead drawings or model/bill of material information to determine part numbers of bulkhead feed throughs necessary for the as-designed audit, as-built audit and mate-fit check/OOCT activities.	SSCN 13121	S/A 1959	1/3/2014	
MMOD Model: Bumper-II compatible finite element model for MMOD models.	SSCN 13121	S/A 1959	10/15/2014	
Finite element models of the BEAM element with CBM included to attach to NODE-3 for on-orbit loads analysis and integrated structural and pressure assessments of the CBM Joint	SSCN 13121	S/A 1959	1/3/2014	
Finite element models of the BEAM element (updated) with CBM element (updated) with CBM included to attach to NODE-3 for on-orbit loads analysis and integrated structural and pressure assessments of the CBM Joint	SSCN 13121	S/A 1959	7/15/2014	
BEAM, EMI Test Plan and Procedure	SSCN 13121	S/A 1959	1/3/2014	
BEAM EMI Test Results	SSCN 13121	S/A 1959	12/1/2014	
BEAM ESD and Corona Analysis	SSCN 13121	S/A 1959	1/3/2014	
BEAM RF Shielding Analysis	SSCN 13121	S/A 1959	1/3/2014	
Analysis showing expected radiation environment inside BEAM containing radiation shielding assumptions	SSCN 13121	S/A 1959	1/3/2014	
BEAM EPS Models	SSCN 13121	S/A 1959	1/3/2014	
BEAM Logistic Data	SSCN 13121	S/A 1959	1/3/2014	
External (vacuum exposed) materials data: identification of all vacuum exposed materials (all materials external to the pressure "shell"; this includes all layers outside of the impermeable layer that contains the pressurized environment), distribution (location of usage), surface area, operating temperatures (maximum and percentage of time spent under 30 degree C, between 30 and 50 C, and between 50 C and maximum).	SSCN 13121	S/A 1959	1/3/2014	
BEAM Grounding Data	SSCN 13121	S/A 1959	1/3/2014	
BEAM Bonding Data	SSCN 13121	S/A 1959	1/3/2014	
List of Program Furnished Equipment (PFE) integrated into the BEAM (indicating items and quantity)	SSCN 13121	S/A 1959	1/3/2014	
NASTRAN geometric model of BEAM, inflated and deflated (text file; 400 - 500 node resolution is preferred).	SSCN 13121	S/A 1959	1/3/2014	
Updated NASTRAN geometric model of BEAM, inflated and deflated (text file; 400-500 node resolution is preferred)	SSCN 13121	S/A 1959	9/3/2014	
Geometric description of vacuum venting paths, including location, orientation and dimensions of venting paths used in the layout of the layers.	SSCN 13121	S/A 1959	1/3/2014	
Bigelow Inflated thermal model	SSCN 13121	S/A 1959	10/1/2013	
Test validated Bigelow thermal model of collapsed Configuration	SSCN 13121	S/A 1959	11/15/2014	
BEAM FMEAs (if required)	SSCN 13121	S/A 1959	1/3/2014	
BEAM Hazard Report	SSCN 13121	S/A 1959	10/15/2013	
Robotics Timelines (generated by NASA/JSC DX org.)	SSCN 13121	S/A 1959	12/1/2014	
Verification Report/Data Submittals as required by SSP 57239	SSCN 13121	S/A 1959	12/1/2014	
Concept of Operations Releases	SSCN 13121	S/A 1959	1/3/2014	
PDR/CDR Package	SSCN 13121	S/A 1959	12/2/2013	
PRR Package	SSCN 13121	S/A 1959	3/15/2015	
CBM-CBM interface analysis	SSCN 13121	S/A 1959	11/15/2014	
Node 3 CAD model updates	SSCN 13121	S/A 1959	6/28/2013	7/17/2013
Space-X Dragon Interface Requirements Data	SSCN 13241	S/A 1974	5/10/2013	7/9/2013
Product Definition Documentation (and Verifications) Delivered with Hardware Specific Drawings				

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Current Version of all Project Management Plan	SSCN 13267	S/A 1925		
Current Version of all Project Technical Requirements Specification (PTRS)	SSCN 13267	S/A 1925		
Current Version of all Verification and Validation Document (V&VD)	SSCN 13267	S/A 1925		
Current Version of all Project Requirements and Verification Doc (PRVD) for IVA non-critical GFE	SSCN 13267	S/A 1925		
Current Version of all Interface Control Documents (ICDs)	SSCN 13267	S/A 1925		
Current Version of all End Item Specification	SSCN 13267	S/A 1925		
Build, Analysis, and Certification Delivered with Hardware Specific Drawings				
Current Version of all Design Analysis Reports	SSCN 13267	S/A 1925		
Current Version of all TPSs / VWARS / Router / GMIPs / Qualification & Acceptance Procedures	SSCN 13267	S/A 1925		
Current Version of all Safety Data Package / RASER	SSCN 13267	S/A 1925		
Current Version of all Ground Safety Analysis Report	SSCN 13267	S/A 1925		
Current Version of all FCA/PCA and SAR (System Acceptance Review)	SSCN 13267	S/A 1925		
Current Version of all Certification Data Package w/ GCAR	SSCN 13267	S/A 1925		
Current Version of all Acceptance Data Package or Parts Tag (includes C of Cs)	SSCN 13267	S/A 1925		
Non-Conformances Delivered with Hardware Specific Drawings				
Current Version of all Discrepancy Reports, FIARs, IFIs, PRACAs	SSCN 13267	S/A 1925		
Current Version of all Waivers, Deviations, Exceptions, NCRs	SSCN 13267	S/A 1925		
Operations Delivered with Hardware Specific Drawings				
Current Version of all User's Guide	SSCN 13267	S/A 1925		
Current Version of all OCADs	SSCN 13267	S/A 1925		
Current Version of all CHITs	SSCN 13267	S/A 1925		
Current Version of all Flight Rules / On Orbit Procedures	SSCN 13267	S/A 1925		
Shipping, Miscellaneous Delivered with Hardware Specific Drawings				
Current Version of all Shipping Documents	SSCN 13267	S/A 1925		
Current Version of all Sustaining Engineering Plan	SSCN 13267	S/A 1925		
Current Version of all Maintenance / Preventative Maintenance Plans	SSCN 13267	S/A 1925		
Current Version of all Lessons Learned Report	SSCN 13267	S/A 1925		
Drawings (GSE)	SSCN 13267	S/A 1925		
Space Station Computer (SSC) base laptop load image file using Windows 7 as operating system	SSCN 13614	S/A 1951	6/1/2013	6/12/2013
Configuration data and details of the assets to be connected to the JSL Ku up/downlink for JSL team to use to configure and test the Edge router configuration files. Includes: IP Addresses of Space-C Systems: configuration files and settings for the affected Space-X LAN switches and laptops and LAN data captures.	SSCN 13629	S/A 1976	7/1/2013	7/25/2013
Updated C3 – 1 Dragon Interface Definition Document (IDD) to define the specific interfaces for the carrier inside the Dragon Trunk. To include but not limited to: structural interface, electrical interface and capabilities, data interface, pyrotechnic uses and capabilities within the Trunk.	SSCN 13678	S/A 1977	7/12/2013	
SpaceX Vehicle loads: transient acceleration, vibration, acoustics, and shock	SSCN 13678	S/A 1977	7/12/2013	
Handling and lifting requirements while in/around the Dragon Trunk	SSCN 13678	S/A 1977	7/12/2013	
Increment Unique IDRD Annex 5 PTPs	IPEO Credit	S/A 1962	IAW Schedule in SSP 57057, Payload Integration Template	
Comm coverage analysis for C2V2, UHF/CUCU, S-band, and Ku-band.	SSCN 13787	S/A 1988	6/14/2013	6/14/2013
SPM structural model	SSCN 13787	S/A 1988	6/30/2013	
Conops for SPM array usage and feathering (each option)	SSCN 13787	S/A 1988	6/30/2013	
Flight attitude envelope for each option	SSCN 13787	S/A 1988	6/30/2013	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

SPM flowfield interaction model from Aerosciences (port or stbd options only)	SSCN 13787	S/A 1988	7/30/2013	
Geometric definition/model of SPM module	SSCN 13787	S/A 1988	5/31/2013	6/11/2013
Available preliminary SPM non-metallic materials usage and operating temperature data	SSCN 13787	S/A 1988	5/31/2013	6/11/2013
SPM thruster locations and direction vectors	SSCN 13787	S/A 1988	5/31/2013	6/11/2013
SPM thruster performance parameters (thrust, specific impulse, nozzle exit area, nozzle area ratio, nozzle length)	SSCN 13787	S/A 1988	5/31/2013	6/11/2013
SPM thruster on-time estimates and firing profiles for ISS roll control (identification of thruster fired for each operational scenario, firing time estimates per event, number of events per year under operational scenarios)	SSCN 13787	S/A 1988	5/31/2013	6/18/2013
Location of SPM array in ISS coordinates	SSCN 13787	S/A 1988	6/14/2013	
Working potential of SPM arrays	SSCN 13787	S/A 1988	6/14/2013	
SPM solar array electrical grounding scheme	SSCN 13787	S/A 1988	6/14/2013	
Geometric layout of strings on array, current collecting area and location	SSCN 13787	S/A 1988	6/14/2013	
Definition of SPM solar array operations and shunting	SSCN 13787	S/A 1988	6/14/2013	
I-V curve of SPM solar arrays and solar cells	SSCN 13787	S/A 1988	6/14/2013	
Element Aerodynamic properties with SPM at Russian Node Starboard side, Russian Node Port Side, Russian Node Aft, and SM Zenith (no MRM2).	SSCN 13787	S/A 1988	6/14/2013	6/18/2013
Composite Aerodynamic properties with SPM at Russian Node Starboard side, Russian Node Port Side, Russian Node Aft, and SM Zenith (no MRM2).	SSCN 13787	S/A 1988	6/14/2013	6/18/2013
Element Inertia properties with SPM at Russian Node Starboard side, Russian Node Port Side, Russian Node Aft, and SM Zenith (no MRM2).	SSCN 13787	S/A 1988	6/14/2013	6/18/2013
Composite Inertia properties with SPM at Russian Node Starboard side, Russian Node Port Side, Russian Node Aft, and SM Zenith (no MRM2).	SSCN 13787	S/A 1988	6/14/2013	6/18/2013
Interface requirements between Boeing CCAA FSE assembly and CMC FSE assembly	SSCN 13773	S/A 1994	Draft Version 07/01/2013 Final Version 8/13/2013	
Block 1 External High Definition Camera Assembly (EHDCA) requirements review Documents including interface documents (external/internal as applicable)	SSCN 13149	S/A 1984	12/15/2012	12/15/2012
Block 2 EHDCA CDR Documents including RF Coverage Analysis and preliminary TRASYS/SINDA compatible thermal model of the EHDV camera	SSCN 13149	S/A 1984	8/16/2013	8/29/2013
Block 2 EHDCA final Requirements and interface documents (internal and external, as applicable)	SSCN 13149	S/A 1984	8/27/2013	8/29/2013
Block 5 EHDCA Qualification Data and (as run) ATP	SSCN 13149	S/A 1984	4/11/2014	
Block 2 Connector Layout to support FIT check	SSCN 13149	S/A 1984	8/27/2013	8/29/2013
Block 3 Detailed Drawings/Schematics of EHDCA hardware needed to support installation procedure development	SSCN 13149	S/A 1984	11/7/2013	
Block 3 EHDCA and Command/Data User Guide	SSCN 13149	S/A 1984	11/7/2013	
Block 2 EHDCA power quality design data (including Schematics, all Filters, all Passive & Active Components, Equipment load magnitude and phase impedances, Operating conditions & modes, Load variations, Large Signal & Small Signal test data, Inrush Current test data, etc.)	SSCN 13149	S/A 1984	8/27/2013	8/29/2013
Block 2 EHDCA structural and CAD models	SSCN 13149	S/A 1984	8/27/2013	8/29/2013
Block 4 EHDCA As-Run EMI/EMC test Data and Quick Look Test Report	SSCN 13149	S/A 1984	2/11/2014	
Block 5 EHDCA and Hardware Level Safety Data Package (Hazard Analysis, FEMA/CILs, GCAR, etc.) to support the integration of EHDCA into ISS	SSCN 13149	S/A 1984	4/11/2014	
Block 5 EHDCA and Qualification level Certification Data Package to support the integration of EHDCA into ISS	SSCN 13149	S/A 1984	4/11/2014	
Block 6 EHDCA flight unit Acceptance Test data	SSCN 13149	S/A 1984	7/17/2014	
Block 6 EHDCA flight unit ADP	SSCN 13149	S/A 1984	7/17/2014	

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 71

NAS15-10000
MOD 2031

Block 3 Final TRASYS/SINDA compatible thermal model of the EHDCA	SSCN 13149	S/A 1984	11/7/2013	
Block 2 EHDCA contaminant source data: identification of vacuum exposed non-metallic materials, location, distribution, vacuum exposed surface area, predicted on-orbit operating temperatures, materials outgassing rate data (per ASTM E 1559).	SSCN 13149	S/A 1984	8/27/2013	8/29/2013
Block 2 Identification of EHDCA contamination sensitive surfaces and predicted on-orbit operating temperatures (note: EHDCA will operate under the ISS system level induced contamination environment of 130 Angstroms per year).	SSCN 13149	S/A 1984	8/27/2013	8/29/2013
Block 6 Final Design Documents for transition to Boeing	SSCN 13149	S/A 1984	7/17/2014	
Block 3 EHDCA Power Quality test objectives and requirements	SSCN 13149	S/A 1984	11/7/2013	
Block 3 EHDCA end-to-end test objectives and requirements	SSCN 13149	S/A 1984	11/7/2013	
WRS2 system level acoustic modeling and recommendations for the new doors	SSCN 13197	S/A 2000	ATP + 1 week	7/24/2013
UPA Materials Testing with Alternate Pre-treat - results	SSCN 13197	S/A 2000	8/1/2014	
Applicable to GRC Dynamic Seals – Static Age Life Analysis (data indicating the seal material's survivability in low-earth orbit)	SSCN 13231	S/A 2016	9/30/2013	8/19/2013
Dynamic – “Seal Requirements Verification Matrix”	SSCN 13231	S/A 2016	3/1/2013	8/19/2013
Adhesion Reduction Treatment Specification for iLIDS Dynamic Seals	SSCN 13231	S/A 2016	8/19/2013	8/19/2013

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	NDS DRAWINGS:				
	Assembly, Control Box Power Flex Cable 29101447	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PWB, Control Box Power Flex Cable (Layout, Control Box Power Flex Cable) 29101496	SSCN 12358	S/A 1797	1/27/2012	2/14/2012
	Assembly, Control Box Data Flex Cable 29101505	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PWB, Control Box Data Flex Cable (Layout, Control Box Power Flex Cable) 29101506	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Assembly, HCS Heater Power Flex Cable, Sys A 29101508	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	PWB, HCS Heater Power Flex Cable, Sys A Left 29101509	SSCN 12358	S/A 1797	2/3/2012	3/2/2012
	PWB, HCS Heater Power Flex Cable, Sys A Right 29101510	SSCN 12358	S/A 1797	2/3/2012	3/2/2012
	Assembly, HCS Heater Sensors Flex Cable, Sys A 29101527	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, HCS Heater Sensors Flex Cable, Sys A Left 29101528	SSCN 12358	S/A 1797	2/3/2012	3/19/2012
	PWB, HCS Heater Sensors Flex Cable, Sys A Right 29101529	SSCN 12358	S/A 1797	2/3/2012	3/19/2012
	Assembly, Lockdown EMA Power Flex Cable, Sys A 29101535	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, Lockdown EMA Power Flex Cable, Sys A Left 29101536	SSCN 12358	S/A 1797	2/3/2012	2/22/2012
	PWB, Lockdown EMA Power Flex Cable, Sys A Right 29101537	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Assembly, Separator EMA Power Flex Cable, Internal 29101539	SSCN 12358	S/A 1797	2/3/2012	3/12/2012
	PWB, Separator EMA Power Flex Cable, Internal 29101542	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Assembly, Hook Gang EMA Power Flex Cable, Internal 29101543	SSCN 12358	S/A 1797	2/3/2012	3/9/2012
	PWB, Hook Gang EMA Power Flex Cable, Internal 29101546	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	Assembly, Lockdown Limit Switch Flex Cable, Sys A 29101547	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, Lockdown Limit Switch Flex Cable, Sys A Left 29101553	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	PWB, Lockdown Limit Switch Flex Cable, Sys A Right 29101558	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	Assembly, Hook and Umbilical Limit Switch Flex Cable 29101563	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, Hook Limit Switch Flex Cable (PWB, Hook and Umbilical Limit Switch Flex Cable) 29101564	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	Assembly, Motor Box Signal Flex Cable 29101565	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PWB, Motor Box Signal Flex Cable 29101566	SSCN 12358	S/A 1797	2/3/2012	3/9/2012
	Assembly, Motor Box Low Power Flex Cable 29101567	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PWB, Motor Box Low Power Flex Cable 29101568	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	Assembly, Motor Box High Power Flex Cable 29101569	SSCN 12358	S/A 1797	2/3/2012	3/9/2012
	PWB, Motor Box High Power Flex Cable 29101573	SSCN 12358	S/A 1797	2/3/2012	3/7/2012
	PWB, Separator and Umbilical Limit Switches Flex Cable 29101575	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	MOUNTING FLG ASSY, FLEX CABLE BACKSHELL - HARNESS, iLIDS 29101576	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	LOCKING FLG, FLEX CABLE BACKSHELL - HARNESS, iLIDS 29101577	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	SPACER, FLEX CABLE BACKSHELL - HARNESS, iLIDS 29101578	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	COVER, FLEX CABLE BACKSHELL - HARNESS, iLIDS 29101579	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	Assembly, HCS Heater Power Flex Cable, Sys B 29101581	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, HCS Heater Power Flex Cable, Sys B Left 29101582	SSCN 12358	S/A 1797	2/3/2012	3/5/2012
	PWB, HCS Heater Power Flex Cable, Sys B Right 29101584	SSCN 12358	S/A 1797	2/3/2012	3/2/2012
	Assembly, HCS Heater Sensors Flex Cable, Sys B 29101596	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, HCS Heater Sensors Flex Cable, Sys B Left 29101598	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, HCS Heater Sensors Flex Cable, Sys B Right 29101599	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	INTERNATIONAL LOW IMPACT DOCKING SYSTEM (iLIDS) TUNNEL ROLLED RING FORGING SPECIFICATION (Tunnel Forging) 29101604	SSCN 12358	S/A 1797	6/29/2011	6/29/2011
	Assembly, Lockdown EMA Power Flex Cable, Sys B 29101616	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, Lockdown EMA Power Flex Cable, Sys B Left 29101617	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	PWB, Lockdown EM Power Flex Cable, Sys B Right 29101618	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	CONTACT, SOCKET, 16GA, PC TAIL (J2 has it listed as HEATERS-28V, 50 & 120V) 29101620	SSCN 12358	S/A 1797	6/22/2011	6/22/2011
	MICROCIRCUIT, HYBRID, 5 VOLT, SINGLE CHANNEL, DC/DC CONVERTER 29101621	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	MICROCIRCUIT, HYBRID, 15 VOLT, DUAL CHANNEL, DC/DC CONVERTER 29101622	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	MICROCIRCUIT, HYBRID, LINEAR, +5 VOLT AND ±15 VOLT, TRIPLE CHANNEL, DC/DC CONVERTER 29101623	SSCN 12358	S/A 1797	7/6/2011	7/6/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	MICROCIRCUIT, MEMORY, DIGITAL, CMOS, FIELD PROGRAMMABLE GATE ARRAY, 1,000,000 GATES, MONOLITHIC SILICON 29101624	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	MICROCIRCUIT, MEMORY, DIGITAL, CMOS, FIELD PROGRAMMABLE GATE ARRAY, 2,000,000 GATES, MONOLITHIC SILICON 29101625	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	MICROCIRCUIT, RADIATION HARDENED 12-BIT, 20 MSPS MONOLITHIC A/D CONVERTER 29101626	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	MICROCIRCUIT, EEPROM, 1 Mbit, SPACE FPGA CONFIGURATION 29101627	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	OSCILLATOR, CRYSTAL, HYBRID, CLASS S (CRYSTAL OSCILLATOR) 29101628	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	TRANSFORMER, CONTROL POWER MODULE (RESISTOR, FOIL, HIGH PRECISION) 29101629	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	RESISTANCE TEMPERATURE DETECTOR (RTD Outside) 29101630	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	SWITCH, LIMIT, HERMETIC 29101632	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	TRANSFORMER, MOTOR POWER MODULE (TRANSFORMER, POWER (New)) 29101633	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TRANSFORMER, EXCITATION 29101634	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	INDUCTOR, CURRENT FEED 29101635	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CHOKE, COMMON MODE FILTER 29101636	SSCN 12358	S/A 1797	7/15/2011	7/15/2011
	INDUCTOR, DIFFERENTIAL MODE FILTER 29101637	SSCN 12358	S/A 1797	7/15/2011	7/15/2011
	OPTOCOUPLER, QUAD 29101638	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	TRANSISTOR, BIPOLAR, NPN, POWER, SPT6235MS 29101639	SSCN 12358	S/A 1797	7/13/2011	7/13/2011
	DUAL MOTOR TORQUE SUMMED LINEAR EMA WITH RESOLVER FEEDBACK SPECIFICATION CONTROL DRAWING 29101640	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	MAGNET WITH DUAL WINDINGS AND STRIKER PLATE SPECIFICATION CONTROL DRAWING 29101641	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	LOCKDOWN EMA SPECIFICATION CONTROL DRAWING 29101643	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	LOAD CELL SPECIFICATION CONTROL DRAWING 29101644	SSCN 12358	S/A 1797	1/16/2012	2/10/2011
	Potentiometer Specification Control Drawing 29101645	SSCN 12358	S/A 1797	10/12/2011	10/12/2011
	HOOK EMA AND GEARHEAD SPECIFICATION CONTROL DRAWING 29101646	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	SEPARATION EMA SPECIFICATION CONTROL DRAWING 29101648	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	UMBILICAL EMA SPECIFICATION CONTROL DRAWING 29101649	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	FLEXSHAFT ASSEMBLY - HCS, iLIDS (Flexible Drive Shaft Specification Control Drawing) 29101650	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	MICROCIRCUIT, HYBRID, DUAL VOLTAGE REGULATOR, POSITIVE AND NEGATIVE, ADJUSTABLE 29101652	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	MICROCIRCUIT, LINEAR, RESOLVER-TO-DIGITAL CONVERTER, 16 BIT, TRACKING 29101653	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	MICROCIRCUIT, LINEAR, PRECISION CURRENT SOURCE, QUINTET 29101654	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	OPTOCOUPLER, OPEN COLLECTOR, HIGH RELIABILITY 29101655	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	RECTIFIER, DUAL SCHOTTKY, 45A, 100A 29101656	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	CAPACITOR, MLC, HIGH VOLTAGE RADIAL LEAD 29101657	SSCN 12358	S/A 1797	6/22/2011	6/22/2011
	HEATER, POLYIMIDE, THERMOFOIL 29101658	SSCN 12358	S/A 1797	6/22/2011	6/22/2011
	RESISTOR, SMT, CURRENT SENSE 29101659	SSCN 12358	S/A 1797	6/22/2011	6/22/2011
	TERMINAL TURRET, SWAGE, TIN/LEAD PLATED 29101660	SSCN 12358	S/A 1797	6/22/2011	6/22/2011
	SWITCH, DATA, MIL-STD-1553 29101661	SSCN 12358	S/A 1797	7/15/2011	7/15/2011
	CONNECTOR, DATA SWITCH, MIL-STD-1553 29101662	SSCN 12358	S/A 1797	6/22/2011	6/22/2011
	RECTIFIER, STANDARD RECOVERY, 600V 29101663	SSCN 12358	S/A 1797	7/15/2011	7/15/2011
	CONNECTOR, D-SUB, HIGH DENSITY, SPACE GRADE (Connector, D-Sub, Space Rated) 29101664	SSCN 12358	S/A 1797	9/13/2011	9/13/2011
	CONNECTOR, MOTHERBOARD TO DAUGHTERBOARD, 3 ROW (Airborn Connector) 29101665	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	SPLICE, CRIMP, INLINE, NICKEL-PLATED COLOR CODED (Barrel Crimp Terminals for Splices) 29101666	SSCN 12358	S/A 1797	9/9/2011	9/9/2011
	SOLDER SPECIFICATION CONTROL DRAWING 29101667	SSCN 12358	S/A 1797	8/9/2011	8/9/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	LEAD FORMING (Lead Form Specification) 29101668	SSCN 12358	S/A 1797	10/4/2011	10/4/2011
	MOSFET, POWER, 200V, P-CHANNEL, RAD HARD 29101669	SSCN 12358	S/A 1797	10/28/2011	10/28/2011
	iLIDS EEE PARTS TEST AND SCREENING REQUIREMENTS & NSPARs 29101670	SSCN 12358	S/A 1797	11/1/2011	11/1/2011
	PWB, External Limit Switches Flex Cable, Sys B Right 29101718	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Assembly, Lockdown Limit Switches Flex Cable, Sys B 29101719	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, Lockdown Limit Switches Flex Cables, Sys B Left 29101721	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	PWB, Lockdown Limit Switches Flex Cables, Sys B Right 29101722	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	D-SUB BRACKET ASSY - HARNESS, iLIDS 29101723	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	Assembly, External Limit Switches Flex Cable, Sys A 29101724	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	PWB, External Limit Switches Flex Cable, Sys A Left 29101725	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	PWB, External Limit Switches Flex Cable, Sys A Right 29101726	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	BRACKET, BACK STRIP, D-SUB - HARNESS, iLIDS 29101727	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	BRACKET ASSY, HARDBOARD, D-SUB - HARNESS, iLIDS 29101728	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	Assembly, External Limit Switches Flex Cable, Sys B 29101729	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	PWB, External Limit Switches Flex Cable, Sys B Left 29101730	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	BRACKET, FLEX CABLE - HCS, iLIDS (Flex Cable, Velcro Assy) 29101741	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	COVER TOWER ASSY, FLEX CABLE BACKSHELL - HARNESS, iLIDS 29101742	SSCN 12358	S/A 1797	9/12/2011	9/12/2011
	CLAMP, FLEX CABLE BACKSHELL - HARNESS, iLIDS 29101743	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	SPACER ASSY, FOAM - HARNESS, iLIDS 29101745	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	SPACER, RUBBER - HARNESS, iLIDS 29101746	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	BRACKET ASSY, VERTICAL D-SUB - HARNESS, iLIDS 29101747	SSCN 12358	S/A 1797	9/13/2011	9/13/2011
	BRACKET ASSY, OFFSET VERTICAL D-SUB - HARNESS, iLIDS 29101748	SSCN 12358	S/A 1797	9/12/2011	9/12/2011
	BRACKET ASSY, HORIZONTAL D-SUB - HARNESS, iLIDS 29101749	SSCN 12358	S/A 1797	9/13/2011	9/13/2011
	COVER, RIGHT ANGLE D-SUB - HARNESS, iLIDS 29101751	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	BRACKET, STRAIGHT D-SUB - HARNESS, iLIDS 29101752	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	COVER, RESISTOR PACK - HARNESS, iLIDS 29101753	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	BRACKET ASSY, RESISTOR PACK D-SUB - HARNESS, iLIDS 29101754	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	Drawing Tree (-301) 29101798	SSCN 12358	S/A 1797	1/17/2012	RETIRED
	iLIDS Assembly (vehicle integration) (iLIDS Assembly, Top Level (vehicle – equivalency matrix)) 29101800	SSCN 12358	S/A 1797	1/31/2012	RECEIVED (LATE)
	iLIDS Assembly 29101801	SSCN 12358	S/A 1797	1/31/2012	RECEIVED (LATE)
	iLIDS Assembly (29101800-30X version) 29101802	SSCN 12358	S/A 1797	2/1/2012	RETIRED
	Cable Harness Routing and Installation, iLIDS 29101810	SSCN 12358	S/A 1797	2/1/2012	RETIRED
	BEARING, iLIDS ALTERED ITEM DRAWING 29101811	SSCN 12358	S/A 1797	12/6/2011	12/6/2011
	SEAL- DYNAMIC SEAL, iLIDS 29101815	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	RETAINER- DYNAMIC SEAL, iLIDS 29101816	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	Process Specification for the International Low Impact Docking System (iLIDS) Dynamic Seals (Seal Process Spec) 29101817	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	SOFT CAPTURE SYSTEM ASSY, iLIDS (SCS System Assy, iLIDS) 29101830	SSCN 12358	S/A 1797	1/20/2012	RETIRED
	Cable Harness Routing and Installation - SCS, iLIDS 29101833	SSCN 12358	S/A 1797	2/1/2012	RETIRED
	SCS MOUNTING BRACKET ASSY - HCS, iLIDS 29101840	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	MAGNET STRIKER MOUNT - HCS, iLIDS (STRIKER MOUNT - HCS, iLIDS) 29101841	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	SHIM, MAGNET - SCS, iLIDS 29101843	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	MAGNET HOUSING ASSY - SCS, iLIDS 29101844	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	MAGNET STRIKER ASSY - SCS, iLIDS 29101850	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	BASE ASSY - MAGNET STRIKER, iLIDS 29101851	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	BUMPER - MAGNET STRIKER, iLIDS 29101852	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	BUMPER FABRICATION PROCEDURES - MAGNET STRIKER, iLIDS 29101853	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	BUMPER RETAINER - MAGNET STRIKER, iLIDS 29101854	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	BEARING ADAPTER - MAGNET STRIKER, iLIDS 29101855	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	BEARING RETAINER BOLT - MAGNET STRIKER ASSY, iLIDS 29101856	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	BEARING RETAINER - MAGNET STRIKER, iLIDS 29101857	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	SHIM, MAGNET STRIKER - HCS, iLIDS 29101858	SSCN 12358	S/A 1797	8/22/2011	8/22/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	GUIDE PETAL ASSEMBLY - SCS, iLIDS 29101860	SSCN 12358	S/A 1797	10/4/2011	10/4/2011
	GUIDE PETAL - SCS, iLIDS 29101861	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	Cable Harness Routing and Installation - Load Ring, iLIDS 29101868	SSCN 12358	S/A 1797	2/1/2012	RECEIVED (LATE)
	LOAD RING ASSY - SCS, iLIDS 29101870	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	TOP RING ASSY - LOAD RING, iLIDS 29101871	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	MID RING ASSY - LOAD RING, iLIDS 29101872	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	STUD, ALTERNATE LOAD PATH, LOWER - LOAD RING, iLIDS 29101873	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	STUD, ALTERNATE LOAD PATH, UPPER - LOAD RING, iLIDS 29101874	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	COVER, LOAD CELL - LOAD RING, iLIDS 29101875	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	SHIM, LOAD CELL END - LOAD RING, iLIDS 29101876	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	ACCESS COVER, LOAD CELL - LOAD RING, iLIDS 29101877	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	COVER, ALTERNATE LOAD PATH - LOAD RING, iLIDS 29101878	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	LOAD CELL ASSEMBLY - LOAD RING, iLIDS 29101880	SSCN 12358	S/A 1797	10/7/2011	10/7/2011
	KEYED WASHER - LOAD CELL, iLIDS ALTERED ITEM DRAWING 29101881	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	OVERLOAD ROCKER - LOAD CELL, iLIDS 29101882	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	OVERLOAD ROCKER PIN - LOAD CELL, iLIDS 29101883	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	HOUSING, TENSION SIDE OVERLOAD - LOAD CELL, iLIDS 29101884	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	OVERLOAD PLUNGER - LOAD CELL, iLIDS 29101885	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	UPPER RING CLEVIS ASSY - LOAD CELL, iLIDS 29101886	SSCN 12358	S/A 1797	8/2/2011	8/2/2011
	SENSING END CLEVIS ASSY - LOAD CELL, iLIDS 29101887	SSCN 12358	S/A 1797	8/2/2011	8/2/2011
	GROUND END CLEVIS - LOAD CELL, iLIDS 29101888	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	AXIAL BEARING RETAINER - LOAD CELL, iLIDS 29101889	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	AXIAL BEARING SPINDLE - LOAD CELL, iLIDS 29101890	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	LARGE CROSS PIN - LOAD CELL, iLIDS 29101891	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	SMALL CROSS PIN - LOAD CELL, iLIDS 29101892	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	JAM NUT - LOAD CELL, iLIDS 29101893	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	AXIAL BEARING SPACER - LOAD CELL, iLIDS 29101894	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	CROSS PIN SPACER - LOAD CELL, iLIDS 29101895	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	HOUSING ASSEMBLY, COMPRESSION SIDE OVERLOAD - LOAD CELL, iLIDS 29101896	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	OVERLOAD BIAS SPRING WASHER - LOAD CELL, iLIDS 29101897	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	OVERLOAD SPACER - LOAD CELL, iLIDS 29101898	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	GROUND END CLEVIS NUT - LOAD CELL, iLIDS 29101899	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	BEARING RETAINER SHIM - LOAD CELL, iLIDS 29101900	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	SPINDLE SHIM - LOAD CELL, iLIDS 29101901	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	PITCH BUSHING - LINEAR EMA JOINT, iLIDS 29101903	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	WASHER - LINEAR ACTUATOR JOINT, iLIDS 29101904	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	LUG-END PITCH PIN - LINEAR EMA JOINT, iLIDS 29101905	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	CLEVIS-END PITCH PIN - LINEAR EMA JOINT, iLIDS 29101906	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	LINEAR EMA JOINT ASSY, UPPER - SCS, iLIDS (J2 has it listed as LINEAR ACTUATOR JOINT ASSY, UPPER - SCS, iLIDS) 29101909	SSCN 12358	S/A 1797	9/26/2011	9/26/2011
	BEARING HOUSING, UPPER - LINEAR EMA JOINT, iLIDS 29101910	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	LINEAR EMA JOINT ASSY, LOWER - SCS, iLIDS 29101912	SSCN 12358	S/A 1797	9/26/2011	9/26/2011
	BEARING HOUSING - LINEAR EMA JOINT, iLIDS 29101913	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	YAW CLEVIS ASSY - LINEAR EMA JOINT, iLIDS 29101914	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	BEARING SPACING SHIM - LINEAR EMA JOINT, iLIDS 29101915	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	BEARING RETAINMENT WASHER - LINEAR EMA JOINT, iLIDS 29101916	SSCN 12358	S/A 1797	8/2/2011	8/2/2011
	BEARING SHIELDS - LINEAR EMA JOINT, iLIDS 29101917	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	LOCKDOWN ELECTRO-MECHANICAL ASSEMBLY - SCS, iLIDS 29101920	SSCN 12358	S/A 1797	1/16/2012	1/11/2012
	LOCKDOWN MECHANISM - SCS, iLIDS 29101921	SSCN 12358	S/A 1797	11/7/2011	11/7/2011
	HOUSING ASSEMBLY - LOCKDOWN, iLIDS 29101922	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	TRIGGER, LIMIT SWITCH - LOCKDOWN, iLIDS 29101923	SSCN 12358	S/A 1797	8/15/2011	8/15/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	SHAFT, SECONDARY CRANK - LOCKDOWN, iLIDS (Driven Crank Shaft - Lockdown, iLIDS) 29101924	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHAFT, PRIMARY CRANK - LOCKDOWN, iLIDS 29101925	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	LINK, PRIMARY CRANK - LOCKDOWN, iLIDS 29101926	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	LINK, STRUT - LOCKDOWN, iLIDS 29101927	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	BLOCK, STRUT GUIDE - LOCKDOWN, iLIDS 29101928	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	HOOK - LOCKDOWN, iLIDS 29101929	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	PIN, CRANK LINK - LOCKDOWN, iLIDS 29101930	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	PIN, GUIDE BLOCK - LOCKDOWN, iLIDS 29101931	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	PIN, HOOK - LOCKDOWN, iLIDS 29101932	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SEAT, TRUNNION - LOCKDOWN, iLIDS 29101933	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	WASHER, STRUT LINK - LOCKDOWN, iLIDS 29101934	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	BUSHING - LOCKDOWN, iLIDS 29101935	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	WASHER - LOCKDOWN, iLIDS 29101936	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	BUSHING, CENTER - LOCKDOWN, iLIDS 29101937	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHIM, BEARING - LOCKDOWN, iLIDS 29101938	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	KEY, CRANK LINK - LOCKDOWN, iLIDS 29101939	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	PIN, SYNCHRO LINK - LOCKDOWN, iLIDS 29101940	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHIM, STRUT LINK - LOCKDOWN, iLIDS 29101941	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHIM, TRUNNION SEAT - LOCKDOWN, iLIDS 29101942	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	DEBRIS SHIELD ASSY, RHS - LOCKDOWN, iLIDS 29101943	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	HARDSTOP - LOCKDOWN, iLIDS 29101944	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHIM, HARDSTOP - LOCKDOWN, iLIDS 29101945	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	LINK, SECONDARY CRANK - LOCKDOWN, iLIDS 29101946	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	LINK, SYNCHRO - LOCKDOWN, iLIDS 29101947	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	WASHER, SPRING - LOCKDOWN, iLIDS 29101948	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	DEBRIS SHIELD ASSY, LHS - LOCKDOWN, iLIDS 29101949	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	TUNNEL BRACKET ASSY - LOCKDOWN, iLIDS 29101950	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	SHIM, RADIAL - LOCKDOWN, iLIDS 29101951	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	TRIGGER, MID RING - LOCKDOWN, iLIDS 29101954	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	STRIKER ASSY, MID RING - LOCKDOWN, iLIDS 29101955	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	CLEVIS BRACKET, MID RING - LOCKDOWN, iLIDS 29101956	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	ROLLER ASSY, STRIKER BAR - LOCKDOWN, iLIDS 29101957	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	PIN, STRIKER BAR - LOCKDOWN, iLIDS 29101958	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHIM, MID RING STRIKER - LOCKDOWN, iLIDS 29101959	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	STRIKER ASSY, TOP RING - LOCKDOWN, iLIDS 29101960	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	CLEVIS BRACKET, TOP RING - LOCKDOWN, iLIDS 29101961	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	SHIM, TOP RING STRIKER - LOCKDOWN, iLIDS 29101962	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	TANGENTIAL SHIM, STRIKER - LOCKDOWN, iLIDS 29101963	SSCN 12358	S/A 1797	8/15/2011	8/15/2011
	Lockdown Electro-Mechanical Assy Match-Drilled to Bracket 29101967	SSCN 12358	S/A 1797	11/22/2011	11/22/2011
	HARD CAPTURE SYSTEM ASSY, iLIDS 29101970	SSCN 12358	S/A 1797	1/20/2012	RECEIVED (LATE)
	Cable Harness Routing and Installation - HCS, iLIDS 29101971	SSCN 12358	S/A 1797	2/1/2012	11/23/2011
	TUNNEL ASSEMBLY - HCS, iLIDS 29101974	SSCN 12358	S/A 1797	7/6/2011	7/6/2011
	RECEPTACLE, GUIDE PIN - HCS, iLIDS 29101978	SSCN 12358	S/A 1797	11/7/2011	11/7/2011
	GUIDE PIN- HCS, iLIDS 29101979	SSCN 12358	S/A 1797	11/7/2011	11/7/2011
	SHIM, FLEXSHAFT - HCS, iLIDS 29101980	SSCN 12358	S/A 1797	11/1/2011	11/1/2011
	GUIDE PIN, PAIR - HCS, iLIDS 29101981	SSCN 12358	S/A 1797	11/7/2011	11/7/2011
	RECEPTACLE, GUIDE PIN, PAIR - HCS, iLIDS 29101982	SSCN 12358	S/A 1797	11/7/2011	11/7/2011
	HEATER CONTROLLER MODULE ASSY - MOTOR BOX, iLIDS 29101986	SSCN 12358	S/A 1797	11/1/2011	11/1/2011
	MOTOR BRIDGE MODULE ASSY - MOTOR BOX, iLIDS 29101987	SSCN 12358	S/A 1797	11/1/2011	11/1/2011
	PIN, DETACHABLE - SEPARATION SYSTEM, iLIDS 29102033	SSCN 12358	S/A 1797	7/13/2011	7/13/2011
	Assembly - Umbilical 29102040	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	MOTOR BOX ASSEMBLY - iLIDS 29102058	SSCN 12358	S/A 1797	10/12/2011	10/12/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	POWER BOX ASSEMBLY, 120V - iLIDS 29102059	SSCN 12358	S/A 1797	10/12/2011	10/12/2011
	CONTROL BOX ASSEMBLY - iLIDS 29102060	SSCN 12358	S/A 1797	10/12/2011	10/12/2011
	TUNNEL MOUNT - MOTOR BOX, iLIDS 29102063	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TUNNEL MOUNT - POWER BOX, iLIDS 29102064	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TUNNEL MOUNT - CONTROL BOX, iLIDS 29102065	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TOP COVER ASSEMBLY - MOTOR BOX, iLIDS 29102066	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TOP COVER ASSEMBLY - POWER BOX, iLIDS 29102067	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TOP COVER - CONTROL BOX, iLIDS 29102068	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOTTOM COVER - MOTOR BOX, iLIDS 29102069	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOTTOM COVER - POWER BOX, iLIDS 29102070	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOTTOM COVER - CONTROL BOX, iLIDS 29102071	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CONNECTOR MOUNTING PLATE - MOTOR BOX, iLIDS 29102072	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CONNECTOR MOUNTING PLATE - POWER BOX, iLIDS 29102073	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CONNECTOR MOUNTING PLATE, POWER - POWER BOX, iLIDS 29102074	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CONNECTOR MOUNTING PLATE - CONTROL BOX, iLIDS 29102075	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOLT, PC BOARD MOUNTING - MOTOR BOX, iLIDS 29102076	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOLT, PC BOARD MOUNTING - CONTROL BOX, iLIDS 29102077	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOTTOM COVER ASSEMBLY - POWER BOX, iLIDS 29102078	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BACK COVER - POWER BOX, iLIDS 29102079	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TRUSS - POWER BOX, iLIDS 29102080	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	UPPER COVER FLANGE - POWER BOX, iLIDS 29102081	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BOTTOM COVER FLANGE - POWER BOX, iLIDS (LOWER COVER FLANGE - POWER BOX, iLIDS) 29102082	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CARD SPACER - MOTOR BOX, iLIDS (Bracket – Control CARD SPACER – MOTOR Box, iLIDS) 29102083	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CARD SPACER A - CONTROL BOX, iLIDS 29102084	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CARD SPACER B - CONTROL BOX, iLIDS 29102085	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TOP COVER - CONTROL BOX, iLIDS 29102086	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TOP COVER ASSEMBLY - MOTOR BOX, iLIDS 29102087	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	TOP COVER - POWER BOX, iLIDS 29102088	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	HEAT SINK - POWER BOX, iLIDS 29102089	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	HEAT SINK ASSY, FILTER BOARD - POWER BOX, iLIDS 29102090	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	SPACER - POWER BOX, iLIDS 29102091	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 1, HARNESS - MOTOR BOX, iLIDS 29102092	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 2, HARNESS - MOTOR BOX, iLIDS 29102093	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 3, HARNESS - MOTOR BOX, iLIDS 29102094	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 1, HARNESS - CONTROL BOX, iLIDS 29102095	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 2, HARNESS - CONTROL BOX, iLIDS 29102096	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 1, HARNESS - POWER BOX, iLIDS 29102098	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 2, HARNESS - POWER BOX, iLIDS 29102099	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	BRACKET 3, HARNESS - POWER BOX, iLIDS 29102100	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	SCREW - ELECTRONIC BOXES, iLIDS ALTERED ITEM DRAWING 29102101	SSCN 12358	S/A 1797	11/22/2011	11/22/2011
	GUARD, INTERNAL FLEX HARNESS - MOTOR BOX, iLIDS 29102102	SSCN 12358	S/A 1797	7/22/2011	7/22/2011
	CAPTURE SENSOR ASSY - SCS, iLIDS 29102111	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	READY TO HOOK LIMIT SWITCH ASSY - HCS, iLIDS 29102112	SSCN 12358	S/A 1797	9/26/2011	9/26/2011
	STRIKER, CAPTURE SENSOR - SCS, iLIDS 29102114	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	SHIM, CAPTURE SENSOR - SCS, iLIDS 29102115	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	LIMIT SWITCH ASSY - LIMIT SWITCHES, iLIDS 29102116	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	CLAMP, CAPTURE SENSOR - SCS, iLIDS 29102117	SSCN 12358	S/A 1797	8/22/2011	8/22/2011
	HOUSING - LIMIT SWITCHES, iLIDS 29102118	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	SCREW, TRIGGER, READY to HOOK - LIMIT SWITCHES, iLIDS 29102119	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	LEVER ASSY - LIMIT SWITCHES, iLIDS 29102120	SSCN 12358	S/A 1797	9/19/2011	9/19/2011
	SHIM, READY TO HOOK - LIMIT SWITCHES, iLIDS 29102121	SSCN 12358	S/A 1797	9/1/2011	9/1/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	PIVOT PIN - LIMIT SWITCHES, iLIDS 29102122	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	SUPPORT WASHER - LIMIT SWITCHES, iLIDS 29102123	SSCN 12358	S/A 1797	9/19/2011	9/19/2011
	BRACKET ASSY, READY to HOOK - LIMIT SWITCHES, iLIDS 29102124	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	PLUNGER ASSY, READY to HOOK - LIMIT SWITCHES, iLIDS 29102125	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	TRIGGER ASSY, READY to HOOK - LIMIT SWITCHES, iLIDS 29102126	SSCN 12358	S/A 1797	8/29/2011	8/29/2011
	SHIM PLATE - LIMIT SWITCHES, iLIDS 29102128	SSCN 12358	S/A 1797	11/7/2011	11/7/2011
	BRACKET ASSY, CAPTURE SENSOR - SCS, iLIDS 29102129	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	LEVER ASSY, CAPTURE SENSOR - SCS, iLIDS 29102130	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	TORSION SPRING, CAPTURE SENSOR - SCS, iLIDS ALTERED ITEM DRAWING 29102131	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	PLUNGER, CAPTURE SENSOR - SCS, iLIDS 29102132	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	SCREW, CAPTURE SENSOR - SCS, iLIDS ALTERED ITEM DRAWING 29102133	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	SPACER, CAPTURE SENSOR - SCS, iLIDS 29102134	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	COUNTERWEIGHT, CAPTURE SENSOR - SCS, iLIDS 29102135	SSCN 12358	S/A 1797	7/29/2011	7/29/2011
	SET SCREW - LIMIT SWITCHES, iLIDS ALTERED ITEM DRAWING 29102136	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	FULL SEGMENT ASSEMBLY - MMOD SHIELD, iLIDS 29102140	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	BUMPER ASSY, FULL SEGMENT - MMOD SHIELD, iLIDS 29102141	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	SEGMENT BUMPER MMOD SHIELD, iLIDS 29102142	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	TOP COVER, FULL SEGMENT - MMOD SHIELD, iLIDS 29102143	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	BOTTOM COVER - MMOD SHIELD, iLIDS 29102144	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	UMBILICAL SEGMENT ASSEMBLY - MMOD SHIELD, iLIDS 29102145	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	BUMPER ASSY, UMBILICAL SEGMENT - MMOD SHIELD, iLIDS 29102146	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	TOP COVER, SMALL, UMBILICAL SEGMENT - MMOD SHIELD, iLIDS 29102147	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	SHROUD, UMBILICAL SEGMENT - MMOD SHIELD, iLIDS 29102148	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	TOP COVER, LARGE, UMBILICAL SEGMENT - MMOD SHIELD, iLIDS 29102149	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	BRACKET ASSEMBLY - MMOD SHIELD, iLIDS 29102150	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	BRACKET ASSEMBLY, BASE - MMOD SHIELD, iLIDS 29102151	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	SOFT COVER ASSEMBLY, UPPER - MMOD SHIELD, iLIDS 29102153	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	SOFT COVER ASSEMBLY, LOWER - MMOD SHIELD, iLIDS 29102154	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	Assembly Dwg - Soft (Inner) MMOD Shield 29102156	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	Assembly - TPS, iLIDS 29102158	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	MLI, FULL SEGMENT - TPS, iLIDS 29102159	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	MLI, UMBILICAL SEGMENT - TPS, iLIDS 29102160	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	MLI, BRACKET - TPS, iLIDS 29102161	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	Internal Closeout Assembly - HCS, iLIDS 29102180	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	Internal Closeout Softgoods - HCS, iLIDS 29102181	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	Softgoods 29102182	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	Softgoods 29102183	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	Internal Closeout Hard Panel - HCS, iLIDS 29102184	SSCN 12358	S/A 1797	1/16/2012	RETIRED
	UNDOCKING COMPLETE LIMIT SWITCH ASSY - HCS, iLIDS (Undocking Complete Sensor Assy - Limit Switch, iLIDS) 29102214	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	BRACKET ASSY, UNDOCKING COMPLETE - HCS, iLIDS 29102215	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	TRIGGER ASSY, UNDOCKING COMPLETE - HCS, iLIDS 29102216	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	PIN, UNDOCKING COMPLETE - HCS, iLIDS 29102217	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	BRACKET ASSY, UNDOCKING COMPLETE - HCS, iLIDS (Bracket, Undocking Complete - Limit Switch, iLIDS) 29102218	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	TORSION SPRING, UNDOCKING COMPLETE - HCS, iLIDS ALTERED ITEM DRAWING (Torsion Spring, Undocking Complete - Limit Switch, iLIDS) 29102219	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	BUSHING, UNDOCKING COMPLETE - HCS, iLIDS (Spacer, Undocking Complete - Limit Switch, iLIDS) 29102220	SSCN 12358	S/A 1797	9/21/2011	9/21/2011
	SCS HEATER POWER ASSEMBLY, SYS A - HARNESS, iLIDS 29102260	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	SCS HEATER POWER ASSEMBLY, SYS B - HARNESS, iLIDS 29102261	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	SCS HEATER SENSORS ASSEMBLY, SYS A - HARNESS, iLIDS 29102262	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	SCS HEATER SENSORS ASSEMBLY, SYS B - HARNESS, iLIDS 29102263	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	MAGNET POWER ASSEMBLY, SYS A - HARNESS, iLIDS 29102264	SSCN 12358	S/A 1797	2/10/2012	8/22/2011
	MAGNET POWER ASSEMBLY, SYS B - HARNESS, iLIDS 29102265	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Linear EMA Power Cable, Sys A 29102266	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Linear EMA Power Cable, Sys B 29102267	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Linear EMA Resolver Cable, Sys A 29102268	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Linear EMA Resolver Cable, Sys B 29102269	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	LOAD CELLS ASSEMBLY, SYS A - HARNESS, iLIDS 29102270	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	LOAD CELLS ASSEMBLY, SYS B - HARNESS, iLIDS 29102271	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Capture Sensor Cable, Sys A 29102272	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Capture Sensor Cable, Sys B 29102273	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Separator EMA Power, Sys A External 29102277	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Separator EMA Power, Sys B External 29102278	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Hook Gang EMA Power, Sys A External 29102279	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Hook Gang EMA Power, Sys B External 29102280	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Umbilical, Sys A External 29102281	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, Umbilical, Sys B External 29102282	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, 1553 Switch, Sys A External 29102283	SSCN 12358	S/A 1797	2/10/2012	RETIRED
	Assembly, 1553 Switch, Sys B External 29102284	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, External Pyro, Sys A 29102285	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Assembly, External Pyro, Sys B 29102286	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	SIGNAL INTERCONNECT ASSEMBLY, MOTOR BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, Motor Box Internal Flex Circuit Signal Interconnect) 29102296	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	SIGNAL INTERCONNECT SCHEMATIC, MOTOR BOX INTERNAL - HARNESS, iLIDS (Schematic, Motor Box Internal Flex Circuit Signal Interconnect) 29102297	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	SIGNAL INTERCONNECT PWB, MOTOR BOX INTERNAL - HARNESS, iLIDS 29102298	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	THERMAL PAD - ELECTRONIC BOX, iLIDS (Thermal Pad, Sil-Pad, Altered Item Drawing) 29102299	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	Detail, FPGA, Supervisor FPGA 29102300	SSCN 12358	S/A 1797	4/2/2012	RECEIVED (LATE)
	Detail, CE Programming, Supervisor FPGA 29102301	SSCN 12358	S/A 1797	3/1/2012	RECEIVED (LATE)
	Assembly, Processor Board 29102302	SSCN 12358	S/A 1797	1/16/2012	1/17/2012
	SCHEMATIC DIAGRAM, PROCESSOR BOARD 29102303	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	PRINTED WIRING BOARD, PROCESSOR BOARD 29102304	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Detail, FPGA, Processor FPGA 29102305	SSCN 12358	S/A 1797	4/2/2012	RECEIVED (LATE)
	Detail, CE Programming, Processor FPGA 29102306	SSCN 12358	S/A 1797	3/1/2012	RECEIVED (LATE)
	Assembly, Resolver Board 29102307	SSCN 12358	S/A 1797	1/16/2012	1/6/2012
	Schematic, Resolver Board 29102308	SSCN 12358	S/A 1797	11/22/2011	11/22/2011
	PRINTED WIRING BOARD, RESOLVER 29102309	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Assembly, Load Cell Board 29102310	SSCN 12358	S/A 1797	1/16/2012	1/25/2012
	Schematic, Load Cell Board 29102311	SSCN 12358	S/A 1797	1/16/2012	1/25/2012
	PRINTED WIRING BOARD - LOAD CELL PC BOARD 29102312	SSCN 12358	S/A 1797	9/2/2011	9/2/2011
	Assembly, Analog Board 29102313	SSCN 12358	S/A 1797	1/16/2012	1/17/2012
	Schematic, Analog Board 29102314	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	PRINTED WIRING BOARD, ANALOG BOARD 29102315	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Assembly, Comm Board 29102316	SSCN 12358	S/A 1797	1/16/2012	1/16/2012
	SCHEMATIC DIAGRAM, PCB, COMMUNICATION AND SUPERVISOR (Schematic, Comm Board) 29102317	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	PRINTED WIRING BOARD, COMMUNICATION AND SUPERVISOR (Detail, PCB Layout, Comm Board 29102318) 29102318	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Detail, FPGA, Comm FPGA 29102319	SSCN 12358	S/A 1797	4/2/2012	RECEIVED (LATE)
	Detail, CE Programming, Comm FPGA 29102320	SSCN 12358	S/A 1797	3/1/2012	RECEIVED (LATE)
	SIGNAL INTERCONNECT ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, Control Box Internal Flex Circuit Signal Interconnect) 29102321	SSCN 12358	S/A 1797	9/1/2011	9/1/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	SIGNAL INTERCONNECT SCHEMATIC, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102322	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	SIGNAL INTERCONNECT PWB, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102323	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	POWER INTERCONNECT ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, Control Box Internal Flex Circuit Power Interconnect) 29102324	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	POWER INTERCONNECT SCHEMATIC, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102325	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	POWER INTERCONNECT PWB, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102326	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	PROCESSOR/COMM ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102327	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	SCHEMATIC DIAGRAM, PROCESSOR/COMM FLEX CABLE 29102328	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	RIGID-FLEX PRINTED WIRING BOARD, PROCESSOR/COMM FLEX CABLE 29102329	SSCN 12358	S/A 1797	8/2/2011	8/2/2011
	RESOLVER ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, Resolver Internal Flex Circuit) 29102330	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	RESOLVER SCHEMATIC, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102331	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	RESOLVER PWB, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102332	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	LOAD CELL ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102333	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	SCHEMATIC DIAGRAM, LOAD CELL FLEX CABLE 29102334	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	RIGID-FLEX PRINTED WIRING BOARD, LOAD CELL FLEX CABLE 29102335	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	J3 ANALOG ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, J3 Analog Internal Flex Circuit) 29102336	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	P3 ANALOG SCHEMATIC, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102337	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	P3 ANALOG PWB, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102338	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	Assembly, Motor Controller Board 29102351	SSCN 12358	S/A 1797	1/16/2012	1/6/2012
	SCHEMATIC DIAGRAM, MOTOR CONTROLLER 29102352	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	PRINTED WIRING BOARD, MOTOR CONTROLLER 29102353	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Detail, FPGA, Motor Controller FPGA 29102354	SSCN 12358	S/A 1797	1/16/2012	RECEIVED (LATE)
	Detail, CE Programming, Motor Controller Board FPGA 29102355	SSCN 12358	S/A 1797	3/1/2012	RECEIVED (LATE)
	Assembly, Motor Bridge Board 29102356	SSCN 12358	S/A 1797	1/16/2012	1/19/2012
	Schematic, Motor Bridge Board 29102357	SSCN 12358	S/A 1797	1/16/2012	1/19/2012
	PRINTED WIRING BOARD, MOTOR BRIDGE BOARD (Detail, PCB Layout, Motor Bridge Board) 29102358	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Assembly, Heater Controller Board 29102359	SSCN 12358	S/A 1797	1/16/2012	1/16/2012
	SCHEMATIC DIAGRAM, HEATER CONTROLLER 29102360	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	PRINTED WIRING BOARD, HEATER CONTROLLER 29102361	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	Detail, FPGA, Heater Controller FPGA 29102362	SSCN 12358	S/A 1797	4/2/2012	RECEIVED (LATE)
	Detail, CE Programming, Heater Controller FPGA 29102363	SSCN 12358	S/A 1797	3/1/2012	RECEIVED (LATE)
	POWER INTERCONNECT ASSEMBLY, MOTOR BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, Motor Box Internal Flex Circuit Interconnect) 29102364	SSCN 12358	S/A 1797	9/7/2011	9/7/2011
	POWER INTERCONNECT SCHEMATIC, MOTOR BOX INTERNAL - HARNESS, iLIDS 29102365	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	POWER INTERCONNECT PWB, MOTOR BOX INTERNAL - HARNESS, iLIDS 29102366	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	HEATER INTERCONNECT ASSEMBLY, MOTOR BOX INTERNAL - HARNESS, iLIDS (Assembly, PCB, Heater Internal Flex Circuit Interconnect) 29102367	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	SCHEMATIC DIAGRAM, HEATER FLEX CABLE 29102368	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	RIGID-FLEX PRINTED WIRING BOARD, HEATER FLEX CABLE (Detail, PCB Layout, Heater Internal Flex Circuit Interconnect) 29102369	SSCN 12358	S/A 1797	8/1/2011	8/1/2011
	Assembly, Control Power Supply Board 29102370	SSCN 12358	S/A 1797	1/16/2012	1/6/2012
	POWER MODULE ASSY - POWER BOX, iLIDS 29102371	SSCN 12358	S/A 1797	11/1/2011	11/1/2011
	Schematic, Motor Power Supply Board 29102372	SSCN 12358	S/A 1797	11/22/2011	11/22/2011
	PRINTED WIRING BOARD, MOTOR POWER SUPPLY (Detail, PCB Layout, Motor Power Supply Board) 29102373	SSCN 12358	S/A 1797	9/9/2011	9/9/2011

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	Schematic, EMI Filter Board 29102374	SSCN 12358	S/A 1797	1/6/2012	1/6/2012
	PRINTED WIRING BOARD, EMI FILTER BOARD 29102375	SSCN 12358	S/A 1797	10/21/2011	10/21/2011
	Assembly, Motor Power Supply Board 29102379	SSCN 12358	S/A 1797	1/16/2012	1/17/2012
	Assembly, EMI Filter Board 29102380	SSCN 12358	S/A 1797	1/16/2012	1/17/2012
	CONTROL POWER MODULE ASSY - POWER BOX, iLIDS 29102381	SSCN 12358	S/A 1797	11/1/2011	11/1/2011
	Schematic, Control Power Supply Board 29102382	SSCN 12358	S/A 1797	11/22/2011	11/22/2011
	PRINTED WIRING BOARD, CONTROL POWER SUPPLY BOARD 29102383	SSCN 12358	S/A 1797	9/12/2011	9/12/2011
	J4 ANALOG ASSEMBLY, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102386	SSCN 12358	S/A 1797	9/1/2011	9/1/2011
	P4 ANALOG SCHEMATIC, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102387	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	P4 ANALOG PWB, CONTROL BOX INTERNAL - HARNESS, iLIDS 29102388	SSCN 12358	S/A 1797	8/9/2011	8/9/2011
	Schematic, External Limit Switch Flex Cable, Sys A Left 29102389	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, External Limit Switch Flex Cable, Sys A Right 29102390	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, External Limit Switch Flex Cable, Sys B Left 29102391	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, External Limit Switch Flex Cable, Sys B Right 29102392	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, 1553 Switch, Sys A External 29102393	SSCN 12358	S/A 1797	2/10/2012	3/18/2012
	Schematic, Control Box Power Flex Cable 29102396	SSCN 12358	S/A 1797	1/27/2012	2/14/2012
	Schematic, Control Box Data Flex Cable 29102397	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Schematic, HCS Heater Power Flex Cable, Sys A Left 29102398	SSCN 12358	S/A 1797	2/3/2012	2/24/2012
	Schematic, HCS Heater Power Flex Cable, Sys A Right 29102399	SSCN 12358	S/A 1797	2/3/2012	2/24/2012
	Schematic, HCS Heater Power Flex Cable, Sys B Left 29102400	SSCN 12358	S/A 1797	2/3/2012	2/24/2012
	Schematic, HCS Heater Power Flex Cable, Sys B Right 29102401	SSCN 12358	S/A 1797	2/3/2012	2/24/2012
	Schematic, SCS Heater Power Cable, Sys A & B 29102402	SSCN 12358	S/A 1797	2/10/2012	3/14/2012
	Schematic, HCS Heater Sensors Flex Cable, Sys A Left 29102403	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, HCS Heater Sensors Flex Cable, Sys A Right 29102404	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	Schematic, HCS Heater Sensors Flex Cable, Sys B Left 29102405	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	Schematic, HCS Heater Sensors Flex Cable, Sys B Right 29102406	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	Schematic, SCS Heater Sensor, Sys A & B 29102407	SSCN 12358	S/A 1797	2/10/2012	3/14/2012
	Schematic, Magnet Power, Sys A & B 29102408	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, Lockdown EMA Power Flex Cable, Sys A Left 29102409	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	Schematic, Lockdown EMA Power Flex Cable, Sys A Right 29102410	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, Lockdown EMA Power Flex Cable, Sys B Left 29102411	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, Lockdown EMA Power Flex Cable, Sys B Right 29102412	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, Linear EMA Power, Sys A & B 29102413	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, Separator EMA Power Flex Cable, Internal 29102414	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, External Separator EMA Power Cable 29102415	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, Hook Gang EMA Power Flex Cable, Internal 29102417	SSCN 12358	S/A 1797	2/3/2012	2/17/2012
	Schematic, External Hook Gang EMA Power Cable 29102418	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, Motor Box Signal Flex Cable 29102419	SSCN 12358	S/A 1797	2/3/2012	3/12/2012
	Schematic, Motor Box Low Power Flex Cable 29102420	SSCN 12358	S/A 1797	2/3/2012	2/14/2012
	Schematic, Motor Box High Power Flex Cable 29102421	SSCN 12358	S/A 1797	2/3/2012	3/19/2012
	Schematic, Capture Sensor Cable, Sys A & B 29102422	SSCN 12358	S/A 1797	2/10/2012	3/19/2012
	Schematic, Lockdown Limit Switches Flex Cable, Sys A Left 29102423	SSCN 12358	S/A 1797	2/3/2012	RECEIVED (LATE)
	Schematic, Lockdown Limit Switches Flex Cable, Sys A Right 29102424	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	Schematic, Lockdown Limit Switches Flex Cable, Sys B Left 29102425	SSCN 12358	S/A 1797	2/3/2012	3/14/2012
	Schematic, Lockdown Limit Switches Flex Cable, Sys B Right 29102426	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	Schematic, Linear EMA Resolver Cable, Sys A & B 29102427	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, Load Cell Cable, Sys A & B 29102428	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, Hook Limit Switches Flex Cable (Schematic, Hook and Umbilical Limit Switches Flex Cable) 29102429	SSCN 12358	S/A 1797	2/3/2012	2/15/2012
	Schematic, External Umbilical Cable Harness 29102431	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Schematic, External Pyro Cable 29102432	SSCN 12358	S/A 1797	2/10/2012	RECEIVED (LATE)
	Cable Schematic, Umbilical Sys A, - Harness, iLIDS 29102433	SSCN 12358	S/A 1797	2/10/2012	3/14/2012
	Schematic, Separator and Umbilical Limit Switches Flex Cable 29102434	SSCN 12358	S/A 1797	2/3/2012	2/15/2012

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	Base Plate Assembly 36153409	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Base Plate 36153410	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Mounting Frame, Avionics Box 36153411	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Side Plate, Cable Support 36153412	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Internal Plate, Cable Support 36153413	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Top Plate, Cable Support 36153414	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Zip Tie Plate, Cable Support 36153415	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Vibe Fixture Assembly, iLIDS Avionics Box 36153416	SSCN 12358	S/A 1797	1/27/2012	RECEIVED (LATE)
	Assembly, iLIDS Emulator 38121350	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	Assembly, Computer Rack 38121351	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Wiring Diagram, Computer Rack 38121352	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Assembly, Motor Loads Rack 38121353	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	Wiring Diagram, Motor Loads Rack 38121354	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Assembly, Rectifier Box 1 38121355	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Wiring Diagram, Rectifier Box 1 38121356	SSCN 12358	S/A 1797	1/20/2012	10/18/2011
	Assembly, Heater Rack 38121357	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	Wiring Diagram, Heater Rack 38121358	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Assembly, Pass Thru Box #1 38121359	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	Wiring Diagram, Pass Thru Box #1 38121360	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	Assembly, Relay Rack 38121361	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	Wiring Diagram, Relay Rack 38121362	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	Assembly, Relay Box #1 38121363	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	Wiring Diagram, Relay Box #1 38121364	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PRINTED WIRING BOARD ASSY, LE RELAY BOARD #1 38121365	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	PRINTED WIRING BOARD, LE RELAY BOARD #1 38121366	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	SCHEMATIC DIAGRAM, PCB LE RELAY #1 (Schematic Diagram, PCB Relay Board #1 - LC & Capture) 38121367	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	Assembly, Relay Box #2 38121368	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	Wiring Diagram, Relay Box #2 38121369	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PRINTED WIRING BOARD ASSY, LE RELAY BOARD #2 38121370	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	PRINTED WIRING BOARD, LE RELAY BOARD #2 38121371	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	SCHEMATIC DIAGRAM, PCB LE RELAY #2 (Schematic Diagram, PCB Relay Board #2 - HG, LRTH & UnComp) 38121372	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	Assembly, Relay Box #3 (Relay Box 3 - Resolvers, LD, Separation & Umbilical LS Assembly) 38121373	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	Wiring Diagram, Relay Box #3 (Relay Box 3 - Resolvers, LD, Separation & Umbilical LS Wiring Diagram) 38121374	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	PRINTED WIRING BOARD ASSY, LE RELAY BOARD #3 (PCB Relay 3 - Resolvers, LD, Separation & Umbilical LS Assembly) 38121375	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	PRINTED WIRING BOARD, LE RELAY BOARD #3 (PCB Relay 3 - Resolvers, LD, Separation & Umbilical LS Layout) 38121376	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	SCHEMATIC DIAGRAM, PCB LE RELAY #3 (PCB Relay 3 - Resolvers, LD, Separation & Umbilical LS Schematic) 38121377	SSCN 12358	S/A 1797	8/10/2011	8/10/2011
	Assembly, Avionics Rack 38121378	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	CHE CABLE HARNESS, CONTROL-HTR/MTR BOX POWER 38121380	SSCN 12358	S/A 1797	2/17/2012	2/29/2012
	CHE CABLE HARNESS, CONTROL-HTR/MTR BOX DATA 38121381	SSCN 12358	S/A 1797	2/17/2012	2/29/2012
	CHE CABLE HARNESS, HCS HEATER POWER 38121382	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, SCS HEATER POWER 38121383	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, HCS HEATER SENSORS 38121384	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, SCS HEATER SENSORS 38121385	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, MAGNET POWER 38121386	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, LOCKDOWN EMA POWER 38121387	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, LINEAR EMA POWER 38121388	SSCN 12358	S/A 1797	2/17/2012	3/2/2012

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	CHE CABLE HARNESS, SEPARATOR EMA POWER 38121389	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, HOOK GANG EMA POWER 38121390	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS,CHE CABLE, CAPTURE SENSORS 38121391	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, LOCKDOWN LIMIT SWITCHES 38121392	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, LINEAR EMA RESOLVERS 38121393	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, LOAD CELLS 38121394	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, HOOK AND UMBILICAL LIMIT SWITCHES 1 38121395	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, HOOK AND UMBILICAL LIMIT SWITCHES 2 (LE Hook, SEP, RTH, UDC, UMB LS & Water, Oxi/Press, Fuel, Loop Back Cable) 38121396	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, POWER-HTR/MTR BOX SIGNAL 38121397	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, POWER-HTR/MTR BOX LOW POWER 38121398	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	CHE CABLE HARNESS, POWER-HTR/MTR BOX HIGH POWER 38121399	SSCN 12358	S/A 1797	2/17/2012	3/8/2012
	ASSEMBLY, SHOCK GUARD, TOP RECTIFIER BOX 38121400	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	ASSEMBLY, SHOCK GUARD, BOTTOM RECTIFIER BOX 38121401	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	ASSEMBLY, SHOCK GUARD, PASS-THRU BOX 38121402	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Wiring Diagram, iLIDS Emulator 38121403	SSCN 12358	S/A 1797	2/24/2012	RECEIVED (LATE)
	Rack shelf altered item drawing 38121404	SSCN 12358	S/A 1797	11/30/2011	11/30/2011
	Assembly, Host Emulator 38121420	SSCN 12358	S/A 1797	3/2/2012	RECEIVED (LATE)
	Assembly, HE Rack 38121421	SSCN 12358	S/A 1797	3/2/2012	RECEIVED (LATE)
	Wiring Diagram,HE Rack 38121422	SSCN 12358	S/A 1797	3/2/2012	RECEIVED (LATE)
	Assembly, HE Power Box 38121423	SSCN 12358	S/A 1797	2/3/2012	2/14/2012
	Wiring Diagram, HE Power Box 38121424	SSCN 12358	S/A 1797	2/3/2012	2/14/2012
	Assembly, HE Comm Box 38121425	SSCN 12358	S/A 1797	2/3/2012	2/14/2012
	Wiring Diagram, HE Comm Box 38121426	SSCN 12358	S/A 1797	2/3/2012	2/14/2012
	HE CABLE HARNESS, VEHICLE POWER 38121427	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	HE CABLE HARNESS, VEHICLE COMM 38121428	SSCN 12358	S/A 1797	2/17/2012	RECEIVED (LATE)
	HE CABLE HARNESS, GSE COMM 38121429	SSCN 12358	S/A 1797	2/17/2012	3/2/2012
	HE CABLE HARNESS, EPO 38121430	SSCN 12358	S/A 1797	2/17/2012	RECEIVED (LATE)
	ASSEMBLY, SHOCK GUARD, SHORT, HE POWER BOX 38121431	SSCN 12358	S/A 1797	2/3/2012	12/28/2011
	ASSEMBLY, SHOCK GUARD, LONG, HE POWER BOX 38121432	SSCN 12358	S/A 1797	2/3/2012	12/28/2011
	Wiring Diagram, Host Emulator 38121433	SSCN 12358	S/A 1797	3/2/2012	12/28/2011
	MECH GSE DRAWINGS:				
	EEMS/Passive Lift Hardware Assembly 38121266	SSCN 12358	S/A 1797	4/17/2012	RETIRED
	EEMS/Passive to JR-3 Interface 38121271	SSCN 12358	S/A 1797	4/17/2012	DELETED
	Lower Seal Surface Protective Cover 38121272	SSCN 12358	S/A 1797	4/17/2012	DELETED
	Upper Seal Surface Protective Cover 38121273	SSCN 12358	S/A 1797	4/17/2012	RETIRED
	iLIDS Active Lift Hardware Assembly 38121276	SSCN 12358	S/A 1797	4/17/2012	4/17/2012
	iLIDS Vib Plate & Lift Hardware Assembly 38121288	SSCN 12358	S/A 1797	4/17/2012	RETIRED
	DOCUMENTATION:				
	JSC-63686 international Low Impact Docking System (iLIDS) Project Technical Requirements Specification (PTRS) - Post IBR version	SSCN 12358	S/A 1797	8/19/2011	8/19/2011
	JSC-65795 NASA Docking System (NDS) Interface Definition Document (IDD)- Post IBR version by Oct 3	SSCN 12358	S/A 1797	10/3/2011	10/3/2011
	Doc # JSC-63966 Validation & Verification Document (V&VD) international Low Impact Docking System (iLIDS) Project Technical Requirements Specification (PTRS)	SSCN 12358	S/A 1797	1/16/2012	1/16/2012
	LE Requirements	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	HE Requirements	SSCN 12358	S/A 1797	12/14/2011	12/14/2011
	Final NDSC and HE/CHE Bill of Material	SSCN 12358	S/A 1797	10/3/2011	10/3/2011
	Control System Software to Complex Electronics IDD (JSC 61743)	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	Ground Support Equipment to Complex Electronics IDD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	Control System Software SDD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	Ground Support Equipment SDD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	LIDS Hardware Simulator SDD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012

Attachment J-2
Government Furnished Data (GFD) (US)
REVISION 69

NAS15-10000
MOD 1840

Unique ID	Nomenclature	Change No.	Mod No.	Delivery Consideration/ Remarks/Need date	Date Received
	Control System Software to LIDS Hardware Simulator IDD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	Control System Software to Ground Support Equipment IDD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	NDS SW V&VD	SSCN 12358	S/A 1797	2/1/2012	2/1/2012
	NDS SW VDD and Data Items Updates	SSCN 12358	S/A 1797	1/27/2014	DELETED
	NDS SW FQT Procedures and Report	SSCN 12358	S/A 1797	3/10/2014	DELETED
	Software Users Manuel and Firmware Support Manual	SSCN 12358	S/A 1797	3/10/2014	DELETED
	NDS MODEL/SIMULATION DATA:				
	SCS Stewart platform control laws and performance parameters	SSCN 12358	S/A 1797	5/10/2012	DELETED
	Component and system-level development test data and results for SCS and HCS model correlation	SSCN 12358	S/A 1797	6/30/2012	RECEIVED (LATE)

Attachment J-2 - CHANGE LOG

REV	DATE	CHANGES MADE	CHANGES POSTED BY
Rev 60; Mod 1563	9-Jan-09	TAB 5 - Section IV: GFD (US). Incorporated additions from the following: Mod 1460 SSCN 9763 Mod 1488 SSCN 10030 Mod 1495 SSCN 10507 Mod 1498 SSCN 11012 Mod 1509 SSCN 10318 Mod 1534 SSCN 10436 Mod 1556 SSCN 11040	D. Clemons Sr.
Rev 61; Mod 1570	8-Apr-09	TAB 5 - Section IV: GFD (US). Incorporated additions from Mod 1570 SSCN 10829	E. Hale
Rev 62; Mod 1590	23-Jul-09	Tab 5 - Section IV: GFD (US) Incorporated additions from the following Mod 1583 Mod 1589 SSCN 11348 Mod 1577 SSCN 11670 Mod 1590 SSCN 11734	E. Hale
Rev 63; Mod 1604	28-Oct-09	Tab 5 - Section IV: GFD (US) Incorporated additions from the following: Mod 1595 SSCN 11372 Mod 1599 SSCN 11431 Mod 1604 SSCN 11686	E. Hale
Rev 64; Mod 1637	20-Apr-10	Tab 5 - Section IV: GFD (US) Incorporated additions from the following: Mod 1605 SSCN 11558 Mod 1609 SSCN 11404 Mod 1624 SSCN 12124 Mod 1628 SSCN 11625 Mod 1629 SSCN 12158 Mod 1637 SSCN 11885	E. Hale
Rev 65; Mod 1672	28-Sep-10	Tab 5 - Section IV: GFD (US) Incorporated additions from the following: Mod 1674 SSCN 12377 SSCN 11625 revised directive signed 09/07/2010 Mod 1645 SSCN 12169 Mod 1648 SSCN 12281 Mod 1648 SSCN 12275 Mod 1648 SSCN 12168	E. Hale
Rev 66; Mod 1693	14-Dec-10	Tab 5 - Section IV: GFD (US) Incorporated additions from the following: Mod 1685 SSCN 12465 Mod 1679 SSCN 12466 Mod 1693 SSCN 12508	E. Hale
Rev 67; Mod 1733	12-May-11	Tab 5 - Section IV: GFD (US) Incorporated additions from the following: Mod 1694 SSCN 11625 Mod 1696 SSCN 12568 Mod 1697 SSCN 12569 Mod 1697 SSCN 12616 Mod 1704 SSCN 12423 Mod 1706 SSCN 12546 Mod 1715 SSCN 12689 Mod 1717 SSCN 12608 Mod 1722 SSCN 12634 Mod 1728 SSCN 12719 Mod 1733 SSCN 12673 Deleted items per the following: Mod 1721 SSCN 12568 Credit	E. Hale
Rev 68; Mod 1752	15-Aug-11	Tab 5 - Section IV: GFD (US) Incorporated additions from the following: Mod 1736 SSCN 12693 Mod 1745 SSCN 12820 Mod 1752 SSCN 12852	E. Hale

Rev 69; Mod 1840	7-May-12	<p>Tab 5 - Section IV: GFD (US)</p> <p>Incorporated additions from the following:</p> <ul style="list-style-type: none">Mod 1760 SSCN 12845Mod 1769 SSCN 10395Mod 1771 SSCN 12443Mod 1776 SSCN 12948Mod 1780 SSCN 12931Mod 1784 SSCN 12957Mod 1792 SSCN 12202Mod 1809 SSCN 12939Mod 1810 SSCN 12961Mod 1811 SSCN 13073Mod 1817 SSCN 12638Mod 1818 SSCN 12833Mod 1825 SSCN 12209NASA Letter BG-12-035Mod 1829 SSCN 12870Mod 1840 SSCN 13105 <p>Added new tab for Docking GFD only.</p>	E. Hale
Rev 70; Mod 1907	23-Oct-12	<p>Tab 5 - Section IV: GFD (US)</p> <p>Incorporated additions from the following:</p> <ul style="list-style-type: none">MOD 1852 SSCN 13269MOD 1856 SSCN 13190MOD 1857 SSCN 13232MOD 1854 SSCN 12443MOD 1866 SSCN 13235MOD 1860 SSCN 12639MOD 1848 SSCN 13175MOD 1887 SSCN 13204MOD 1886 SSCN 12961MOD 1896 SSCN 13384MOD 1899 SSCN 13366MOD 1907 SSCN 13322 <p>Deleted items per the following:</p> <ul style="list-style-type: none">MOD 1886 SSCN 12961	E. Hale
Rev 71; Mod 2031	5-Sep-13	<p>Tab 5 - Section IV: GFD (US)</p> <p>Incorporated changes from the following:</p> <ul style="list-style-type: none">-Letter 12-015531R1-Letter 13-010420-Letter 13-011194-S/A 1972 - SSCN 12358 Variance-S/A 1999 - SSCN 12639-S/A 1919 - SSCN 13351-S/A 1944 - SSCN 12837-S/A 1943 - SSCN 13047-S/A 1959 - SSCN 13121-S/A 1974 - SSCN 13241-S/A 1925 - SSCN 13267-S/A 1951 - SSCN 13614-S/A 1976 - SSCN 13629-S/A 1977 - SSCN 13678-S/A 1962 - IPE Credit-S/A 1988 - SSCN 13787-S/A 1994 - SSCN 13773-S/A 1984 - SSCN 13149-S/A 2000 - SSCN 13197-S/A 2016 - SSCN 13231	E. Hale

ATTACHMENT J-3**SECTION****TITLE**

Section I	List of Installation Property and Services
Section II	Johnson Space Center On-Site Provisions
Section III	Kennedy Space Center On-Site Provisions
Section IV	Lewis Research Center On-Site Provisions
Section V	Marshall Space Flight Center On-Site Provisions

Attachment J-3/Section I
Installation Property and Services

ATTACHMENT J-3/SECTION I

LIST OF INSTALLATION
PROPERTY AND SERVICES

CENTER	BUILDING	TITLE
JSC	5	SPACE STATION TRAINING FACILITY Node 2 Crew Station HAB Crew Station LAB Crew Station Node 1 Crew Station
JSC	7	CREW SYSTEMS LABORATORY Space Station Airlock Test Article Facility
JSC	9	SYSTEMS INTEGRATION FACILITY Space Station Mockups and Trainer Facility Precision Air Bearing Floor
JSC	14	ANTENNA AND TRACKING DEVELOPMENT LABORATORY Anechoic Chamber
JSC	29	WEIGHTLESS ENVIRONMENT TRAINING FACILITY Weightless Environment Training Facility
JSC	32	SPACE ENVIRONMENT SIMULATION LABORATORY Chamber A Chamber B
JSC	33	SPACE ENVIRONMENT EFFECTS LABORATORY Chamber E
JSC	44	COMMUNICATIONS AND TRACKING DEVELOPMENT LABORATORY Electronic System Test Lab
JSC	49	VIBRATION AND ACOUSTICS TEST FACILITY Vibro-Acoustic Test Facility
JSC	267	SPACE MATERIALS RESEARCH LABORATORY Hypervelocity Impact Test Facility
JSC Ellington	990	MAINTENANCE HANGAR KC-135 Reduced Gravity Aircraft

JSC WSTF	272	HAZARDOUS HYPERVELOCITY IMPACT TEST FACILITY	Hazardous Hypervelocity Impact Test Facility
MSFC	4477	Audioreverberant Chamber	Audio Lab
MSFC	4487	LAB AND OFFICE BUILDING	Electrical Systems Integration Lab
MSFC	4530	PROPULSION SYSTEM COMPONENT TEST STAND	Environment Simulation Chamber
MSFC	4572	PROPULSION AND STRUCTURAL TEST FACILITY	Structural Test Facility
MSFC	4619	STRUCTURES AND MECHANICS LABORATORY	Environment Testing Lab Structural Facility Dynamic Facility
MSFC	4663	COMPUTER FACILITY	Mechanism Test Bed
JSC	SCTF	SONNY CARTER TRAINING FACILITY	
MSFC	4708	ENGINEERING AND DEVELOPMENT LABORATORY	Engineering & Development Lab Environmental Testing Lab Seal Development Lab
MSFC	4755	HIGH-BAY ASSEMBLY FACILITY	High-Bay Assembly Facility
LERC	16	ELECTRONIC PROPULSION RESEARCH BUILDING	Tank 11 VF-61 & -62

LERC	301	ELECTRIC PROPULSION LABORATORY	
		TK-5	
		S-74,VF-59	
		TK-6	
LERC PLUM- BROOK	1411	SPACE POWER FACILITY	
		Space Power Facility	
LERC	333	POWER SYSTEMS FACILITY	
		The Space Power Research Lab	
LERC	5	Engine Research Building	
KSC	M7360	SPACE STATION PROCESSING FACILITY (SSPF)	
CAPE CANAVERAL	NSLD	AMMONIA BOILER SYSTEM FACILITY	
GSFC	15	MECHANICAL TEST LABORATORY	
		Acoustic Test Facility	
		Static Load Test Facility	
MSFC	4711	Materials Laboratory	
MSFC	4755	Environmental Control and Life Support (ECLS Test Bed	
JSC/WSTF	800	Materials Laboratory	
KSC	K6-1547	NASA Shuttle Logistics Depot	
JSC	9	Robotics Laboratory	
JSC	14	Electromagnetic Interference (EMI) Test Laboratory	
JSC	16	Guidance, Navigation, and Control Integrated Test Facility (GITF)	
JSC	32	External Active Thermal Ammonia System Test Article	
JSC	229	Environmental Control and Life Support (ECLS) Test Bed	
JSC	SCTF	Systems Development Integration Laboratory	
JSC	SCTF	ISS Systems Integration Laboratory	

JOHNSON SPACE CENTER

Section II: Johnson Space Center On-Site Provisions

PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL – FAR 52.204-9 (JAN 2006) S/A 1369

- (a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) Number 201.
- (b) The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have physical access to a federally-controlled facility or access to a Federal Information system.

(End of clause)

SECURITY/BADGING REQUIREMENTS FOR FOREIGN NATIONAL VISITORS AND EMPLOYEES/REPRESENTATIVES OF FOREIGN CONTRACTORS (JSC 52.204-91) (JAN 2006) S/A 1369

- (a) An employee of a domestic Johnson Space Center (JSC) contractor or its subcontractor who is not a U. S. citizen (foreign national) may not be admitted to the JSC site for purposes of performing work without special arrangements. In addition, all employees or representatives of a foreign JSC contractor/subcontractor may not be admitted to the JSC site without special arrangements. For employees as described above, advance notice must be given to the Security Office of the host installation [JSC or White Sands Test Facility (WSTF)] at least 3 weeks prior to the scheduled need for access to the site so that instructions on obtaining access may be provided. Contractors should be aware that approval for access to the site and issuance of a badge may take much longer than three weeks and sufficient lead time must be allowed to accommodate the approval process.
- (b) All visit/badge requests for persons described in (a) above must be entered in the NASA Foreign National Management System (NFMMS) for acceptance, review, concurrence and approval purposes. When an authorized company official requests a JSC or WSTF badge for site access, he/she is certifying that steps have been taken to ensure that its contractor or subcontractor employees, visitors, or representatives will not be given access to export-controlled or classified information for which they are not authorized. The authorized company officials shall serve as the contractor's representative(s) in certifying that all visit/badge request forms are processed in accordance with JSC and WSTF security and export control procedures.

No foreign national, representative, or resident alien contractor/subcontractor employee shall be granted access into JSC or WSTF until approved and processed through the NFNMS. Unescorted access will not be granted unless a favorable National Agency Check (NAC) has been completed by the JSC Security Office, and an approved NASA Foreign National Visitor Security/Technology Control Plan (STTCP), (previously called the Access Control Plan) has been submitted and approved.

(c) The contractor agrees that it will not employ for the performance of work onsite at the JSC or WSTF any individuals who are not legally authorized to work in the United States. If the JSC or WSTF Industrial Security Specialist or the contracting officer has reason to believe that any employee of the contractor may not be legally authorized to work in the United States and/or on the contract, the contractor may be required to furnish copies of Form I-9 (Employment Eligibility Verification), U. S. Department of Labor Application for Alien Employment Certification, and any other type of employment authorization document.

The contractor agrees to provide the information requested by the JSC or WSTF Security Office in order to comply with NASA policy directives and guidelines related to foreign visits to NASA facilities so that (1) the visitor/employee/representative may be allowed access to JSC or other NASA Centers for performance of this contract, (2) required investigations can be conducted, and (3) required annual or revalidation reports can be submitted to NASA Headquarters. All requested information must be submitted in a timely manner in accordance with instructions provided by JSC or any other Center to be visited.

(End of clause)

USE OF JSC CALIBRATION LABORATORY

(JSC 52.204-92) (SEP 1993)

In accordance with the requirements of JSC Management Directive 8070.1G, "Metrology and Calibration Services (12/12/91), and JSC Manual 8070C, "JSC Metrology Requirements Manual (4/90)", the Contractor shall utilize the services of the JSC Calibration Laboratory to the maximum extent practicable for calibration of all instruments (Government property or Contractor property) utilized under this contract, the total cost for (maintenance of which would otherwise be a direct charge to the Government.

The procedures for obtaining calibration of instruments are described in "JSC Support Contractor handbook," JSCM 5151 D, Section X.

(End of clause)

IDENTIFICATION OF EMPLOYEES JSC 52.242-92 (JAN 2006) S/A 1369

At all times while on Government property, the Contractor, subcontractors, their employees and agents shall wear badges which will be issued by the NASA Badging & Visitor Control Office, located in Building 110 at the Johnson Space Center (JSC), or at the Main Gate at the White Sands Test Facility (WSTF). JSC employee and visitor badges will be issued only between the hours of 6:00 a.m. to 7:30 p.m., Monday through Friday, and 7:00 am to 4:00 pm on Saturday and Sunday. WSTF employee badges will be issued only between the hours of 8 a.m. to 2 p.m., Monday through Friday. WSTF visitor badges will be issued on a 7-day a week, 24-hour a day basis. Resident aliens and foreign nationals/representatives shall be issued green foreign national badges.

Each individual who wears a badge shall be required to sign personally for the badge. The contractor shall be held accountable for issued badges and all other related items and must assure that they are returned to the NASA Badging & Visitor Control Offices upon completion of work under the contract in accordance with Security Management Directive (SMD) 500-15, "Security Termination Procedures." Failure to comply with the NASA contractor termination procedures upon completion of the work (e.g., return of badges, keys, CAA cards, clearance terminations, JSC Public Key Infrastructure (PKI)/special program deletions, etc.) may result in final payment being delayed.

(End of clause)

**ADMINISTRATIVE PROVISIONS RELATING TO
INSTALLATION-PROVIDED PROPERTY AND SERVICES**
(JSC 52.245-97) (APR 1989)

1. Requests for specific support to be furnished by the Government pursuant to the "Installation-Provided Government Property" clause and the "List of Installation-Provided Property and Services" clause shall be made by the Contractor to the Contracting Officer in accordance with the current issue of JSCM 5151. "Support Contractor Handbook." The completion of forms needed to obtain support shall be accomplished by the Contractor.
2. If the Contractor requests property or services which are not available or cannot be made available from the Government to meet the Contractor's schedule needs, the requesting document will be canceled and returned to the Contractor. The Contractor will thereafter be responsible for acquiring the needed items or services.
3. If the Contractor initiates a transfer of accountability (DD Form 1149) from the Contractor to the Government, the Contractor shall continue to account for the property in question until Contractor receives notification that the form has been signed by the JSC Supply and Equipment Management Officer (SEMO) or his/her authorized representative. If the Contractor does not receive such notice in a reasonable time, the Contractor will make inquiry through the Property Administrator as to the status of the transfer.

(End of clause)

INSTALLATION PROVIDED SERVICES

1. Audiovisual: Presentation services, sound services, Release Print Film Library, Film Repository, and loan of audiovisual equipment.
2. Cafeteria: Cafeteria privileges for Contractor employees during JSC cafeteria normal operating hours.
3. Automatic Data Processing (ADP) Services: Generally, this includes access to large general-purposes computer systems, workstations, and the accessing media; i.e., terminals, printers, data communications, and consultation and training in the use of said systems. Unless otherwise specified in the contract, this does not include providing computer systems or ADP services for the Contractor business management, accounting, and administrative functions.
4. Communications: Telephones, Federal Telecommunication System (FTS) 2000 communications, telegraphic and facsimile services as required for official Government business. Direct distance dialing cannot be authorized. JSC will provide commercial toll service only when other service is not available. Such calls must be placed through the JSC operator. The Contractor shall use the Government telephones for OFFICIAL PURPOSES ONLY.
5. Transportation Services:
 - (a) Rigging and Heavy Lifting: For lifting of program hardware, including flight and supporting hardware (onsite only).
 - (b) Moving and Hauling: Moving services, such as moving and hauling for office moves and movement of large equipment (onsite only).
 - (c) Delivery: Delivery of supplies from the JSC Stores Stock Warehouse to onsite and offsite locations.
 - (d) Travel and Transportation: Taxi and shuttle bus service for Contractor employees within the parameters provided for Government employees.
 - (e) Government Bills of Lading: GBL's for shipment of Government property located onsite and offsite.
6. Disposal Services: Disposal services for excess onsite and offsite Contractor-held/Government-owned property.
7. Fabrication Services: Fabrication services such as machining, sheet metal and welding, electronics, metal finishing, model and plastics and precision cleaning.

8. Janitorial and Custodial: For Contractor personnel and facilities (onsite only).
9. Photography, Processing, and Closed-Circuit Television: For technical and scientific photography, photographic processing, photographic sciences, and closed-circuit television.
10. Pickup and Delivery of Official Mail: Within the Center and to and from the Albert Thomas Post Office, provided the mail is properly sealed and stamped. Such mail will be picked up or dropped from only one point as designated by JSC or, if preferred, JSC will provide a box in the central mailroom for the Contractor to pick up and deposit its mail.
11. Printing, Duplicating, and Microfilming/Microreproduction: For official needs except for payroll, accounting, and similar records.
12. Scientific and Technical Information (STI) Center: Use of STI Center facilities and research material, loan of its documents, and reference assistance. Classified information will be released only after a "need-to-know" has been substantiated, the individual requesting the information has been determined to be cleared to receive it and Contracting Officer approval has been obtained. Proprietary or confidential business information will not be made available.
13. Graphic Services: General and technical illustration work including charts and graphs.
14. Security:
 - General. For Contractor personnel and facilities (onsite only). (S/A 1369)
 - Background investigations. NASA will conduct the appropriate investigation for contractor personnel requiring access to NASA information systems or to NASA owned facilities in the performance of this contract. Access to NASA owned facilities is defined for this purpose as greater than six months.
15. Calibration Services: For instruments, standards, sensors, and measuring equipment for the physical sciences, communications, electrical/electronic, and gas (analytical) analysis fields.
16. Materials Analysis and Test Laboratory (MATL): For performing chemical and mechanical testing of externally treated fasteners and metallic raw materials.
17. Emergency and Ambulance service: For Contractor personnel on duty, to the extent available (onsite only).
18. Safety and Fire Protection: For Contractor personnel and facilities (onsite only).
19. First-Aid and Medical Treatment: For Contractor personnel injuries or illnesses sustained during onsite duty. Cases resulting in lost time

(requiring absence during the individual's following duty tour) or requiring the extended treatment will not be treated, and may be referred to the Contractor's designated physician.

20. Radiological: Advisory services, radiological safety analyses, education, film badge service, radioactive waste disposal, and licensing of radioactive materials.

21. Environmental Health: Advisory services, inspections, and education in the fields of industrial hygiene and sanitation.

22. Maintenance: Equipment provided for onsite use.

23. Interactive Supply Management System: Access to and use of this software system to aid in the requisitioning of supplies (onsite only).

24. Contractor Responsibilities:

The responsibilities of the Contractor as contemplated by paragraph (a) of the installation-Provided Government Property clause are defined in the following property management directives and installation supplements to these directives.

(a) NHB 4200.1, NASA Equipment Management Manual.

(b) NHB 4200.2, NASA Equipment Management System (NEMS) User's Guide for Property Custodians.

(c) NHB 4300.1, NASA Personal Property Disposal Manual.

(d) NHB 4100.1, NASA Materials Inventory Management Manual.

JSC will provide the Contractor with all applicable regulations, handbooks, and other materials that may be required.

(End of clause)

Personal Identity Verification of Contractor Personnel Procedures
PIV Card Issuance Procedures in accordance with FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

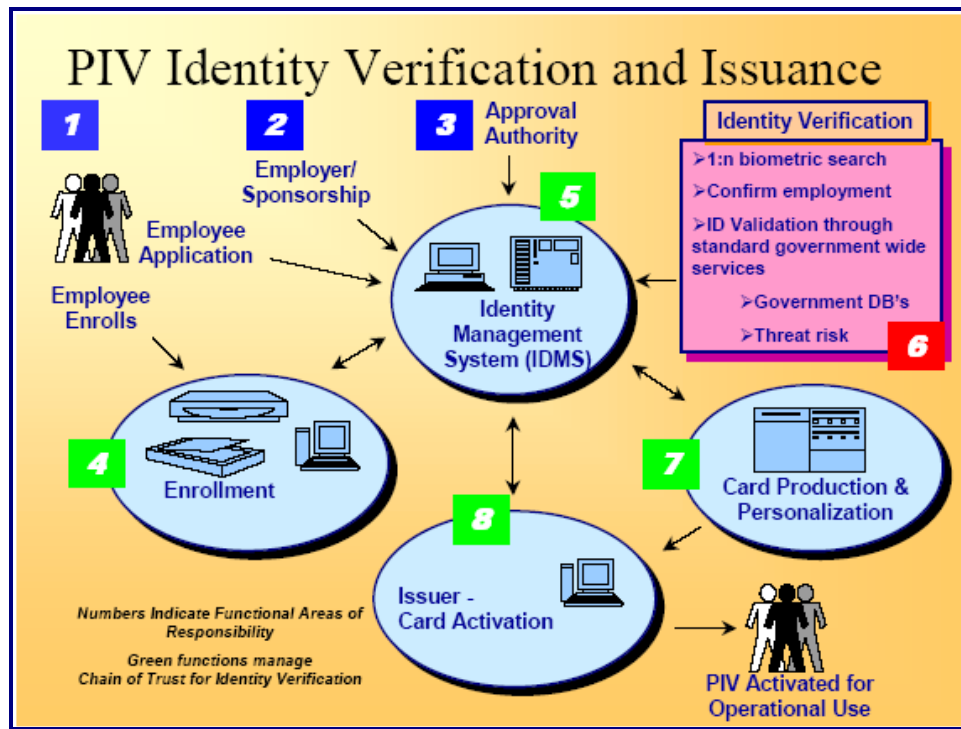


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

Step 1:

The Contractor's Corporate Security Officer (CSO), Program Manager (PM), or Facility Security Officer (FSO) submits a formal letter that provides a list of contract employees (applicant) names requesting access to the NASA Contracting Officer's Technical Representative (COTR). In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFMMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a contract where a COTR has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the COTR mentioned herein. In each case, the letter shall provide notification of the contract or foreign national employee's (hereafter the "applicant") full name (first, middle and last), social security number (SSN) or NASA

Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the contract employee has a current satisfactorily completed National Agency Check with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that contract employees may be denied access to NASA information or information systems based on an unsatisfactory background investigation/adjudication. .

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the COTR/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the COTR/host information and instructions on how to access the e-QIP for each contract or foreign national employee requiring access

Step 2:

Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one which must be a Federal¹ or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear **no later than** the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

Step 3:

Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

¹ A non-PIV government identification badge, including the NASA Photo Identification Badge, MAY NOT BE USED for the original issuance of a PIV vetted credential

Step 4:

Prior to authorizing physical access of a contractor employee to a federally-controlled facility or access to a Federal information system, the CCS will ensure that a check has been performed with the National Crime Information Center (NCIC) and Interstate Identification Index. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the COTR/host of the determination regarding access made by the CCS.

Step 5:

Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the COTR will advise the contractor that the employee is being denied physical access to all federally-controlled facilities and Federal information systems.

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the COTR/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

Step 6:

Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

Step 7:

The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential.

The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9) documents. These documents **must** be the same documents submitted for registration.

The credential issuing operator will verify that the facial image, and optionally reference finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, et al.) may be modified to more accurately record the employee's information.

The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance.

**ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED
AND ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY**

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.
2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination if an additional extension will be granted for the temporary identification card.
3. Upon return of the completed NAC, the process will continue from Step 5.

Kennedy Space Center

Section III: Kennedy Space Center on-site Provisions

KSC 52.204-90**SECURITY CONTROLS AT KSC (JAN 1992)**

1. Identification of Employees

A. The contractor shall require each employee engaged on the work site to display NASA-furnished identification badges and special access badges at all times. The contractor shall obtain and submit badging request forms on each person employed or to be employed by the contractor under this contract. The contractor shall designate his own security and badging officials to act as points of contact for the KSC Security Office. Prior to proceeding with onsite performance, the contractor shall submit the following information to the NASA Internal Security Office, (SI-PSO-1), Kennedy Space Center.

- (i) Contract number and location of work site(s)
- (ii) Contract commencement and completion dates
- (iii) Status as prime or subcontractor
- (iv) Names of designated security and badging officials

B. Identification and badging of employees shall be accomplished as soon as practicable after award of the contract. During performance of the contract, the Contractor shall, upon termination of an employee, immediately deliver badges and/or passes issued to the employee to the NASA Internal Security Office. It is agreed and understood that all NASA identification badges/passes remain the property of NASA, and the Government reserves the right to invalidate such badges/passes at any time.

(End of clause)

2. Access to Controlled Areas within KSC

A. Certain areas within KSC have been designated as Controlled Areas. These are normally surrounded by fencing and have an entrance gate monitored by a guard or monitoring device. Access into such Areas is classified into "escorted" and "unescorted" access. For each employee for which the contractor desires to have unescorted access, the prescribed forms must be submitted to the NASA Internal Security Office. Due to the time required to process requests for unescorted access the contractor is advised to complete and submit the required forms as soon as practicable after contract award.

Within 14 working days after the receipt of the forms, the NASA Internal Security Office will determine whether the person is eligible for unescorted access.

B. The prime Contractor is responsible for providing escort services for any of his employees and/or any subcontractor employees who are not eligible for unescorted access.

C. All requests for unescorted access by subcontractors will be submitted through the prime Contractor for forwarding to the NASA Internal Security Office.

(End of clause)

KSC 52.247-100**NOTICE TO CARRIER (FEB 1990)**

Upon arrival at KSC, the carrier's Agent will report to the Transportation Officer, NASA, BOC Warehouse, Bldg. M6-744. The Transportation Officer will assign a Support contractor's delivery employee to accompany the Agent to the final delivery point.

(End of clause)

KSC 52.247-97**SHIPPING INSTRUCTIONS (FOREIGN PURCHASES) (FEB 1990)**

SHIP BY: U.S. Customs Bonded Carrier

SHIP TO: Transportation Officer, NASA
BOC Warehouse, Building M6-744
Kennedy Space Center FL 32899
C/O U.S. Customs Office
Port Canaveral FL

(End of clause)

KSC 52.247-94**MARKING INSTRUCTIONS - CONTRACTOR ACQUIRED EQUIPMENT (SEP 1990)**

Inbound shipments to the Contractor of contractor acquired equipment and parts from all sources for the account of the Government shall be consigned to and marked as follows:

Transportation Officer, NASA
EG&G Florida, Inc., Bldg. M6-698
Kennedy Space Center, FL 32899

Mark for: _____ *

*Contractor to insert the name, code and address of the consignee and, if appropriate, identifying contract or order number.

NOTE: (On shipments of explosives, propellants, dangerous and potentially hazardous items via motor carrier, the contractor shall require the carrier to call KSC Transportation Management Section, phone 407-867-3240, immediately prior to arrival, in order to receive instructions as to the exact unloading point within the Kennedy Space Center.)

(End of clause)

KSC 52. 247-92

MARKING INSTRUCTIONS (FEB 1990)

Transportation Officer, NASA
BOC Warehouse, Building N6-744
Kennedy Space Center, Florida 32899

In addition, special marks or ultimate consignee will be shown as:

Marked For: Ultimate Consignee
 Mail Code _____
 Building # _____
 Contract # _____

(End of clause)

KSC 52.242-90

**CONTROLS APPLICABLE TO CONTRACTOR'S
ACTIVITIES (JUNE 1994)**

The below listed Kennedy Space Center publications and subsequent revisions thereof are applicable to this contract and are incorporated herein by reference. These issuances prescribe regulatory procedural criteria which are applicable to the contractor. The contractor, upon receipt of notice of noncompliance with any provisions of the below listed publications from the Contracting Officer or his representatives, shall promptly take corrective action.

KSC 1200.IA	"Management of Facilities, Systems & Equipment w/ch. 35 Handbook"
KMI 1310.1F	"Unescorted Access and Personnel Reliability Program"
KHB 1610.1A	"KSC Security Handbook"
KHB 1610.2	"Personnel Security Handbook" w/ch. 1
KMI 1610.2D	"Photography and Photography Identification"
KHB 1710.2B	"Kennedy space Center Safety Practices w/ch. 8 Handbook"
KMI 1710.13G	"Technical Operating Procedures Policy"
KHB 1711.1C	"Reporting and Investigation of Mishaps" w/ch 5
AI 1800. 2A	"KSC Hazard Communication Program"
KMI 1860. IC	"KSC Radiation Protection Program"
KMI 1870.1	"KSC Sanitation and Pollution Control Program"
KMI 2410.2D	"Information Resources Management"
KHB 4000.1C	"Supply Support System Manual, Part 5, w/ch. 3 Equipment Management"
KMI 7110,1D	"Centerwide Manpower Reports"
KHB 8800.7A	"Hazardous Waster Management
KMI 8800.7A	"Management of Hazardous Waste for Compliance, Handling, Treatment and Disposal/Reclamation"
KMI 8810.1 D	"Excavation/Subsurface Permit Process"
KHB 8810.1D	"Processing and Approving Excavation Permits"
GP-509G	"Contractor/User Safety Program Criteria"

GP-1098C "KSC Ground Operations Safety Plan" (Volume I&II) w/changes

(End of clause)

KSC 52.236-127

R.F. RESTRICTIONS DURING CONSTRUCTION (FEB 1992)

1. Through the Contracting Officer, the Contractor will be required to meet the provisions of Kennedy Management Instruction 2570.1E "KSC Radio Frequency Management" dated 4/29/91, following documents referenced therein:

- (a) NASA Management Instruction 5104.2
- (b) NASA Radio Frequency Management Manual
- (c) NASA Management Instruction 2570.2B (Radio Frequency Management)

2. During periods of special testing on Kennedy Space Center and at the Cape Canaveral Air Force Station, he may be required to cease radiating on any radio equipment he may be utilizing at the time.

3. Any construction equipment utilized by the successful bidder which may be causing radio frequency interference will be required to shut down during special tests. NASA will utilize its frequency analysis equipment to determine the interference.

(End of clause)

KSC 52.227-90

**MANAGEMENT AND PROTECTION OF DATA OF THIRD PARTIES
(MAR 1992)**

1. In performance of this contract, it is anticipated that the Contractor may have access to, be furnished, use, or generate the following types of data (recorded information):

(a) data of third parties bearing limited rights or restricted rights notices submitted either to NASA or directly to the Contractor; or

(b) other data of third parties which NASA has agreed to handle under protective arrangements; or

(c) data generated by NASA or the Contractor for third parties which NASA intends to control the use and dissemination thereof until delivered to the third parties.

2. In order to protect the interests of the Government and the interests of other owners of such data, the Contractor agrees with respect to data in category (a) above, and with respect to any data in categories (b) and (c) when so identified by the Contracting Officer, to:

(a) use and disclose such data only to the extent necessary to perform the work required under this contract, with particular emphasis on restricting the data to employees having a "need to know":

(b) preclude disclosure of such data outside Contractor's organization performing work under this contract without written consent of the Contracting Officer; and

(c) return or dispose of such data as directed by the Contracting Officer, or the furnishing third party owner, when such data is no longer needed for contract performance.

(End of clause)

KSC 52.223-95 REPORTING OF MISHAPS (JUL 1992)

The Contractor shall immediately report to the Director of Safety, Reliability and Quality Assurance, and the cognizant Contracting Officer (by telephone if possible) accidents and incidents which result in serious personal injuries or death and/or substantial damage to KSC resources, equipment or facilities used or occupied by the Contractor. Prepare and submit a NASA Mishap Report (NASA Form 1627, unshaded blocks) to the KSC Safety Operations Division, Payloads and Industrial Safety Branch (RT-SAF-2), within one working day, covering all known circumstances of the mishap. The follow-up completion of the NASA Form should be submitted within 10 working days.

Guidance in reporting mishaps shall be obtained from the Contracting Officer.

(End of clause)

KSC 52.223-93 OCCUPATIONAL HEALTH (FEB 1992)

1. Occupational Health Service

The medical services set forth in KMI 1810.1F entitled KSC Occupational Medicine and Environmental Health Program, dated September 17, 1991, will be provided to the contractor by the Government to the extent that there will not be any restriction of the employees' rights under applicable Workmen's Compensation statutory provisions.

Information from records generated as a result of rendition of these medical services may be obtained from the Director, Biomedical Operations and Research Office/MD upon written request.

2. Health Examinations and Physical Requirements Standards

The contractor shall provide the following data to the Director Biomedical Operations and Research Office/MD:

- (a) A breakdown of the various health examinations required in support of this contract; providing type, frequency, and a roster of personnel affected.
- (b) The applicable physical requirements standards for personnel certification, if the Contractor has physical requirement standards which are stricter than the applicable KSC (Federal) standards; otherwise the KSC (Federal) physical requirements standards are applicable to this contract.

(End of clause)

KSC 223-91

GENERAL SAFETY AND ACCIDENT PREVENTION (FEB 1992)

The Contractor will be required to participate in the KSC Safety Program. The primary safety and health responsibility will be with the prime Contractor, and will include the following:

1. Maintaining continuous surveillance of Industrial Safety Operations in the Contractor's contractual areas for detection and correction of unsafe practices and conditions
2. Providing a safety staff to ensure that working conditions and practices in areas of contract responsibility are maintained in a safe manner.
3. Coordinating with the KSC Safety Operations Division (RT-SAF) on all matters pertaining to accident prevention, whether between the Contractor and other contractors, or NASA elements and the Contractor.

4. Submitting a written safety program (Plan) stating how the Contractor will implement the Safety program to the Director of Safety, Reliability, and Quality Assurance, for review and approval in accordance with the Data Requirement List (DRL) shown in the contract. The Safety Plan should be written in accordance with KSC GP-509F, "Contractor/User Safety Program Guidelines."
5. Submitting a Monthly Safety Summary Report in accordance with the DRD shown in the contract. Information should contain (as a minimum) items listed in Section V, KSC GP-509F.
6. Ensuring that Contractor employees are provided with and use safety clothing and equipment for hazardous operations. Responsibility for "furnishing" this clothing and equipment lies with the Contractor, except when otherwise authorized by contract or any revisions thereof
7. Complying with KMI 1710.1G, dated September 5, 1991, entitled Safety, Reliability and Quality Assurance Programs, and the safety and health provisions contained therein, but not limited to, documents shown in a listing issued by the Director of Safety, Reliability, and Quality Assurance.
8. Complying with KMI 1710.13F, dated May 19, 1988, entitled Technical Operating Procedures Policy, for all operations performed at KSC and ESMC 27-1, Range Safety Manual for all operations performed on CCAFS by the Contractor.
9. Notifying the KSC Safety Operations Division (RT-SAF) immediately when contacted by personnel from the Department of Labor. Furnishing the KSC Safety Office copies of all correspondence reports relating to inspection performed under the Occupational Safety and Health Standards by the Department of Labor.
10. Furnishing a written report to the KSC Safety office of all deficiencies with equipment facilities in violation of the Occupational Safety and Health Standards which are under their contract SOW.
11. The Contractor agrees to insert this clause, including this paragraph 11 and any applicable Schedule Provisions, with appropriate changes of designations of the parties, in subcontracts of every tier unless the Contracting Officer makes a written determination of exemption from this clause.

Nothing herein shall be construed as imposing upon the Contractor any duty to assure or otherwise assume responsibility for the safe operations of any other contractor or their subcontractor performing work on behalf of the Government at

the John F. Kennedy Space Center or for the personal safety of the representatives or employees of any such other contractors or subcontractors.

(End of clause)

KSC 52.212-91 DELIVERY INSTRUCTIONS (FEB 1991)

Deliveries must be made to the receiving activity located in Building M6-698, PGOC Transportation Warehouse, John F. Kennedy Space Center, Florida. Unless the Contracting Officer has authorized deliveries to be made at other times because of an emergency requirement, vendor deliveries will be accepted only during normal operating hours which are from 07:20 a.m. to 03:30 p.m. daily excepting Saturdays, Sundays and legal holidays.

(End of clause)

KSC 52.212-90 CONSIGNMENT ADDRESS

Ship To: Transportation Officer
PGOC Transportation Warehouse
Building M6-698
Attn: Harold Fish, NASA QA Representative
Kennedy Space Center, Florida 32899

Note: See Section D for special marking instructions that may be required.

(End of clause)

KSC 52. 209-90 PERMITS AND LICENSES (FEB 1990)

The Contractor shall procure and keep effective all necessary permits and licenses required by the Federal, state, or local Government or subdivision thereof, or of any other duly constituted public authority in performance of the work unless otherwise directed by the Contracting Officer, and shall obey and abide by all applicable laws, regulations or ordinances.

(End of clause)

NFS 18-52.247-71 PROTECTION OF THE FLORIDA MANATEE (March 1989)

NFS 18-52.247-71 PROTECTION OF THE FLORIDA MANATEE (March 1989)

1. Pursuant to the Endangered Species Act of 1973 (Pub. L. 93-205), as amended, and the Marine Mammals Protection Act of 1972 (Pub. L. 92-522), the Florida Manatee (*Trichechus Manatus*) has been designated an endangered species, and the Banana and Indian Rivers within and adjacent to NASA's Kennedy Space Center (KSC) have been designated as a critical habitat of the Florida Manatee.
2. Contractor personnel involved in vessels operations, dockside work, and selected disassembly functions shall be provided training relative to (1) habits and characteristics of the Florida Manatee, (2) provisions of the applicable laws, (3) personal liability of workers under the laws, and (4) operational restrictions imposed by KSC.
3. All vessel operations shall be conducted within the posed speed restrictions, and vessels shall be operated at minimum controllable speeds in all KSC waters. Shallow-water operations are prohibited.
4. Training will be conducted by personnel of the U.S. Fish and Wildlife Service (USFWS). The Contractor agrees to cooperate with the USFWS by allowing access at reasonable times and places (including shipboard) to USFWS personnel, and by making available such contractor personnel as are required to have the training. Arrangements for training will be made as follows:
 - (a) For personnel involved in tug, barge, or marine operations, through the Lockheed Space Operations Contractor, Transportation Coordination Center, Kennedy Space Center, Florida, telephone (407) 867-5330.
 - (b) For all other personnel, through the Systems Training and Employee Development Branch, Code PM-TNG, telephone (407) 867-2737.
5. The Contractor shall incorporate the provisions of this clause in applicable subcontracts (including vendor deliveries).

(End of clause)

LEWIS RESEARCH CENTER

Section IV: Lewis Research Center On-Site Provisions

1. BADGES

All Contractor personnel having a need to enter areas of the Lewis Research Center or Plum Brook Station shall have an identification badge or pass. This badge or pass shall be obtained at the entrance of the Lewis Research Center or Plum Brook Station. In addition to the requirements contained herein, the Contractor shall comply with LeRC management instruction LMI 1900 3, Managing Conduct Issues Affecting the Center, incorporated herein by reference and made a part hereof.

Permanent On-Site Contractors (picture badged employees)

(a) The on-site company supervisor will notify the Main Gate Badge Clerk at PABX 3-2206 when a new employee is reporting to work. The Badge Clerk will give the company supervisor specific instructions as to how the new employee will be badged, photographed, fingerprinted, etc.

(b) When an employee terminates and/or resigns employment, the company supervisor will issue to the employee NASA Form c10087, Non-NASA Separation Clearance Record. The company supervisor or his designee will be responsible for making an inquiry of all offices listed on the form to see if the employee has any outstanding Government items. The employee will then take this form to all offices that list he/she has outstanding items. The employees last stop is for the return of their Government issued I.D. badge.

(c) Company supervisors are to ensure that the terminated and/or resigned employee has returned his/her badge to the Main Gate Badge Clerk. Final clearance of a Contractor upon completion of a contract will depend in part upon the accounting for all badges issued to employees during the performance of the contract. It should be recognized that security badges are Government Property and any alteration or misuse of these badges may be Prosecuted as a violation of Section 499, Title 18. U S. Code.

Construction Contractors (non-picture badged employees)

(a) The Contractor's on-site supervisor shall comply with the Badge and Property Regulations (NASA Form C-421) a copy of which will be given the

Contractor's supervisors at the time of the Construction Site Showing. The Badge and Property Regulations are quoted below:

(b) The following regulations have been adopted governing the control of contractors' Badges at the Lewis Research Center.

1. Ensure that each company employee is in possession of NASA Form C-9975 prior to reporting to work for badging purposes. Employees not in possession of the above mentioned form will be delayed at the gate until such time as the company supervisor/foreman or his representative reports to the Main Gate with the appropriate paperwork for badging.
2. Report lost badges immediately.
3. Upon termination of duties, each employee's badge will be collected and returned to the Main Gate Sergeant by the Contractor supervisor/foreman. Final clearance of a Contractor upon completion of a contract will depend in part upon the accounting for all badges issued to employees during the performance of the contract. It should be recognized that security badges are Government property and any alternation or misuse of these badges may be prosecuted as a violation of Section 499, Title 18, U.S. Code.

(End of clause)

2. NASA-OWNED PROPERTY

(a) The term "NASA-Owned Property" refers to all controlled (tagged) equipment, library property, security badges, computer passwords and other materials furnished by the Government during the course of the contract.

(b) The Contractor shall ensure that all NASA-Owned Property issued to its employees is returned and in satisfactory condition upon termination of an employee's duties. In cases where accountability for the Property is transferred from one employee to another, the NASA Equipment Management System (NEMS) Control office of the Logistics Management Division must be notified. At the completion of the Government contract, all Property will be returned, and the contract value will be adjusted for any Property not accounted for.

(c) When access to Federal computer systems has been granted, the Contractor shall ensure that its employees comply with the clause of the contract entitled ADP SECURITY (LeRC 52.204-94) (Aug 1987).

(End of clause)

3. EMERGENCIES

(a) The Contractor shall ensure that its employees are informed that Emergency, Fire, Medical, Safety, and Security assistance can be summoned by Dialing "911" on the center's PABX telephone system. Emergencies are defined as incidents involving serious personal injury or damage that causes a possible hazardous condition. or any incidents that require immediate attention of the Plant Protection Department or Security. All other medical treatment is the responsibility of the Contractor.

(b) For incidents not classified as an emergency, contractor personnel shall be instructed to immediately notify the Lewis Research Center Space Station Representative at _____ (rather than dialing "911") in the event of an accident involving either personal injury or damage to property whether public or private, including damage to motor vehicles. They shall cooperate fully with the Government Accident Investigator and the Center Accident Investigation Board. This cooperation shall include interviews at the accident site and/or at a Board meeting.

(c) The Chairman of the appropriate Accident Investigation Board will notify the contractor through the COTR as to the date and time and location of the Board meeting. The Board meetings will be held between the hours of 8:15 a.m. and 4:45 p.m. regular work days Monday through Friday.

(d) For Contractor duties where continuous manning of posts is mandatory during a work shift, the contractor shall provide substitute personnel as required for manning these posts during the meeting of the Accident Investigation Boards.

(End of clause)

4. TRAFFIC

(a) The Contractor agrees to comply, and agrees to require that all of its personnel will comply with all posted traffic signs, signals and instructions of personnel assigned for traffic control and parking purposes and with the provisions of LMI 1735.1C, incorporated herein by reference and made a part hereof.

(b) The Government reserves the right to bar from the Lewis Research Center any Contractor employee who has failed to comply with any such signs, signals, instructions and the provisions of LMI 1735.1C. The period of the bar shall be as determined appropriate by the Contracting Officer subject to the provisions of LMI 1735.1C paragraph 9, with the exception that the words

"BARRED FROM THE CENTER" be substituted for "SUSPENSION". The Contracting Officer will notify the Contractor in writing, setting forth the name(s) of the affected employee(s) and the time period(s) of the bar(s).

No action by the Government in barring any Contractor employee from the Lewis Research Center shall be the basis for any claim whatever by the Contractor under this contract, nor shall it excuse the Contractor from complying with any provision of this contract.

(End of clause)

5. ON-SITE STANDARDS OF CONDUCT

(a) The Contractor's entry onto the Center shall be pursuant to fulfilling its contractual obligations, and any related activities thereto. Contractor personnel gaining access to Lewis facilities are required to certify that they meet the minimum ethical standards for entry onto a Government facility. Falsification of this certification could lead to criminal prosecution.

(b) The Contractor agrees to comply, and agrees to require that all of its personnel will comply with all applicable Federal and State statutes and regulations, NASA Management Instructions (NMI'S), Lewis Management Instructions (LMI'S), and other regulations pertaining to personal conduct while on-site. Any conduct prejudicial to the efficient operation of the Center shall be cause for removal from the Center.

(End of clause)

6. PROHIBITION OF FIREARMS

Firearms or weapons of any kind are strictly prohibited at the Lewis Research Center.

(End of clause)

7. SECURITY INCIDENTS

Theft of Property, Bomb threats, malicious damage and any other threat or violent situations shall be immediately reported to the Security Office.

(End of clause)

8. PROPERTY PASSES

A Property Pass (NASA Form C-702) is required for the removal of all Contractor owned property and equipment and must be presented to the gate guard upon exit. This form can be obtained from the COTR or inspector and must contain a complete description of the materials/equipment being removed. Material relating to a specific contract or purchase order must be identified by insertion of the appropriate contract/purchase order number on the pass by the inspector.

(End of clause)

9. AFTER-HOUR ACCESS

During normal working hours, 7:00 a.m. to 5:30 p.m. Monday through Friday, the guards at the gates will permit your entrance and departure. At any other time (other than normal hours), advance clearance is required, and may be obtained through the Lewis/Plum Brook COTR or Inspector who will then make the request to the Main Gate Sergeant PABX 3-2204 at Lewis and 3-3221 at Plum Brook. After-hour clearances as approved by the COTR Inspector are certification to the guards as authority for admittance of a Contractor during off hours, including Saturdays, Sundays, and Holidays.

(End of clause)

MARSHALL SPACE FLIGHT CENTER

Section V: Marshall Space Flight Center On-Site Provisions

LIST OF INSTALLATION-PROVIDED PROPERTY AND SERVICES (18-52.245-77) (MAR 1989)

1. Office space, work area space, and utilities as identified by NAS8-50001 (f) The Contractor shall use Government telephones for official purposes only. Pay telephone stations are available for the convenience and use of employees in making unofficial calls, both local and long distance.
2. General- and special-purpose equipment, including office furniture.
 - (a) Equipment to be made available to the Contractor for use in performance of this contract on-site and at such other locations as approved by the Contracting Officer is listed in Contract Attachment Government-Furnished Property. The Government retains accountability for this property under the Installation-Provided Government Property clause, regardless of its authorized location.
 - (b) If the Contractor acquires property as a direct cost under this contract, this property also shall become accountable to the Government upon its entry into the NASA Equipment Management System (NEMS) in accordance with the property-reporting requirements of this contract.
 - (c) The Contractor shall not bring on-site for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.
3. Supplies from stores stock.
4. Publications and blank forms stocked by the installation.
5. Safety and fire protection for Contractor personnel and facilities.
6. Installation services.
7. Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

8. Cafeteria privileges for Contractor employees during normal operating hours.
9. Building maintenance for facilities occupied by Contractor personnel (see Consolidated Facilities Contract NAS8-50001(F)).
10. Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.
11. The responsibilities of the Contractor as contemplated by paragraph (a) of the Installation-Provided Government Property clause are defined in Consolidated Facilities Contract NAS8-50001(F) and the following management directives and installation supplements to these Directives:

(End of clause)

**CONTRACTOR EMPLOYEE BADGING AND EMPLOYMENT TERMINATION CLEARANCE
(MSFC--52.204-90) (JAN. 1989)**

1. It is anticipated that performance of the requirements of this contract will require employee access to and picture badging by the Marshall Space Flight Center. Contractor requests for badging of employees shall be by MSFC Form 1739, Visit Request and Badge Application Card. Requests for badging shall be submitted to the attention of the appointed Contracting Officer Technical Representative for completion and approval prior to staffing by the MSFC Security Division.
2. The Contractor shall establish procedures to ensure that each badged employee is properly cleared in accordance with MSFC Form 383-1, "Contractor Employee Clearance Document," prior to finalization of employment termination.
3. Requests for copies of MSFC Forms 383-1, and 1739 shall be directed to the MSFC Security Division, Marshall Space Flight Center, Alabama 35812.

(End of clause)

REGULATIONS AND SECURITY CONTROLS AT OFF-SITE LOCATIONS (CC)

1. The Contractor shall be required to perform effort described in the contract Statement of Work at locations other than their facilities. At these facilities, the Contractor must adhere to the regulations and security controls of the Government Agency operating the off-site location. As a minimum, the Contractor must designate security and badging identification officials and display identification badges. When issued, Government identification badges become the property of the Government and the Government reserves the right to invalidate such badges at any time. During performance of the contract, the Contractor shall, upon termination of an employee, immediately deliver such employee's identification badge to the appropriate security office.

2. If required by the visiting site, Contract Security Classification Specifications Forms shall be provided for security classified visits prior to Contractor personnel being permitted access to the secured sites.

(End of clause)

SUPPORT OF FIELD PERSONNEL

1. The Contractor shall provide, at the Contractor furnished primary place of performance, adequate office space and office equipment to accommodate 6-10 resident Government personnel which are deemed necessary to the contract by the Contracting Officer and/or the COTR, designated pursuant to the clause of this contract entitled, "G.3 TECHNICAL DIRECTION."

2. The Government will provide adequate office space and equipment, warehouse, work areas, shop facilities and supporting services to Contractor personnel required to be located at a Government or associated Contractor-operated facility for the proper performance of the work and services to be furnished under this contract.

(End of clause)

**OBSERVANCE OF REGULATIONS (AT NASA AND OTHER GOVERNMENT LOCATIONS)
(CC)**

In performing in any capacity while on-site at NASA or other Government locations the Contractor shall comply with all applicable regulations and procedures. Copies of applicable NASA regulations and procedures will be available upon request from the Contracting Officer

(End of clause)

ASBESTOS MATERIAL (MSFC--52.223-90) (JUL 1988)

During performance of this contract, Contractor personnel performing work in MSFC buildings may come in contact with materials containing asbestos. MSFC Buildings 4200, 4201, 4202, 4610, 4663 and 4666 contain a sprayed-on fire insulation on or above the ceiling and usually located on the metal or concrete structure of the buildings. Prior to disturbing this material in any manner, representatives of the Environmental Health Office, an office within the MSFC Medical Center, must be notified to provide guidance. Other buildings may contain asbestos insulation in piping and lagging. Contractor shall be responsible for ensuring that all Contractor personnel working on-site are made aware of and comply with this clause.

(End of clause)

[END OF SECTION]

ATTACHMENT J-4

DATA REQUIREMENTS DESCRIPTIONS

Preface

1.0 SCOPE

This preface identifies and defines the Data Requirements (DRs) to be provided and monitored by the contractor during the period of performance of this contract. As used in this Attachment, “DR” and “DRs” are generic references to data or data submittals being provided to NASA.

2.0 DESCRIPTION

The Data Requirement Descriptions (DRDs) define, by individual DR, the information and data required for each deliverable document. If there is conflicting language between the requirements in the SOW and DRDs, the language in the SOW shall take precedence.

Data types are used to identify the approval and control required for each DR.

DRs submitted may incorporate references to other current approved documentation, provided the references are adequate and include such identification elements as title, document number, and approval date (where applicable). However, if the pertinent information is of relatively minor size, the contractor shall incorporate the information itself, in lieu of using a reference. The contractor shall assure that any referenced information is readily available to appropriate users of the submitted document.

All DRs shall be delivered using the NASA Electronic Document Management System (EDMS) workflow.

3.0 DATA REQUIREMENT DESCRIPTION (DRD) EXTENSION NUMBERS

Extension numbers are used for those DRs where more than one deliverable document is described. These extension numbers are used to identify distinct delivery dates, data types, or content requirements for those DRs which specify multiple deliverables. The extension numbering system will begin with the DR number (e.g., PC07) and then be extended to include a distinct suffix (e.g., PC07-1, PC07-2, PC07-3, and PC07-4) for each distinct item or deliverable required under that DRD.

4.0 DATA TYPES

The following describes the document types pertaining to DRs:

Type 1 Type 1 data requires NASA’s approval prior to being viewable in EDMS. The NASA Contracting Officer’s Technical Representative (COTR) will approve Type 1 deliverables in EDMS after concurrence from the NASA Office of Primary Responsibility (OPR) unless otherwise noted in the DRD. Approved Type 1 information and documentation shall be controlled, and deviations from or changes to the concepts, techniques, and/or requirements stated therein shall require NASA approval prior to implementation. Type 1 data that has received written COTR or designee approval prior to its submittal into EDMS will be viewable in EDMS upon delivery. A Type 1 document can be implemented after written NASA COTR or designee approval (either within EDMS or by written approval prior to its submittal into EDMS).

Type 1 submissions shall be marked “TYPE 1 PRELIMINARY -- PENDING NASA APPROVAL” or “TYPE 1 APPROVED BY NASA” after NASA approval. Additional special designations and deviations may be required on specific submissions in accordance with configuration management requirements.

Type 2 The NASA Office of Primary Responsibility (OPR) has a 30 work day review period to approve Type 2 deliverables in EDMS. During that review period, Type 2 data shall not be viewable in EDMS unless prior approval has been received. After the 30 work-day review period, if the contractor has not received any NASA comment, the document will be considered accepted. If a NASA comment is received prior to the expiration of the 30 work-day review period, the comment shall be appropriately dispositioned by the contractor and resubmitted into EDMS. Once the document is resubmitted after dispositioning NASA comments, the 30-day review period starts over. A Type 2 document can be implemented after NASA OPR approval within EDMS or after the expiration of the 30 work-day review period without any NASA comments.

Type 2 submissions shall be marked “TYPE 2 PRELIMINARY -- PENDING NASA APPROVAL”, “TYPE 2 -- APPROVED BY NASA” after NASA approval within EDMS, or “TYPE 2 – ACCEPTED WITHOUT COMMENT” if acceptance is based on the expiration of the 30 work-day review period and no NASA approval or comments have been made. The use of different acceptance terminology is used above to differentiate between active (i.e. “approved”) versus passive (i.e. “accepted”) acceptance.

Type 3 That information and documentation which is provided to NASA for surveillance, information, review, and/or management control. This information does not require NASA’s approval prior to its release in EDMS and will be released in EDMS upon delivery. Information in this category would include documents such as design solutions, status, and cost/schedule reporting; analyses and test results, handbooks, and other designated lists, reports, etc.

Type 3 submissions shall be marked "TYPE 3 DOCUMENT - FOR INFORMATION, SURVEILLANCE, REVIEW OR MANAGEMENT CONTROL".

5.0 ELECTRONIC FORMAT

DRs shall be maintained electronically in a format specified within the DRD.

6.0 EDMS WORKFLOW PROCESS

As specified in earlier sections, the contractor shall deliver a DR to NASA electronically using the EDMS workflow. Approval of DRs is based on the prescribed data type, which is discussed in Section 4.0. A DR will follow a workflow process once it is delivered into EDMS where it may either be approved or “reworked”. If NASA approves a DR, the contractor will get notification via e-mail that the DR has been approved. If the DR is rejected, NASA will provide comments to the contractor through the “rework” process detailing why it has not been approved. The contractor has 30 work days from the date the DR was rejected to disposition NASA comments and resubmit the DR electronically into EDMS. The DR will then be either approved or sent back again to the contractor via the “rework” process. There is not a limit on how many times a DR can go through the “rework” process before it is finally approved.

7.0 STATEMENT OF WORK DATA DELIVERIES

Data required in accordance with a SOW statement which does not have a DR reference will be delivered to NASA electronically using the EDMS workflow, indicating the applicable SOW paragraph. This information does not require NASA's approval prior to its release in EDMS and will be released in EDMS upon delivery.

8.0 NUMBER OF COPIES AND DISTRIBUTION REQUIREMENTS

The contractor shall deliver one electronic copy of each DR into EDMS for NASA Data Management. With the implementation of EDMS, hard copies are no longer required by NASA Data Management. All other distribution requirements including number of copies for each DR (hard and soft) are specified within the DRD. Additional distribution shall be made as directed by the Contracting Officer. The number of hard copies required will not exceed the limits set forth in Clause H-2, Printing and Duplicating, without prior Contracting Officer approval.

9.0 SUBMISSION INFORMATION

In the DRDs under "First Submission Date," or "Frequency of Submission," if delivery is specified as "at SRR" or at any other program event, then delivery shall be required at the start or initialization of the event. Similarly when delivery is specified as a discrete amount of time before a program or project event (i.e., SRR minus 60 days) then delivery will be required that discrete amount of time before the start of the program or project event. In addition, whenever delivery is specified as after an event, (i.e., SRR plus 30 days) delivery shall be required after the end of the event.

10.0 CLOSEOUT OF DRD REQUIREMENTS

Closeout of DRD requirements shall be as addressed in the approved SOW Evidence of Completion Matrix (DRD F-PM-09). For circumstances where the approved DRD F-PM-09 does not adequately cover closeout of a DRD requirement, closeout shall occur through written concurrence by the NASA COTR or Contracting Officer.

11.0 DRD TABLE OF CONTENTS AND DRDs

The following pages set out the documentation requirements of this contract, starting with a Table of Contents for the DRDs contained within Attachment J-4. Each DRD includes the required data product content, schedule, type, and other information applicable to specific data submission requirements.

DRD	DATA TYPE	DRD TITLE	SOW PARAGRAPH	REVISED BY
OP03		Deleted		1660
PC05	3	Merged with F-VE-09	2.5.3.2.a	1660
PC06	3	Integrated Program Schedules	1.2.5.1	1660
PC08	3	Acceptance Data Package	7.4.1	1660
PC18	3	Modification Package Acceptance Data Package	7.4.2	1660
PC19	3	Time Compliance Technical Instructions for Modification Packages	7.4.2	1660
PC20		Deleted		1660
PC22	1	Integration and Operations Management Products	H.37	1660
PC24		Deleted		1660
PC25	3	On-Orbit Installation Drawings	3.3.2.8.1 3.3.2.8.2	1660
PC27	3	Contractor Financial Management Report (533M)	1.2.3.1	1660
SE02	2	Integrated Flight Loads (IFLs) and Software Package	3.3.7.3.1 3.3.7.2.3 3.3.7.2.4	1660
SM02		Deleted		1660
SM03	3	Mishap and Investigation Reports	3.8.1.4	1660
SM04		Merged with F-SA-05		1327
SM05		Merged with F-SA-06		1327
SW01		Deleted		1660
VE06		Deleted		1660
VE09	2	Materials Identification and Usage Lists (MIUL)	3.4.6.1	1660
VE10	1	Materials Usage Agreements (MUAs)	3.4.6.1	1660
VE12		Deleted		1660
VE15		Deleted		1660
VE20	2	Integration and Verification Requirements for U.S. Segments & ISS System	3.2.1.11.3	1660
VE23	2	ISS System and Vehicle Subsystems Analyses and Analytical Models	3.2.1.11.3	1660
VE24	3	Specification Traceability and Compliance Reports	3.2.1.11.3	1660
VE28	2	Integrated Signal Lists (ISL)	3.3.7.2.5	1660
VE32	2 and 3	Vehicle Engineering Data	3.3.2.9.2 3.3.4.1.1	1660
VE42		Deleted		1660
F-CM-01	1	Configuration Management Plan	1.3.1.1	1356
F-EC-01	2	Export Control Audit Results	1.5.2	1356
F-LM-01	3	ISS On-Orbit Logistics Supportability Assessment Report	3.3.8.2.2 3.3.8.2.5	1660
F-LM-02	3	ISS ORU Ground Supportability Assessment Report	3.3.8.2.2	1660
F-LM-03	1	Increment Definition and Requirements Document (IDRD) Annex 2, On-Orbit Maintenance Plan	3.3.8.2.3	1430
F-LM-04	3	Parts Obsolescence Monitoring	3.3.8.5.3	1356
F-MA-12	3	Certification of Flight Readiness (CoFR)	3.2.1.6	1333
F-MI-01	2	Certification of Flight Readiness (CoFR) Plan	3.2.1.6	1231
F-MI-02		Deleted		1547
F-MI-03		Deleted		1547

F-MI-05		Deleted		1547
F-MI-06		Deleted		1547
F-MI-07		Deleted		1547
F-MI-08		Deleted		1547
F-MI-09		Deleted		1547
F-MI-11		Deleted		1962
F-MI-12	1	Payload Unique Integration Agreements	8.2.1.9	1333
F-PA-02		Deleted		1547
F-PA-03		Deleted		1547
F-PA-04		Deleted		1547
F-PA-06		Deleted		1547
F-PA-07		Deleted		1547
F-PA-08		Deleted		1547
F-PA-09		Deleted		1547
F-PA-10		Deleted		1547
F-PA-14	3	Element Level and Truss Level Payload Engineering Analysis Reports	8.3.3.3	1333
F-PA-15	3	ISS Level Payload Engineering Integration Reports	8.3.3.4	1333
F-PA-16	1	Payload Unique Hardware Interface Control Documents	8.2.1.23	1430
F-PA-17	1	Unique Payload Software Interface Control Documents	8.4.1.2	1333
F-PA-19	3	Payload Operations Guidelines and Constraints Document	8.3.3.5	1333
F-PA-20	3	Verification Reports	8.3.2.5	1333
F-PA-21	3	Configuration Layout/Interface Schematics	8.3.3.8, 8.3.3.9	1333
F-PA-25		Deleted		1547
F-PA-27	3	Increment Capability Reports	8.3.3.6	1333
F-PC-03	3	Workforce Reports	1.2.3.3	1619
F-PC-04	1	Work Breakdown Structure (WBS) and Dictionary	1.2.3.4	1619
F-PC-06		Deleted		1660
F-PM-01	1	Management Plan	1.1.1.1	1356
F-PM-02	3	Integrated Financial Review Products	1.1.1.2	1660
F-PM-03	2	Socio-Economic Subcontract Reporting	G.17	1356
F-PM-04	1	Subcontracting Plan	52.219-9	1356
F-PM-07	3	Data Accession List	H.43	1356
F-PM-08	3	Property Reporting with Element Pricing Methodology	H.52	1660
F-PM-09	1	SOW Evidence of Completion Matrix	H.37, H.51	1547
F-PM-10	3	Certification Baseline Documents and Supporting Documentation	3.2.2.3.4	1265
F-RA-01		Deleted		1547
F-RA-02		Deleted		1547
F-RA-03		Deleted		1547
F-RA-04	3	Payload MDM Configuration Files and PCS Displays	8.4.1.15	1333
F-RA-10	3	Payload Product Integrated List (PPIL)	8.4.1.5	1333
F-RA-11	1	Payload Unique Displays Software Requirements Specifications	8.4.1.4	1547

F-RM-03		Deleted		1547
F-SA-01	1	Safety & Mission Assurance/Risk Management Plan	3.8.1.1, 3.8.6.1	1356
F-SA-02	3	Monthly Safety & Health Metrics	3.8.1.4	1356
F-SA-03		Deleted		1660
F-SA-04	2	Hazard Reports	3.8.4.1 3.8.4.2	1660
F-SA-05	1	Failure Modes and Effects Analysis (FMEA) and Critical Items List (CIL)	2.7.1.a.3 3. 8.5.1	1660
F-SA-06	3	R&M Allocations, Assessment, and Analyses Reports	2.7.1.a.3 2.7.1.a.4 3.8.5.2.1 3.8.5.2, 3.8.5.2.2	1356
F-SE-31	3	Engineering Integration Reports	8.3.3.1, 8.3.3.5, 8.3.3.10	1333
F-SE-44		Deleted		1547
F-SE-46		Deleted		1547
F-SE-47		Deleted		1547
F-SE-49		Deleted		1547
F-SE-50		Deleted		1547
F-SE-57		Deleted		1547
F-SV-03	2	Traceability Verification Requirements	8.5.3.1	1333
F-SW-01	2	Data Integration Standards	3.3.7.2.5	1356
F-SW-02		Deleted		1547
F-SW-03	2	Integrated Software Schedule	3.3.7.11.2	1231
F-SW-05	2	Flight Software Operations Handbook (FSOH)	3.3.7.13	1660
F-SW-12	3	Payload Integrated Flight Load (PIFL) Version Description Drawing	8.5.1.1	1333
F-SW-15	3	EXPRESS Configuration Files	8.4.1.15	1333
F-UT-32	3	PSIVF Flight Products Verification Documents	8.4.1.17	1333
F-UT-39	3	Software Version Description Document (VDD), Software and Data Item Package		1333
F-VE-02	3	Engineering CAD Models	3.3.2.7.1, 3.3.2.7.2	1231
F-VE-03	3	Abstracts for CAD, Thermal, and Structural Models	4.12	1246
F-VE-09	3	Sustaining Engineering Drawings, Mod Kit Drawings and Associated Lists	3.3.2.9.1, 3.3.4.1.2.2	1660
F-VE-13	3	Data Conversion and Interface for GFE/IP Drawings to the VMDB	3.3.4.1.3	1231
F-VE-14	3	Launch Configuration Drawings	3.3.2.9.3	1660
F-VE-15	3	ISS COFR Validation Matrix	3.2.1.11.3.4	1660
F-SSPTS-01		Deleted		1660
F-SSPTS-02		Deleted		1660
F-SSPTS-03		Deleted		1660
F-SSPTS-04		Deleted		1660
F-SSPTS-05		Deleted		1660
F-SSPTS-06		Deleted		1660
F-SSPTS-07		Deleted		1660
F-SSPTS-08		Deleted		1660
F-SSPTS-09		Deleted		1660
F-SSPTS-10		Deleted		1660

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Integrated Program Schedules	2. Date of Current Version 10/01/10	3a. DRD No. PC06	3b. RFP/Contract No. NAS 15-10000
1b. Data Type: 3			
4. Use (Define need for, intended use of, and/or anticipated results of data) Provide and maintain a consistent and standardized schedule development and status for the International Space Station Program Office			5. DRD Category ___ Technical _x Administrative ___ SR&QA
6. References SOW paragraph : 1.2.5; WBS paragraph 1.2.5		7. Interrelationships (e.g., with other DRDs) PC-27, F-PM-02	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE:

This data requirement is to describe the format and type of data needed for the program integrated schedule. The intent is for the Contractor to continue established standard processes, data structures and reporting conventions to plan, manage, and report the assigned work for the Schedule Coordination Managers and the Space Station Program Office. The resource loaded schedules in this DRD should reconcile with the data reported in DRDs PC-27 and F-PM-02 for authorized work.

CONTENT:

- a. The contractor shall provide schedules that specify plans for International Space Station spares and modification tasks (WBS 7.0 and 8.0). For projects greater than \$5M (regardless of fiscal year phasing) reporting is required from authority to proceed (ATP) through project completion. Resource loaded schedules shall be provided for the work within the contract period of performance. Schedules (resource loaded not required) for all activities shall also be provided for work falling outside the period of performance (per contract clause H.57). For projects less than \$5M, vendor schedule data shall be provided once the project baseline is established (status of project milestones will be reported in F-PM-02 from ATP through completion). The contractor is encouraged to utilize modern manufacturing resource planning, industrial engineering techniques and other approaches to ensure schedule stability, accuracy, reliability, predictability, and achievability.
- b. The contractor shall develop, maintain (update), provide and ensure a consistent, accurate, and stable scheduling approach that provides for the identification, coordination, sequencing, control, implementation and tracking of all utilization activities and is easily auditable by the Government.
- c. The approach shall provide the ability to fully identify, analyze, mitigate and control scheduling risks and impacts and allow its users to easily measure the progress towards achieving the intended plan.
- d. For all work required to complete the project, the approach shall not only represent the scheduled work for that activity, but also the commitment from all interfacing organizations.
- e. Provide monthly electronic status and updates.

- f. Provide a Microsoft Project schedule that will represent full detail of project tasks and vendor/subcontractor schedules. Each activity must, at a minimum, contain the following information:
- Unique, fixed Activity ID (Cannot exceed 12 digits)
 - Boeing WBS
 - Activity Title
 - Level Project/SSCN Identification
 - Baseline Start and Finish dates which support latest approved baseline for authorized work and preliminary start and finish dates for work outside the period of performance (H.57 clause).
 - Actual Start and Finish dates
 - Original Duration
 - Percent complete
 - Predecessors (including Type and Lag), if any are assigned
 - Successors (including type and Lag), if any are assigned
 - Total Budget for authorized work.
 - Budget associated with work performed for authorized work.
 - Flight Number
- g. *Schedule consistency* shall be defined as the degree to which the contractor utilized standardized scheduling approaches between similar processing activities and flows. *Accurate scheduling* shall be defined as the accurate representation of work content and tasks duration (predicted vs. actuals). A *stable schedule* shall refer to the degree to which daily schedule changes are minimized and limited to unforeseen hardware/software problems or NASA-directed changes.
- h. Scheduling approaches shall address the following information as a minimum
1. Predicted task duration/labor standards derived from accurate and objective prediction methodologies
 2. Indications of activities by appropriate nomenclature that clearly delineates the task to be performed
 3. Identification of who is responsible for doing the actual work - OBS
 4. Required supporting activities or support from other contractors, outside organizations, agencies, or center.
 5. Special test activities or requirements.

FORMAT: electronic

9. OPR: OH – ISS Program Planning and Control Office/Assessments, Cost Estimates and Schedules

10. FIRST SUBMISSION DATE: First month after contract start, on the first Monday of the month.

Frequency of Submission: Monthly, containing status through the last Thursday of the previous month

Additional Submissions: N/A

11. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

12. REMARKS:

DATA REQUIREMENTS DESCRIPTION

1. DR Title: PC08, Acceptance Data Package
2. DRD Extension Number(s): None
3. TPR Code: DM IPT
4. Data Type: 3
5. Frequency of Submission: Required with each delivery of hardware or software from a manufacturer/developer to a using site or deliveries between using sites.
6. First Submission Date: Submitted with initial shipment/transfer of hardware item or software delivery.
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: NONE
10. Use: Provide baseline documentation defining the CIs/CSCIs.
11. References:
 - (a) Statement of Work (SOW); paragraphs 7.4.1
 - (b) SSP 30695, Acceptance Data Package
12. Interrelationships: DR VE32
13. Preparation Information:
 - 13.1 Scope: The ADP is an accumulation of documentation that provides a verified, complete, and current status of deliverable hardware and/or software needed by the procuring/using organization to enable the continuation of required activities.
 - 13.2 Format: The ADP shall be delivered in the Contractor's format in accordance with SSP 30695.

- 13.3 Content: The ADP contents shall be in accordance with SSP 30695. The Integrated Flight Load Software and Ground Reconfiguration data item package shall include installation instructions, any possible or known problems with the software release and problem resolutions (operational workarounds), user documentation, and significant test results. Integrated Flight Load Software and Ground Reconfiguration data item package production tools (including those of the software build environment) are included with the document delivery.
- 13.4 Maintenance: N/A

DATA REQUIREMENTS DESCRIPTION

1. DR Title: PC18, Modification Package Acceptance Data Package
2. DRD Extension Number(s): None
3. TPR Code: DM
4. Data Type: 3
5. Frequency of Submission: A stand alone Modification Package (here after referred to as a Mod Kit) ADP is required to be delivered to NASA, concurrent with the DD250 to support the delivery of each hardware Mod Kit from the manufacturer/developer, as ordered under this contract via separate Class I changes.
6. First Submission Date: Submitted with delivery to NASA of the applicable hardware Mod Kit, as ordered under this contract by the addition of a Mod Kit to the Contract Deliverable Items List (DIL), via separate Class I changes.
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: The ADP shall describe the contents of the Mod Kit that is used to update/revise/modify/retrofit a particular serial numbered item of a CEI/CI which has been delivered to NASA (Post DD250).

Both the Mod Kit and the baseline documentation requirements shall be as per SSP 41170. The content of the Mod Kit ADP shall be as per SSP 30695. The Mod Kit ADP shall be a supplement to the ADP of the originally delivered CEI/CI that is being updated by the Mod Kit.
10. Use: Provide the detailed description of the applicable hardware Mod Kit and the update of the baseline documentation defining the applicable modified CI.
11. References:
 - (a) SSP 30695, ISS Acceptance Data Package Requirements Specification
 - (b) SSP 41170, ISS CM Requirements Document
 - (c) SOW 7.4.2
12. Interrelationships: DRs PC19
13. Preparation Information:

- 13.1 Scope: The Mod Kit ADP represents an accumulation of documentation that provides a verified, complete, and current status of deliverable hardware needed by the procuring/using organization to enable the continuation of required activities.
- 13.2 Format: The Mod Kit ADP is a supplement to the ADP of the originally delivered CEI/CI that is being updated by the Mod Kit and shall be delivered in the Contractor's format in accordance with SSP 30695.
- 13.3 Content: The Mod Kit ADP contents shall be in accordance with SSP 30695.
- 13.4 Maintenance: N/A

DATA REQUIREMENTS DESCRIPTION

1. DR Title: PC19 Time Compliance Technical Instructions (TCTIs) for Modification Packages
2. DRD Extension Number(s): None
3. TPR Code: DM
4. Data Type: 3
5. Frequency of Submission: A TCTI is required to be delivered to NASA as a part of the Modification Package (here after referred to as a Mod Kit) for each delivery of a hardware Mod Kit from the manufacturer/developer, as ordered under this contract via separate Class I changes.
6. First Submission Date: Submitted with delivery to NASA of the applicable hardware Mod Kit, as ordered under this contract by the addition of a Mod Kit to the Contract Deliverable Items List (DIL), via separate Class I changes.
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
 - (d) Included in the applicable Mod Kit
9. Remarks: The ISSP Time Compliance Technical Instruction (TCTI) shall be written in one of two styles "Detail" and "Record". The difference is (a) whether the TCTI and the Mod Kit have to be checked out on the ground prior to delivery of the TCTI/Mod Kit and (b) where/who is installing the Mod Kit. Specific requirements are provided in SSP 41170, paragraph 3.4.8 and subparagraphs.

Detail TCTIs provide complete, step-by-step instructions for incorporating a modification. Detail TCTIs are issued when (a) a modification is to be accomplished on flight hardware post DD250/postlaunch and requires installation of the Mod Kit by the on-orbit ISS Crew by either Intra-Vehicular Activity (IVA) or Extra-Vehicular Activity (EVA), or (b) a modification is to be accomplished on the ground and requires installation by anyone other than the Design Center/OEM, or by KSC/Depot Technicians.

Record TCTIs do not contain detailed installation instructions, but do contain all other information included in Detail TCTIs. Record TCTIs list the engineering data required to perform the work if the data is not included as a package in the kit. Record TCTIs may be issued when a modification is to be accomplished by a Contractor or by NASA personnel at KSC on flight hardware after DD250 but prior to launch, or for Non-Flight hardware modifications. However, NASA may direct the issuance of a Detail TCTI regardless of the level of accomplishment which shall be documented in the Class I change that directs the development of the Mod Kit and its attendant TCTI.

An Installation Notification Card (INC) shall be prepared in accordance with the requirements of reference (a) and included with the TCTI that is delivered in the Mod Kit. An INC shall be prepared for each Mod Kit that is every serial numbered CI having a Mod Kit installed shall have its own INC completed to document installation of the Mod Kit. Guidance on TCTIs/INC's is provided by references (b) and (c).

10. Use: The TCTI shall be used for accomplishing and providing a record of any modification/retrofit of delivered hardware, or alteration, to the design or construction of any delivered System and related equipment, site, facility, support system or associated GSE that has been delivered to NASA via DD250.
11. References:
 - (a) SSP 41170, ISS CM Requirements Document
 - (b) SSP 50123, ISS CM Handbook
 - (c) D684-10749-01, ISS Product Support Group TCTI Mod Kit Procedures
 - (d) SOW 7.4.2
12. Interrelationships: DRs PC18
13. Preparation Information:
 - 13.1 Scope: The TCTI is applicable to the modification/retrofit of hardware which has been delivered to NASA via a DD250 accomplished via a Mod Kit.
 - 13.2 Format: The TCTI shall be prepared in accordance with program requirements.
 - 13.3 Content: The TCTI contents shall be in accordance with the requirements. TCTI requirements are included in paragraph 3.4.8 and subparagraphs of reference (a). Guidance on how TCTIs are completed, content of the TCTIs, format of the TCTIs, and how TCTIs are processed is provided by references (b) and (c).
 - 13.4 Maintenance: N/A

DATA REQUIREMENTS DESCRIPTION

1. DR Title: PC22, Integration & Operations (I&O) Management Products
2. DRD Extension Number(s): None
3. TPR Code: Business Management/BG
4. Data Type: 1
5. Frequency of Submission: Initial Baseline: 90 days after contract award

Yearly Work Plan for January 1 – September 30, 2004: 30 days after contract award.

Yearly Work Plan: September 1st of each year except 2008 October 1, 2008 for GFY 2009

Quarterly Work Plan Update: January 31, April 30, and July 31.
6. First Submission Date: Initial Baseline: March 30, 2004

Yearly Work Plan for January 1 – September 30, 2004: January 30, 2004.

Yearly Work Plan: September 1, 2004

Yearly Work Plan Reconciliation: December 1, 2004
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) BG/Contracting Officer
 - (b) LO/Space Station Resources Office
 - (c) OA/COTR
 - (d) Data Management, OH
 - (e) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: NONE
10. Use: These products will be utilized by Government and contractor personnel to manage the I&O baseline for the contract
11. References: Section H, Special Contract Requirements, H.37 Management of I&O Tasks
12. Interrelationships: I&O Reporting; DR PC27; NASA Form 533

13. Preparation Information:

13.1 Scope:

Initial Baseline: The contractor shall provide a baseline, which documents the negotiated contract value of all I&O tasks throughout the entire period of performance including options through September 30, 2008. The contractor shall provide the negotiated contract value of all I&O tasks at the 3rd level WBS for October 1, 2008 through September 30, 2009 by October 15, 2008. The contractor shall provide the negotiated contract value of all I&O tasks at the 3rd level WBS for October 1, 2009 through September 30, 2010 by August 15, 2009.

Yearly Work Plan: The plan will be comprised of work packages, which document the content and estimated resources/cost for I&O (the I&O Baseline and forecast) which will be performed in the subsequent fiscal year. For GFY 2009 forward, this will include the time-phased budget and forecast for Sustaining Engineering tasks* only. Work packages will be jointly developed by the Government and the Contractor and approved by the Government. *For GFY 2009 and 2010, Sustaining Engineering tasks are defined as all tasks in SOW sections 1.0, 2.0, 3.0 and 8.0 or discrete tasks in SOW section 6.0 that are considered sustaining engineering (vs. a modification). For GFY 2011 and subsequent years, sustaining engineering tasks are defined as all tasks in SOW sections 1.0, 3.0 and 8.0 or discrete tasks in SOW section 6.0 that are considered sustaining engineering (vs. a modification).

13.2 Format: NASA and contractor agreed to format.

13.3 Content:

For the purposes of this DRD, the Work Plan is defined as the summary of all work packages under the contract (for GFY 2009 forward, this will include Sustaining Engineering tasks* only). Work packages represent a subset of tasks within the work plan.

For each work package include:

- (a) Identifiers – Reference WBS, SOW paragraph number, task title, and team or subteam designation
- (b) Schedules – related to work included in task descriptions.
- (c) Task Descriptions include:
 - (i) Description of the work to be accomplished and how it will be accomplished
 - (ii) Parameters for performance describing limitations of performance scope,
 - (iii) Tangible outputs generated by performance (at a minimum DRD and DIL products should be specified where appropriate)
- (d) Resource requirements – monthly spread of resources, including totals at the work package level
- (e) Reference to tasks required by the Evidence of Completion Matrix (DRD F-PM-09).
- (f) Metrics. For GFY 2009 forward, include the task performance metrics showing progress towards satisfying the completion criteria in the F-PM-09.

Initial Baseline: The initial baseline shall consist of task descriptions, schedule, and resources by contractor team. A summary section shall be provided which documents the resources by lowest level reportable WBS, by each major SOW section (1.0, 2.0, 3.0 and 4.0), by major task and the total I&O level. Resources will include all direct cost elements, other direct costs and indirect costs. The initial baseline for FY 2009 and 2010 shall consist of distributed budget by 3rd level WBS.

Yearly Work Plan: The Work Plan shall consist of a compilation of I&O Baseline/forecast Work Packages from designated program functional areas. Each of these Work Packages shall identify the tasks, schedule, resources, basis for resources, and signature block for contractor and government technical managers.

- 13.4 Maintenance: All deliverables shall be maintained electronically. Government approved adjustments to individual Work Packages as a result of added or deleted or modified tasks shall be maintained in the electronic file. The current Work Plan shall be available as a "read-only" file.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: On-Orbit Installation Drawings or Models 1b. Data Type: 3	2. Date of Current Version 10//01/10	3a. DRD No. PC25	3b. RFP/Contract No. NAS 15 -10000
4. Use: Provide the design data used to install and assemble the ISS On-orbit. The drawings will be used for flight procedure development/validation, configuration status accounting, contingency planning, and real time mission support.			5. DRD Category X Technical — Administrative — SR&QA
6. References <ul style="list-style-type: none"> (a) Statement of Work (SOW); paragraph 3.3.2.8.1, 3.3.2.8.2 (b) ASME Y14.100-2000, Engineering Drawing Practices (c) ASME Y14.35M-1997, Revisions of Engineering Drawings and Associated Documents (d) ASME Y14.24-1999, Types and Applications of Engineering Drawings (e) ASME Y14.41-2003, Digital Product Definition Data Practices (f) ASME Y14.34M-1996, Associated Lists (g) IEEE/ASTM SI 10-2002, SI 10, American National Standard for Use of the International System of Units (SI): The Modern Metric System (h) MIL-PRF-28002C-1997, Requirements for Raster Graphics Representation in Binary Format (i) SSP 50177 Part II, 3.5.2 (j) SSP 50124 RA Sec 3.3.2 (k) SSP 50126 Sec 3.3.1 (l) SSP 50137 Sec (m) SSP 50127 RB Sec 3.3.2 (n) SSP 50301 Sec 3.2.3 (o) SSP 41173 Space Station Quality Assurance Report (p) SSP 30695 Acceptance Data Package Requirements Specification 		7. Interrelationships F-VE-09, Sustaining Engineering Drawings and Associated Lists or Models VE32, Vehicle Engineering Data	

SCOPE: This DR establishes the content, format, control, and maintenance of On-Orbit Installation Drawings or Models and associated Indentured Parts Lists or models prepared by the contractors or obtained from subcontractors or vendors for products of this contract. The contractor shall develop and deliver As-Designed On-Orbit Installation drawings or models for all equipment installed (& their connections) On-orbit to US End Items that requires NASA EVA, EVR, & IVA installation. This does not cover installation of items onto or within the IP End Items (except for items directly mated from USOS to IP End Items; i.e. FGB to PMA2 cables, MPLM to Node 1 cables). This includes internal and external installations, but not stowed items, contingency (unplanned) activities and tasks for incorporation of on-orbit changes, including Mod Kits. Those impacts are identified within the associated change. Contractor shall also develop and deliver stage drawing trees for each of these flights.

These drawings or models shall cover at least the following type of assembly activities (in sufficient detail to depict the installation):

- a) element to element berthing
- b) hardware installation (e.g. ORUs, brackets, handrails, thermal blankets)
- c) hardware detachment
- d) relocation of installed equipment
- e) hardware deployment
- f) electrical cable harness and fluid line routing & mating
- g) torque values including temperature effects, in table form with values at minimum, nominal and maximum expected on-orbit installation temperature conditions (EVA only)
- h) equipment preconditioning for an installation (e.g. lubrication application, thermal conditioning, switch positions)
- i) software loading (by reference)

Installation drawings or models, and parts lists shall include sufficient detail to accomplish safe and expedient installation by including the following on the actual drawing or model, and parts list:

- 1) Identify critical cautions and warnings, such as over tightening may damage fine threads, or deactivating fans for duct installation
- 2) Identify special tools required for installation/removal
- 3) Identify any required special surface preparation, such as lubricant or alcohol cleaning
- 4) Identify special handling requirements or techniques, such as gloves or handling of O-rings, etc.
- 5) Identify special idiosyncrasies, such as extra force or that a cap may “pop off” if not installed properly
- 6) Identify requirements for proper clocking or orientation of the hardware during installation
- 7) Identify any special torque requirements, such as temperature dependency for CBM bolts, or torque values or number of turns or turn rate limits (RPMs) for various clamps and fasteners
- 8) Identify special attachment methods such as tie downs or Velcro
- 9) Identify special configurations required, such as valve or handle configurations of MPEV, PPRV, etc., when installing access jumpers

- 10) Include part numbers and reference designators for all major components of the assembly to include wire harnesses, electrical connectors and attaching hardware (nuts, bolts, screws, etc.) related to the assembly task
- 11) Include a depiction of adjacent hardware, which may affect access for installation of electrical connectors, bolts, nuts, latches, QDs, and other fluid connections.

CONTENT: Raster images: Raster images are to be Group 4 raster images, prepared per MIL-PRF-28002C and applicable documents. The format and quality verification requirements for Raster images of engineering drawings and related documents shall be in conformance with MIL-PRF-28002C, section 6.4.5 (Ordering data). Ordering data to be used for the interchange of engineering drawing and associated document images are as follows:

- a. The basic requirements for interchange of Raster image of engineering drawings and related documents shall be in accordance with Military Specification MIL-PRF-28002C, Requirements for Raster Graphics Representation in Binary Format,
- b. The type of raster graphics being procured is Type 1 (untiled).
- c. The delivery medium to be used shall be either by magnetic or an electronic transmission.
- d. Proper viewing orientation shall be based on a pel path direction of 0 degrees and a line progression direction of 270 degrees, as defined in section 6.4.6, and shown in Figures 1 and 2 of MIL-PRF-28002C.
- e. Raster image pixel element (pel) spacing shall be a minimum of 200 dots per inch (dpi).
- f. No over scanning is required beyond the drawing sizes listed in section 6.4.2; however, over scanning is encouraged to capture ancillary information that is placed outside the border, such as CAD file name or plot date.
- g. Bit ordering shall be most significant bit (MSB) to least signification bit (LBS).
- h. Coding of background and foreground information. To the extent that a drawing represents lines on paper, the picture elements (pels) representing lines shall be coded as "black" and those pels representing the paper background shall be coded as "white". This coding convention shall hold, regardless of the colors used for display on any particular device, and regardless of the coding as "0" or "1" on any particular system. In this way, white pels (paper) may be processed as background, and black pels (lines) may be processed as foreground.

NOTE: The preceding definition of the convention for coding background and foreground has been provided because a choice of convention has not been defined in MIL-PRF-28002C or CCITT Recommendation T.6. This convention is needed to support processing of drawing images without human interpretation.

Stage Drawing Tree content shall be contractor defined and is not subject to the above content requirements.

FORMAT: Delivery to NASA of drawings or models and associated lists will be made electronically. All drawings or models and associated lists, except for "A" size book form drawings, shall be delivered bundled into .zip or .tar files. "A" size book form drawings may be delivered in an electronic format other than raster image as mutually agreed to by the NASA and Contractor organizations involved in the interchange. Models shall be delivered in PDF format. Drawings and associated lists shall be delivered in PDF, ASCII, HPGL MS Excel or Raster Image format provided the following criteria are met:

- (a) Engineering flight drawings shall be in accordance with the intent of ASME Y14.100-2000. Models shall be in accordance with the intent of ASME Y14.41-2003.
- (b) All design activities shall use the methods designated in IEEE/ASTM SI 10-2002 to convert dimensional units from one system (SI or English) to another, where required for interfaces with IPs.
- (c) All design activities shall use the U.S. convention on third-angle projection in depicting views on drawings. A model coordinate system shall be depicted by three mutually perpendicular line segments with its origin located at the intersection of the three axes.
- (d) Where design activity material or process specification numbers are called out, the equivalent Government or industry specification numbers shall accompany them wherever a Government or industry specification is applicable.
- (e) Engineering parts list, bill of materials, and note format shall be consistent with ASME Y14.100 and delivered in ASCII format, Raster Image or MS Excel format with each drawing.
- (f) Electronic formats shall provide for magnetic, optical media, or electronic transmission exchanges.

Delivery of drawings or models and associated list files will be electronic. The file formats and structures of drawing or model delivery packages are defined in F-VE-09.

Drawing deliveries will be in one of the following: Raster image format, PDF or HPGL file. Model deliveries will be in PDF.

Other associated lists shall be delivered in one of the following: ASCII text files, PDF, MS Excel format, or Raster image format.

Stage Drawing Trees shall be delivered electronically in Contractor format not subject to the above format and drawing requirements.

8. **OPR:** OM5, Assembly and Configuration Team

9. **FIRST SUBMISSION DATE:**

Frequency Of Submission: One release/year. Drawings or models shall be delivered in electronic format to the VMDB.

Additional Submissions: After reconciliation and before the next stage, if the hardware is modified, procedure changed or the installation did not occur, then drawings or models will be revised and resubmitted to the VMDB.

11. **MAINTENANCE:** Changes and/or updating of drawings or models and associated lists shall be accomplished in accordance with the Contractor's engineering system and the provisions of the cited applicable documents through Sustaining Engineering for the as-built configuration. Drawings or models shall be maintained electronically. Changes and/or updating of Stage Drawing Trees shall be accomplished by Contractor defined process.

12. **COPIES/DISTRIBUTION:**

1 original/record (hard copy): OH/Data Management

1 electronic copy: JSC Stage Configuration Website (Stage drawing Trees)

13. **REMARKS:** None

DATA REQUIREMENTS DESCRIPTION

1. DR Title: PC27, Contractor Financial Management Report (533M)
2. DRD Extensions: None
3. Team of Primary Responsibility (TPR): Program Control (LO)
4. Data Type: 3
5. Frequency of Submission: Monthly
6. DRD Cancellation/Consolidation: This DRD replaces DRDs PC09, PC10, PC11, PC21, and PC23, in their entirety, into one monthly Financial Management report. Consolidated reporting begins with GFY 02 actual data (October 2001).
7. Due Date: Report is due the 15th operating day following the close of the Contractor's accounting system for the reported month end data. If the 15th operating day falls after the 24th calendar day, the report is due the 24th calendar day. Variance explanations are due seven calendar days from delivery of the PC27. Instructions are provided in paragraphs 11 and 12.

Due dates reflect the dates the report is received by the TPR and the Cost Accounting Branch/LF6; not the dates the report is generated or mailed by the contractor. It is critical that the NF533M reports are submitted in a timely manner to ensure adequate time for NASA to analyze and record the cost into the NASA accounting system.

8. Distribution:

	Recipient	PC27 Cost Report	Comments
a	LO/Team of Primary Responsibility (TPR)	3 copies	Hand Deliver to Bldg 4S, Rm 3814D
b	LF6/Cost Accounting Branch	1 copy	Hand Deliver to Bldg 12, Rm 118
c	OH/Data Management	1 copy	Hand Deliver
d	Program Repository (EDMS)	1 copy	Electronic copy
e	NASA HQ/Suite 7K39/J. Davis	1 copy	Mail
f	JSC/OA/Lorraine Anderson	1 copy	Mail
g	BG/Contracting Officer	1 copy	Electronic copy

9. USE: The NASA Form 533 (NF533M) reports provide data necessary for the following:
 1. Projecting costs and hours to ensure that dollar and labor resources realistically support project and program schedules.
 2. Evaluating contractors' actual cost and fee data in relation to negotiated contract value, estimated costs, and budget forecast data.
 3. Planning, monitoring, and controlling project and program resources.
 4. Accruing cost in NASA's accounting system, providing program and functional management information, and resulting in liabilities reflected on the financial statements.

10. Preparation and Content Information:

10.1 General 533M Reporting Instructions.

The contractor shall submit the agreed to modified NASA Form 533M prepared in accordance with instructions contained in NASA Contractor Financial Management Reporting, NASA Procedures and Guidelines (NPG) 9501.2D, or its most current revision, which identifies the cost reporting requirements for a contract. NASA is required by law to maintain accrual accounting, which requires cost to be reported in the period in which benefits are received, without regard to time of payment. The 533M is the official control document for actuals expended to date and all other resource management reports will reconcile to the current actuals to date.

Cost shall be identified and recorded in the period of time when the benefit is received or incurred without regard to the date of payment. The data provided shall reconcile with DRD F-PM-02 and DRD F-PC-06. Monthly forecast costs shall reflect the most current and reliable data recognized by both Boeing technical community and finance personnel. Cost is a financial measurement of resources used in accomplishing a specified purpose, such as performing a service, carrying out an activity, acquiring an asset, or completing a unit of work or project.

Examples of accrual accounting for common cost elements reported on the NASA Form 533M follow:

Labor: Reported to NASA as hours are incurred.

Equipment and Materials (commercial off the shelf): generally reported to NASA when received and accepted by the contractor. Defined as any equipment that is produced to specific requirements that make it useless to anyone else without rework. Cost should be reported to NASA as the equipment is being manufactured. The straight-line method for estimating accrued costs or the use of supplemental information obtained from the vendor are acceptable methods used to calculate the cost accrual amount.

Manufactured Equipment: Reported to NASA as costs are incurred.

Travel: Reported to NASA as costs are incurred.

Subcontracts: Actual and estimated costs reported by contractors shall include subcontractors' incurred costs for the same accounting period. Major subcontractor as identified in PC27 G, costs will be separately identified on NF533M reports. The contractor shall include in the total cost of each subdivision of work the accrued cost (including fee, if any) of related subcontractor effort. Subcontractors should, therefore, be required to report cost to the contractor, using the accrual method of accounting. If the G&A and fee reported by a subcontractor are at the total subcontractor level, these costs must be allocated to specific subdivisions of work. Data submitted by the subcontractor should be structured similar to the contractor's NF533M to enable the contractor to properly report to NASA. For Firm Fixed Price subcontracts with a contract value greater than \$500,000, the contractor is required to document the methodology used to generate the subcontractor costs reported and provide this information to the Contracting Officer and Center Deputy Chief Financial Officer (Finance). EPs are a financial measurement of resources used in accomplishing a specified purpose, such as performing a service or carrying out an activity as related to a specific skill.

Unfilled Orders: Reported as the difference between the cumulative cost incurred to date and amounts obligated to suppliers and subcontractors.

Fee: Fee shall be accrued as earned using a consistent and auditable method to determine the amount. For example: an acceptable method would be to use historical data to determine the amount to accrue each month. Fee should be reported on the NF533M following the "Total Cost" line. Fee shall be reported by the following categories: Fixed Fee, Maximum Award Fee, FY 2000 Forward Technical Performance Award Fee, FY 2000 Forward Cost Performance Award Fee, FY2004 Forward Performance Fee, Base Fee, Authorized/Undefinitized Change, Total Award Fee, Fixed Fee (Provisions I/F), Schedule III Performance Fee, and Total Fee.

Prompt Payment Discounts: Cumulative cost reported to NASA should be the full incurred cost. The prompt payment discount amount taken should be reported as a separate line item on the NF533M below the cumulative cost amounts for the contract, if applicable.

The NF533M reports are the official cost documents used at NASA for cost type, price redetermination, and fixed price incentive contracts. The data contained in the reports must be auditable using Generally Accepted Accounting Principles. Supplemental cost reports submitted in addition to the NF533M must be reconcilable to the NF533M.

Prior period cost adjustments should be reported in the current month actual (column D) and CTD actual (column E). Provide reasons/amounts for the adjustments in the Executive Summary.

For contracts that have multiple schedules, a summary NF533M is required to provide a cumulative from inception cost for the contract, regardless of schedule. Short and long term cost estimates, which include all data entered in columns 8 and 9a on the NF533M and NF533Q reports, shall be based on the most current and reliable information available.

10.2 Specific Format Reporting Instructions.

PC27 A - Total Contract Summary – top level summary of all contract cost elements, EPs and hours;

PC27 B - Summary of all contract cost elements, Boeing direct and major subcontractor EPs and Boeing hours by category of work, i.e., 1st level of the WBS (DDT&E, I&O, OPD, Modifications and Spares);

PC27 C - Specific Contract Summary – Summary of all contract cost elements, Boeing EPs and hours at the 2nd level of the WBS by category of work (OPD, spares, modifications, and I&O). For DDT&E, the requirement is to report cost elements, Boeing EPs and hours at the 3rd level of the WBS;

PC27 D - Specific Detail:

1. Cost, Boeing direct and major subcontractor EPs and Boeing direct hours for DDT&E at the 4th level and a summary roll up of cost and EPs at the total DDT&E level;
2. Cost and Boeing direct and major subcontractor EPs for I&O, spares, modifications and OPD at the 3rd level including the exceptions listed in the Appendix and a roll up of cost and EPs to the 2nd level and then totaled at the first level.

PC27 E – Provide specific detail for all Material Pool WBS's; 5.14.7.1.5-Repairs, 5.14.7.1.6-Transitions, 5.14.7.2.2-Commercial Bill of Lading (CBL), 5.14.7.2.3-Residual Assets and 5.14.7.2.4-Parts Procurement. Provide monthly costs per individual WBS including EPs and Total Dollars. Boeing shall also provide specific detail for the new Material Pool WBS's starting in FY2014; 5.14.6.1-Repairs, 5.14.6.2-Transitions, 5.14.6.3-CBL, 5.14.6.4-Residual Assets, 5.14.6.5-Parts Procurement. Provide monthly costs per individual WBS including EPs and Total Dollars. History under WBS 2.14.7.8 Material acquisition for Post Production Support (PPS) will also be included.

PC27 F - Specific Detail for WBS 3.20 and 7.0, Spares. Each major subcontractor as identified in PC27 G, will report dollars and EPs.

PC27 G - Major Subcontractor Summary by WBS. Top-level summary of total cost and EPs. Major subcontractors are those previously identified as major subcontractors from contract inception and provide a specific skill, excluding purchased labor and non-labor; or whose subcontract has an annual contract value of \$3M or greater and provide a specific skill, excluding purchased labor and non-labor.

11. Variance Explanation: All variance explanations are based on prior month's forecast for current month's report.
- 11.1 Executive Summary Narrative: The contractor shall provide a top-level variance report by the three categories of work (DDT&E, I&O, spares, modifications, and OPD) in a narrative section at the beginning of each submitted PC27. A variance explanation is required whenever a +/- 5% variance occurs between the monthly forecasted cost and the actual cost for that month for resolution of major outstanding financial issues. The computation is (Forecasted Monthly Cost – Monthly Actual Cost) / Monthly Forecasted Cost.
 - a. Any Prior Period Adjustment to previously reported actuals will require a thorough explanation and reconciliation.
 - b. All Formats and Sections of the 533 report must reconcile to the total Contract Summary page.
- 11.2 Detail Variance Report: The contractor shall provide a detailed variance explanation at the second level of the WBS whenever a +/-10% and +/- \$250,000.00 variance occurs between the current month's forecast and the actual cost for the month. The contractor shall provide a detailed variance explanation at the second level of the WBS whenever a +/-10% and +/-10 Boeing EP variance occurs between the current month's forecast and the actual EPs for the month. This explanation is due seven (7) calendar days from delivery of PC27. The variance explanation shall identify the lower level WBS contributing to the variance. In addition variance explanations need to detail what caused the variance (i.e., NASA change in direction, unexpected problem, discrepancy due to a change order). Also addressed will be any impact to delivery, schedule, other affected WBS's; and the contractor's plan for resolving the effect of the variance. The forecast plan needs to be adjusted to reflect a change in plan.
12. Statement of Work (SOW) Changes – The contractor will report (listing and amount) contract value changes as part of the contractor's Executive Summary for the month in which the changes occur.
13. Inter-relationships and Applicable Documents:

NPG 9501.2D or latest version, NASA Contractor Financial Management Reporting

NMI 9501.1, NASA Contractor Financial Management Reporting System

NFS 1852.242-73, NASA Contractor Financial Management Reporting

DR F-PM-02 (Integrated Management Review Products)

DR F-PC-06 (Cost, Schedule and Technical Report for Avionics and Software)

SOW 1.2.3.1
14. Maintenance: Contractor must provide a revised NF533M immediately to correct significant errors. The revised NF533M must be delivered prior to closure of the JSC accounting system for the month.

Monthly financial reporting is no longer required once the contract is physically complete, provided the final cost report includes actual cost only (no estimates or forecasts). The contractor must continue to submit monthly financial reports as long as estimates for the following period are included. If the final cost of a contract changes after submission of the "final" contractor cost report, the contractor must submit a revised financial report in the month the cost change is recognized.

Appendix

I&O—Exceptions to include along with all I&O at the 3rd level

- 5.4.1.1 EME
- 5.4.1.2 EEE Parts
- 5.4.1.3 Environments
- 5.4.1.4 Materials
- 5.16.1.1 Requirements and Interfaces
- 5.16.1.2 Test and Verification Integration
- 5.16.1.3 Vehicle Integrated Performance & Resources
- 5.16.1.4 Vehicle Data Integration
- 5.16.1.5 Nonprime Integration
- 5.16.3.1 Project Office & Project Engineering
- 5.16.3.2 Proposal Preparation

OPD—Exceptions to include along with all OPD at the 3rd level

- 3.13.1.1 FSE/OSE
- 3.13.1.2 Storage
- 3.13.1.3 Carriers

Modifications – Exceptions to include along with all Modifications at the 3rd level

WBS 8.25.2 Docking System

- WBS 8.25.2.1 Common Docking Adapter
- WBS 8.25.2.2 Docking System Development
- WBS 8.25.2.3 Docking System Production

WBS 8.25.3 Docking Hub System

- WBS 8.25.3.1 Docking Hub
- WBS 8.25.3.2 DHS Launch Service
- WBS 8.25.3.3 DHS Orbital Transfer System

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Integrated Flight Loads (IFLs) and Software Package	2. Date of Current Version 10/01/10	3a. DRD No. SE02	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 2			4. Use (Define need for, intended use of, and/or anticipated results of data) Describes the contents of the software delivery package including the Integrated Flight Load (IFL) for users.
5. DRD Category <u> X </u> Technical — Administrative — SR&QA			6. References (SOW, Clause, etc.) Contract F, Statement of Work (SOW) – paragraph 3.3.7.3.1, 3.3.7.2.3, 3.3.7.2.4
7. Interrelationships (e.g., with other DRDs) DRD F-SW-03			

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Includes the delivery of sustaining engineering software applications, patches, PPLs and IFLs and their associated software products including VDDs, PDDs, RDFs, CDDs, and delta ADPs. IFLs identify an integrated Flight Software and Data Subsystem configuration for a particular Flight Configuration and are used for formal integrated testing and for Flight.

CONTENT: The contractor shall produce and deliver software application packages in the form of Integrated Flight Loads (IFL) to the user community. The contractor shall deliver both planned IFL deliveries and unplanned IFL deliveries.

The products delivered along with the software application, patch, and/or pre-positioned load (PPL) will include the functionality as follows:

- Document the delivery of the sustaining engineering software applications, patch, and/or PPL to NASA
- Document the detailed description of the software application (CSCI), patch, and/or PPL and the instructions on how to upload to the Space Station.
- Document the physical data pertaining to the software and configuration definition of the software application, patch, and/or PPL.
- Document the engineering values for all instances/versions of a patch and/or PPL or Adaption Data Table (ADT).
- Document the transfer of accountability for each delivered item.

The delivered sustaining engineering software applications/Patches/PPLs will be uploaded into the IFL in the Mission Build Facility with “Read-Only” capability.

FORMAT: NASA/Contractor agreed format currently used by ISSP.

9. OPR: OD/Avionics and Software Office

10. FIRST SUBMISSION DATE: First IFL after start of new contract

Frequency Of Submission: Product schedule will support Block releases for Flight CSCIs, Stage, Operations, and Launch IFL releases or as required by applicable software control panel approved/authorized make operable change

Additional Submissions: **As required by applicable software control panel approved/authorized make operable change.**

11. MAINTENANCE: (The documents shall be maintained electronically.) Update products as documented with an approved change to maintain currency and accuracy in accordance with SSP 41170.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (MBF or equivalent)

13. REMARKS: This DRD provides the mechanism for the Contractor to deliver software application versions, patches, and/or PPLs as designated by the software schedule control forum in the form of an Integrated Flight Load (IFL) and approved by the ASCP.

DATA REQUIREMENTS DESCRIPTION

1. DR Title: SM03, Mishap and Investigation Reports
2. DRD Extension Number(s): N/A
3. TPR Code: S&MA AIT
4. Data Type: 3
5. Frequency of Submission: Frequency of submission shall be in accordance with NMI 86211.1. Type C injury mishaps occurring offsite at contractor facilities shall be reported in a monthly summary of such injuries.
6. First Submission Date: As required. Type C injury summary due first month after DRD change.
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: NONE
10. Use: Provide notification and status of investigation of accidents or incidents related to the ISS Program.
11. References:
 - (a) Statement of Work (SOW), paragraph 3.8.1.4, 7.2
 - (b) NHB 1700.1, Basic Safety Manual
 - (c) NMI 8621.1, Mishap Reporting and Investigating
 - (d) NASA Letter OE-96-007, April 15, 1996
12. Interrelationships: NONE
13. Preparation Information:
 - 13.1 Scope: These reports shall encompass CEI mishaps occurring during the contracted period as follows:

All mission failures and type A and B mishaps resulting in injury to contractor personnel or equipment damage occurring onsite at NASA facilities and offsite at contractor facilities.

Type C mishaps resulting in equipment damage onsite at NASA facilities and offsite at contractor facilities.

Type C mishaps resulting in injury to contractor personnel located onsite at NASA facilities.

Incidents and close calls occurring onsite at NASA facilities.

- 13.2 Format: The mishap report is to be recorded on NASA Form 1627. Telephonic reports are to be reported in accordance with 1627a.
- 13.3 Content: The mishap report shall be in accordance with NHB 1700.1 (VI-B) and NMI 8621.1.
- 13.4 Maintenance: These reports shall be maintained electronically.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Materials Identification and Usage Lists (MIUL) 1b. Data Type: 2	2. Date of Current Version 10/01/2010	3a. DRD No. VE09	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To identify and document the materials and processes used on all flight hardware and on ground support equipment specified by SSP 30233. Provide a complete identification of all materials usages in configuration items excluding piece-part electronics.			5. DRD Category _x_ Technical — Administrative — SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 7.2, 3.4.6.1 Specialty Engineering		7. Interrelationships (e.g., with other DRDs) VE10	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: To provide a searchable data base of materials and processes that are used in contractor provided ISS hardware and denote where materials and processes that do not meet the requirements of SSP 30233 have been approved by Material Usage Agreements (MUAs). The information shall reflect the final design and as-built hardware.

CONTENT: The system shall identify, as a minimum, the following applicable information using the instructions in Section 13, REMARKS

1. Associate Contractor by number (assigned by the Contractor or a conversion code supplied by the Associated Contractor and approved by the Contractor)
2. Part number
3. Next assembly
4. Material code
5. Material specification
6. Process specification (s)
7. MUA number and/or rationale code for category III MUAs

FORMAT: Guidelines for MIUL format and field sizes are provided in Section 13, REMARKS.

9. OPR: OB/Vehicle Office

10. FIRST SUBMISSION DATE: As required for new hardware delivered on this contract.

Frequency Of Submission: Updates as required to reflect changes to hardware sustained on this contract or new items delivered.

Additional Submissions:

11. MAINTENANCE:

The Contractor shall maintain such files as necessary for tracking, reporting status, and traceability of submittals for the as-built and delivered MIULs.

(These files shall be maintained electronically and updated as required)

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (MAPTIS or equivalent)

13. REMARKS:

GUIDELINES FOR PREPARATION OF MATERIALS IDENTIFICATION USAGE LIST

An electronic database of CAD/CAM drawings parts list or a separate equivalent electronic parts database with the following data shall be considered the MIUL. The database shall as a minimum contain the following:

a. Associate contractor code number

Associate contractor drawing source number as assigned by the contractor. Not required for CAD/CAM delivery when contractor company identification is on parts list data base. (field length 4 characters with optional electronic data base)

b. Part/drawing number

Part/drawing number is the drawing number or the part number for the MIUL entry. Commercial parts and components used shall be entered at least once for the materials at the level of assembly used for approval of that part. Material codes shall be used for commercial parts where available from NASA. For mechanical parts, the appropriate MS, NP, etc., shall be entered here. (field length 20 characters with optional electronic data base)

c. Next assembly used on drawing number with dash if applicable

Next assembly used on drawing with dash if applicable is for the next used on drawing assembly. (field length 16 characters with optional electronic data base)

d. NASA material code

NASA material code is assigned by NASA and found in MAPTIS. (field length 8 characters)

e. Material specification

Material specification is the specification to which the material is procured. (field length 30 characters with optional electronic data base)

f. Process specification

Process specifications shall include those processes which could have significant effects on the hardware. All major processes called out on the drawing shall be reported. These specifications do not have to be given down to the individual dash number. (field length 40 characters with optional electronic data base)

g. MUA number with rationale code if used

MUA number shall have the assigned associate contractor code number followed by a dash and four digit number beginning with 0001. Category III MUAs shall use the Associate Contractor code number followed by a dash then a 9 and the three digit rationale code. Other formats may be used if given prior approval by the Contractor. When an alternate format is used, a code key shall be provided to show the correlation between the alternate format code and this code. (field length 12 characters with optional electronic data base)

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Materials Usage Agreements (MUAs)	2. Date of Current Version 10/01/2010	3a. DRD No. VE10	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 1			
4. Use To identify for NASA and provide rationale and approval for use of materials and processes that are exceptions to the requirements found in SSP 30233 that are considered acceptable for use on the program.			5. DRD Category _X_ Technical — Administrative — SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 7.2, 3.4.6.1 Specialty Engineering		7. Interrelationships (e.g., with other DRDs) VE09	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: To provide rationale for use of materials and processes that are exceptions to the requirements found in SSP 30233, and are considered acceptable for use on the program. A tiered MUA system with three categories shall be used: Category I are those considered a hazard to the safety of the mission, crew, or vehicle, or affect the mission success; Category II are those that fail a screening of requirements and are not considered a hazard in their use but for which no Category III rationale code exists; and Category III are those that shall be reported in the MIUL system or electronic data system utilizing the approved rationale codes in Appendix C of SSP 30233 or as described in F-VE-09, item g.

CONTENT: Category I MUAs shall be prepared using the form and instructions from page B-2 of SSP 30233 or approved equivalent and reviewed and approved by the Contractor. The MUA will then be submitted to the NASA Program Office for approval. Category II MUAs shall be prepared using the form and instructions from page B-2 of SSP 30233 or approved equivalent, reviewed and approved by the Contractor, and reviewed and approved by the NASA ISS M&P Manager. Both Category I and II MUAs shall contain attachments providing detailed treatment of the material application, photographs, sketches, drawings, test data and rationale to the extent necessary for usage acceptability. Category III MUAs shall be reported in the MIUL system or electronic drawing data system utilizing the approved rationale codes in SSP 30233.

FORMAT: Category I and II MUAs shall be prepared using the form and instructions from page B-2 of SSP 30233 or approved equivalent. The form shall be in an electronic format compatible with MAPTIS; attachments shall be in Adobe Acrobat format.

9. OPR: OB/Vehicle Office

10. FIRST SUBMISSION DATE: As required.

Frequency of Submission: As required.

Additional Submissions: As required.

11. MAINTENANCE:

The Contractor shall maintain such files as necessary for tracking, reporting status, and traceability of submittals for the MUAs.

(These files shall be maintained electronically and updated as required)

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management (Category I MUAs only)

1 electronic copy: to a Program authorized repository (MAPTIS or equivalent)

1 electronic copy: to MAPTIS (Category I and Category II MUAs)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION

1. DR Title: VE20, Integration and Verification Requirements for U.S. Segments & ISS System
2. DRD Extension Number: None
3. TPR Code: Verification IPT
4. Data Type: 2
5. Frequency of Submission: Preliminary copy at L-18 for the applicable ISS DIL Configuration stages reviewed; final documents submitted for approval no later than L-12 for the final ISS DIL Configuration launch. Post 9/30/10: Twice: One updated VE20 for ISS Assembly Complete following last Shuttle flight (ULF5/6); and a final VE20 for ISS Assembly Complete following Flight 3R.
6. First Submission Date: IDR
7. As-of Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: Submittals shall reflect the relationship of the incremental stage buildup to the ISS System.
10. Use: Document integration and verification requirements for the ISS System. In addition, this DR documents and provides a cross-reference of interim assembly stage nominal capabilities as defined in the Capabilities Description Documents. These requirements are necessary for the preparation of verification procedures and analyses.
11. References:
 - (a) Statement of Work (SOW); 3.2.1.11.3
 - (b) Other: N/A
12. Interrelationships: DRs, VE24, VE23
13. Preparation Information:
 - 13.1 Scope: This document establishes ISSA Program detailed integration and verification requirements for the incremental stage buildup of the ISS to meet ISS requirements (SSP 41000) at Assembly Complete.

.
 - 13.2 Format: The document shall be delivered in the Contractor's format.

- 13.3 Content: This document shall be written by Stage and shall contain all stages from FEL to Assembly Complete, as defined by SSP 50110. All U.S. On-orbit requirements shall be addressed in this document.
- (a) These documents shall identify each requirement, specification and constraint (functional and environmental) applicable to the ISS stages.
 - (b) The detailed verification requirement shall include allowable tolerances for standards of judgment to be used in determining acceptable performance. For tests/demonstrations, test types, levels and durations shall be included.
 - (c) For tests/demonstrations, qualification test requirements shall include test-level margins and factors of safety.
 - (d) The integrated Verification Logic Networks (VLNs) for the Stages shall be contained in this document.
- 13.4 Maintenance: The document shall be maintained electronically.

DATA REQUIREMENTS DESCRIPTION

1. DR Title: VE23, ISS System and Vehicle Subsystems Analyses and Analytical Models
2. DRD Extension Number(s): None
3. TPR Code: VIPER/OM
4. Data Type: 2
5. Frequency of Submission: As needed.
6. First Submission Date: SDR;
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR) – CD ROM
 - (b) VIPER Quality Records Custodian – CD ROM
 - (c) OH/Data Management
 - (d) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: NONE
10. Use:
 - (a) Provide NASA with the analysis information as part of the evidence that the vehicle and subsystems (including structures) have the capabilities to meet the intent of all applicable requirements in accordance with SSP 41000.
 - (b) Provide analytical models to ensure proper structure and content, and to aid in the evaluation of the Contractor's designs.
11. References:
 - (a) Statement of Work (SOW) paragraph 3.2.1.11.3, 3.2.1.2
 - (b) Other: N/A
12. Interrelationships: DRs VE20, VE24, VE32
13. Preparation Information:
- 13.1 Scope:
 - (a) Analysis reports shall document all input data, assumptions and boundary conditions, analysis methodology, and analysis results for analyses intended to:
 - (1) Demonstrate the proper design of the ISS DIL Configuration vehicle or subsystem in consideration of all design constraints. This includes analysis of vehicle performance and the performance of integrated subsystems with or without the effects of the Shuttle Orbiter and other orbiting vehicles.
 - (2) Demonstrate that the ISS vehicle or subsystem capabilities meet specific requirements. This includes analyses performed as part of the formal verification program.

- (b) Analysis models that are developed for vehicle or subsystem end-to-end performance analysis shall be documented and submitted in accordance with this DR.
- (c) Analysis and data developed to demonstrate the ISS vehicle Solar Array Operational Constraints meets the NASA PHALCON ability to respond to nominal and contingency operations shall be documented and submitted in accordance with this DR.

13.2 Format: ISS Analysis results and models shall be delivered in accordance with the following:

- (a) Results of analyses shall be documented in two data items:
 - (1) An informal copy of the team's internal memorandum or report documenting the results shall be submitted as required, in hard copy or electronic format, to the Vehicle Integrated Performance and Resources VIPER Team. This document will be retained by VIPER. Suggested contents of this documentation are:
 - Summary of the analysis or study along with the activity objectives and relation to other analyses.
 - All boundary conditions, inputs, ground rules, assumption, and identification of all data sources.
 - Analysis methodology including analytical study elements (models, equations, algorithms). Discuss validation of the analysis methodology.
 - Analysis results, conclusions, and recommendations.
 - (2) A one- to two-page abstract of the analysis in the common format defined by the VIPER team shall be submitted in electronic format. This abstract shall be published in the formal submittal of VE23 and electronically configuration controlled. This common abstract shall include the analysis title, author, and date as well as a description of the analysis including background, assumptions, analysis discussion, analytical models, operational constraints, issues, summary, and verification closure recommendations.
 - (3) A Systems Engineering and Integration memo written to NASA OM which includes a summary of analysis performed and data files delivered in support of the PHALCON Solar Array operations tool. The data files are delivered in an electronic format and submitted, as required with delivery of this DR.

- (b) Models shall be documented with three data items.
- (1) An informal copy of the team's internal memorandum or report documenting the models shall be submitted to the VIPER Team and should include the following information:
 - Inputs
 - Methodology
 - Results
 - Validation

This document will be retained by the VIPER team.
 - (2) A separate abstract or a paragraph included in the abstract of the analysis per the content in 13.2.(2). This abstract shall be published in the formal submittal of VE23 and electronically configured. This paragraph should name the analytical models used in the analysis and, if specifically developed for the analysis, the inputs, outputs, and limitations should be described. Evidence of model certification should be included and a description of the model and data configuration control and location.
 - (3) An electronic copy of the model shall be submitted as requested for formal configuration control in a format agreed upon by NASA and the Contractor.

13.3 Content: This DR includes:

- (a) The documentation of analyses results conducted at the Product Groups and the Contractor demonstrating vehicle or subsystem performance. Each team is responsible for identifying the significance of the assessments (per 13.1) to determine the need for formal submittal. All analyses not determined to require formal submittal of results shall have documentation maintained by the team that performed the assessment.
 - (1) Design process analyses to determine ISS vehicle, subsystem and element and lower level hardware and software design characteristics.
 - (2) Analyses for ISS vehicle, subsystem, and element and lower level hardware and software functional performance under specified natural and induced environment conditions and operational conditions.
 - (3) Microgravity quasi-steady, structural dynamic and vibroacoustic analyses as specified in the Microgravity Control Plan, VE16, to determine ISS DIL Configuration compliance with microgravity requirements.
 - (4) ISS DIL Configuration Human engineering/crew systems analyses

- (5) The Analysis Master Plan and Schedule documenting the end-to-end analyses performed in support of the Design or Verification Analysis Cycles. This plan will include (as a minimum):
 - A description of each assessment.
 - Schedule for completion.
 - Vehicle configuration and groundrules used in the assessments.
 - Identification and control of data to be used in the assessments.
 - Coverage matrix showing assessments conducted.
 - Assessment interdependencies.
 - Analysis results.
 - (a) Abstract of the integrated analyses of the end-to-end ISS thermal control system performance and ISS vehicle loads and dynamics analyses shall be documented under this DR.
 - (c) Models submitted electronically and configuration controlled are those used in the end-to-end performance analyses of the vehicle and will include analytical models used to perform the assessments listed in 13.3a
- 13.4 Maintenance: Deliverables shall be maintained electronically such that analysis results reflect changes in analysis input data and models.

DATA REQUIREMENTS DESCRIPTION

1. DR Title: VE24, Specification Traceability and Compliance Reports
2. DRD Extension Number: None
3. TPR Code: Verification IPT
4. Data Type: 3
5. Frequency of Submission: Preliminary copy in SIR data package for applicable specifications reviewed at SIR Post 9/30/10: Twice: One updated VE-24 for ISS Assembly Complete following last Shuttle flight (ULF5/6); and a final VE-24 for ISS Assembly Complete following Flight 3R.
6. First Submission Date: System Specification Only: SRR; Next submittal: SIR Post 9/30/2010: Launch + 3 months (ULF5/6)
7. As-of Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (a) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: NONE
10. Use: Document specification traceability to closure for the ISSA System Specification as modified by Appendix C, U.S. On-Orbit Segment Specification and Configuration Item Specifications. Document traceability from the ISS System Specification to the International Partners/Participants and U.S. Ground Segment.
11. References:
 - (a) Statement of Work (SOW); paragraphs 3.2.1.11.3
 - (b) Other: N/A
12. Interrelationships: DRs, VE20, VE23
13. Preparation Information:
 - 13.1 Scope: The Specification Traceability and Compliance Reports document the requirements traceability flowdown and verification closure for:
 - (a) ISS System specification as modified by Appendix C.
 - (b) U.S. On-Orbit Segment Specification

13.2 Format: The Specification Traceability and Compliance Reports shall be delivered in the Contractor's format.

13.3 Content:

- (a) The Specification Compliance Report shall contain the following for the ISS System Specification, and U.S. On-orbit, and Configuration Item/component specifications requirements:
 - (1) Specification numbers
 - (2) Specification titles
 - (3) Section 3 paragraph # and title
 - (4) Requirement text
 - (5) Requirement identification number
 - (6) Section 4 paragraph # and text
 - (7) Detailed verification objective number
 - (8) Verification objective text
 - (9) Verification activity title
 - (10) Verification report number and title
 - (11) Verification closure documentation
 - (12) Requirements Status.
- (b) The Specification Traceability Report shall contain the following for the ISSA System Specification and U.S. On-Orbit Specification:
 - (1) Requirements with no lower level requirements.
 - (2) Requirements with no parent requirements.

13.4 Maintenance: The reports shall be maintained electronically.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Integrated Signal Lists (ISL)	2. Date of Current Version 10/01/10	3a. DRD No. VE28	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 2	4. Use The ISL will support the ISS Design, Development, Test, and Operational phases and will be used to support the development of the onboard Command and Control processor telemetry and display definition software, timeliner software, and ground test and operations software.		5. DRD Category _x_ Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 3.3.7.2.5		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The ISL shall be electronic files containing an integrated definition of all the contractor USOS signals including: hardware, firmware, and software primitives, data acquisition, command and telemetry definition, firmware controller/MDM channelization, 1553 bus messaging and calibration. The ISL shall also include USOS, International Partners (e.g. core data) and Payload (e.g. core data) and signal data processed by the USOS Command and Control Processor for the purpose of display and telemetry/command to/from the ISS S-Band system or the Shuttle OIU. The list shall also identify all critical commands and hazardous parameters.

CONTENT: Shall be as defined in the Mission Build Facility Standard Out Definition document (D684-10177-1).

FORMAT: The ISL shall be delivered as specified in the Mission Build Facility Standard Out Definition document (D684-10177-1).

9. OPR: OD/Avionics and Software Integration Office

10. FIRST SUBMISSION DATE: As defined by the Program Software Integrated schedule

Frequency Of Submission: As defined by the Program Software Integrated schedule approved by Avionics Software Control Board (not more than 4 per year)

Additional Submissions: Updates as scheduled

11. MAINTENANCE: (The document shall be maintained electronically.)

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (MBF or equivalent)

13. REMARKS: The ISL provides an integrated definition of all the USOS signals including: hardware, firmware, and software primitives, data acquisition, command and telemetry definition, firmware controller/MDM Channelization, 1553 bus messaging, and calibration This integrated list is a critical deliverable in the implementation of the USOS avionics hardware and software integration and flight-to-ground interfaces. Assembly of all signal data provided by the Contractor, GFE, Payloads, and International Partners (e.g. core data) into a single list assures uniformity in the definition and application of these signals by the onboard core software and the ground processing systems.

**DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)**

1a. DRD Title: Vehicle Engineering Data 1b. Data Type: 2 – Plan 3 – Data Set	2. Date of Current Version 10/01/10	3a. DRD No. VE32	3b. RFP/Contract No. NAS 15 -10000
4. Use: This DR defines the data categories that will reside in the Designated Program Repository (VMDB or <i>equivalent</i>) and is the responsibility of the contractor to capture, store, sustain, integrate, and configuration manage.			5. DRD Category <input checked="" type="checkbox"/> Technical <input type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
6. References: SOW 3.3.2.9.2, 3.3.4.1.1, 7.2		7. Interrelationships: F-VE-09, Sustaining Engineering Drawings and Associated List, DRD F-SA-04 Hazard Reports and Systems Description	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE:

This DRD encompasses the capture, storage, loading, integration, sustaining and configuration management of Vehicle engineering data and GFD that will reside in the Vehicle Master Database (a Government Furnished Database) or equivalent.

Vehicle engineering data providers shall be Program Integration and Control Contract, the Mission Integration Contract, the Cargo Mission Contract, and the USOS Acceptance and ISS Vehicle Sustaining Contract. Teams Authorized to provide Vehicle engineering data shall be listed and maintained in the Designated Program Repository (VMDB or equivalent).

GFD providers shall be IPs (reference BDEALS) and the manufacturers of GFE (reference SSP 50177, Government Furnished Data Description Document Part I U.S. Sources).

CONTENT:

a) The ISS Vehicle, as defined by SSP 41000 and modified by latest revision, engineering and safety Data shall include:

- (1) Configuration Data
 - Drawings and schematics
 - Master Equipment List (MEL) (Indentured Parts List (IPL))
 - Identification of as-built configuration (SSAV)
 - Grapple Fixtures
- (2) Resource Data
 - Mass Properties (weight and c.g.)
 - Power and Thermal characteristics
 - Electrical Power usage (Component Electrical Power during steady-state, standby, startup, and peak operations)
 - Thermal Consumption Data

- (3) Configuration Data/Assembly Data
 - Assembly Sequence
 - Traffic Model
 - (4) Performance and Characteristics Data (Space Station Operations Data Book (SSODB)).
 - Constraints and Operational Limits, Design Limits, Hardware
 - Characteristics for the operating envelope
 - (5) Electromagnetic and Environment Interference (RF Survey Reports)
 - (6) Safety and Mission Assurance
 - Safety Hazards
 - Limited Life Items
 - (7) Parts Selection and Control
 - Electrical, Electronic, and Electromechanic Parts
 - (8) Configuration Aerodynamic Properties
- b) The GFD engineering and safety data shall include applicable items of:
- (1) Configuration Data
 - Drawings and schematics
 - Master Equipment List (MEL) (Indentured Parts List (IPL))
 - Identification of as-built configuration (CSAS)
 - (2) Resource Data
 - Mass Properties (weight and c.g.)
 - Power and Thermal characteristics
 - Electrical Power usage (Component Electrical Power during steady-state, standby, startup, and peak operations)
 - Thermal Capacity Data
 - (3) Safety and Mission Assurance
 - Safety Hazards

FORMAT:

Data shall be stored, managed and controlled in VMDB or Program authorized repository electronic format.

For VMDB or Program authorized repository supplied data, the data inventory shall be electronically generated and available as a report from the VMDB or Program authorized repository.

Copy of all GFD hard copy data received for conversion into electronic format shall be retained in contractor provided storage.

9. OPR: OH

10. FIRST SUBMISSION DATE:

Inventory - February 27, 2004

Data set - February 27, 2004

Data Management Plan – April 30, 2004

Frequency of Submission:

Data set and inventory updates - Provide data as mutually established by NASA and Contractor.

Data Integration Plan – Subsequent updates as required.

11.MAINTENANCE: The DR shall be maintained electronically.

12.COPIES/DISTRIBUTION:

1 record (hard copy): OH/Data Management (Data Inventory)

1 copy (electronic): Program authorized repository-VMDB or equivalent
(Data Inventory)
Program authorized repository – EDMS or equivalent
(Data Management Plan)

13. REMARKS: The Program Authorized Repository (VMDB or equivalent) shall be the authoritative source for Vehicle engineering data utilized by the Contractor and the ISS Program participants to accomplish Vehicle integration and operations.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Configuration Management Plan	2. Date of Current Version 01/01/04	3a. DRD No. F-CM-01	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 1			4. Use This plan is prepared by the contractor to describe the assignment of responsibility organizationally and the procedures used in accomplishment of the specific configuration management requirements as stated in the SOW and SSP 41170.
5. DRD Category ___ Technical _X_ Administrative ___ SR&QA			6. References (SOW, Clause, etc.) SOW 1.3.1.1
7. Interrelationships (e.g., with other DRDs) NONE			

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: This CM plan defines the requirements, responsibilities, and procedures for the CM system pursuant to SSP 41170 and as it applies to this contract.

CONTENT: The CM plan shall address, as a minimum, the following:

1) Management Organization, (including reference documents)

- a) Identification, Relationships and Integration of contractor's proposed organization
- b) Responsibility and authority for CM including roles in configuration control boards and technical reviews
- c) Interfaces between contractor's CM organization and NASA, Subcontractors, and other contractor's/contracts
- d) Training plans

2) Configuration Identification

- a) Selection of CI's (Hardware, CSCI's and firmware)
- b) Establishment of the functional, allocated and product baselines for the H/W and S/W
- c) Assignment and application of configuration identifiers including serial numbers, part numbers, lot codes, software and firmware identifiers

3) Configuration Control

- a) Establishment of internal configuration and contractual baselines
- b) Implementation of Internal and NASA configuration control
- c) Support to configuration control boards and processes
- d) Identification of processes to control changes, deviations, and waivers to program baselines (both class I and II)
- e) Subcontractor and vendor control
- f) Systems & tools

4) Configuration Status Accounting (CSA)

- a) Hardware/Software Configuration Status Accounting processes and provisions for reports and/or access to CSA data
- b) Description and methods of processes and tools to provides:
 - i.) Identification of current approved configuration documentation and configuration identifiers associated with each CI
 - ii.) Status of proposed engineering changes from initiation to implementation
 - iii.) Waiver/deviation status and processing
 - iv.) Results of configuration audits; status and disposition of discrepancies
 - v.) Traceability of changes and confirmation of change incorporation
 - vi.) Methods of access to information
- c.) Retention of historical data
- d.) Systems and tools (including data elements)

5) Configuration Verification/Audits

- a.) Audit conduct, policies, procedures, documentation, access, and support
- b.) Processes, plans, schedules for internal CM audits and subcontractor CM audits

6) Data Management

- a) Development, approval, release and submittal of configuration data/documentation (including drawings) in relation to program and contractual events (DRD's technical reviews, FCA/PCA, Acceptance reviews, COFR, etc.)
- b) Plan for subcontractor data management deliveries/control and access
- c) Establishment and operation
- d) Process for documentation control (i.e., DCNs)
- e) Retention of historical data
- f) Systems and tools

FORMAT: Electronic

9. OPR: OH/NASA ISS Configuration Management Office

10. FIRST SUBMISSION DATE: Sixty (60) days following contract award

Frequency Of Submission: One time

Additional Submissions: Updated id major systems or processes are changed.

11. MAINTENANCE: as required (see additional submissions).

12. COPIES/DISTRIBUTION:

1 record (hard copy): OH/Data Management

1 copy (electronic): Program authorized repository EDMS or equivalent.

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Export Control Audit Results	2. Date of Current Version 1/1/04	3a. DRD No. F-EC-01	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 2			5. DRD Category ___ Technical _x_ Administrative ___ SR&QA
4. Use (Define need for, intended use of, and/or anticipated results of data) To provide insight into the Contractor's Export Control processes			
6. References (SOW, Clause, etc.) NFS 1852.225-70 and clause H.19, SOW 1.5.2.		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Audits should include a thorough examination of all export control processes associated with this contract, areas for improvement (if any), and corrective action plans for identified areas of improvement. Affected subcontractors are required to do their own self-audits and report the results of the audit to NASA through the contractor. Prior to audit completion, inclusion on the audit process thru informal statuses to the JSC Export Services Team or Center Export Administrator is optional and might prove useful in the success of this effort.

CONTENT:

- (a) Define your current audit processes
- (b) Document the export control processes audited and audit findings
- (c) Based on audit findings, the contractor/subcontractor shall include corrective action plans for any processes identified for improvements and notification of when the correction of any non-conformances has been completed.

FORMAT: a, b, c, & d must be submitted to the Center Export Administrator (CEA) at the end of each fiscal year for review & approval and be in an acceptable format (e.g. Microsoft Word, Excel, etc.) that is compatible with the Program authorized repository

9. OPR: JSC Export Control Office or Center Export Administrator

10. FIRST SUBMISSION DATE: September 30, 2004

Frequency Of Submission: annually, at the end of each fiscal year

Additional Submissions:

11. MAINTENANCE: The document shall be maintained electronically.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

Contracting Officer/BG

Center Export Administrator/JA

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: ISS On-Orbit Logistics Supportability Assessment Report 1b. Data Type: 3	2. Date of Current Version 10/01/10	3a. DRD No. F-LM-01	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To provide assessment of resources and requirements for the maintenance of the International Space Station to determine if it can be logistically supported as designed.			5. DRD Category X Technical — Administrative — SR&QA
6. References (SOW, Clause, etc.) SOW, paragraph 3.3.8.2.2, 3.3.8.2.5		7. Interrelationships (e.g., with other DRDs) NONE	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The Logistics Supportability Assessment Report is applicable to the maintainable systems of ISS Vehicle provided by the programs' partners and participants. Resources requirements are evaluated against design. These include but are not limited to spares and repair parts, locations for storage of spare part hardware, tools for performing the required maintenance, robotic capability, extravehicular activity capability, as well as the transportation of supplies to the space station. Logistics concerns and issues are documented in this assessment to minimize impacts to the programs limited resources or system downtimes, and aid in providing for a safe and habitable environment for the crew.

CONTENT: The Logistics Supportability Assessment Report shall evaluate USOS, ISS Vehicle, and Payload Facilities (Boeing Sustained and non-Sustained (see SOW Appendix L for non-Sustained) supportability in terms of crew time, up mass and functional availability. Additional supportability performance characteristics may be used as needed to evaluate USOS, ISS Vehicle, and Payload Facilities supportability.

FORMAT: In a format supported by electronic library.

9. OPR: OB511

10. FIRST SUBMISSION DATE: 6/1/04

Frequency Of Submission: Bi-Annual (months of August and February)

Additional Submissions:

11. MAINTENANCE: Shall be maintained and updated electronically

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: NONE

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: ISS ORU Ground Supportability Assessment Report 1b. Data Type: 3	2. Date of Current Version 10/01/10	3a. DRD No. F-LM-02	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To provide assessment of ground ORU supportability			5. DRD Category X_ Technical __ Administrative __ SR&QA
6. References (SOW, Clause, etc.) SOW, paragraph 3.3.8.2.2		7. Interrelationships (e.g., with other DRDs) NONE	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The ground supportability assessment pertains to the ORU and includes the repair posture, repair location, parts inventory, part obsolescence status and supplier viability. Ground supportability assessment does not include non-Boeing sustained Payload Facilities.

CONTENT:

1. List repair agencies, identify ORUs maintained, identify readiness status, identify emerging problem areas
- 2) List inventory totals, identify top ten usage items, identify emerging problem areas
- 3) Status parts obsolescence activities
- 4) Status supplier viability

FORMAT: In format supported by the electronic repository

9. OPR: OB511

10. FIRST SUBMISSION DATE: 06/01/04

Frequency Of Submission: Bi-Annual

Additional Submissions:

11. MAINTENANCE: Shall be maintained and updated electronically

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: NONE

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Increment Definition and Requirements Document (IDRD) Annex 2, On-Orbit Maintenance Plan	2. Date of Current Version 03/15/2009	3a. DRD No. F-LM-03	3b. RFP/Contract No. NAS 15 -10000 Modification 1568
1b. Data Type: 1			5. DRD Category <input checked="" type="checkbox"/> Technical <input type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
4. Use (Define need for, intended use of, and/or anticipated results of data) To document on-orbit maintenance planning for the ISS Vehicle			
6. References (SOW, Clause, etc.) SOW, paragraph 3.3.8.2.3		7. Interrelationships (e.g., with other DRDs) NONE	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The IDRD Annex 2 shall contain preventive and corrective maintenance planning for the Increment, as well as planned spares deliveries to ISS Vehicle. The IDRD Annex 2 shall integrate maintenance planning for International Partners. The IDRD Annex 2 shall document housekeeping tasks for ISS Vehicle. The IDRD Annex 2 shall document ISS system performance and data collection tasks.

CONTENT: The IDRD Annex 2 shall contain comprehensive maintenance planning for the ISS Vehicle.

FORMAT: In a format supported by the electronic library.

9. OPR: OB511

10. FIRST SUBMISSION DATE: Not earlier than 60 days from contract award

Frequency Of Submission: Increment IDRD Release + 15 Days, 6 Months, 3 Months and /or as driven by operational requirements.

Additional Submissions:

11. MAINTENANCE: Shall be maintained and updated electronically.

12. COPIES/DISTRIBUTION:

1 electronic copy: OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: Due to International Partner (IP) impacts Data Submitted under this DRD will be submitted in EDMS as Early Release. At the date of this upload, this data will be considered delivered to NASA.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Parts Obsolescence Monitoring	2. Date of Current Version 01/01/04	3a. DRD No. F-LM-04	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 3			
4. Use (Define need for, intended use of, and/or anticipated results of data) Obsolescence reporting and Single Source Supplier Analysis (SSSA) alerts the ISS Program that production is concluding for a specific part, and provides the identification of single source suppliers and plans and methods to be used to provide for the continued support of the ISS through its operational life.			5. DRD Category X Technical — Administrative — SR&QA
6. References (SOW, Clause, etc.) Statement of Work (SOW); paragraphs 3.3.8.5.3		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Scope: Parts Obsolescence Monitoring shall consist of Parts Obsolescence and Single Source Supplier Analysis (SSSA).

Parts Obsolescence Monitoring: The contractor shall identify and resolve hardware and component obsolescence issues and loss of failure analysis, production and repair capabilities in compliance with Program management and control requirements. Loss of capabilities includes, but is not limited to, loss of skills or a supplier going out of business. The contractor shall deliver parts provisioning data for all repairable parts and parts containing EEE parts to support management of parts obsolescence. The contractor shall obtain government approval for hardware changes as required by NSTS 07700 and SSP 41170.

The Contractor shall compile a list of their sole source, single source (where requalification may be required) “production” suppliers for essential consumable industrial materials, parts, components, systems, and critical facilities and perform an analysis of those suppliers to identify areas of concern relative to supporting the program mission. This analysis and plan shall address consumables, hardware (including flight hardware), , and expendable items requiring recurring procurement over the Station’s life. This analysis shall encompass all subcontractors regardless of tier. The Contractor shall perform an analysis of those single source suppliers to identify areas of concern relative to supporting program mission. The Contractor shall prioritize the analysis to ensure that any subcontractors / suppliers that are leaving the program near term are addressed first, with the remaining scheduled based on their contract completion dates. The contractor shall identify those subcontractors / suppliers which have already completed their production requirements.

CONTENT: The SSSA shall consist of the following:

A list of single source suppliers (includes all subcontractors regardless of tier)

The items that the single source suppliers provide.

Identify any risks associated with proprietary processes, environmental issues and foreign ownership of the resultant suppliers outside the continental United States.

Provide recommendations to protect the items from production stoppages and ensure availability of materials, consumables and facilities.

This report shall document items that have been previously identified as obsolete and the actions taken to ensure support for the life of the program (i.e. life of type procurements)

FORMAT: Parts Obsolescence and SSSA content submittal shall be submitted in a format supported by the electronic library or as otherwise agreed to by NASA and the contractor.

9. OPR: OB511

10. FIRST SUBMISSION DATE: 03/01/04

Frequency Of Submission: Quarterly Report

Additional Submissions:

11. MAINTENANCE: Shall be maintained and updated electronically

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Certification of Flight Readiness (CoFR)	2. Date of Current Version 10/01/05	3a. DRD No. F-MA-12	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	4. Use (Define need for, intended use of, and/or anticipated results of data) This DR defines payload safety and operational readiness as required by the ISS Payloads Office.		5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 3.2.1.6		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the deliverable as follows:

SCOPE: This DR establishes the preparation and maintenance requirements for the Certification of Flight Readiness (COFR) for SOW Section 8 Payload Integration only. This includes flight and stage specific CoFR implementation focused on Launch Package Assessment (LPA) and Stage Operation Requirements Review (SORR). A formal and disciplined process with readiness certification statements is required by the ISS Program Manager to support flight readiness decisions on ISS payloads and organizations for flight, increment, on-orbit and return.

CONTENT: Contents: Certification of items per flight and stage must be included in accordance with SSP 52054 Latest Revision. This includes:

1. CoFR endorsements for all Utilization Hardware for launch, including integrated racks
2. CoFR endorsements for Utilization Hardware remaining on-orbit from the previous stage
3. CoFR for descent Utilization Hardware
4. Stage-specific Open Work Tracking Log

FORMAT: Per SSP 52054, latest revision.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Per negotiated work plan.

Frequency Of Submission: Updated for any ascent or on-orbit conditions or anomalies affecting original certification. For each flight and stage that supports payloads at L-6 weeks.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system
13. REMARKS: This data requirement is applicable to SOW 8.0 Payload Integration only.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Certification of Flight Readiness (CoFR) Plan 1b. Data Type: 2	2. Date of Current Version 01/01/04	3a. DRD No. F-MI-01	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To provide a management approach and implementation plan for Certificate of Flight Readiness (CoFR) endorsement			5. DRD Category X Technical — Administrative X SR&QA
6. References (SOW, Clause, etc.) SOW 3.2.1.6 SSP 50108		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Scope: The plan shall describe the approach and implementation for accomplishing the contractor's CoFR responsibilities and requirements to provide endorsement per each type of flight (i.e. - International Partner/Participant, Logistics, Utilization, Assembly) and stage assessments.

CONTENT: Address all contractor responsibilities for preparing for and providing the CoFR endorsement in accordance with SSP 50108. The Plan must address relationship to NASA counterparts and the division of responsibility for the CoFR endorsement activities.

FORMAT: Contractor format is acceptable

8. OPR: OB for ISSP H/W, OD for ISSP S/W, OM for ISSP Robotics

10. FIRST SUBMISSION DATE: Submit draft within 30 days after contract award

Frequency Of Submission:
Additional Submissions:

11. MAINTENANCE: Changes to the plan shall be incorporated once/year. Changes to Flight Readiness Status and Endorsements shall be made as required. The contractor shall maintain a historical file of Flight Readiness Status.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

Reviewed By: _____

Concurrence:

_____	Chief,	Date	Chief Financial Officer
Date	Cost Accounting, Reports, and Property Branch Financial Management Division		

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload Unique Integration Agreements	2. Date of Current Version 10/01/05	3a. DRD No. F-MI-12	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 1	5. Use (Define need for, intended use of, and/or anticipated results of data) Documents integration requirements between a specific payload developer and the ISS Program.		5. DRD Category X Technical __Administrative __SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.2.1.9		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: Payload Unique Integration Agreements address generic requirements for the planned life cycle of the payload. These agreements include Pressurized Payload Integration Agreements (PIAs), Unpressurized PIAs, Small PIAs, EXPRESS Integration Agreements (EIAs), and WOLF Integration Agreements (WIAs).

CONTENT: Requirements contained in the Payload Unique Integration Agreements are in addition to those established in the Standard Payload Integration Agreements. Also, any requirements deviations or unique responsibilities between the Payload Developer and ISS Program are defined in the unique Payload Integration Agreement. These may include but are not limited to: management roles and responsibilities; flight and ground safety requirements; interface design requirements; verification and testing requirements; operational requirements; launch/landing site processing requirements; resource and interface commitments.

FORMAT: Per SSP 50010-01, Documentation Requirements, Standards and Guidelines.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Next revision as required.

Frequency Of Submission: Once with updates as required to maintain agreements and requirements for the payload life cycle.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: EXPRESS and WOLF Integration Agreements will be developed within the Payload Data Library.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Element Level and Truss Level Payload Engineering Analysis Reports	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-14	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	6. Use (Define need for, intended use of, and/or anticipated results of data) This report is used to demonstrate US Lab, CAM, and truss element level payload compatibility.		5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.3.3.3		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR describes the results of the integrated payload and ISS system compatibility analyses performed for each stage for the US Lab, CAM, and truss segments. This report does not describe the compatibility of the JEM or APM, nor the initial flight and stage of the CAM which is NASDA's responsibility. This DR is submitted for each stage covering all payloads operating in the US Lab, CAM, and truss segments.

CONTENT: The analyses may include:

- electrical power system availability and channelization
- active thermal control availability and channelization
- payload electrical power stability
- command and data handling
- communications and tracking
- vacuum exhaust and resource
- environmental control and life support
- acoustics
- human factors
- EVR/EVA
- translation paths (EVA/IVA)

FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: For planning purposes only L-5 weeks for each stage. However, the actual delivery dates of the products are driven by payload developers schedule as negotiated real time for each stage with NASA/OZ office.

Frequency Of Submission: Updated for each increment and each stage.
Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: ISS Level Payload Engineering Integration Reports	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-15	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	7. Use (Define need for, intended use of, and/or anticipated results of data) This DR is used to document the results of the ISS level payload complement compatibility analyses performed by the PEI contractor.		5. DRD Category X Technical __Administrative __SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.3.3.4		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR describes the results of the ISS level payload complement compatibility analyses performed by the PEI contractor. This DR is submitted for each stage.

CONTENT: The analyses may include:

- electrical power availability and channelization
- active thermal control availability and channelization
- command and data handling (US Lab, CAM, and extended into JEM & APM)
- communications and tracking (Integrated payload using USOS downlink)
- environmental control and life support
- external contamination

FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: For planning purposes only L-5 weeks for each stage.

However, the actual delivery dates of the products are driven by payload developers schedule as negotiated real time for each stage with NASA/OZ office.

Frequency Of Submission: Update for each stage as required.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload Unique Hardware Interface Control Documents 1b. Data Type: 1	2. Date of Current Version 05/22/07	3a. DRD No. F-PA-16	3b. RFP/Contract No. NAS15-10000 Modification 1430
8. Use (Define need for, intended use of, and/or anticipated results of data) This DR documents unique payload hardware interfaces.			5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.2.1.23		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: The payload specific ICD and verification applicability will contain specific design and verification requirements applicable to an individual payload/experiment relating to interface compatibility and safety, which must be complied with for transportation and subsequent integration into the appropriate ISS accommodations. This DR includes all pressurized payloads (facility class and non-rack mounted), payloads to be integrated into an EXPRESS rack or onto an EXPRESS Logistics Carrier, WOLF payloads, and all attached payloads. This DR also includes the integrated EXPRESS rack or Logistics Carrier being integrated into US payload accommodations, to include IP modules/elements and the EXPRESS Transportation Rack.

CONTENT: This DR will contain (1) the payload unique ICD which defines, by discipline, the payload to ISS or EXPRESS facility hardware interfaces representing the as-built (or as-designed) hardware in order to ensure payload interface compatibility for integration into the ISS or EXPRESS facility; (2) the integrated payload rack unique verification applicability matrix which describes the verification requirements associated with each design requirement identified in the ICD and establishes verification methods and data requirements which must be performed and supplied to ensure interface compatibility and safety.

FORMAT: Per SSP 50010-01, Documentation Requirements, Standards and Guidelines.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Final baseline delivery for each payload is L-18 months of manifested flight. However, actual delivery dates of the products are driven by the payload developer schedule as negotiated for each flight with the NASA/OZ office.
Frequency Of Submission: One time for each hardware ICD, with updates as required to support payload and program milestones.
Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: This document will be updated either by the IRN process or document revisions in accordance with SSP 41170.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Unique Payload Software Interface Control Documents	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-17	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 1	9. Use (Define need for, intended use of, and/or anticipated results of data) This DR is used as an agreement between a rack or truss level payload integrator and the ISS Program of the payload to ISS software interface implementation. This payload specific data package will document the interface, safety, and verification requirements between the payload and the ISS program necessary for transportation to and subsequent integration into the ISS.		5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.4.1.2		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR provides the rack to ISS software interface implementation data. It also provides documentation of the payload implementation of the interface. This DR is developed jointly with the rack or truss level payload integrator. This DR is not used for sub-rack or EXPRESS payloads. This DR does not describe IP specific software interfaces. The payload specific ICD contain specific design and verification requirements applicable to an individual payload/experiment relating to interface compatibility and safety, which must be complied with for transportation and subsequent integration into the appropriate ISS accommodations.

CONTENT: This data package will contain: The payload unique ICD which defines, payload design requirements to be met in order to certify payload interface and safety for transportation to and integration into the ISS.

FORMAT: Per SSP 50010-01, Documentation Requirements, Standards and Guidelines.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Completed under previous contract.

Frequency Of Submission: One time for each hardware ICD with updates as required to support payload and program milestones.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: This document will be updated either by the IRN process or document revisions in accordance with SSP 41170.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload Operations Guidelines and Constraints Document 1b. Data Type: 3	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-19	3b. RFP/Contract No. NAS15-10000
10. Use (Define need for, intended use of, and/or anticipated results of data) This DR is used by the Payload Operations Integration Function (POIF) in planning and executing payload operations.			5. DRD Category X Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.3.3.5		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR provides guidelines and constraints for payloads operations on the ISS.

This document identifies operational guidelines and constraints for US payloads at the EXPRESS rack level, element level (US Lab, CAM, MPLM, and truss) and ISS level.

CONTENT: This DR provides guidelines and constraints for payloads operations on the ISS.

All-Flights Payload Operation Guidelines and Constraints

This DR contains guidelines and constraints that remain the same for multiple stages in the following areas:

- electrical power system
- thermal conditioning system
- command and data handling
- communications and tracking
- vacuum exhaust and resource
- environmental control and life support
- acoustics
- structures
- fields of view
- EVR/EVA

Translation paths (EVA and IVA)

Stage–Unique Payload Operation Guidelines and Constraints

This DR is submitted for each stage and contains updated guidelines and constraints in the following areas:

- electrical power system
- thermal conditioning system
- command and data handling
- communications and tracking
- vacuum exhaust and resource
- environmental control and life support
- acoustics
- structures
- fields of view
- EVR/EVA

Translation paths (EVA and IVA)

FORMAT: Contractor format is acceptable.

9. OPR: OZ

10. FIRST SUBMISSION DATE: For planning purposes, the All-flights GL&C first submittal is targeted for January, 2004 and the stage unique document is targeted for 14P. However, the actual delivery dates of the products are driven by payload developers schedule as negotiated real time for each stage with NASA/OZ office.

Frequency Of Submission: Stage Unique documents : Update for each stage or as required; All-Flights document: Update semi-annually or as required.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system.

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Verification Reports	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-20	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	11. Use (Define need for, intended use of, and/or anticipated results of data) This DR is used to demonstrate that each rack and truss level payload has been certified as meeting all verification requirements in the Pressurized Payloads and Attached Payload IRDs and forms the basis for the CoFR Endorsement. This DR is submitted for each stage and covers all USOS payloads manifested for that stage. This DR is also used to demonstrate that the element and ISS level analysis has been successfully completed for each stage (as required by DR F-PA-14 and F-PA-15).		5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.3.2.5		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR establishes the content, format, maintenance, and submittal requirement for the verification report. This report will include the qualification and acceptance assessment and test for payload components, subsystems, and the systems verification activities.

CONTENT: The Payload Engineering Verification Reports shall contain the following:

Status of each Unique Payload's Verification (traceable to unique PVP)

Status of Element Level Verification (traceable to PVPP)

Status of ISS Level Verification (traceable to PVPP)

Status of Requirements Change Assessment Report (RCAR) submittal

FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. **FIRST SUBMISSION DATE:** For planning purposes, the submittal is targeted at L-5 weeks. However, the actual delivery dates of the products are driven by payload developers schedule as negotiated real time for each stage with NASA/OZ office.

Frequency Of Submission: Final submitted for each stage.

Additional Submissions: None.

11. **MAINTENANCE:** Single submittal per stage.

12. **COPIES/DISTRIBUTION:** NASA Data Management electronically using EDMS or follow-on system

13. **REMARKS:** None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Configuration Layout/Interface Schematics	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-21	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	12. Use (Define need for, intended use of, and/or anticipated results of data) Integrated System Schematics: To provide the results of integration of payload drawings and schematics for EXPRESS/WORF, payloads, the ELC and the integrated USL Payload Complement. These schematics will be used for on-orbit malfunction troubleshooting. Payload Stage Configuration Layout - To define the USL, the ELC Payload Hardware configuration and Truss Payload Hardware configuration and by the payload operations, mission operations and training teams as familiarization of the payload complement layout for each stage. EXPRESS/WORF Payload Assembly and Installation Drawings: To use in the physical integration, installation and checkout of EXPRESS/WORF payloads		5. DRD Category X Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.0		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: Integrated System Schematics - The contractor shall develop integrated schematic drawings for all U.S. elements containing payload hardware and for the EXPRESS rack subsystems. The schematics will be a one-time delivery and will only be updated if the US Lab or EXPRESS Rack subsystems are modified.

Payload Stage Configuration Layout - This DR provides the on-orbit payload complement layout. This DR is submitted for each stage. This DR includes a description of each EXPRESS, WORF, USOS rack, truss level, and ELC payload, locations of the payload on the rack and ELC, US Lab module payload rack and aisle layout drawings, and truss payload layout drawings for the S3 and P3 attach sites. IPs/Partner's layout drawings for bartered payloads into the US Lab are provided by the IPs for incorporation into this DR.

EXPRESS/WORF Payload Assembly and Installation Drawings – This DR defines the requirements for the assembly and installation of the EXPRESS/WORF payloads into the EXPRESS/WORF racks for On-Orbit and MPLM installations.

CONTENT: Integrated System Schematics - The following products shall be delivered once. The schematics will be updated if the US Lab or EXPRESS rack subsystems are modified.

Document Title: Payload Interface Schematics

The contractor shall develop payload interface and configuration schematics for the US Lab and EXPRESS Racks, to include:

- Command and data handling
- Electrical
- Fluids and gases
- Utility Outlet Panels
- Communication and tracking
- Vacuum system

Payload Stage Configuration Layout - This includes a description of each EXPRESS, WOLF, USOS rack, truss level, and ELC payload, locations of the payload on the rack and ELC, US Lab module payload rack and aisle layout drawings, and truss payload layout drawings for the S3 and P3 attach sites. IPs/Partner's layout drawings for bartered payloads into the US Lab are provided by the IPs for incorporation into this DR.

Drawings will include a parts list down to the level of the On-Orbit Replacement Units (ORU) that can affect interface compatibility. Input to this DR for the applicable Payloads will be obtained from the Configuration Data Set in the Payload Data Library (PDL).

Document Title: Payload Configuration Layout Drawings

The contractor shall develop payload configuration layout drawings, which include the following:

- U.S. elements payload complement layout
- U.S. truss complement layout
- Static/dynamic envelopes

Payload Assembly and Installation Drawings: The contractor shall develop payload assembly and installation drawings for use in physical integration, installation and checkout of EXPRESS/WORF payloads.

FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: For planning purposes, the submittal is targeted at L-6 months. However, the actual delivery dates of the products are driven by payload developers schedule as negotiated real time for each stage with NASA/OZ office.

Frequency Of Submission: Update for each stage as required.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION:

- (a) Hard copy and CD to MSFC/POIF-for the US Lab and Truss Layout/Schematic
- (b) Hard copy to NASA EXPRESS/WORF Chief Engineer, MSFC/POIF, and KSC Configuration Management (Boeing)/Utilization (NASA) for the EXPRESS/WORF Rack Layouts/Schematics
- (c) Program authorized electronic library (VMDB)
- (d) Payload Data Library (PDL)
- (e) NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Increment Capability Reports	2. Date of Current Version 10/01/05	3a. DRD No. F-PA-27	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	13. Use (Define need for, intended use of, and/or anticipated results of data) This DR is used to document the anticipated ISS resources available for payload use during a given increment. The information may be used by NASA and the International Partners for planning payload activities in their respective laboratory elements and the truss.		5. DRD Category X Technical ___Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.3.3.6		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR describes the results of the ISS level analysis of major subsystems to define resources available during a given increment. This DR is submitted for each increment.

CONTENT: The analyses may include:

- electrical power availability and channelization
- active thermal control availability and channelization
- command and data handling (USOS busses in USL, truss, CAM, and extended into JEM and APM only)
- communications and tracking (USOS downlink capability only)
- environmental control and life support

FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Generically at I-12 months. However, the actual delivery dates of the products are driven by payload developers schedule as negotiated real time for each stage with NASA/OZ office.

Frequency Of Submission: Final submitted for each increment. No updates required.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Workforce Reports 1b. Data Type: 3	2. Date of Current Version 12/14/09	3a. DRD No. F-PC-03	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) The semi-annual report is used by the LA organization to provide workforce information to senior center management. The supplemental report is used by NASA Headquarters to support congressional inquiries.			5. DRD Category ___ Technical X Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW 1.2.3.3		7. Interrelationships (e.g., with other DRDs) All PC and PM DRDs	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The reports provide workforce data by geographic location. There are two types of reports: 1) a Semi-Annual Workforce Report by location, and 2) a supplemental Workforce Report.

CONTENT: The semi-Annual workforce report should provide Equivalent Personnel (EPs) by location, specifically on or near site (JSC), and by State for workforce outside of the Houston area. The report shall include contract labor and subcontract labor. The data should be reconcilable to other financial deliverables. The content and frequency of the supplemental Workforce Report may vary based on specific direction provided by NASA Headquarters to support congressional inquiries. Its most common form is an annual request to provide workforce data by state, congressional district, or Zip Code.

FORMAT: Semi-Annual submissions: The contractor format is acceptable.

Supplemental Submissions: Specific formatting will be mutually agreed upon by the Contractor and NASA.

9. OPR: OH

10. FIRST SUBMISSION DATE: Ten (10) Workdays after initial month end

Frequency Of Submission:

Semi-Annual Submission: Ten (10) workdays after period end.

Supplemental Submissions: The submission date for supplemental reports will be mutually agreed upon by the Contractor and NASA.

Additional Submissions:

11. MAINTENANCE: Document will be maintained electronically. Changes shall be incorporated by change page or complete re-issue..

12. COPIES/DISTRIBUTION:

(electronic): 1 copy to LO

1 copy to OH

1 copy to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Work Breakdown Structure (WBS) and Dictionary 1b. Data Type: 1	2. Date of Current Version 3/8/11	3a. DRD No. F-PC-04	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) Provides framework to define work and to establish financial reporting levels and to correlate schedules.			5. DRD Category <input type="checkbox"/> Technical <input checked="" type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
6. References (SOW, Clause, etc.) SOW 1.2.3.4		7. Interrelationships (e.g., with other DRDs) All PC and PM DRDs	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Contains the contractual Work Breakdown Structure (WBS), the WBS Dictionary, and a map to the ISS Program WBS.

CONTENT: Contains the contractual WBS, the corresponding dictionary, Program map, and specific requirements as follows:

- a. WBS: The WBS shall subdivide the total contracted effort into elements that serve as the basis for detailed planning and control of the project, and permit collection of cost and schedule data at element level. These elements include hardware, software, services, tasks, etc. It shall include all subcontracting and major procurement effort at the proper level. It shall be product oriented and structured so that key SOW tasks are at an appropriately high level.
- b. WBS Dictionary: The WBS Dictionary shall define the scope of each WBS element and narratively describe the tasks included in each element
- c. Program WBS Map: The contractor shall provide a mapping of the contract WBS to the ISS Program WBS.
- d. Specific requirements: Integration and Operations (I&O) discrete tasks considered to be “modifications” (not baseline sustaining) shall be reported in WBS 8.0, “Modifications”. Categorization of an I&O discrete task as WBS 5.0 or WBS 8.0 should be agreed to by NASA and Boeing. In general, scope to be reported under WBS 8.0 will meet the following criteria:
 - Hardware or new software CSCIs to be delivered
 - DIL (DD250)
 - GFE (1149)

- Test Support Equipment (TSE)
- Flight Support Equipment (FSE)
- Discrete analysis, integration task, test, study, etc.

All discrete modification effort will go into 8.X unless approved by the NASA COTR. International Travel budget will be distributed to the prime teams's WBS 7.X or 8.X per the PIO or SSCN.

FORMAT: Per JSC instructions and in a format supported by the program-authorized electronic library. The WBS shall be in a chart format showing element relationships. The WBS Dictionary shall be ordered in consonance with the WBS and shall reference each WBS element by its identifier and name. Specific formatting for the map to the Program WBS will be done by LO/contractor.

9. OPR: OH

10. FIRST SUBMISSION DATE: Draft with initial proposal. Baseline submission within thirty (30) operating days after contract start date.

Frequency of Submission: Update as required.

Additional Submissions:

11. MAINTENANCE: Document will be maintained electronically. Information shall be updated as required by the contractor.

12. COPIES/DISTRIBUTION:

(hard copy): 2 copies to LO

1 copy to OH

1 copy OH/Data Management

(electronic): 1 copy to LO

1 copy to OH

1 copy Contracting Officer's Technical Representative (COTR)

1 copy to the Contracting Officer

1 copy to a Program authorized repository (EDMS or equivalent)

13. REMARKS: NONE

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Management Plan	2. Date of Current Version 01/01/04	3a. DRD No. F-PM-01	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 1			
4. Use (Define need for, intended use of, and/or anticipated results of data) To describe the contractor's management organization, approach and systems.			5. DRD Category ___ Technical _x Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 1.1.1.1		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The Management Plan shall describe the basis for the contractor management organization, approach and systems. It shall provide a comprehensive integration of all management systems of the contractor, subcontractors, and major vendors. The systems will include those specifically required to accomplish the Statement of Work, as well as those systems and procedures that are to be set in place by the contractor.

CONTENT: The Management Plan shall address the contractor's plans for work definition and authorization, scheduling, budgeting, data accumulation, Safety and Mission Assurance, risk management, subcontract/material control, indirect cost management, baseline control, and organization structure.

The following issues should also be addressed:

1. A discussion of the new processes/procedures, which will be employed to increase efficiencies on the contract.
2. How the contractor plans to utilize Associate Contractor Agreements to ensure contractual requirements are fulfilled. (Reference clause in section H)
3. A discussion of how new requirements will be fulfilled under this contract. New requirements refer to requirements, which were not being performed under NAS 15-10000 but will be performed under this contract extension.
4. The contractor shall discuss its approach for assessing contract performance. What metrics will be utilized by Boeing Management to monitor performance on this contract? The contractor shall provide the rationale to demonstrate the appropriateness and effectiveness of its proposed assessment approach.

FORMAT: Contractor format is acceptable.

- 9. OPR:** BG/Contracting Officer
Contracting Officer's Technical Representative (COTR)

10. FIRST SUBMISSION DATE: With initial proposal

Frequency Of Submission:

- As necessary to describe and justify major changes in the contractor's management organization, approach and/or systems.
- Within 45 days after the addition/deletion of major content to the contract which is mutually agreed to by the parties.

11. MAINTENANCE: Changes shall be incorporated as required by complete reissue.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Integrated Management Review Products 1b. Data Type: 3	2. Date of Current Version 10/01/10	3a. DRD No. F-PM-02	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) These packages support the monthly management reviews of costs, schedule, and technical performance. The format provides a standardized approach for review materials.			5. DRD Category <input checked="" type="checkbox"/> Technical <input type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 1.1.1.2 NPG 7120.5A and NG 9501.2D		7. Interrelationships (e.g., with other DRDs) All PC and PM DRDs	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: These data packages document the monthly and quarterly integrated management reviews of the cost, schedule, and technical performance on the contract. The data provided per the requirements of this DRD should reconcile with the data provided per the requirements of DRD PC27 (Contractor Financial Management Report (533M), and PC-06. This DRD shall be delivered monthly for work in WBS 7.0 and 8.0 (spares and modifications) and shall be delivered quarterly for I&O (WBS 5.0).

CONTENT: These packages support the monthly and quarterly management reviews of cost, schedule, and technical performance. The metrics shall be developed and defined by the contractor with concurrence from the Government. These metrics shall provide linkage to Program level metrics in the Management Information System. Metrics that effectively indicate the level of success in the execution of contract requirements and the status of the contractor's achievement against the performance standards contained within this statement of work or elsewhere in this contract shall be presented at the program review. The format provides a standardized approach for review materials.

The Monthly and Quarterly Integrated Review package:

Summary Section:

- Status of fiscal year Program cost (budget and actuals/forecast), staffing (plan and actuals/forecast), management reserve, undistributed budget, risks and opportunities, schedule, and technical performance.

- Cumulative variance explanations (to fiscal year plan) and End-Of-Year trend variance explanations.
- Major Contract Milestone Schedule

Component Sections (done at major element/organization/subsystem level)

Include all Summary Section items.

- Budget and forecast trace (*shall be provided for all WBS's by subsystem level*)
- I&O Sustaining Task Status and associated metrics: Should include a status to the baselined work plan on work accomplished vs. planned, work not completed or delayed, and major work to be completed in the next 90 days. Status should contain detail sufficient for NASA to understand progress of completing work plan.
- Project status and schedule for projects (I&O Modifications, OPD, and Spares) less than \$5M: major milestones and progress toward milestone completion..
- Project status and schedule for projects (I&O Modifications, OPD, and Spares) greater than \$5M. This value includes the entire project regardless of fiscal year expenditures. This should include metrics showing actual work completed vs. work scheduled to be completed and actual cost expended vs. cost budgeted for work.
- DIL Status
- IMP/IMS Spotlight Schedule

FORMAT: Specific formatting to be tailored by NASA/contractor

9. OPR: OH

- 10. FIRST SUBMISSION DATE:** The first Monthly input should support a review 20 working days after the initial financial month end.

Frequency Of Submission: Monthly for spares and modifications (WBs 7.0 and 8.0)
Quarterly for I&O (WBS 5.0): October-December data, January-March data, April-June data,
July-September data

Additional Submissions:

- 11. MAINTENANCE:** Changes shall be incorporated as required by change page or complete reissue.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management
8 copies LO
1 copy LW
1 copy OH
1 copy Contracting Officer's Representative (COTR)

1 electronic copy: to a Program authorized repository (EDMS or equivalent)
1 copy to LO
1 copy to LW
1 copy to OH
1 copy to Contracting Officer's Technical Representative (COTR)
1 copy to BG/Contracting Officer
1 copy to OC/Boeing Contract Monitor

13. REMARKS: None

**DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)**

1a. DRD Title: Socio-Economic Subcontract Reporting 1b. Data Type: 2	2. Date of Current Version 03/01/06	3a. DRD No. F-PM-03	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To report contractor's efforts and progress toward meeting the contractor's socio-economic goals established in Clause G-17 of the subject contract.			5. DRD Category ___ Technical _x Administrative ___ SR&QA
6. References (SOW, Clause, etc.) <i>G.17 SOCIO-ECONOMIC SUBCONTRACTING GOALS</i> NFS 1852.219-76 NASA 8 Percent Goal		7. Interrelationships (e.g., with other DRDs) F-PM-04	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: To document contract and subcontractor efforts and progress to foster subcontracting opportunities for small, small disadvantaged, and women-owned small businesses.

CONTENT:

a) Metrics - The report shall provide the contractor's metrics providing actual expenditures for the preceding quarter and the current fiscal year, inclusive of lower-tier subcontractor actuals. Breakdown will include metrics by category as indicated in clause G.17.

b) Reporting of actions taken and a description of efforts expended by contractor and subcontractors toward enhancing small business, small disadvantaged business, and women-owned business utilization.

FORMAT: Contractor format is acceptable.

9. OPR: BG

10. FIRST SUBMISSION DATE: April 30, 2004

Frequency Of Submission: Quarterly submissions for January 1st – March 31st and July 1st – September 30th are due no later than the 21st day after the close of the quarter. Quarterly submissions for April 1st – June 30th and October 1st – December 31st are due no later than the 30th day after the close of the quarter.

11. MAINTENANCE: Changes shall be incorporated as required by change page or complete reissue.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)
1 copy to Contracting Officer

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Subcontracting Plan	2. Date of Current Version 01/01/04	3a. DRD No. F-PM-04	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 1			
4. Use (Define need for, intended use of, and/or anticipated results of data) To update the contractor's subcontracting plan in accordance with FAR 19.702(a)(1). The government will review the plan to verify compliance with the FAR.			5. DRD Category ___ Technical x Administrative ___ SR&QA
6. References (SOW, Clause, etc.) Clause 52.219-9		7. Interrelationships (e.g., with other DRDs) SF 294 submissions	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: To document contract and subcontract efforts to foster subcontracting opportunities for all socio-economic small businesses.

CONTENT: The contents of the revised subcontracting plan shall be in accordance with paragraph (d) of FAR clause 52.219-9.

FORMAT: Contractor format is acceptable.

9. OPR: BG

10. FIRST SUBMISSION DATE: Submit with initial proposal

Frequency Of Submission: Semiannually on February 1st and August 1st of each year. The revision submitted on February 1st shall incorporate all reportable actions from July 1st to December 31st of the previous year. The revision submitted on August 1st shall incorporate all reportable actions from January 1st to June 30th of the present year. A reportable action is defined as a modification to this contract which increases the contract value by greater than \$500,000.

Any individual change valued at over \$50 Million requires an update to the plan. Any outstanding modifications shall be rolled into the plan at that time (not waiting for the six month interval).

11. MAINTENANCE: Changes shall be incorporated as required by change page or complete reissue.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)
1 copy to Contracting Officer

13. REMARKS: No submission is required on February 1, 2004

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Data Accession List	2. Date of Current Version 03/16/2004	3a. DRD No. F-PM-07	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 3			
4. Use (Define need for, intended use of, and/or anticipated results of data) To provide an index of data that is available on request. It is a medium for identifying contract internal data, which has been generated by the contractor in compliance with the work effort described in the statement of work and other contract requirements.			5. DRD Category <input type="checkbox"/> Technical <input checked="" type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
6. References (SOW, Clause, etc.) All SOW Paragraphs Clause H. 43 ACCESS TO CONTRACTOR DATA		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The Data Accession List shall be a cumulative listing of all contractor-generated documentation including drawings. The Data Accession List serves as a medium for identifying internally released data, which has been generated by the Contractor and his Subcontractors/Suppliers in compliance with the work effort described in the Statement of Work.

CONTENT: The Data Accession List shall provide a listing of all data requirement documentation plus other project-pertinent documents. The format and content of this list shall be prepared by the contractor to document compliance with the statement of work and other contract requirements. The list shall be a cumulative listing of contractor-generated documentation generated to date, data released during the past quarter, and data submitted to NASA. The list shall include the related document number, title, date, and revision.

FORMAT: On-line access to the data listing can be provided in lieu of hard copy listings.

9. OPR: OH

10. FIRST SUBMISSION DATE: **Quarterly Delivery** - April 15, 2004
Annual Delivery – October 15, 2004

Frequency Of Submission: Quarterly update shall be a complete new submittal incorporating all data into a consolidated listing delivered electronically only. Annual delivery shall include both electronic and hardcopy.

11. MAINTENANCE: Changes shall be incorporated as a complete reissue.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy) - Annually: OH/Data Management
1 electronic copy - Quarterly: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Property Reporting with Element Pricing Methodology 1b. Data Type: 3	2. Date of Current Version 10/01/10	3a. DRD No. F-PM-08	3b. RFP/Contract No. NAS 15-10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To report NASA Property in the custody of contractors per the (3) reporting types		5. DRD Category ___ Technical <u> x </u> Administrative ___ SR&QA	
6. References (SOW, Clause, etc.) 1) Procurement Information Circular (PIC) 04-12* 2) NASA FAR Supplement 1845.7101 3) ISS Major Element Values 4) Clause H.52		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

- SCOPE:**
- 1) Quarterly reporting shall be in compliance with NASA PIC 03-14, 04-12* and additional requirement for the 1st tier subcontractors.
 - 2) Annual reporting shall be in compliance with NASA FAR Supplement Subpart 1845.7101.
 - 3) ISS Major Element Values

CONTENT:

STANDARDS FOR ALL REPORTS

- A. Acquisition costs shall be developed using actual costs to the greater extent possible, especially costs directly related to fabrication such as labor and materials. Where estimates are used, there must be a documented basis. Supporting documentation shall be maintained and available for all amounts reported.
- B. Items that are considered obsolete in the plant clearance cycle or heritage assets must be reported separately. Obsolete property is property for which there are no current plans for use in their intended purpose. Examples of obsolete property are items in configurations which are no longer required or used by NASA or items held for engineering evaluation purposes only. NASA may have approved the retention of these items for programmatic reasons even though they have no current plans to be used.

1) QUARTERLY PROPERTY FINANCIAL REPORTS -The quarterly report shall be submitted using the format described in the Contractor-Held Asset Tracking System (CHATS) User's Manual. Contractors shall report all NASA-owned property in US dollars (regardless of the location) to include: real property and equipment, special test equipment, special tooling, agency peculiar property greater or equal to \$100,000, and material and contract work in process of any value in their possession (including subcontractors). Negative reports are required.

2) ANNUAL REPORTS - provides financial data on government-furnished and contractor-acquired property to which NASA has title. Contractors shall report all NASA-owned property in US dollars (regardless of the location), to include: real property and equipment, special test equipment, special tooling, agency peculiar property, and material and contract work in process regardless of cost (including subcontractors). Negative reports are required. This reporting shall be completed in accordance with the NASA FAR Supplement Subpart 1845.7101 and any supplemental guidance provided by the contracting officer.

3) ISS MAJOR ELEMENT VALUES REPORTS - provide ISS major elements property (Airlock, FGB, Lab, Node 1, P1, P3, P4, P5, P6, PMA 1, PMA 2, PMA 3, S0, S1, S3, S4, S5, S6, Z1, Subsystems, and Mission Software) estimated value for the purpose of NASA HQ FMD financial reporting and subsequent depreciation of Government-owned ISS.

9. FORMAT:

- 1) **Quarterly Property Financial Report**—The quarterly report shall be submitted electronically into CHATS using the format described in the CHATS User's Manual.
- 2) **Annual Report**—NASA Form 1018
- 3) **ISS Major Element Values Report**—Agreed to by Contractor and NASA using the Element methodology outlined within the element pricing package.

10. OPR: BG

11. FIRST SUBMISSION DATE:

- 1) **Quarterly Property Financial Report:**
 - Due 7/21 for period ending 6/30
 - Due 10/15 for period ending 9/30
 - Due 1/21 for period ending 12/30
 - Due 4/21 for period ending 3/31
- 2) **Annual Report:** Due 11/30
- 3) **ISS Major Element Values Report:** Submit along with each quarterly and annual report

12. MAINTENANCE: Revisions shall be incorporated by change page or complete reissue.

13. COPIES/DISTRIBUTION:

- 1) **Quarterly Property Financial Report:**
 - a. Submit electronically into CHATS at <http://nasachats.gsfc.nasa.gov> and to the NASA JSC Property Administrator
 - b. 1 hardcopy to the PCO
- 2) **Annual Report:**
 - a. Submit electronically through the NASA Form 1018 Electronic Submission System (NESS)
 - b. 1 hardcopy to PCO
- 3) **ISS Major Element Values Report:**
 - a. Submit electronically along with each quarterly and annual report (submit to the NASA Contract Property E-mail address as CHATS nor NESS can currently support attachments of this size)
 - b. 1 soft (electronic) copy to PCO

14. REMARKS: None

***Although PIC 04-12 requires monthly reporting, the NASA ISS Program has not yet given authorization to implement the monthly submission. Until such time, please deliver as described within the body of this DRD.**

DATA REQUIREMENTS DESCRIPTION

(Based on JSC-STD-123)

1a. DRD Title: SOW Evidence of Completion Matrix 1b. Data Type: 1	2. Date of Current Version 10/14/05	3a. DRD No. F-PM-09	3b. RFP/Contract No. NAS 15-10000
4. Use (Define need for, intended use of, and/or anticipated results of data) To provide closure criteria for each paragraph of the Statement of Work			5. DRD Category <input type="checkbox"/> Technical <input checked="" type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
6. References (SOW, Clause, etc.) Clauses H.37 and H.51		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The contractor shall provide a matrix defining completion criteria for each numbered paragraph of the statement of work.

CONTENT: This document shall identify the completion requirements for each numbered statement of work paragraph. Completion requirements shall be identified within the matrix in terms of products, events or time period. Paragraphs within the matrix will be categorized as I&O, DDT&E, OPD and/or Spares. Updates to the Evidence of Completion Matrix will be made in response to approved supplemental agreements and Work Plan Revision Requests (WPRRs) compiled and submitted on an annual basis.

FORMAT: The specific format of the document (e.g. Microsoft Word, Excel, etc.) shall be mutually agreed to between the parties and shall be compatible with the Program authorized repository

9. OPR: BG

10. FIRST SUBMISSION DATE: March 30, 2004 for the baseline submission

Frequency Of Submission: Baseline plus annually on the 1st of September

Additional Submissions: None.

11. MAINTENANCE: The document shall be maintained electronically.

12. COPIES/DISTRIBUTION:

Electronic copy: to a Program authorized repository (EDMS or equivalent)

Contracting Officer/BG

COTR/OA

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Certification Baseline Documents and Supporting Documentation 1b. Data Type: 3	2. Date of Current Version Various	3a. DRD No. F-PM-10	3b. RFP/Contract No. NAS 15-10000
4. Use (Define need for, intended use of, and/or anticipated results of data) The Certification Baseline document will define the certified performance for the ORUs and document agreements to operate outside of the defined parameters used in CoFR analysis. In addition, the Certification Baseline document will summarize the analyses performed for extending the operational lifetime of the ISS until 2028.			5. DRD Category x Technical — Administrative — SR&QA
6. References SOW paragraph :3.2.2.3.4		7. Interrelationships (e.g., with other DRDs) PC08 – Acceptance Data Packages VE32- Vehicle Engineering Data	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE:

This DR establishes the content, format, maintenance, and submittal requirements for the Certification Baseline Document. The products of this DRD are:

- Volume 1, SSP 50699-01 (ORUs only)
- Volume 2, SSP 50699-02 (ORUs only)
- Templates (flat files) (ORUs only)
- Supporting Documentation (ORUs only) – all supporting documentation referenced in templates, which has not been previously delivered to the authorized Program repository. (ORUs only)
- Volume 4, SSP 50699-04 (ISS Lifetime Extension)

CONTENT:

a) Volume 1, SSP 50699-01

Volume 1, SSP 50699-01, shall describe the performance design capabilities of USOS ORUs.

The ORU portion of Volume 1 shall compile the performance, environment, and physical constraints of the ORU as identified in the corresponding ATP/41172 data. Common to each ORU will be the main data information for Performance, Environment and Physical characteristics. One additional “Other” category will serve as means to cover some peculiar aspect of an ORU, which may fall outside of the aforementioned headings. For "Performance", depending on the ORU type, categories would include:

1. Power Consumption
2. Electrical Power
3. Resistance
4. Impedance
5. Current
6. Gain
7. Torque
8. Force
9. Closure Cycles
10. External Leakage
11. Internal Leakage
12. Command Response Time
13. Operating Pressure
14. Temperature (Operational Set Point)
15. Deployment Speed
16. Cable Length
17. Cable Tension
18. Displacement
19. Other

For "Environments" typical categories are:

1. Temperature (Thermal Cycling)
2. Thermal Vacuum
3. Vibration in the x, y, z axis
4. Acoustics
5. Leakage
6. Oxygen Compatibility (For O2 ORUs)
7. Burn-In
8. Corona
9. Depress/Repress
10. Pyro-Shock
11. EMI/EMC
12. Pressure

Items 9 - 11 are performed during the qualification phase of the ORU as noted per SSP 41172.

For "Physical", the weight of the ORU is identified.

For each of the above categories, the limit values are entered in the "Data" column as established per applicable Acceptance Test Procedure(s) (ATP). That is max and/or min values with corresponding units. The method and ATP (current version) in which these limits may be found are entered in the last two columns of the table.

Figure 8.2.1-1. Sample ORU template:

Flight: 7A Nomenclature: ORU NAME Boeing P/N: 683-XXXX-1, -2
System: ECLSS Vendor P/N: BXXXXX-1, -3
Subsystem: ACS Supplier: Name here

Specification Requirements	Data Per ATP	Verification	
		Method	ATP
Performance			
Electrical Power	Voltage: 120 +6/-7 Vdc	T	
Operating Pressure	Max. 3400 psig	T	CRA-1385, Rev. C
	Min. 0 psig		
	Proof 5100 psig		
Closure Cycles	Min. 100 Cycles	T	CRA-1385, Rev. C
	Performed Burn -In @ 3450 psig		
External Leakage	Max. 1 x 10 ⁻³ scc/sec He	T	CRA-1385, Rev. C
	Min. NS scc/sec He		
Internal Leakage	Max. 2.5 x 10 ⁻⁴ scc/sec He		CRA-1385, Rev. C
	Min. NS scc/sec He		
Command Reponse Time	Open 1 to 2.5 sec	T	CRA-1385, Rev. C
	Close 1 to 1.5 sec		
Environmental			
Temperature	Max. 85 °F		CRA-1385, Rev. C
	Min. -40 °F		
	8 °F		
Depress/ RePress	Max. 12 psia	T	Ref Vendor Ltr dated 9/8/99
	Min. 5.5 psia		available
	Rate 1.0 to 0.01 psi/sec		
Vibration	Freq. Range	Min PSD	T
	20-2000	0.01 G ² /Hz	CRA-1385, Rev. C
	20-200	3dB/oct	
	80-350	0.05 G ² /Hz	
	350-2000	-3dB/oct	
	2000	0.007 G ² /Hz	
Overall: 6.1 grms duration: 1 minute in each axis			
EMC	Designed to be electromagnetically compatible with itself and with all interfacing equipment	A	N/A
Corona	Designed to preclude damaging or destructive corona in any ISS operating environment	A	N/A
Physical			
Weight	Max. ≤ 5 lb	T	CRA-1385, Rev. C
Reliability			
Storage Life	10 yrs	A	N/A

Method = A - Analysis; N/A - Not Applicable; NS - Not Specified; T - Test;
ATP = Acceptance Test Procedure

b) Volume 2: SSP 50699-02

Volume 2, SSP 50699-02, shall describe the ISS Program agreements and supporting rationale to operate the ISS ORUs outside the values identified in Volume 1.

c) Templates (flat files)

Individual Excel spreadsheet templates used to document the parameters for each ORU as individual flat files; one flat file for each completed template

d) Supporting Documentation

Supporting documentation referenced in the templates that has not been previously delivered into the ISS authorized Program repository.

e) Volume 4: SSP 50699-04

Volume 4, SSP 50699-04, shall describe the overall ISS Program plan regarding the extension of the ISS operational lifetime until 2028. The document will summarize and reference completed analysis reports, summarize issues identified from the analysis, and the program disposition of those issues relative to ISS lifetime extension. This document will be used as objective evidence for flight certification (CoFR) after the certified operational lifetime for ISS elements have expired based on launch date.

FORMAT:

- a) Volume 1, SSP 50699-01 –
This document shall be delivered in the Contractor's format compatible with the ISS Program Electronic repository.
- b) Volume 2, SSP 50699-02 –
This document shall be delivered in the Contractor's format compatible with the ISS Program Electronic repository.
- c) Templates (flat files) –
The Contractor shall electronically deliver the individual Excel spreadsheet templates used to document the parameters for each ORU as individual flat files; one flat file for each completed template.
- d) Supporting Documentation –
Documents shall be delivered in the Contractor's format compatible with the ISS Program Electronic repository.
- e) Volume 4: SSP 50699-04
This document shall be delivered in the Contractor's format compatible with the ISS Program Electronic repository.

9. OPR: Vehicle Office

10. FIRST SUBMISSION DATE:

- a) **Volume 1, SSP 50699-01:**
The final released version shall be delivered twelve (12) months after contract definitization.
- b) **Volume 2, SSP 50699-02:**
The final released version shall be delivered twelve (12) months after contract definitization.
- c) **Templates (flat files):**
Electronic flat files will be delivered incrementally beginning three months after contract definitization. All flat files shall be delivered twelve (12) months after definitization.
- d) **Supporting Documentation:**
Supporting documentation requiring delivery shall be delivered beginning three months after contract definitization.
- e) **Volume 4, SSP 50699-04**

The first baseline shall be released December 2011.

Frequency Of Submission:

- a) **Volume 1, SSP 50699-01:**
Every 6 months as required for updates to hardware ADPs.
- b) **Volume 2, SSP 50699-02:**
Every 6 months as required for updates to agreements on ORU operation.
- c) **Templates (flat files):**
Every 6 months as required for updates to hardware ADPs.
- d) **Supporting Documentation:**
Every 6 months as required for updates to hardware ADPs or updates to agreements on ORU operation.
- e) **Volume 4, SSP 50699-04**
Every 12 months as required aligning with the completion of ISS lifetime extension analysis phases.

Additional Submissions: N/A

11. MAINTENANCE:

- a) **Volume 1, SSP 50699-01:**
Update as required via the ISS change process to maintain currency and accuracy, in accordance with SSP 41170, Configuration Management Requirements.
- b) **Volume 2, SSP 50699-02:**
Update as required via the ISS change process to maintain currency and accuracy, in accordance with SSP 41170, Configuration Management Requirements.
- c) **Templates (flat files):**
If the Volume 1 templates are updated, then the corresponding electronic flat files shall be updated as well.
- d) **Supporting Documentation:**
Volume I or Volume II templates are updated, in accordance with the ISS Change Process, then the corresponding supporting data shall be provided.
- e) **Volume 4, SSP 50699-04**
Update as required via the ISS change process to maintain currency and accuracy, in accordance with SSP 41170, Configuration Management Requirements.

12. COPIES/DISTRIBUTION:

- a) **Volume 1, SSP 50699-01:**
 - 1 original/record (hard copy): OH/Data Management
 - 1 electronic copy: To the Program authorized electronic repository (EDMS or equivalent).
- b) **Volume 2, SSP 50699-02:**

- 1 original/record (hard copy): OH/Data Management
- 1 electronic copy: To the Program authorized electronic repository (EDMS or equivalent).

c) Templates (flat files):

- 1 original/record (hard copy): OH/Data Management
- 1 electronic copy: To the Program authorized electronic repository (EDMS or equivalent).

d) Supporting Documentation:

- 1 original/record (hard copy): OH/Data Management
- 1 electronic copy: To the Program authorized electronic repository (EDMS or equivalent).

e) Volume 4, SSP 50699-04

- 1 original/record (hard copy): OH/Data Management
- 1 electronic copy: To the Program authorized electronic repository (EDMS or equivalent).

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload MDM Configuration Files and PCS Displays 1b. Data Type: 3	2. Date of Current Version 10/01/05	3a. DRD No. F-RA-04	3b. RFP/Contract No. NAS15-10000
14. Use (Define need for, intended use of, and/or anticipated results of data) This DR provides reconfiguration files to be resident on the Payload MDM, and payload-unique PCS displays and reconfiguration files to be resident on a PCS.			5. DRD Category X Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.4.1.15		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR includes the delivery of all reconfiguration files which are used by the Payload MDM and the PCS in support of payload operations, and the VDDs associated with those files when appropriate.

CONTENT: These files include reconfiguration data that is used by the Payload MDM and the PCS in the conduct of payload operations. The files will be provided electronically to the MBF and PIMS. The data files will be provided along with a VDD and Transfer of Accountability (DD 1149).

FORMAT: Contractor format (per SSP 50010-01) is acceptable, and must be compatible with the Payload MDM design and the PCS design.

9. OPR: OZ

10. FIRST SUBMISSION DATE: As required per negotiated work plan.

Frequency Of Submission: Typically there will be a preliminary, interim, and final delivery of the products. Actual delivery dates of the products are driven by payload developer's schedule as negotiated real time for each stage.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: (a) Mission Build Facility and PIMS
(b) NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload Product Integrated List (PPIL)	2. Date of Current Version 10/01/05	3a. DRD No. F-RA-10	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	15. Use (Define need for, intended use of, and/or anticipated results of data) This DR documents the versions of payload-related flight and ground software products used to build payload-related software products. As determined in the PPIL Working Group (PSCP Subpanel), there will be a test PPIL for every major payload test and a flight PPIL for each flight of payloads.		5. DRD Category X Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.4.1.5		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: This DR provides a list of the payload-related flight and ground software products.
 CONTENT: Provides an integrated list of payload software products that are used to support specific ISS stages or ground test configurations.
 FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: As required per negotiated work plan.

Frequency Of Submission: Once with update for each flight of payloads manifested for the ISS.
 Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload Unique Displays Software Requirements Specifications 1b. Data Type: 1	2. Date of Current Version <p align="center">10/01/08</p>	3a. DRD No. <p align="center">F-RA-11</p>	3b. RFP/Contract No. <p align="center">NAS 15 -10000</p>
4. Use (Define need for, intended use of, and/or anticipated results of data) <p align="center">This DRD provides the requirements for which payload unique PCS displays must be verified.</p>			5. DRD Category <u> X </u> Technical <u> </u> Administrative <u> </u> SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.4.1.4		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION:

SCOPE: This DR provides the payload-unique PCS display requirements for payloads.

CONTENT: Documents the requirements for the Computer Software Configuration Item (CSCI) identified as the Payload Support Systems Portable Computer System (PCS) Display CSCI. This CSCI is provided to support the operation of payloads on orbit.

FORMAT: Any format acceptable to the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: As required per negotiated work plan.

Frequency Of Submission: Once with update for each flight of payloads that require new payload-unique displays to be resident on the Portable Computer System (PCS).

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Safety & Mission Assurance/Risk Management Plan 1b. Data Type: 1	2. Date of Current Version 01/01/04	3a. DRD No. F-SA-01	3b. RFP/Contract No. NAS 15 -10000
4. Use The plan is used to identify, evaluate, and eliminate or control risks related to safety, health and mission assurance.			5. DRD Category ___ Technical ___ Administrative _X_ SR&QA
6. References SOW 3.8.1.1, 3.8.6.1		7. Interrelationships None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Applicable to all contractor sites where the contractor is operational including on-site NASA facilities.

APPLICABLE DOCUMENTS: See Contents

CONTENT: The plan shall demonstrate the contractor's compliance with NFS Clause 1852.223-73 and NPG 8715.3, Appendix H. In addition, the plan shall address:

- a. S&MA Management (SOW 8.1) - Description of the contractor's processes for establishing and maintaining a Quality Management System to meet SAE AS 9100 Rev A and the requirements for Mishap Investigation and Reporting (NPG 8621.1), Safety and Health (JPG 1700.1, MPG 8715.1 and KHB 1710.2), and Lessons Learned (NPG 7120.5 and AG-CWI-001).
- b. Program Risk (SOW 8.3) - Description of the contractor's process for compliance with SSP 50175, NPG 8000.4 and JPD 306.
- c. System Safety (SOW 8.4) – Description of the contractor's process for establishing system safety tasks and activities to identify, evaluate, and eliminate or control hazards associated with space flight hardware and related operations in accordance with NPG 8715.3 (Chapter 3), SSP 30599, SSP 30309, NSTS 1700.7, SSP 13830, SSP 50021 (as specified between SSP 41000 and SSP 41162) and KHB 1700.7.
- d. Reliability and Maintainability (SOW 8.5) – Description of the contractor's process for compliance with SSP 30234.
- e. Quality Assurance (SOW 8.6) - Description of the contractor's processes for compliance with AS 9100 Rev A, SSP 41173, SSP 30695, SSP 50287 (excluding sections on hardware/software acceptance), SSP 30223 and SSP 30524 for both hardware and software.
- f. Software Assurance (SOW 8.4.4) – Description of the contractor's processes for software safety (SSP 30309), software quality assurance (SSP 41173), software quality engineering (SSP 41173). Software Management Plan (SSP 50482), and software certification (SSP 50287).
- g. Operations Safety (SOW 8.7) – Description of the contractor's processes for compliance with SSP 50437.

FORMAT: MS Word

9. OPR: OE

10. FIRST SUBMISSION DATE:

Frequency Of Submission: The safety and health aspects of the plan shall be submitted in final form to address NFS 1852.223-73 and NPG 8715.3 Appendix H requirements (Ref, Sections 8.3.a, b, g, h and i above) at proposal submittal. The remainder of the plan (Sections 8.3.c, d, e and f) shall be submitted in draft form at proposal submittal and revised to provide a final plan for approval within 30 days after contract start.

Additional Submissions: The plan shall be reviewed at least annually thereafter and updated as required. If there are no changes since the last update, the Contractor shall re-certify its accuracy NLT 1 October of each year.

11. MAINTENANCE: The document shall be delivered and maintained electronically. Changes shall be incorporated as required by change page or complete reissue.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: The Safety and Mission Assurance/Risk Management Plan requires approval of the Manager, S&MA/Program Risk Office. The final plan, as approved by the Contracting Officer, shall be incorporated in the contract as Attachment J-6.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Monthly Safety & Health Metrics 1b. Data Type: 3	2. Date of Current Version 01/01/04	3a. DRD No. F-SA-02	3b. RFP/Contract No. NAS 15 -10000
4. Use Establishes selected Safety and Health Program metrics in accordance with OSHA Requirements			5. DRD Category ___ Technical ___ Administrative _X_ SR&QA
6. References SOW 3. 8.1.4		7. Interrelationships None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The scope of the information required is limited to the JSC-administered establishments of Houston Texas at NASA Road One, the Sonny Carter Training Facility, and Ellington Field; MSFC and KSC facilities.

CONTENT:

1. Management Commitment and Employee Involvement. Dates and types of meetings (i.e Safety Committee Meetings, Employee Safety Meetings, etc), and number of management, supervisors & non-supervisory attendees. Include electronic copies of minutes or representative information.
2. Worksite Analysis. Number of required and performed hazard analyses, job safety analyses and routine inspections for reported month and year-to-date. Refer to JPG 1700.1 for definitions of terms
3. Hazard Prevention and Control -Identified hazards found during routine and special inspections, close calls, mishap investigations, etc., and require correction. Report number found, closed and open during reported month, previous month and year-to-date. Also, include number of JF 1240's *(See note) in place. Attach copies of JF 1240's (or equivalent) or send electronically. Indicate JF 1240's where abatement has been completed as closed.
4. Safety and Health Training - List courses specific to loss control initiatives (such as slips/trips falls, material handling; etc.) and report number to be trained, completed training and schedule of training. Report other training as "Generic safety training not otherwise specified" (examples include Hazard Communication, Confined Space entry, HAZWOPER, system safety, job safety analysis, etc.) Do not include job proficiency course work where safety is an issue (such as radiography, welding, painting, etc.) Training should be as specified in accordance with the contractor's corporate safety and health program.

*Note: For KSC use FORM 6-22 and for MSFC use FORM 4371.

FORMAT: Format supported by ISS Management Information System

9. OPR: OE

10. FIRST SUBMISSION DATE:

Frequency of Submission: Monthly the by the 10th of the month following month being reported

Additional Submissions: none

11. MAINTENANCE: The document shall be maintained electronically.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

1 copy to Occupational Health Officer/NT2

1 copy to Occupational Safety Branch/SD26

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Hazard Reports 1b. Data Type: 2	2. Date of Current Version 10/01/10	3a. DRD No. F-SA-04	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) The ISS SRP will use the Hazard Reports to assess the design and operation of ISS element hardware configuration. The GSRP will use Hazard Reports to assess ISS cargo element/launch packages and ground support equipment design and operations for compliance			5. DRD Category — Technical — Administrative _X_ SR&QA
6. References (SOW, Clause, etc.) 3.8.4.1, 3.8.4.2, 7.2		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: Submittals shall consist of Hazard Reports for all Contractor Provided Hardware and GSE. Additionally, this shall document integrated hazard analyses for the ISS Vehicle, as defined by SSP 41000.

CONTENT: Hazard Reports shall be provided that are commensurate with the level of maturity of the design in accordance with SSP 30309.

- The Contractor shall provide a description of the launch and on-orbit configuration of the hardware and software in accordance with SSP 30599, Safety Review Process. Functional diagrams shall be submitted and supplemented with descriptions of interfaces and operations.
- Hazard Report: Hazard Reports shall include the following data fields:
 - Hazard Report Number
 - Hazard Title
 - Review Level
 - Revision Date
 - Scope
 - Hazard Description
 - Cause Summary
 - Program Stage
 - Interfaces
 - Status of Work

Remarks

- Submittal Concurrence
- Approval
- Mission Phase
- Severity Category
- Likelihood of Occurrence
- Controls

- Method for Verification of Controls
- Safety Requirements
- Detection and Warning Method
- Cause Remarks
- CIL Reference
- Point of Contact.

For Phase I maturity, Hazard Reports shall reflect the preliminary design and define hazards causes. Additionally, provide the preliminary hazard controls and verification methods when available. For Phase II maturity, the Hazard Reports shall be updated to reflect the critical design and define the finalized hazard controls and verification methods. For Phase III maturity, the Hazard Reports shall be updated to reflect the as-built contractor design and document completion of verification.

FORMAT: These deliverables shall be in the format described in SSP 30599.

9. OPR: OE

10. FIRST SUBMISSION DATE:

Frequency Of Submission: 45 days pre safety review

Additional Submissions: none

11. MAINTENANCE: This specification shall be maintained electronically

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository VMDB or equivalent)

1 copy ISSA Program independent safety review panel*

1 copy ISS Chairmen, Ground Safety Review Panel, KSC, UB-F *

1 copy Executive Secretary, Safety Review Panel, NE42*

*Note: Submittal of the Hazard Report will be based on associated needs of the Joint ISS and SSP Safety Review Panel (SRP), and Ground Safety Review Panel (GSRP).

13. REMARKS: The Hazard Report shall be prepared in accordance with SSP 30599 in support of the safety review process

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Failure Modes and Effects Analysis (FMEA) and Critical Items List (CIL) 1b. Data Type: 1	2. Date of Current Version 10/01/10	3a. DRD No. F-SA-05	3b. RFP/Contract No. NAS 15 -10000
4. Use The FMEA serves as a source that documents the systematic evaluation by item failure mode analysis, the potential impact of each functional or hardware failure on mission success, personnel, and systems safety, system performance, maintenance, and maintainability requirements. Each potential failure is assessed in order that appropriate corrective action(s) may be taken to eliminate or control the high risk items. The CIL documents the item's inability to meet program requirements and/or risk deemed necessary for Program Managements acceptance.			5. DRD Category ___ Technical ___ Administrative _X_ SR&QA
6. References SOW 3.8.5.1 & 7.2		7. Interrelationships None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The FMEA/CIL shall be performed on program hardware to the equipment level consistent with the identified on-orbit maintenance level, and on ground support equipment, as specified in SSP 30234.

CONTENT: The FMEA/CIL Report and worksheet contents are specified by SSP 30234.

FORMAT: The data element format shall be specified in SSP 30234. The reports shall be delivered electronically in a MS Word compatible format that can be edited and made accessible in the VMDB.

9. OPR: OE (COTR Approval Delegated to OE/Safety & Mission Assurance/Program Risk Office)

10. FIRST SUBMISSION DATE: First report due March 31, 2004

Frequency Of Submission: As required to support CoFR. individual FMEA/CIL worksheets upon updates

Additional Submissions: none

11. MAINTENANCE: The document shall be maintained electronically.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: R&M Allocations, Assessments, and Analyses Reports 1b. Data Type: 3	2. Date of Current Version 01/01/04	3a. DRD No. F-SA-06	3b. RFP/Contract No. NAS 15 -10000
4. Use The R&M Allocations, Assessments, and Analysis Report shall be used to identify, validate and status quantitative and qualitative R&M allocation and performance characteristics of space station functions and hardware and to document preventive maintenance requirements and limited life items.			5. DRD Category — Technical — Administrative _X_ SR&QA
6. References SOW 2.7.1.a.3; 2.7.1.a.4; 3.8.5.2, 3.8.5.2.1, & 3.8.5.2.2		7. Interrelationships None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: This report shall provide R&M predictions and analyses for the space station system according to designated capabilities, functions, and on-orbit repairable items. Predicted and/or experienced R&M performance shall be documented according to capability, function, and on-orbit repairable item for each stage of the assembly sequence.

CONTENT: The R&M Allocations, Assessments, and Analysis Report shall document the program status and progress in executing the R&M requirements and objectives. The asterisk represents those items no longer required once verification of SSP 41000 is completed. The report shall contain the following:

- (a) * R&M Requirements Compliance Summary
 - (1) Assess compliance at system, segment, and End Item level.
 - (2) Identify areas of non-compliance and corresponding program approved waiver.
- (b) * R&M Qualitative Assessments
 - (1) Provide ground rules and assumptions used in assessments.
 - (2) Identify methods/tools used in performing assessments.
 - (3) Provide results summary, conclusions, and recommendations.
- (c) R&M Quantitative Predictions and Analyses
 - (1) Define the approach/process used, including prediction techniques, methodologies, and tools.
 - (2) Identify associated ground rules and assumptions used in making predictions and performing analyses.
 - (3) * Provide R&M source data in accordance with Table 1.
 - (4) * Provide EVA, EVR, and IVA maintenance time predictions in accordance with **Table 2** to demonstrate compliance with allocations and assess ISS performance. Modeling of crew maintenance time shall use algorithms in **Table 3**.
 - (5) * Provide EVA, EVR, and IVA overhead maintenance time predictions.

- (6) * Provide maintenance action rate predictions.
 - (7) Provide summaries of major contributors to probability of failure and crew maintenance time.
 - (8) * Provide percentages of failure modes capable of being isolated to a single maintainable equipment item and to the ambiguity group.
 - (9) Identify source data used in analysis.
 - (10) Provide reliability block diagrams and associated data.
 - (11) * Provide a summary table of current micro-gravity reliability (probability of success) predictions
 - (12) * Provide manifest and activation flights of all on orbit maintainable items.
- (d) Preventive Maintenance
- (1) * Perform preventive maintenance analysis per decision matrix enclosed (see Figure 1)
 - (2) Identify any preventive maintenance reassessments and rationale for changing the interval.
 - (3) Identify ground rules and assumptions.
 - (4) Provide preventive maintenance requirements and rationale.

FORMAT: These reports shall be delivered electronically in a format supported by MS Word.

9. OPR: OE/S&MA

10. FIRST SUBMISSION DATE: First report due March 31, 2004 (annually thereafter)

Frequency Of Submission: Report submitted annually and individual data items upon updates

Additional Submissions: none

11. MAINTENANCE:

12. COPIES/DISTRIBUTION:

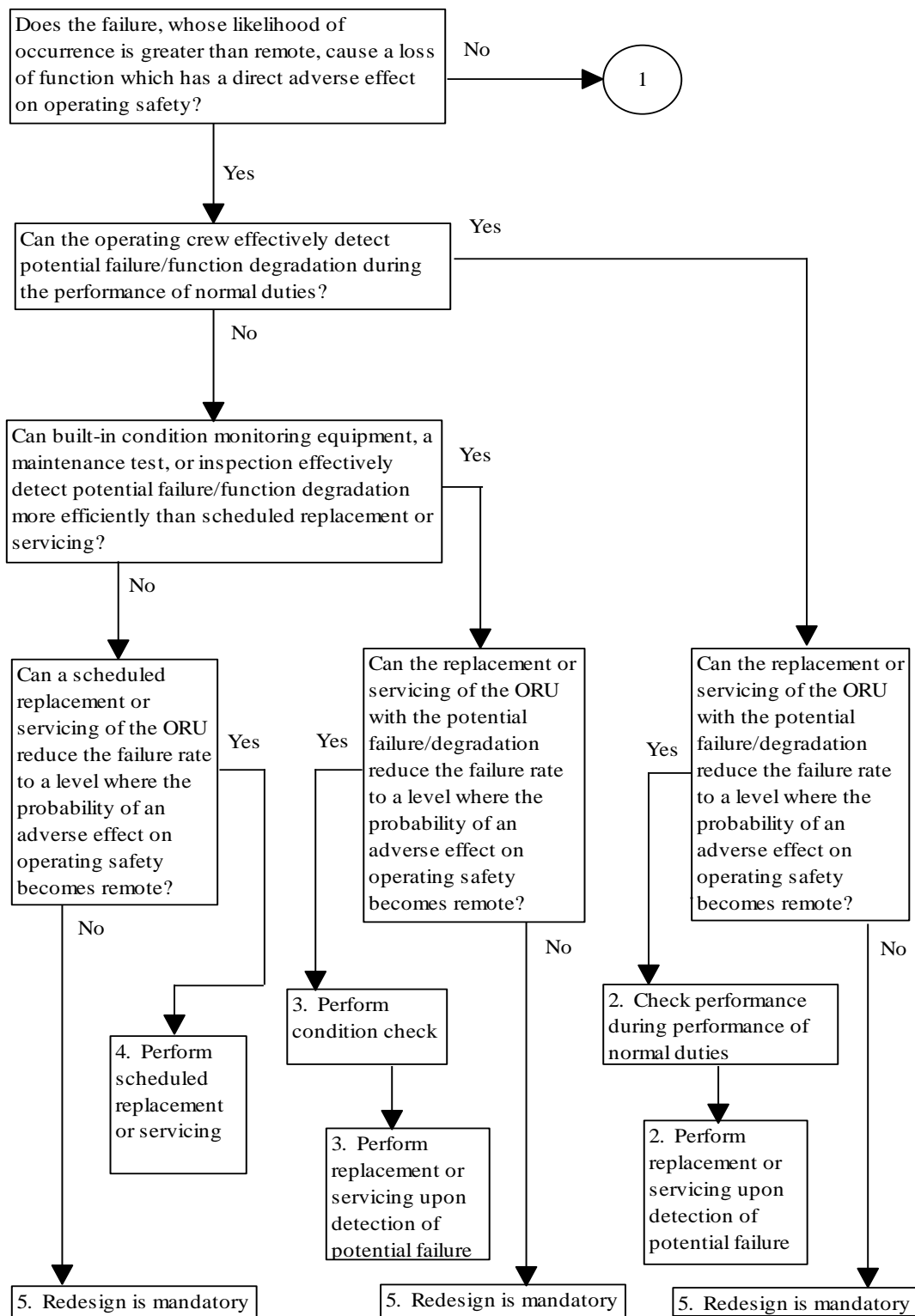
1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

1 electronic copy: to a Program authorized repository (VMDB or equivalent)

13. REMARKS: Electronic access of source data shall be made available and compatible with the VMDB

Figure 1 PM Decision Matrix



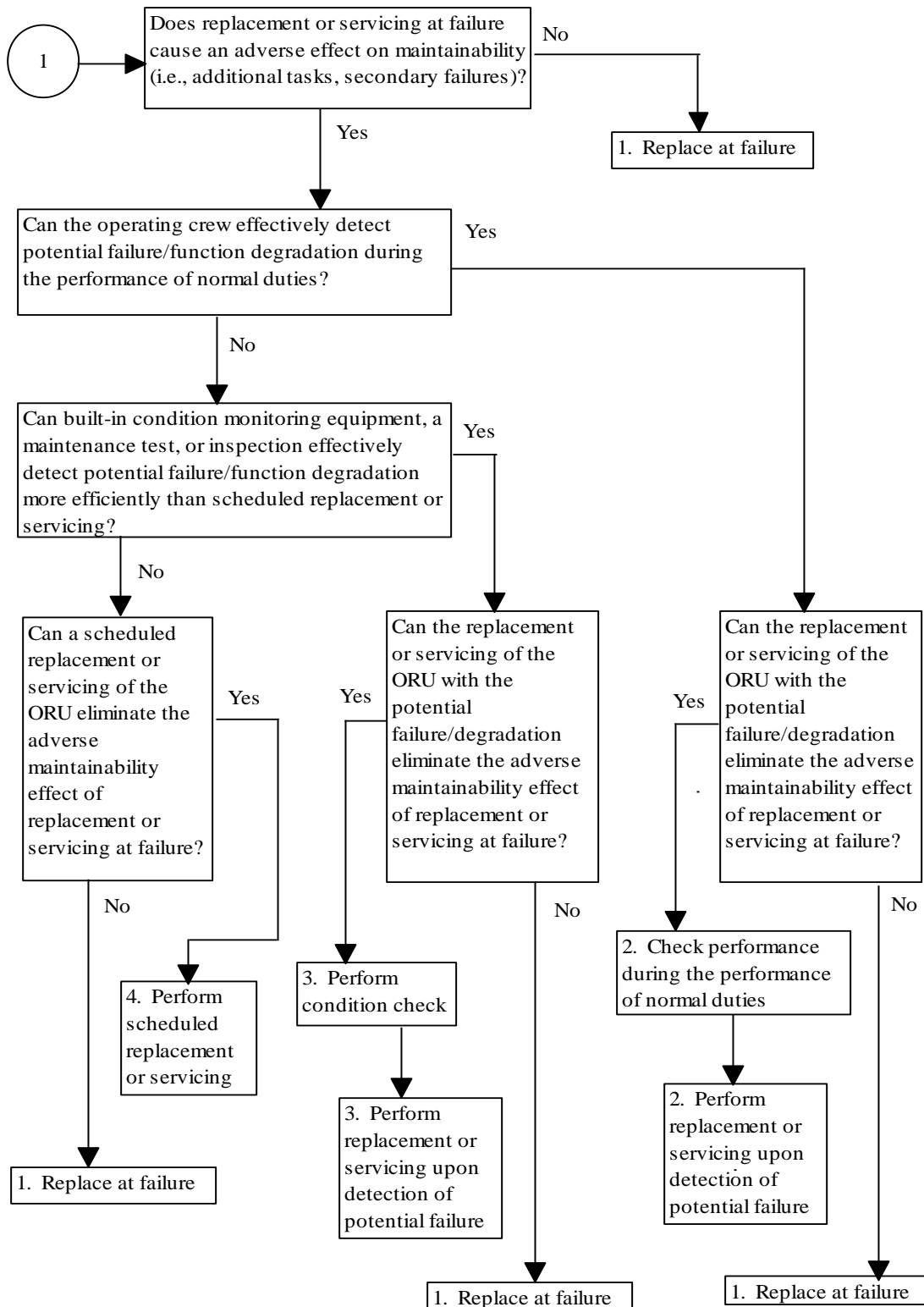


TABLE 1: R&M SOURCE DATA FIELD DEFINITION TABLE

Col	DESCRIPTION
A.	<p>Item Name – R&M attributes shall be entered for each item that is to be maintained on orbit. The Vehicle Master Data Base (VMDB) nomenclature shall be used for all R&M reporting. R&M is not responsible to develop the Item Name but shall use it as a reference for reporting R&M parameters. Field specification: Defined by Engineering.</p>
B.	<p>Drawing/Part Number – R&M attributes shall be referenced to the Drawing/Part number in the VMDB. R&M is not responsible to develop the Drawing/Part number but shall use it as a reference for reporting R&M parameters. Field specification: Defined by Engineering.</p>
C.	<p>Occurrence Number – R&M attributes shall be referenced to a unique Identifying number for each different record of an item that has the same Drawing/Part Number with multiple entries in the VMDB. R&M is not responsible to develop a serial or occurrence number but shall use it, if available, as a reference for reporting R&M parameters. Field Specification: Defined by Engineering.</p>
D.	<p>Distributed System Name – The distributed system or subsystem that contains the item in the distributed systems breakdown (i.e., C&DH, EPS, GN&C, etc.). R&M is not responsible to develop a System name but shall use it, if available, as a reference for reporting R&M parameters. Field specification: Defined by Engineering.</p>
E.	<p>Subsystem Name – The name assigned to the subsystem of a given distributed system in which an equipment item is located. R&M is not responsible to develop a Subsystem name but shall use it, if available, as a reference for reporting R&M parameters. Field specification: Defined by Engineering.</p>

TABLE 1: R&M SOURCE DATA FIELD DEFINITION TABLE (CONT'D)

Col DESCRIPTION

F. Reliability Class – Reliability classification. This is used to assign the K-factor values of Table 4

Field specification: I1. The six reliability class codes are as follows:

CODE	DESCRIPTION
1	Electronic – equipment that primarily contains digital or low power analog electronics. Moving parts and high power electrical equipment normally constitute less than 5% of the item failure rate in the classification. Electronic types will typically have a fairly high level of Built-In-Testing (BIT).
2	Electrical – equipment that performs electrical power distribution, power storage, signal distribution, and/or radio frequency radiation functions. Moving parts or low power electronics normally constitute less than 5% of the item failure rate in this classification. Electrical types will typically have a low level of BIT.
3	Electro-Mechanical – equipment which contains electrical/electronic and mechanical parts, including devices which use electrical power to produce mechanical motion, and devices which use mechanical motion to produce electrical power or signals. Electro-mechanical items should contain more than 5% electrical/electronic and more than 5% mechanical parts by failure rate contribution in this classification.
4	Mechanical – equipment that primarily consists of moving parts, fluid handling equipment (including thermal systems), and/or seals. High power electrical equipment or low power electronics normally constitute less than 5% of the failure rate in this classification.
5	Structural with Crew Contact – equipment that is primarily structural but encounters planned crew contact or provides equipment protection. This type specifically includes doors, covers, panels, hatches, micrometeoroid/debris shields, and thermal blankets.
6	Structural with No Crew Contact – equipment that is load bearing. Moving parts, electronics, and electrical equipment normally constitute less than 5% of the failure rate in this classification. Structural items should not normally encounter planned crew contact.

TABLE 1: R&M SOURCE DATA FIELD DEFINITION TABLE (CONT'D)

Col DESCRIPTION

G. IVA/EVA/Robotics Code – The code that describes the level of robotic compatibility of the equipment.

Field specification: I1. The codes are as follows:

CODE	DESCRIPTION
0	Equipment located in pressurized area.
1	Equipment can be maintained only by EVA crew member. No robotic support is required or intended.
2	Equipment can be maintained using SPDM without EVA. Equipment is SPDM compatible. Compatibility consists of Equipment to SPDM interface. EVA can provide maintenance support in a backup role.
3	Equipment can be maintained using SSRMS without EVA. Equipment is SSRMS compatible. Compatibility consists of Equipment to SSRMS interface. Equipment must be equipped with SSRMS grapple fixture. EVA can provide maintenance support in a backup role.
4	Equipment requires combined SPDM/EVA operations for maintenance.
5	Equipment requires EVA crew member to be positioned on SSRMS for access to the worksite. Equipment requires no robotic compatibility.
6	Equipment requires the Mobile Servicing System/SSRMS for transportation to the EVA worksite. Dimensions or mass of equipment to be replaced are not compatible with EVA/CETA translation. Equipment must be equipped with SSRMS grapple fixture.

H. Average Duty Cycle Prior to PHC – Fraction of time an equipment item's operating (hot) MTBF is applicable prior to the Permanently Human Capability (PHC) phase. Format is a number from 0.0 to 1.0. Based on the sum of total operating and test hours per year for the given part number divided by the product of 8760 hours per year times the quantity of items with that part number. Cyclic failure rates shall be converted to time-based failure rates and the duty cycle of the parent equipment shall be reported and used to make that correlation. Items having different operating times for various lower-level components may report a duty cycle of 1 and the operating (hot) MTBF shall be adjusted for those different duty cycles accordingly. A duty cycle of 1.0 shall be reported for items with failure rates independent of active operation time such as fluid filled or pressurized containers, lines, and static seals, structure, and static wiring harnesses. Operating time is averaged between shuttle attached and unmanned periods by using total equipment operating hours per year for both states under nominal flight schedules. Optional field. Assumed equal to post-PHC duty cycle unless otherwise stated.

Field specification: R7.5

TABLE 1: R&M SOURCE DATA FIELD DEFINITION TABLE (CONT'D)

Col	DESCRIPTION
I.	<p>Average Duty Cycle after PHC – Fraction of time an equipment item's Operating MTBF is applicable for the PHC phase for nominal operations. Same format and basis as Average Duty Cycle Prior to PHC except that this is for the period after PHC. Field specification: R7.5</p>
J.	<p>MTBF – Mean Time Between Failures (“Hot” or “operating” MTBF). The estimated average time in hours between failures due to random effects under nominal operating conditions at the maintainable equipment level. Redundancy within the maintainable equipment item that is not necessary to meet failure tolerance requirements (e.g., component redundancy used for reducing maintenance demand) shall be modeled so as to improve the reported MTBF. Worst case estimates shall not be used. Failures of components that are used only during installation or removal (such as deployment motors and mechanisms) shall be excluded where maintenance would not be caused by the component's failure. Failures of components that cause degradation of the equipment within the specified limit shall also be excluded. For complex items having components operating at different duty cycles, the operating MTBF may be adjusted to a duty cycle of 1.0 if the duty cycle is reported as 1.0. MTBF does not include failures due to Micrometeoroid/Orbital Debris (MM/OD). Field specification: R14.2</p>
K.	<p>Deleted</p>
L.	<p>Wearout Life – Expected time to failure (in calendar years at the stated average duty cycles) due to wear-out, degradation, or fatigue conditions in the absence of random failures for age or cycle life limited items. wearout life shall be used as an estimate of characteristic life (L Char) in the algorithms (Table3). Best available data and engineering judgment should be used to estimate wearout life as the time when 63 percent of a population would have failed due to wearout/aging conditions alone. Minimum design life shall not be reported as the wearout life. No life limit should be reported if the expected wearout life is 15 years or greater. Field specification: R4.2</p>
M.	<p>MTBPM: Removal/Replacement – Mean Time Between Preventive Maintenance for Removal & Replacement – The average time in calendar hours (at the stated duty cycles) between all preventive maintenance (PM) replacements. Care should be given when determining if preventive maintenance replacements should be performed in place of waiting until maintenance is required due to gradual performance degradation and eventual wearout (life limits). The ability of the system to effectively accommodate wearout without adverse system function impacts may allow maintenance to be performed on an as required basis instead of at specific time intervals. Field specification: R4.2</p>

- N. MTBPM – Inspect/Service** – Mean Time Between Preventive Maintenance for Inspection – The average time between PM inspections and/or servicing expressed in calendar hours. A single MTBPM – Inspect/Service parameter shall be developed for any equipment items requiring multiple servicing and/or inspection actions.
Field specification: R4.2
- O. CM EVA MTTR** – Corrective Maintenance EVA Mean Time to Repair – Nominal elapsed EVA crew hours at the worksite including nominal EVA crew hours for manual on-orbit fault isolation weighted by the failure rate of failure modes which require such manual isolation. The MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. Computed for zero-g using task standards.
Field specification: R7.4
- P. CM EVA Crew Size** – EVA crew size normally required for the task described above. If crew sizes are different for individual tasks within the MTTR, the mean crew size shall be reported. This mean crew size shall be determined as the summation of total crew-hours from each step within the MTTR divided by the elapsed time reported to perform all tasks included in that particular MTTR.
Field specification: R3.2
- Q. CM IVA MTTR** – Corrective Maintenance IVA Mean Time to Repair – Nominal elapsed IVA crew hours at the worksite including nominal IVA crew hours for manual on-orbit fault isolation weighted by the failure rate of failure modes which require such manual isolation. The MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. Computed for zero-g using task standards.
Field specification: R7.4
- R. CM IVA Crew Size** – IVA crew size nominally required for the task described above. If crew sizes are different for individual tasks within the MTTR, the mean crew size shall be reported. This mean crew size shall be determined as the summation of total crew-hours from each step within the MTTR divided by the elapsed time reported to perform all tasks included in that particular MTTR.
Field specification: R3.2
- S. CM EVR MTTR** – Corrective Maintenance EVR (Robotic) Mean Time to Repair – Nominal worksite time in hours for a maintenance task on externally located equipment performed by an IVA crew member operating either the SSRMS or the SPDM for either solely robot-compatible equipment or for equipment requiring co-operative robotic tasks with EVA. Includes nominal time operating robotic systems for manual on-orbit fault isolation weighted by the failure rate of failure modes that require such manual isolation. The CM EVR MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. If the robotic tele-operator is used jointly with EVA during only a portion of the worksite activity, the CM EVR MTTR may exclude times when the EVR operator is able to be away from the operating station or is using the robotic servicer for other unrelated tasks. Computed for zero-g using task standards.
Field specification: R7.4

TABLE 1: R&M SOURCE DATA FIELD DEFINITION TABLE (CONT'D)

Col	DESCRIPTION
T.	<p>PM/R&R EVA MTTR – Preventive Maintenance/Remove & Replace EVA Mean Time to Repair – Nominal elapsed EVA crew hours at the worksite for preventive remove and replace. The MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. Computed for zero-g using task standards. Field specification: R7.4</p>
U.	<p>PM/R&R EVA Crew Size – EVA crew size normally required for the task described above. If crew sizes are different for individual tasks within the MTTR, the mean crew size shall be reported. This mean crew size shall be determined as the summation of total crew-hours from each step within the MTTR divided by the elapsed time reported to perform all tasks included in that particular MTTR. Field specification: R3.2</p>
V.	<p>PM/R&R IVA MTTR – Preventive Maintenance/Remove & Replace IVA Mean Time to Repair – Nominal elapsed IVA crew hours at the worksite for preventive remove and replace. The MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. Computed for zero-g using task standards. Field specification: R7.4</p>
W.	<p>PM/R&R IVA Crew Size – Crew size required for the task described above. If crew sizes are different for individual tasks within the MTTR, the mean crew size shall be reported. This mean crew size shall be determined as the summation of total crew-hours from each step within the MTTR divided by the elapsed time reported to perform all tasks included in that particular MTTR. Field specification: R3.2</p>
X.	<p>PM/R&R EVR MTTR – Preventive Maintenance/Remove & Replace EVR (Robotic) Mean Time to Repair – Nominal worksite time in hours for a preventive remove and replace maintenance task on externally located equipment performed by an IVA crew member operating either the SSRMS or the SPDM for either solely robot-compatible equipment or for equipment requiring co-operative robotic tasks with EVA. The PM/R&R EVR MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. If the robotic tele-operator is used jointly with EVA during only a portion of the worksite activity, the PM/R&R EVR MTTR may exclude times when the EVR operator is able to be away from the operating station or is using the robotic servicer for other unrelated tasks. Computed for zero-g using task standards. Field specification: R7.4</p>

TABLE 1: R&M SOURCE DATA FIELD DEFINITION TABLE (CONT'D)

Col	DESCRIPTION
Y.	<p>PM/Inspect/Service EVA MTTR – Preventive Maintenance/Inspect/Service EVA Mean Time to Repair – Nominal elapsed EVA crew hours at the worksite for preventive inspection. The MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. Computed for zero-g using task standards. Field specification: R7.4</p>
Z.	<p>PM/Inspect/Service EVA Crew Size – EVA crew size normally required for the task described above. If crew sizes are different for individual tasks within the MTTR, the mean crew size shall be reported. This mean crew size shall be determined as the summation of total crew-hours from each step within the MTTR divided by the elapsed time reported to perform all tasks included in that particular MTTR. Field specification: R3.2</p>
AA.	<p>PM/Inspect/Service IVA MTTR – Preventive Maintenance/Inspect/Service IVA Mean Time to Repair – Nominal elapsed IVA crew hours at the worksite for preventive inspection. The MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. Computed for zero-g using task standards. Field specification: R7.4</p>
AB.	<p>PM/Inspect/Service IVA Crew Size – IVA Crew size required for the task described above. If crew sizes are different for individual tasks within the MTTR, the mean crew size shall be reported. This mean crew size shall be determined as the summation of total crew-hours from each step within the MTTR divided by the elapsed time reported to perform all tasks included in that particular MTTR. Field specification: R3.2</p>
AC.	<p>PM/Inspect/Service EVR MTTR – Preventive Maintenance/Inspect/Service EVR (Robotic) Mean Time to Repair – Nominal worksite time in hours for a preventive inspection maintenance task on externally located equipment performed by an IVA crew member operating either the SSRMS or the SPDMS for either solely robot-compatible equipment or for equipment requiring co-operative robotic tasks with EVA. The PM/Inspect/Service EVR MTTR includes all elements of crew time beginning with the first step of setting up the worksite and ending after the last step of worksite teardown. If the robotic tele-operator is used jointly with EVA during only a portion of the worksite activity, the PM/Inspect/Service EVR MTTR may exclude times when the EVR operator is able to be away from the operating station or is using the robotic servicer for other unrelated tasks. Computed for zero-g using task standards. Field specification: R7.4</p>

TABLE 2: MAINTENANCE DERIVED DATA FIELD DEFINITION TABLE

Derived data elements at the PHC on-orbit maintainable equipment level shall be summed up to obtain EVA MMCH/Y, IVA MMCH/Y, EVR MMCH/Y and On-Orbit Maintenance Actions per Year for all like End Items (e.g., sum for all PV modules) or other level at which allocations have been imposed by the Contractor. Those derived data elements shall consist of the following:

- A. EVA Mean Maintenance Crew-Hours per Year (MMCH/Y)** – The estimate of annual average on-orbit allocation-chargeable cumulative time for all crew members at the EVA worksite. Includes all chargeable maintenance tasks that are nominally performed using EVA, including EVA crew time during co-operative EVA/EVR or EVA/IVA tasks. Excludes EVA crew time for contingency EVA maintenance that is normally performed using robotics. Excludes maintenance of equipment that is normally maintained on the ground. Summary data shall include a breakdown of corrective and preventive totals for both O-level and I-level maintenance as well as the combined totals that are compared to the allocations.

- B. IVA Mean Maintenance Crew-Hours per Year (MMCH/Y)** – The estimate of annual average on-orbit allocation-chargeable cumulative time for all crew members at an IVA worksite. Includes maintenance of equipment installed or used in the pressurized area. Also includes maintenance of equipment normally installed or used outside the pressurized environment when the item is nominally planned to be maintained in the pressurized environment. Includes IVA support to external maintenance other EVR support when such IVA support is nominally required (for example, for manual on-orbit failure isolation). Excludes EVA and EVR observation time spent by IVA crew members. Excludes maintenance of equipment that is normally maintained on the ground. Summary data shall include a breakdown of corrective and preventive totals for both O-level and I-level maintenance as well as the combined totals that are compared to the allocations.

- C. EVR Mean Maintenance Crew-Hours per Year (MMCH/Y)** – The estimate of annual average on-orbit allocation-chargeable cumulative time for all crew members at the tele-operation workstation for worksite activities on external equipment including one crew member and the elapsed time. Includes crew time operating SSRMS and/or SPDM for either co-operative or fully robotic maintenance tasks. Excludes any times that the EVR tele-operator could normally be relieved from duty when the tele-operators are in a safe configuration during cooperative EVA/EVR or during any automated or ground-controlled sequences which do not require operator operative EVA/EVR or during any automated or ground-controlled sequences which do not require operator presence at the workstation. Excludes time for observation of EVR activities by a second crew member. Summary data shall include a breakdown of corrective and preventive totals for both O-level and I-level maintenance as well as the combined totals that are compared to the allocations.

**TABLE 3: MAINTAINABILITY CREW TIME AND
MAINTENANCE ACTION RATE MODELING ALGORITHMS**

The contractor crew maintenance time estimates reported in Part 2 above shall be developed using standardized steady state deterministic algorithms that approximate the RMAAT without the need for Monte Carlo simulation. Where a more precise estimation is needed for a special case, a computational method developed by the Tier I subcontractor may be used with approval by the Contractor. The standard steady state deterministic algorithm for predicting the number of corrective and preventive maintenance actions and crew time per year is summarized below. Steps 1 through 6 shall be used to calculate total MTBMA for corrective maintenance only. Maintenance actions per year for corrective maintenance shall be calculated using the first equation in Step 7. Crew time predictions for corrective maintenance shall be calculated using Step 8. Maintenance actions per year for preventive maintenance shall be calculated using the remaining two equations in Step 7. Crew time predictions for preventive maintenance shall be calculated using Step 8.

1. Unless a more precise estimate is needed for a special case, assume the ratio of 1:35 for Operating (Hot) MTBF to Non-operating (Cold) MTBF ratio, which is defined as follows:

$$R = \frac{\text{MTBF Hot}}{\text{MTBF Cold}}$$

2. To determine Operating Ratio, OP (e.g., Duty Cycle (DC) adjusted for Non-operating MTBF):

$$OP = DC + R - (DC \times R)$$

3. To determine Adjusted MTBF (e.g., a single MTBF value adjusted for NON-operating MTBF):

$$MTBF_{Adj} = \frac{MTBF_{Hot}}{OP}$$

4. To determine MTTF for inherent random and life failures with adjustment for non-operating failures:

$$MTTF_{Adj} = MTBF_{Adj} \times [1 - e^{-(8760 \times L_{CHAR}) / MTBF_{Adj}}]$$

NOTE: L Char may be approximated by the wearout life from Table 1, column L.

If a preventive maintenance removal/replacement is planned (MTBPM R/R reported in column M of Table 1) or the wearout life is greater than the operational lifetime requirement specified in the end item PIDS, the Lchar term should be set to 9,999,999,999 (approximating infinity) to model zero maintenance for wear out in this equation and in Step 6. Preventive maintenance actions using MTBPM R/R should be computed using Step 7.

Caution: Do not calculate corrective maintenance MMCH/Y using a wear out life in Steps 4 and 6 when preventive maintenance MMCH/Y is calculated using MTBPM R/R in Step 7.

**TABLE 3: MAINTAINABILITY CREW TIME AND
MAINTENANCE ACTION RATE MODELING ALGORITHMS (CONT'D)**

5. To determine MTBMA for random failures and other maintenance occurring at random as defined by the K-factors in Table 4. This MTBMA–Random value includes random occurrences of damage resulting, from replacement for wearout but does not include replacement for wearout itself.

$$\text{MTBMA}_{\text{Random}} = \frac{1}{\frac{1}{\text{MTBF}_{\text{Adj}}} + \frac{(K-1)}{\text{MTTF}_{\text{Adj}}}}$$

6. To determine total corrective MTBMA to include MTBMA–Random and replacement due to wearout:

$$\text{MTBMA}_{\text{Total cm}} = \text{MTBMA}_{\text{Random}} \left[1 - e^{-\frac{(8760 \times L \text{ CHAR})}{\text{MTBMA}_{\text{Random}}}} \right]$$

7. To determine the corrective and preventive maintenance actions per year:

$$\text{MA / Y}_{\text{CM}} = \frac{8760 \times \text{Qty}}{\text{MTBMA}_{\text{Total CM}}}$$

$$\text{MA / Y}_{\text{PM R\&R}} = \frac{8760 \times \text{Qty}}{\text{MTBPM}_{\text{R\&R}}}$$

$$\text{MA / Y}_{\text{PM Inspect/Service}} = \frac{8760 \times \text{Qty}}{\text{MTBPM}_{\text{Inspect/Service}}}$$

8. Compute MMCH/Y for each of the categories of maintenance identified in Step 7 as follows using information from Table 1:

- a. For corrective maintenance MMCH/Y, use CM EVA MTTR and CM EVA Crew Size for the EVA portion; use CM IVA MTTR and CM IVA Crew Size for the IVA portion; and use CM EVR MTTR and a crew size of one (1) operator for the EVR portion.
- b. For preventive maintenance remove/replace MMCH/Y, use PM/R&R EVA MTTR and PM/R&R Crew Size for the EVA portion; use PM/R&R IVA MTTR and PM/R&R IVA crew size for the IVA portion; and use PM/R&R EVR MTTR and a crew size of one (1) operator for the EVR portion.
- c. For preventive maintenance inspect/service MMCH/Y, use PM/Inspect/Service EVA MTTR and PM/Inspect/Service EVA crew size for the EVA portion; use PM/Inspect/Service IVA MTTR and PM/Inspect/Service IVA crew size for the IVA portion; and use PM/Inspect/Service EVR MTTR and a crew size of one (1) operator for the EVR portion.

$$\text{MMCH / Y} = \text{MA / Y} \times \text{CREW SIZE} \times \text{MTTR}$$

TABLE 4: MAINTAINABILITY K FACTORS

Code	Reliability Class	External K-Factor	Internal K-Factor
1	Electronic	1.59	1.31
2	Electrical	1.63	1.34
3	Electro-Mechanical	1.57	1.30
4	Mechanical	1.64	1.35
5	Structural with Crew Contact	1.16	1.16
6	Structural with No Crew Contact	1.16	1.16

Table 5: FDIR Assessment Data Definition Table

Description

Function – Identify the function supported by the ORU.

ORU – Identify the ORU associated with the failure mode code.

24 Hour Autonomous (Y/N) – Specify whether the function provided by the ORU is required for 24 hour autonomous operations (Yes or No).

Failure Mode Code – Reference the failure mode code for each ORU failure mode as identified in the FMEA.

Cat/Crit Hazard < 24 Hours (Y/N) – May a critical or catastrophic hazard occur in less than 24 hours as a result of the failure mode (Yes or No).

Detection: A/M/N – Specify whether Automatic, Manual or No detection is provided for the failure mode.

Detection: Failure Signature Algorithms – Describe the algorithm (including sensor/system states) used to detect the failure mode.

Detection: SRS/LSAR Reference – Provided a reference to the SRS that documents automatic detection, and/or the LSAR that documents manual detection procedures.

Isolation for Recovery: A/M/N – Specify whether Automatic, Manual or No isolation to the recovery level is provided for the failure mode.

Isolation for Recovery: Algorithms – Describe the algorithm (including sensor/system states) used to isolate the failure mode to the recovery level.

Isolation for Recovery: SRS/LSAR Reference – Provided a reference to the SRS that documents automatic isolation to the recovery level, and/or the LSAR that documents manual isolation to the recovery level procedures.

Isolation for Maintenance: Ambiguity Level 1/2/3/>3 – Specify the ambiguity level (1, 2, 3 or greater than 3 maintenance units) that Isolation for Maintenance will be able to achieve.

Isolation for Maintenance: A/M/N – Specify whether Automatic, Manual or No isolation to the maintenance level is provided for the failure mode.

Isolation for Maintenance: Algorithms – Describe the algorithm (including sensor/system states) used to isolate the failure mode to the maintenance level.

Isolation for Maintenance: SRS/LSAR Reference – Provided a reference to the SRS that documents automatic isolation to the maintenance level, and/or the LSAR that documents manual isolation to the maintenance level procedures.

Recovery: A/M/N – Specify whether **A**utomatic, **M**anual or **N**o on-orbit recovery is provided for the failure mode.

Table 5: FDIR Assessment Data Definition Table

Description

Recovery: Algorithms – Describe the algorithm (including sensor/system states) used to recovery the function lost as a result of the failure mode.

Recovery: SRS/LSAR Reference – Provided a reference to the SRS that documents automatic recovery, and/or the LSAR that documents manual recovery procedures.

Safe: A/M/N – Specify whether **A**utomatic, **M**anual or **N**o on-orbit safing is provided for the failure mode.

Safe: Algorithms – Describe the algorithm (including sensor/system states) used to safe a hazard that results from the failure mode.

Safe: SRS/LSAR Reference – Provided a reference to the SRS that documents automatic safing, and/or the LSAR that documents manual safing procedures.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Engineering Integration Reports	2. Date of Current Version 10/01/05	3a. DRD No. F-SE-31	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	16. Use (Define need for, intended use of, and/or anticipated results of data) To provide the results of integration engineering analysis to ensure interface compatibility, safety, and data relating to operational constraints for the integrated EXPRESS Rack, WOLF Rack and ELC payloads with the ISS and transportation carrier.		5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.0		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION:

SCOPE: Reports describing results of engineering analyses required for EXPRESS/WOLF/ELC Payload integration and operations.

CONTENT: The following products shall be delivered on a schedule compatible with individual increment integration requirements.

EXPRESS Rack, WOLF, and ELC Compatibility Analysis and Compliance report for each stage: The contractor shall use analyses, test reports, data certificates, and CoCs as the basis for verification submittals per PVPs for the following categories of verification items: (structures/mechanical, EMC, electrical, C&DH, human factors, acoustics, safety, thermal, venting, and gases).

PDL Data Sets: The contractor shall provide inputs to the integrated data sets (, KSC Technical, , and Configuration). Note: KSC Technical Requirements Data Set on an as needed basis.

FORMAT: Any format acceptable by the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Per negotiated work plan.

Frequency Of Submission: Initial, update as required, and final reports.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Traceability Verification Requirements 1b. Data Type: 2	2. Date of Current Version 10/01/05	3a. DRD No. F-SV-03	3b. RFP/Contract No. NAS15-10000
17. Use (Define need for, intended use of, and/or anticipated results of data) To provide a system that ensures that all design and performance requirements requiring verification are addressed by the verification program and that all verification program requirements are closed out.			5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.5.3.1		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: The requirements traceability system shall include all design and performance requirements and all verification program requirements.

CONTENT: The traceability system shall include a record of verification requirements derivation and the subsequent history of where, by what process in the program, and when the requirements were satisfied and certified closed.

FORMAT: Any format acceptable to the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Submit one time for each Contract End Item (CEI) or group of similar CEIs.

Frequency Of Submission: Update as required.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: NASA time limited right of 30 workdays to disapprove in writing any issues and interim changes to those issues shall be 60 calendar days for this data submittal.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Data Integration Standards	2. Date of Current Version 01/01/04	3a. DRD No. F-SW-01	3b. RFP/Contract No. NAS 15 -10000
5. Use Documents the data requirements, standards, and formats of system and operational data required to integrate and sustain the ISS flight software and provide insight into the hardware systems and their operational state.			5. DRD Category <u> X </u> Technical — Administrative — SR&QA
6. References (SOW, Clause, etc.) Contract F, Statement of Work (SOW) – paragraph 3.3.7.2.5		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The Data Integration Standards are used for the signal data either developed or provided for the International Space Station (ISS) program

- Flight software;
- Ground software, including Mission Build Facility (MBF) software;
- Ground Support Equipment (GSE) software and Test Support Equipment (TSE) software;
- Test software, including simulations; and
- Software Verification Facility (SVF) software.

CONTENT:

The signal data standards shall be integrated, documented, and managed in a program document. Signal data is identified as Instrumentation Program and Command List (IP&CL). The signal data standards define the IP&CL that provides the Command and Control (C&C) Multiplexer/DeMultiplexer (MDM), International Partner (IP) interfaces, Shuttle interfaces, and Ground reconfiguration facilities with the data necessary for developing/ controlling the on-board and space/ground interfaces with the United States On-orbit Segment (USOS).

Data Integration standards will be used by NASA Mission Operations Directorate, Payload providers, International Partners for the generation of command instances and telemetry format data. Data standards will be used for the dissemination of the final IP&CL for each flight or stage of the ISS.

FORMAT: NASA/Contractor agreed format currently used by ISSP

9. OPR: OD/Avionics and Software Office

10. FIRST SUBMISSION DATE:

Final Draft submission: 90 days after contract start.

Additional Submission: the approved final draft version submitted to Configuration Management for baselining 120 days after contract start.

11. MAINTENANCE: (The document shall be maintained electronically.)

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (EDMS or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Integrated Software Schedule 1b. Data Type: 2	2. Date of Current Version <p align="center">01/01/04</p>	3a. DRD No. <p align="center">F-SW-03</p>	3b. RFP/Contract No. <p align="center">NAS 15 -10000</p>
6. Use (Define need for, intended use of, and/or anticipated results of data) Provide an integrated schedule to manage the delivery of software products.			5. DRD Category <input checked="" type="checkbox"/> Technical — Administrative — SR&QA
6. References (SOW, Clause, etc.) Contract F, Statement of Work (SOW) – paragraph 3.3.7.11.2		7. Interrelationships (e.g., with other DRDs) PC06	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The integrated software schedule shall serve as the basis for managing and communicating software milestones and deliveries with NASA.

CONTENT: The contractor shall deliver an integrated software schedule identifying software deliveries and Level 2 and Level 3 milestones to satisfy Level 1 program milestones.

FORMAT: The Schedule shall be compatible with DRD PC06.

9. OPR: Avionics and Software Office (OD) Avionics and Software Control Board (ASCB)

10. FIRST SUBMISSION DATE: Start of contract.

Frequency Of Submission: Schedule shall be updated on a weekly basis with ASCB approved updates.

Additional Submissions: None

11. MAINTENANCE: (The document shall be maintained electronically.)

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (MBF or equivalent), designated Website

13. REMARKS: The schedule integrates program participants, consisting of the contractor, NASA institutional support organizations, International Partners/Participants (IPs) and Utilization organizations.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Flight Software Operations Handbook (FSOH)	2. Date of Current Version 10/01/10	3a. DRD No. F-SW-05	3b. RFP/Contract No. NAS 15 -10000
1b. Data Type: 3			5. DRD Category _x_ Technical — Administrative — SR&QA
4. Use The information will be used by flight controllers to understand the operating characteristics and behavior of the flight software.		6. References (SOW, Clause, etc.) SOW paragraph 3.3.7.13	
		7. Interrelationships (e.g., with other DRDs) None	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: The information shall provide flight controllers with information relevant to each ISS system and software release to facilitate display requirements development, procedure development, and effect command and telemetry requirements.

CONTENT: The level of detail provided by the electronic data book, per CSCI function, will be determined and agreed to through a joint definition activity between Boeing/SCI/FCI and NASA/OD/DF. The types of information to be considered for inclusion are as follows: math formula descriptions, flow control diagrams, timing diagrams, mode dependencies, and software sequence conditions (e.g. pass and fail criteria).

FORMAT: Contractor format

9. OPR: OD/Avionics and Software Integration Office

10. FIRST SUBMISSION DATE: First scheduled delivery to be 30 days after contract start.

Frequency Of Submission: TBD

Additional Submissions: As required.

11. MAINTENANCE: (The document shall be maintained electronically.)

12. COPIES/DISTRIBUTION:

1 electronic copy: to a Program authorized repository (MBF or equivalent), designated Website

13. REMARKS: The information will provide operational guidance on the use of the ISS Flight Software.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Payload Integrated Flight Load (PIFL) Version Description Drawing 1b. Data Type: 3	2. Date of Current Version 10/01/05	3a. DRD No. F-SW-12	3b. RFP/Contract No. NAS15-10000
18. Use (Define need for, intended use of, and/or anticipated results of data) Describes the content of the software delivery package including a list of waivers, changes from the previous delivery, and known deficiencies.			5. DRD Category X Technical ___Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.5.1.1		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: To be provided with each delivery of each software product.

CONTENT: The document, which accompanies each software release, contains a version number of the software release, the type of release (flight, test, etc.), and/or scope of content of the release. The following specifics shall be addressed in the content where applicable:

- Source nomenclature
- Database
- Test environment
- Documentation
- Software change requests implemented
- Limitations
- Installation instructions
- Operating system specification
- Software discrepancy reports unresolved in this version
- Notes

FORMAT: Any format acceptable to the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: Complete

Frequency Of Submission: One time, update as required for each software delivery.

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: EXPRESS Configuration Files	2. Date of Current Version 10/01/10	3a. DRD No. F-SW-15	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	19. Use (Define need for, intended use of, and/or anticipated results of data) Used to establish integrated rack or pallet operating configuration; used to support integrated testing at KSC and on-orbit operation.		5. DRD Category X Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.0		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: To describe PSIV products.

CONTENT: PSIV products include:

a. EXPRESS configuration files

1. RIC tables for payloads as required in each stage.
2. Two sets of files are to be delivered. One set will be byte-swapped. This will accommodate loading from the laptop or uplink from the HOSC.

b. Payload applications to be loaded on the EXPRESS rack laptop

c. EXPRESS Logistics Carrier (ELC) configuration

FORMAT: PSIV products should be delivered electronically (MBF, PIMS, etc.) and on CDs or as specified by the customer.

9. OPR: OZ

10. FIRST SUBMISSION DATE: As required per negotiated work plan.

Frequency Of Submission: Each stage that requires EXPRESS or ELC based configuration updates

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: (a) NASA Data Management electronically using EDMS or follow-on system

(b) Program Automated Electronic File (PIMS) – electronic copy

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: PSIVF Flight Products Verification Documents	2. Date of Current Version 10/01/05	3a. DRD No. F-UT-32	3b. RFP/Contract No. NAS15-10000
1b. Data Type: 3	20. Use (Define need for, intended use of, and/or anticipated results of data) This document is used to document PSIVF verification tests plans, procedures, and results to ensure that payload SW is adequately verified		5. DRD Category X Technical ___Administrative ___SR&QA
6. References (SOW, Clause, etc.) SOW paragraph 8.4.1.17		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: Document contains the verification test plans, test procedures, and test reports for each flight of payloads that the PSIVF is producing a set of flight software.

CONTENT: This DR contains the following:
verification requirements
verification procedures
verification traceability and reports

FORMAT: Any format acceptable to the electronic repository.

9. OPR: OZ

10. FIRST SUBMISSION DATE: As required per negotiated work plan.

Frequency Of Submission: One time, update as required

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: None.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Software Version Description Document (VDD), Software and Data Item Package 1b. Data Type: 3	2. Date of Current Version 10/01/05	3a. DRD No. F-UT-39	3b. RFP/Contract No. NAS15-10000
21. Use (Define need for, intended use of, and/or anticipated results of data) Describes the contents of the software delivery package including a list of waivers and lists the changes from the previous operational delivery.			5. DRD Category X Technical ___Administrative ___ SR&QA
6. References (SOW, Clause, etc.) SOW paragraph		7. Interrelationships (e.g., with other DRDs) None.	

8. PREPARATION INFORMATION:

SCOPE: Includes all software products.

CONTENT: The documents which accompany each software release contain a version number of the software release, the type of the release (initial, revision, sustaining engineering, or maintenance), and/or the scope of content of the release (Ears, Software Problem Reports incorporated, etc.). It includes source and object code. The following specifics shall be addressed in the content:

- a. Source Nomenclature.
- b. Data Base.
- c. Test Environment.
- d. Documentation.
- e. Software Change Requests Implemented.
- f. Limitations.
- g. Installation Instructions
- h. Operating System Specification
- i. Software Discrepancy Reports unresolved in this version
- j. Notes

FORMAT: Per SSP 50010-01, Documentation Requirements, Standards and Guidelines

9. OPR: OZ

10. FIRST SUBMISSION DATE: As required per negotiated work plan

Frequency Of Submission: : One time, update as required for each software delivery

Additional Submissions: None.

11. MAINTENANCE: The data item shall be maintained electronically or as otherwise directed by NASA.

12. COPIES/DISTRIBUTION: NASA Data Management electronically using EDMS or follow-on system

13. REMARKS: One delivery for each deliverable item using software. Included with the VDD is all source and executable code, associated data and/or Data Item Package comprising the CSCI. Machine loadable software will be delivered with each software delivery. One CSCI copy per machine delivered.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Engineering CAD Models 1b. Data Type: 3	2. Date of Current Version 01/01/04	3a. DRD No. F-VE-02	3b. RFP/Contract No. NAS 15 -10000
4. Use Input to vehicle integration to support the development of the launch and on-orbit stage models to perform functional performance assessments. The models will be used to support mission design, procedure development, clearance analysis, Shuttle cargo integration, EVA worksite analysis, NBL reconfiguration, solar array shadowing, Aerodynamics/Mass Properties Data Book development, analyze stowage configuration, robotic assembly ops SMS and SSTF training, validate ISS hardware interfaces and ensure hardware will mate on-orbit, and for performing analyses related to IVA operations and Station interior integration.			5. DRD Category <u>X</u> Technical ___ Administrative ___ SR&QA
6. References (a) Statement of Work paragraph 3.3.2.7.1, 3.3.2.7.2 (b) SSP 50124 Sec 3.3.3 (c) SSP 50126 Sec 3.3.2 (d) SSP 50137 Sec R1A-05 (e) SSP 50127 Sec 3.3.3 (f) SSP 50301 Sec 3.2.1 (g) SSP 50177 Part II, Sec 3.5.1		7. Interrelationships: F-VE-09, Sustaining Engineering Drawings and Associated Lists, VE32, Vehicle Engineering Data.	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: End items, elements and/or major assemblies that are assembled and/or reconfigured on-orbit, and that will be launched in the Space Shuttle, HTV and ATV. Best Available and as-designed validated models for planned construction are required. As-built models are required for end items, elements and major assemblies. For Russian elements, only on-orbit (stage) configurations shall be provided. For each stage, a stage configuration model based on integration of all on-orbit elements shall be provided.

CONTENT: Program requires 3-D CAD models with sufficient detail that the external and internal geometry shows an accurate depiction of the element. Two levels of fidelity; high fidelity and low fidelity, should be provided for cargo and on-orbit configurations. Reference model should be provided only for the on-orbit configuration.

Exterior CAD Models

For all exterior CAD models provided, the model is required to show all payload protuberance from the 87-inch radius of the element as it appears in the Shuttle Cargo Bay. The following details shall be included (but not limited to): docking aids, debris shields, cables, cable clamps, brackets, antennas, cameras, lights, targets, vents, handrails, EVA aids, sensors, thrusters, and element-to-element interface geometry.

Low fidelity cargo and stage models shall be created to correspond to the validated models. They contain less information than the corresponding validated models. Launch and on-orbit configurations are required. Files provided shall be identified uniquely for both launch and on-orbit configurations. Reference models are created for the cargo, but are provided only in the on-orbit configuration.

High fidelity cargo and stage detailed models shall be provided including the ORU's that are planned to be replaced on-orbit. Stage models shall be created based on integration of all elements including the EVA tools. Launch and on-orbit configurations are required. Files provided shall be identified uniquely for both launch and on-orbit configurations.

Interior CAD Models

CAD models of interior features are required that may include the following: internal pressure shell, standoffs, hatches, ports, stowage compartments, rack attachments, vents, lights, handrails, racks, seat track, emergency equipment and significant GFE (i.e., CEVIS, IRED, CMRS, etc.) All objects that deploy rotate or otherwise move shall be appropriately documented and modeled with location and limit parameters described.

FORMAT:

- Models shall be full scale in English (inches) units.
- Models shall be constructed to nominal dimensions.
- Models should be built with respect to element local coordinate system as defined by SSP 30219.
- One of the following formats should be provided to the CAD team by the design agency of the end item, element, or major assembly: CATIA, UG, Pro-E or Microstation.
- Models shall be supplied in CATIA, UG, Pro-E, Parasolid, DGN, SLA, VRML, JT or Microstation formats
- Translation: STEP AP203 neutral file format acceptable only if none of the above formats are available.
- Solid Models Only—Models may be unparameterized “dumb solids” meaning tolerance data; model history, material properties, etc. need not be included. CATIA models must be solid-E.
- Model parts should be individual entities and not fused together. This will allow CAD team to update the model based on hardware measurements. Assembly structure, part names and part numbers would be helpful. However, for controlling file size growth and having redundant geometry, all identical components (i.e., handrails, connectors, etc) will be nested in detail/ditto space/assemblies. For example if 20 identical handrails are used, only one detail is required and the rest should be in ditto space/assembly.
- Description on movement limits for any articulating items should be provided.
- As-designed and As-built (validated and final) models shall be validated to released engineering drawings. Drawings shall be located in the VMDB. Interior models shall be delivered either separate from exterior models, or as an appropriately documented assembly such that interior models can easily be separated leaving both interior and exterior features intact. If supplied as separate models, information to associate interior to exterior shall be provided.

- Where interior subassemblies are supplied as separate models, sufficient documentation shall be provided to support correct geometrical integration of each subassembly into its larger interior element.
- A model tree shall be provided which documents the element model assembly architecture as well as model and subassembly titles.
- Models shall be under configuration management so that the pedigree and source of models are documented and retained.
- Models and associated assembly trees and configuration data shall be delivered electronically via FTP site or as Compact Discs.

9. OPR: OM5, Assembly and Configuration Team

10. FIRST SUBMISSION DATE:

Frequency of Submission:

EVA

- High fidelity best available CAD model required at L-21 months, Design Review 1 or Preliminary Design Review.
- High fidelity validated CAD model required at L-15 months, Design Review 2 or Critical Design Review.
- Cargo Low Fidelity CAD model required at L-14 months.
- Stage Validated CAD model required at L-14 months.
- Stage Low Fidelity CAD model required at L-13 months
- High fidelity final CAD model required at L-6 months or Acceptance Data Package.
- Stage Final CAD model required at L-5 months.
- Reference Model required L-20 months.

IVA

- **High Fidelity Best Available CAD Model required at L-14 months.**
- **High Fidelity Validated CAD Model required at L-9 months.**

Additional Submissions:

11. MAINTENANCE: Changes and/or updating of models shall be accomplished in accordance with the Contractor's engineering system and the provisions cited through Sustaining Engineering for the as-built configuration. Models must be maintained electronically.

12. COPIES/DISTRIBUTION:

- 1 original/record (hard copy): OH/Data Management
- 1 electronic copy:** to NASA/ISAC server

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Abstracts for CAD, Thermal, and Structural Models 1b. Data Type: 3	2. Date of Current Version 3/3/04	3a. DRD No. F-VE-03	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) Provide content and format requirements for delivery to NASA of all analytical models, tools, and supporting documentation used to perform assessments to sustain and certify the ISS Vehicle			5. DRD Category _X_ Technical ___ Administrative ___ SR&QA
6. References (SOW, Clause, etc.) CR8320		7. Interrelationships (e.g., with other DRDs)	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE:

The Cargo Mission contractor (Lockheed) is responsible for maintaining all of the items listed in Appendix 6 of the Cargo Mission contract. To facilitate Cargo Mission's sustaining task, various flight latest CAD, thermal and structural models developed for Flight Support Equipment (FSE) needs to be provided to NASA. In addition, each of these models shall be documented and submitted in accordance with this DRD.

CONTENT:

- A. Summary abstracts (usually less than a page in length) for each unique model or category of model will be prepared with the following formatting guidelines:
 - The subsystem team delivering the model.
 - The name of the model with all acronyms defined.
 - The version number of the model delivered.
 - The date of the delivery.
- B. Model/Category of Model Description: This shall be a brief description of the purpose of the model including key input and output parameters, calculation algorithms, and use of the results.
- C. Model Assumptions and Limitations: This shall be a brief discussion of the key assumptions and/or limitations that need to be understood by the user when performing analysis with the model. This discussion should discuss (as applicable to a given model) the uncertainty and/or conservatism of specific inputs and other assumptions that impact the analysis results.
- D. Model Pedigree Discussion: This shall be a brief discussion of the level of validation, verification, correlation, and/or peer review (as appropriate) of the model. The discussion should include results of comparison to test and/or on-orbit data if available. If the model was formally verified or validated via the Verification Analysis Cycle process (Analytical Model Validation Process), provide the appropriate engineering documentation or report number to reference.
- E. Operating Requirements: Describe the hardware and software requirements to operate the analytical model.

FORMAT: Electronic format

- 9) **Office of Primary Responsibility:** External Carriers Office, OM6
- 10) **FIRST SUBMISSION DATE:**
- The delivery plan and schedule shall be provided with the proposal.
 - Frequency Of Submission: Provide model abstract in conjunction with the delivery of the electronic model. Model and abstract updates are the responsibility of NASA.
- 11) **MAINTENANCE:** Electronic model and abstract updates are the responsibility of NASA.
- 12) **COPIES/DISTRIBUTION:**
- 1 original/record (hard copy): OL/Data Management
 - 1 electronic copy: to a Program authorized repository (EDMS or equivalent)
- 13) **REMARKS:** This DR was developed for the delivery of CAD, thermal and structural models on CR8320.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Sustaining Engineering Drawings, New Development Drawings, Mod Kit Drawings or Models and Associated Lists 1b. Data Type: 3	2. Date of Current Version 10/01/10	3a. DRD No. F-VE-09	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) Provide the design data used to manufacture, install, verify, operate, maintain and repair the products of this contract.			5. DRD Category <u>X</u> Technical — Administrative — SR&QA
6. References (a) Statement of Work; paragraph 7.2, 3.3.2.9.1, 3.3.4.1.2.2 (b) ASME Y14.34M-1996, Drawings, Engineering and Associated Lists (c) ASME Y14.100-2000, Engineering Drawing Practices (d) ASME Y14.41-2003, Digital Product Definition Data Practices (e) MIL-PRF-28002C, Requirements for Raster Graphics Representation in Binary Format (f) IEEE/ASTM SI 10-2002, SI 10 American National Standard for Use of the International System of Units (SI): The Modern Metric System (g) SSP 41173, Space Station Quality Assurance Report (h) SSP 30695, Acceptance Data Package Requirements Specification		7. Interrelationships (e.g., with other DRDs) PC25, On-Orbit Installation Drawings or Models VE32, Vehicle Engineering Data PC08 Acceptance Data Package	

8. PREPARATION INFORMATION: The contractor shall prepare the DRD as follows:

SCOPE: This DR establishes the content, format, control, delivery requirements and post delivery maintenance of drawings, schematics, models and associated lists prepared by the contractors and/or obtained from subcontractors/vendors for products of this contract. Subcontractor/vendor drawings, describing items classified as minor procurements or limited development items, which were not developed on CAD systems, are exempt from the electronic transmission and database requirements herein. These drawings shall be accepted by the Contractor and converted to an electronic format using a file format consistent with the requirements in format paragraph for delivery under this DRD.

This DR also covers the drawings or models and associated lists unique to Mod Kits.

- a) Modification Collector Drawing or Models – A drawing or model that lists all the applicable Mod Kit drawings or models for each Class 1 change, by Space Station Change Notice number and is prepared and released by the Design Center Change Engineer assigned the change.
- b) Modification Index Drawing or Model – A drawing or model that depicts the application and sequence of installation for all modifications to an end item. Modification index drawings or models correlate the Mod Kit drawing or model number, Time Compliance Technical Instruction (TCTI), Change Directive number and the production installation drawing or model being modified on the before and after end item identification; also affectivity and serial number to which each modification applies and the prior incorporation sequence requirements when necessary.
- c) Mod Kit Drawing or Model – A drawing or model containing all of the information required to package and identify all the parts assemblies and materials necessary to modify a delivered end item. A Mod Kit also includes modification instructions and special tools, as required.

CONTENT:

Raster Images are to be Group 4 raster images, prepared per MIL-PRF-28002C and applicable documents. The format and quality verification requirements for Raster images of engineering drawing and related documents shall be in conformance with MIL-PRF-28002C, section 6.4.5 (Ordering Data). Ordering data to be used for the interchange of engineering drawings and associated document images are as follows:

- a. The basic requirements for interchange of raster image of engineering drawings and related documents shall be in accordance with Military Specification, Requirements for Raster Graphics Representation in Binary Format, MIL-PRF-28002C.
- b. The type of raster graphics being procured is Type 1 (untiled).
- c. The delivery medium to be used shall be either by magnetic or an electronic transmission, as determined by the Contractor and Tier 1 Subcontractor organizations involved in the interchange.
- d. Proper viewing orientation shall be based on a pixel element path direction of 0 degrees and a line progression direction of 270 degrees, as defined in section 6.4.6, and shown in Figures 1 and 2 of MIL-PRF-28002C.
- e. Raster image pixel element spacing shall be 200 dots per inch (dpi) minimum.
- f. No over-scanning is required beyond the drawing sizes listed in section 6.4.2; however, over-scanning is encouraged to capture ancillary information that is placed outside the border, such as CAD file name or plot date.
- g. Bit ordering shall be MSB to LSB (most significant bit to least significant bit).

- h. Coding of background and foreground information. To the extent that a drawing represents lines on paper, the pixel elements representing lines shall be coded as "black" and those pixel elements representing the paper background shall be coded as "white". This coding convention shall hold, regardless of the colors used for display on any particular device, and regardless of the coding as "0" or "1" on any particular system. In this way, white pixel elements (paper) may be processed as background, and black pixel elements (lines) may be processed as foreground.

NOTE: The preceding definition of the convention for coding background and foreground has been provided because a choice of convention has not been defined in MIL-PRF-28002C or CCITT Recommendation T.6. This convention is needed to support processing of drawing images without human interpretation.

FORMAT:

Delivery to NASA of drawings or models and associated lists will be made electronically, to the NASA server bundled into a ". zip" or a ". tar" file, as mutually agreed to by the NASA and Contractor organizations involved in the interchange and consistent with the specific requirements discussed below.

Delivery of drawing, models, and associated list files will be electronic. The file formats and structures of drawing or model delivery packages are defined in the attachment.

Drawing or model deliveries will be in one of the following formats as mutually agreed to between the Contractor and NASA: Drawings will be in Raster image format, HPGL plot files, PDF files or Printerleaf files. Models will be delivered in a PDF format. "A" size (8.5x11) book form drawings may be delivered in an electronic format other than raster image (including PDF files) as mutually agreed to be the NASA and contractor organizations involved in the interchange.

Other associated lists, including engineering parts list, shall be delivered in one of the following formats as mutually agreed to between the Contractor and NASA: ASCII text files, MS Excel files, HPGL plot files, Printerleaf files, PDF files or raster image format.

- a. Engineering flight drawings shall be in accordance with the intent of ASME Y14.100-2000. Models shall be in accordance with the intent of ASME Y14.41-2003. For inseparable, integral items, which require no intermediate maintenance activities upon installation and operation, specification of part marking and identification requirements in all applicable product drawings may be considered optional.
- b. Drawings for Ground Support Equipment (GSE), Functionally Equivalent Units, and Facility Outfitting shall be in accordance with the intent of ASME Y14.34M-1996, Level 2 characteristics and the specific tailoring shall be as defined by a Product Group-prepared and Contractor-approved GSE/TSE Tailoring Document submitted and maintained under the associated SDRL. Regardless of tailoring, the following requirements shall be met:

Drawings or models will be provided to the lowest level of assembly subject to replacement during maintenance. Existing drawing, model, or catalog data may be provided for items incorporated without alteration into GSE design.

Processes shall be referenced to military specifications, described in the drawings or models, or when referenced to company standards, the standards shall be provided as part of the drawing or model package delivered per this DR.

ANSI standards shall be used for dimensions and tolerance.

Acceptance test requirements shall be identified for replaceable functional components.

Cable diagrams for the GSE unit shall be provided. Connector reference numbers including commercial-off-the-shelf (COTS) receptacles shall be shown. Identify COTS connectors by the vendor's part number, cage code (if available) and manufacturer's name and address.

- c. Drawings for Facility Outfitting (Software Verification Facility, SVF) shall be in accordance with the intent of ASME Y14.34M-1996 (Level 1 classification) and ASME Y14.100-2000. Models shall be in accordance with the intent of ASME Y14.41-2003.
- d. All design activities shall use the methods designated in IEEE/ASTM SI 10-2002 to convert dimensional units from one system (SI or English) to another, where required for interfaces with International Partners.
- e. All design activities shall use the U.S. convention on third-angle projection in depicting views on drawings. A model coordinate system shall be depicted by three mutually perpendicular lines segments with its origin located at the intersection of the three axis.
- f. Where design activity material or process specification numbers are called out, the equivalent Government or industry specification numbers shall accompany them wherever a Government or industry specification is applicable.
- g. Engineering parts list, bill of materials, and note format shall be consistent with ASME Y14.100 and delivered in ASCII format, Raster Image, PDF or MS Excel with each drawing.
- h. Electronic formats shall provide for magnetic, optical media, or electronic transmission exchanges between the subcontractors and Contractor computer systems.

Delivery of drawings, models and associated list files will be electronic bundled into .zip or .tar files. The file formats and structures of drawing delivery packages are defined in the F-VE-09 Attachment.

Drawing deliveries will be in one of the following formats as mutually agreed to between the subcontractors and the Contractor: Raster image format, PDF or HPGL plot files.

Other associated lists shall be delivered in one of the following formats as mutually agreed to between the subcontractors and the Contractor: ASCII text files, HPGL plot files, MS Excel files, PDF files or Raster Image format.

- i. See the attachment that describes the formats for the Headers, Content and Packaging requirements for delivering engineering drawings or models.

9. OPR: OM5, Assembly & Configuration Team

10. FIRST SUBMISSION DATE: NA

Frequency Of Submission: As required to reflect modification of hardware drawings.

Mod Kits are submitted via separate Class 1 changes.

Additional Submissions: Additional submission for any new hardware.

11. MAINTENANCE: The document shall be maintained electronically.

Changes and/or updating of drawings, models, and lists shall be accomplished in accordance with the Contractor's engineering system and the provisions of the cited applicable documents.

Drawings or models shall be maintained electronically.

12. COPIES/DISTRIBUTION:

1 original/record (hard copy): OH/Data Management

1 electronic copy: to a Program authorized repository (VMDB or equivalent)

13. REMARKS: See F-VE-09 Attachment that describes the formats for the Headers, Content and Packaging requirements for delivering engineering drawings.

Attachment for F-VE-09

1.0 INTRODUCTION

This attachment defines the specific requirements for the delivery of engineering drawings and associated lists.

1.1 HOW TO USE THIS ATTACHMENT

This attachment will specify the format in which engineering drawings, models and associated lists are to be delivered by the contractor. Contractor will deliver as described in this attachment.

See Section

Drawings and Models	2.1
Change Documents	2.2
Parts Lists	2.3
Other Associated Lists	2.4

1.2 APPLICABLE DOCUMENTS

The following specifications are referenced in this document:

- MIL-PRF-28002C, Requirements for Raster Graphics Representations in Binary Formats
- MIL-STD-1840A, Automated Interchange of Technical Information
- ASME Y14-100-2000*, Engineering Drawings Practices
- ASME Y14.34*, Associated List
- HP RTL, Reference Guide (Copyright 1994)

*Note: *Drawings on the previous contract were governed by DOD-STD-100C and MIL-D-1000B, but these references have been retired and ASME Y14.100-2000 and ASME Y14.34 are the equivalent documents.*

1.3 GLOSSARY OF TERMS

ASCII [American Standard Code for Informational Interchange] The predominant character set encoding of present day computers. The code includes the 128 upper and lower letters, numerals, and special characters, each encoded in a unique 7 or 8-bit binary number.

Text A subset of ASCII, common to virtually all computer devices, consisting principally of printable characters.

CAGE [Corporate And Government Entity] The code used to uniquely identify a manufacturer. The CAGE code acronym has replaced former acronym FSCM (Federal Supply Code for Manufacturers).

CCITT [International Consultative Committee on Telegraphy and Telephony]

Delivery	A delivery, or drawing delivery, is a complete delivery made in accordance with F-VE-09. This includes all of the drawings, change documentation, parts lists, associated lists, declaration files, and packaging files for the delivery. A delivery is made-up of multiple drawing packages and packaging files.
HPGL	[Hewlett–Packard Graphics Language] A widely used computer language for communicating with printers and plotters.
ISSA	[International Space Station Alpha]
Package	Packages, or drawing packages, are the collection of files that relate specifically to a single drawing. This includes the drawing itself, change documentation, parts lists, associated lists, and declaration files specific to that drawing.
Pixels	Physical picture elements.
PDF	Portable Document Format (PDF) is a universal file format that preserves the fonts, images, graphics, and layout of any source document, regardless of the application and platform used to create it. Adobe PDF files are compact and complete, and can be shared, viewed, and printed by anyone with Adobe reader software.
Raster	The closely spaced parallel lines produced on a display device. An image is formed by modulating the intensity of the individual pixels. A binary representation, "raster form", of the pixels can be used to digitally represent an image.
Raster Graphics	The presentation or storage of images in raster form.

2.0 DOCUMENTS

This section describes the formats that are to be delivered by the product group. In the tables Describing format, Header refers to the section of this document, which defines the relevant headers for this file format, Content refers to the section of this document, which describes the content of this format, and Packaging refers to the section of this document that describes the methods required to package.

2.1 DRAWINGS AND MODELS

Drawing images are to be delivered in one of the following formats, as directed by the SDS. Model Based Definition files are to be delivered in PDF format.

Format	Header	Format	Packaging	dstdocid
Group 4 Raster	3.2	4.3	5.1	CAGE_Dwg_CL_DSI.IMG
Printerleaf	3.4	4.5	5.1	CAGE_Dwg_CL.IPL
HPGL	3.3	4.4	5.1	CAGE_Dwg_CL_DSI.HPL
PDF	3.6	4.7	5.1	CAGE_Dwg_CL_DSI.PDF

TABLE 2.1–1

The dstdocid defines the destination document ID for file headers and delivery packaging purposes. Please note the use of the underscore (“_”) as a delimiter between lexical tokens. This is very important because the software used to verify deliveries relies on this delimiter. Variable codes (shown in *italicized* font) applied to the file names above are explained in the following table. Static codes (shown in normal font) are applied as shown. Do not forget the period preceding the extension. Variable codes are defined as follows:

Code	Description	Length (max)	Example(s)
CAGE:	Contractor CAGE Code	6 char	018355
Dwg:	Drawing number	40 char/digits	1F12345
CL: ¹	Change Letter	Up to 10 char as req’d	–, A, AY, A01
DSI: ²	Drawing Sheet Identifier	7 digits/underscore	002_015

TABLE 2.1–2

¹ Up to 10 characters; initial (first) release shall be indicated by a single dash (“–”). ‘NEW’, ‘N/C’, ‘N/A’, or any other designation is not acceptable for an initial release. Each sheet should be marked with its current revision letter.

² First three digits indicate current sheet number; last three digits indicate total number of sheets for the drawing.

For example, a raster image of the third page (of six) of Boeing-Huntington Beach drawing 1F12345, “A” change letter would have the dstdocid of: “018355_1F12345_A_003_006.IMG”.

For example, a raster image scanned from a MIL–Std–1840 Condition 4 Aperture Card for pages 5 through 8 (of 16 pages total) of a Boeing-Huntington Beach drawing 1F12345, “A” change letter would have the dstdocid of: “018355_1F12345_A_005_016.IMG”.

A printerleaf document of the same drawing (all sheets are present in a single printerleaf file) would have the dstdocid: “018355_1F12345_A.IPL”.

An Adobe PDF document of the same drawing would have the dstdocid: “018355_1F12345_A_003_006.PDF”.

2.2 CHANGE DOCUMENTS

The change document, otherwise known as: Engineering Order (EO), Engineering Change Notices (ECN), Advanced Design Change Notices (ADCN) (unincorporated), or any other document used to describe the type and scope of changes that differentiate the current drawing from its previous revision. If this information is on the face of the drawing, no separate document need be delivered. The change document must contain: the drawing number affected, change letter, the part number affected, description of change, next assembly part number, and effectivity. Change documents are to be delivered in one of the following formats, as directed by the DRD.

Format	Header	Format	Packaging	dstdocid
Group 4 Raster	3.2	4.3	5.1	<i>CAGE_EO_Dwg_CL_DSI</i> .IMG
Printerleaf	3.4	4.5	5.1	<i>CAGE_EO_Dwg_CL</i> .IPL
HPGL	3.3	4.4	5.1	<i>CAGE_EO_Dwg_CL_DSI</i> .HPL
ASCII Text	3.1	4.1	5.1	<i>CAGE_EO_Dwg_CL</i> .LIS
PDF	3.6	4.7	5.1	<i>CAGE_EO_Dwg_CL</i> .DSI.PDF

TABLE 2.2–1

Note: Where *Dwg* this can be either the drawing number or the EO/CR number.

The dstdocid, defines the destination document ID for file headers and delivery packaging purposes. Please note the use of the underscore (“_”) as a delimiter between lexical tokens. This is very important because the software used to verify deliveries relies on this delimiter. Variable codes (shown in *italicized* font) applied to the file names above are explained in the following table. Static codes (shown in normal font) are applied as shown. Do not forget the period preceding the extension. Variable codes are defined in Table 2.1–2.

For example, a raster image of the third page (of six) of the EO for Boeing-Huntington Beach drawing 1F12345, “A” change letter would have the dstdocid of: “018355_EO_1F12345_A_003_006.IMG”.

A printerleaf document of the same drawing EO (All sheets are present in a single printerleaf file) would have the dstdocid: “018355_EO_1F12345_A.IPL”.

An Adobe PDF document of the same drawing EO would have the dstdocid of: “018355_EO_1F12345_A_003_006.PDF”.

2.3 PARTS LISTS

The Parts Lists can be delivered as part of a Raster Image, Printerleaf file, MS Excel spreadsheet or PDF file or as an ASCII file. If delivered in ASCII, the file shall be identified by Drawing Number and Change Letter. The Parts List shall contain, as a minimum, the following data elements for each constituent material: Material Code, description, quantity, and unit of measure. The Parts List shall contain, as a minimum, the following data elements for each component part: Part Number, quantity, description, and vendor CAGE Code (if purchased). Parts lists are to be delivered in the following formats defined in Table 2.3–1.

The dstdocid, defines the destination document ID for file headers and delivery packaging purposes. Please note the use of the underscore (“_”) as a delimiter between lexical tokens. This is very important because the software used to verify deliveries relies on this delimiter. Variable codes (shown in *italicized* font) applied to the file names above are explained in the following table. Static codes (shown in normal font) are applied as shown. Do not forget the period preceding the extension. Variable codes are defined as follows:

Format	Header	Format	Packaging	Dstdocid
Group 4 Raster	3.2	4.3	5.1	CAGE_PL_Dwg_CL_DSI.IMG
Printerleaf	3.4	4.5	5.1	CAGE_PL_Dwg_CL.IPL
HPGL	3.3	4.4	5.1	CAGE_PL_Dwg_CL_DSI.HPL
ASCII Text	3.1	4.1	5.1	CAGE_PL_Dwg_CL.LIS
MS Excel	3.5	4.6	5.1	CAGE_PL_Dwg_CL.XLS
PDF	3.6	4.7	5.1	CAGE_PL_Dwg_CL.DSI.PDF

TABLE 2.3-1

For example, as ASCII text PL for Boeing-Huntington Beach drawing 1F12345, “A” change letter would have the dstdocid of: “018355_PL_1F12345_A.LIS”.

An Adobe PDF document of the same drawing PL would have the dstdocid of: “018355_PL_1F12345_A_003_006.PDF”.

2.3.1 DELIVERY OF PARTS LISTS ONLY

2.3.1.1 NAMING CONVENTION FOR DATASETS

The naming convention for the dataset of a Parts List only delivery shall be 3a768_PL_YYYYMMDD.tar or .zip (where YYYYMMDD shall be the year, month and day). For Boeing Huntsville’s subcontractor PL only deliveries you would add an “s” after the date such as 3a768_PL_YYYYMMDDs.tar or .zip.

2.3.1.2 NAMING CONVENTION FOR ASCII MAP FILE

The naming convention for the ASCII Map File shall be 3a768_PL-Number_-.TXT. (Note: Where *PL-Number_-* is the PL number and the Revision Letter or a dash.) For example an ASCII map file for the PL for drawing 9008477 would be 3A768_PL9008477_-A.TXT. Each PL can be mapped to only one drawing.

2.3.1.3 ATTACHMENT FILE

Please note the order in which the file names appear within each Parts List package; first the Parts List Declaration File, then the ASCII map file, Parts List files.

Each record shall be a maximum of 80 characters in length, un-padded, followed by a CRLF (ASCII 13 followed by ASCII 10) terminator.

10	20	30	40	50	60	70
123456789 123456789 123456789 123456789 123456789 123456789 123456789						
123456789						
3A768_20020929.DF						
3A768_20020929.LET						
3A768_20020929.ATT						
3A768_DF_PL9008477_A.LIS						
3A768_PL9008477_A.TXT						

3A768_PL_PL9008477_A_001_001.IMG
3A768_DF_PL1J01512_-.LIS
3A768_PL1J01512_-.TXT
3A768_PL_PL1J01512_-_001_002.IMG
3A768_PL_PL1J01512_-_002_002.IMG

2.4 OTHER ASSOCIATED LISTS

Other Associated Lists (AL), those documents which are a part of the drawing package and are not otherwise defined in this document, are to be delivered in the following formats as described in Table 2.1–1, or as directed by the DRD.

Other Associated Lists (AL) must reference: the drawing number, change letter, and the part number (if applicable) of its parent drawing.

The *dstdocid*, defines the destination document ID for file headers and delivery packaging purposes. Please note the use of the underscore (“_”) as a delimiter between lexical tokens. This is very important because the software used to verify deliveries relies on this delimiter. Variable codes (shown in *italicized* font) applied to the file names above are explained in the following table. Static codes (shown in normal font) are applied as shown. Do not forget the period preceding the extension. Variable codes are defined as follows:

TABLE 2.4–1

Format	Header	Format	Packaging	<i>dstdocid</i>
Group 4 Raster	3.2	4.3	5.1	<i>CAGE_AL_Dwg_CL_DSI.IMG</i>
Printerleaf	3.4	4.5	5.1	<i>CAGE_AL_Dwg_CL.IPL</i>
HPGL	3.3	4.4	5.1	<i>CAGE_AL_Dwg_CL_DSI.HPL</i>
ASCII Text	3.1	4.1	5.1	<i>CAGE_AL_Dwg_CL.LIS</i>
PDF	3.6	4.7	5.1	<i>CAGE_AL_Dwg_CL_DSI.PDF</i>

Note: Where *Dwg* this can be either the drawing number or the AL number.

For example, a raster image of the third page (of six) of the AL for Boeing-Huntington Beach drawing 1F12345, “A” change letter would have the *dstdocid* of:
“018355_AL_1F12345_A_003_006.IMG”.

A printerleaf document of the same drawing AL (All sheets are present in a single printerleaf file) would have the *dstdocid*: “018355_AL_1F12345_A.IPL”.

An adobe PDF document of the same drawing AL would have the *dstdocid* of:
“018355_AL_1F12345_A_003_006.PDF”.

3.0 FILE HEADERS

The file headers for drawing delivery files are detailed in this section. File names, types and content for those files used in the delivery of the drawing package are detailed in section 5.0.

3.1 ASCII TEXT FILE HEADER

Reference: MIL-STD-1840A, Paragraph 5.1.4.1

All text files share the same common file header structure.

Example:

```

      10   20   30   40   50   60   70
123456789 123456789 123456789 123456789 123456789 123456789 123456789
1234567890

```

```

srcdocid: 1F02676_A.PL
dstdocid: 018355_PL_1F02676_A.LIS
txtfilid: AW
doccls: Unclass
notes:

```

Notes: srodocid: Original name of file (if none, use name in dstdocid)
 dstdocid: Destination Document ID as defined in sections 2.1–2.5
 txtfilid: Use as directed in the content description of the text file
 doccls: Use as shown
notes: Use as shown, unless directed otherwise.

3.2 RASTER FILE HEADER

All MIL-R-28002(A) raster files share a common header structure. The following information is provided to clarify the values these fields should take for this application. The raster image files are set up so that the first 2048 bytes contain the header information in ASCII code and the residual bytes containing the image data are encoded in raster CCITT Group 4 code. The first 2048 bytes shall be written with 128 byte ANSI type F fixed-length records using ASCII data. The area provided for data in a given record can be computed by subtracting the length of the record tag (the field name with a colon and space at the end, i.e.; “notes:”) from 128. The notes field in the header can store 121 characters of text (128–7).

Rec	Name	Contents
1	srcdocid	Filename used to uniquely identify this drawing in senders system (80 characters of data max.)
2	dstdocid	Destination Document ID as defined in sections 2.1–2.5
3	txtfilid	The text literal “None”
4	figid	The text literal “None”
5	srcgph	The text literal “None”
6	doccls	The text literal “Unclass”
7	rtype	The text literal “1”, describing a type 1 raster per MIL-R-28002

8	rorient	Two three digit, zero padded character, strings separated by a comma, specifying the integer pel path and line progression, i.e., "000,270:
9	rpelcnt	Two six digit, zero padded character strings separated by a comma, specifying the integer pel count, i.e.; "040800,052800"
10	rdensty	The text literal "0200", specifying a raster density of 200dpi
11	notes	Free test

Example: The first 90 characters of the first 3 records:

```

          10      20      30 40      50 60      70      80
123456789 123456789 123456789 123456789 123456789 123456789 123456789
123456789 123456789
sredocid: DL1F12345 18355 A 000100001U EHN 002
dstdocid: 018355_1F12345_A_001_006.IMG
txtfilid: None
figid: None
srcgph: None
doccls: Unclass
rtype: 1
rorient: 000,270
rpelcnt: 040800,052800
rdensty: 0200
Notes: None

```

3.3 HEWLETT PACKARD GRAPHIC LANGUAGE FILE HEADER

Hewlett Packard Graphic Language (HPGL) files do not support file headers

3.4 PRINTERLEAF FILE HEADER

Do not alter the Printerleaf file headers.

3.5 MS EXCEL FILE HEADER

MS Excel does not require a header.

3.6 ADOBE ACROBAT PDF FILE HEADER

Do not alter the PDF file headers.

4.0 DATA FILE FORMAT

The file formats for drawing delivery files are detailed in this section. File names, types, and content for those files used in the delivery of the drawing package are detailed in section 5.0.

4.1 ASCII DATA FILE FORMAT

Files shall be 80 (Portrait) or 132 (Landscape) characters wide, blank padded, followed by a Carriage Return Line Feed (CRLF) [ASCII 13 followed by ASCII 10] terminator. Only 7 bit ASCII characters shall be used in ASCII data files

4.2 DRAWING/MODEL INFORMATION FILE FORMAT

The drawing information file is an ASCII text file contained variable length records, terminated by a CRLF [ASCII 13 followed by ASCII 10] sequence. See section 2.4 for specific formatting requirements relating to the content of the document.

4.3 RASTER IMAGE FILE FORMAT

Raster images are to be Group 4 raster images, prepared per MIL-PRF-28002C and applicable documents. The format and quality verification requirements for Raster images of engineering drawings and related documents shall be in conformance with MIL-PRF-28002C, section 6.4.5 (Ordering Data). Ordering data to be used for the interchange of engineering drawing and associated document images are as follows:

- a. The basic requirements for interchange of raster image of engineering drawings and related documents shall be in accordance with Military Specification, Requirements for Raster Graphics Representation in Binary Format, MIL-PRF-28002C.
- b. The type of raster graphics being procured is Type 1 (untiled).
- c. The delivery medium to be used shall be either by magnetic or an electronic transmission, as determined by the organizations involved in the interchange.
- d. Proper viewing orientation for single page per raster fin engineering documents shall be based on a pel path direction of 0 degrees and a line progression direction of 270 degrees, as defined in section 6.4.6, and shown in Figures 1 and 2 of MIL-PRF-28002AC. Multi sheet per raster file engineering documents (i.e., documents scanned from MIL-STD-1840 condition 4 aperture cars) may use one of the other sets of values defined in section 6.4.6 and shown in Figures 1 and 2 of MIL-PRF-28002C, if said values represent the normal viewing orientation.
- e. Raster image pel (pixel element) spacing shall be 200 dpi (dots per inch) minimum.
- f. No overscanning is required beyond the drawing sizes listed in section 6.4.2; however, overscanning is encouraged to capture ancillary information that is placed outside the border, such as CAD file name or plot date.
- g. Bit ordering shall be MSB to LSB (most significant bit to least significant bit).
- h. Coding of background and foreground information. To the extent that a drawing represents lines on paper, the picture elements (pels) representing lines shall be coded as "black" and those pels representing the paper background shall be coded as "white". This coding convention shall hold, regardless of the colors used for display on any particular device, and regardless of the coding as "0" or "1" on any particular system. In this way, white pels (paper) may be processed as background, and black pels (lines) may be processed as foreground.

NOTE: The preceding definition of the convention for coding background and foreground has been provided because a choice of convention has not been defined in MIL-PRF-28002C or CCITT Recommendation T.6. This convention is needed to support processing of drawing images without human interpretation.

4.4 HEWLETT PACKARD GRAPHIC LANGUAGE DATA FILE FORMAT

Hewlett Packard Graphic Language (HPGL) files are to be compliant with HPGL/2 as defined in "The HP–GL/2 and HP RTL Reference Guide [A Handbook for Program Developers]", Hewlett Packard, 1994. (HP part number 5959–9733).

4.5 PRINTERLEAF DATA FILE FORMAT

Printerleaf files shall be compatible with those produced by Interleaf version 5.x.

4.6 MS EXCEL DATA FILE FORMAT

Ms excel files shall be compatible with Windows 97, 2000 or any succeeding version.

4.7 ADOBE ACROBAT PDF FILE FORMAT

Adobe Acrobat PDF files shall be compatible with Adobe Acrobat reader version 4.0 or higher.

5.0 PACKAGING OF DOCUMENTS FOR DELIVERY

This section details file names, types, and content for those files used in the delivery of drawing packages. Regardless of the methods and formats used, each drawing package must be complete within a submittal when delivered.

Drawings packages split across submittals or incomplete drawing packages will not be accepted. All pages belonging to a multiple–page drawing must be accounted for and included within the drawing submittal and must be delivered in the same submittal

The Drawing Declaration file must include all images files, change document files, associated lists, and parts list files submitted electronically.

Copies of the transmittal letter (5.1.2) and its attachment (5.1.3) are to accompany the electronic portion of the delivery.

5.1 PACKAGING OF ELECTRONIC DOCUMENTS FOR DELIVERY

This section details file names, types, and content for those files used in the delivery of electronic documents in drawing packages. A delivery package consists of one delivery declaration file, one transmittal lever, one attachment file, and one or more drawing packages. Each drawing package may contain from one to 999 drawings and be organized as follows:

Delivery Declaration file

Transmittal Letter

Attachment (Electronic)

Drawing declaration file #1

One or more data files

Drawing declaration file #2

One or more data files

5.1.1 DELIVERY DECLARATION FILES

The delivery declaration file is an ASCII file, providing information about the source, destination of the delivery as a whole and specifically the transmittal letter and its attachment.

The destination document ID (dstdocid) for the delivery declaration file shall be a concatenation of the Contractor's six digit CAGE code, an underscore ("_"), the date of the delivery package's transmittal in the format YYYYMMDD, and the extension ".DF". For example, the dstdocid for a transmittal made on 17 March, 2002 by Boeing-Huntington Beach would be: "018355_20020317.DF". The file name of the delivery declaration file is to be the file's destination document ID (dstdocid).

The Delivery Declaration File contains 15 records. Each record shall be 80 characters in length, blank padded, followed by a CRLF (ASCII 13 followed by ASCII 10) terminator. Use the format in the example below. Clarification of data fields is provided in the notes after the example. Where "None" or "Unclass" appears, use as shown. Each line in this file consists of a code starting in column 1, followed by a colon, followed by a space, followed by a data field pertinent to the delivery package. These codes are defined in MIL-STD-1840A.

The example below shows the formatting of a typical line srcdocid: "XMIT20020228".

Example of Delivery Declaration File (Do not include ruler):

```
10 20 30 40 50 60 70
123456789 123456789 123456789 123456789 123456789 123456789 123456789
1234567890
```

```
srcsys: Boeing-Huntington Beach 5301 Bolsa Ave, HB CA 92647
srcdocid: XMIT20020123
srcrelid: NONE
chglvl: 20020123
dteisu: 20020123
dstsys: The Boeing Company: 13100 Space Center Blvd, Houston, TX 77059
dstdocid: 18355_20020123.DF
dstrelid: NONE
dtetrn: 20020123
dlvacc: F-VE-09
filcnt: T3
ttlcls: Unclass
doccls: Unclass
doctyp: NONE
docttl: NONE
```

Notes:

srcsys: Name and address of subcontractor
srcdocid: Name of Transmittal Letter file on source system
chglvl: Date of original document formatted YYYYMMDD
dteisu: Date of issue of the latest change to this document
dstsys: Name and address of receiving system
dstdocid: Destination document ID as defined above
dtetrn: Date of transmission or mailing date formatted YYYYMMDD
dlvacc: Contract – use as shown
filcnt: Number of files – use as shown.

5.1.2 TRANSMITTAL LETTER

The transmittal letter is an ASCII text document with no header. The file name and destination document ID (for use in the attachment) for the transmittal letter shall be a concatenation of the subcontractor's six-digit CAGE code, an underscore (" _ "), the date of the delivery package's transmittal in the format YYYYMMDD and the extension ".LET". Please note that with the exception of the extension, the file names of the transmittal letter and the delivery declaration file are identical. For example the dstdocid for a transmittal made on 17 March, 2002 by Boeing-Huntington Beach would be "018355_20020317.LET".

Use the template below for the format of the Transmittal Letter. Note that it is not a formal contract letter. Formal contract transmittal letters are to be sent by contract administrator.

```

      10  20  30  40  50  60  70
123456789 193456789 123456789 123456789 123456789 123456789 123456789
1934567890
Date: 23-Jan-02
Subject: Space Station Data submittal
1. This is an electronic transmittal of Your Company Name Here drawings enumerated on
the enclosed attachment
2. Distribution of the electronic drawing information has been sent to the computer
database system at Computer Description
Here on January 23, 2002.
3. The number of drawing(s) transmitted: 3
4. A formal contract transmittal letter will follow under separate cover.
```

Each record shall be 80 characters in length, blank padded, followed by a CRLF (ASCII 13 followed by ASCII 10) terminator.

5.1.3 ATTACHMENT

The attachment lists all of the destination document IDs for all of the files in a delivery package. The files are the Delivery Declaration File, the Transmittal Letter, the Attachment, and the filenames in each drawing package. The destination document ID for the attachment shall be a concatenation of the subcontractor's six digit CAGE code, an underscore (" _ "), the date of the delivery package's transmittal in the format YYYYMMDD and the extension ".ATT".

Please note the order in which the file names appear within each drawing package; first the Drawing Declaration File, then the image file(s), Change Document files, Parts List files, and any other associated lists. Note also that the drawing title follows only the first image file for each drawing number.

Each record shall be a maximum of 80 characters in length, un-padded, followed by a CRLF (ASCII 13 followed by ASCII 10) terminator.

10	20	30	40	50	60	70
----	----	----	----	----	----	----

123456789 123456789 123456789 123456789 123456789 123456789 123456789 123456789

```
018355_20020123.DF
018355_20020123.LET
018355_20020123.ATT
018355_DF_1F04087_B.LIS
018355_1F04087_B_001_003.IMG FRAME ASSY, SLING-FLIGHT ELEMENT
018355_1F04087_B_002_003.IMG
018355_1F04087_B_003_003.IMG
018355_EO_993344_-.LIS
018355_PL_1F04087_B.LIS
018355_DF_1F65085_-.LIS
018355_1F65085_-_001_002.HPL BAR, SPREADER - FLIGHT ELEMENT SLING
018355_1F65085_-_002_002.HPL
018355_EO_993344_-.LIS
018355_PL_1F65085_-.LIS
018355_AL_SP-M-512_B.LIS
018355_DF_1F65555_-.LIS
018355_1F65555_-_001_002.IMG BRACKET ASSEMBLY-FLIGHT ELEMENT SLING
018355_1F65555_-_002_002.IMG
018355_EO_1F65555_-.LIS
018355_PL_1F65555_-.LIS
018355_AL_1F65555_-_001_002.IMG
018355_AL_1F65555_-_002_002.IMG
```

5.1.4 DRAWING/MODEL DECLARATION FILE

The drawing declaration file is, in itself, a header for the drawing package, and consists of only header information. The file name and destination document ID (dstdocid) of the drawing declaration file is "CAGE_DF_DWG_CL.LIS".

The dstdocid, defines the destination document ID for file headers and delivery packaging purposes. Please note the use of the underscore ("_") as a delimiter between lexical tokens. This is very important because the software used to verify deliveries relies on this delimiter. Variable codes applied to the file names above are explained in the following table. Static codes are applied as shown. Do not forget the period preceding the extension. Variable codes are defined as follows:

TABLE 5.1.4–1

Code	Description	Length (max.)	Example(s)
CAGE	Contractor CAGE Code	6 char	018355
Dwg or Model	Drawing or Model number	40 char/digits	1F12345
CL ¹	Change Letter	Up to 10 char as req'd	–, A, AY, A01

1. One or two characters; initial (first) release shall be indicated by a single dash ("–"). 'NEW', 'N/C', 'N/A', or any other designation is not acceptable for an initial release.
Reference: MIL–STD–1840A, Paragraph 5.1.1.2

For example, the drawing file for Boeing-Huntington Beach drawing 1F12345, "A" change letter would have the dstdocid of: "018355_DF_1F12345_A.LIS".

Example:

```

          10          20          30          40          50          60          70
123456789 123456789 123456789 123456789 123456789 123456789 123456789
srcsys: Boeing-Huntington Beach 5301 Bolsa Ave, HB CA 92647
srcdocid: 1F04087
srcrelid: NONE
chglvl: B
dteisu: 20020123
dstsys: The Boeing Company: 13100 Space Center Blvd, Houston, TX 77059
dstdocid: 018355_DF_1F04087_B.LIS
dstrelid: NONE
dtetrn: 20020123
dlvacc: F–VE-09
filcnt: R01, T01
ttlcls: Unclass
doccls: Unclass
doctyp: PD
docttl: FRAME ASSY, SLING–FLIGHT ELEMENT

```

Notes:

srcsys: Name and address of subcontractor (80 char max.)
srcdocid: Drawing number (35 char max.)
srcrelid: Use as shown
chglvl: Change Letter (use single "–" if new)(2 char max.)
dteisu: Date of issue of the latest change to this document (YYYYMMDD format)
dstsys: Name and address of receiving system
dstdocid: *Cage Code, Drawing number and Change letter (use single "–" if new)*
dtetrn: Date of transmission or mailing date formatted YYYYMMDD
dlvacc: Contract – use as shown
filcnt: Number of files R01 means one raster file. T4 means four text files, X07 means seven Printerleaf files, and L05 means five HPGL files, E01 means one MS Excel file, and P01 means one PDF file. . (Comma separated)

ttlcls: Use as shown
doccls: Use as shown
doctyp: Use as shown
docttl: Drawing title

The filcnt document types are as follows:

Type	Code
Group 4 Raster Image	R
ASCII Text File	T
Printerleaf File	X
HPGL/2 File	L
MS Excel File	E
PDF	P

5.1.5 DATA FILE NAMES

The file name for data files shall be the file's description document ID (dstdocid), as defined in the relevant sections of this document.

DATA REQUIREMENTS DESCRIPTION
(Based on JSC-STD-123)

1a. DRD Title: Data Conversion and Interface for GFE/IP Drawings to the VMDB. 1b. Data Type: 3	2. Date of Current Version 01/01/04	3a. DRD No. F-VE-13	3b. RFP/Contract No. NAS 15 -10000
4. Use (Define need for, intended use of, and/or anticipated results of data) Take the design data from GFE/IP hardware providers if the providers cannot provide the format and content required by VMDB and convert to the format and content required by the VMDB.			5. DRD Category <u> X </u> Technical — Administrative — SR&QA
6. References a. Statement of Work; paragraph 3.3.4.1.3 b. ASTM-E380, Standard Practice for Use of the International System of Units c. MIL-PRF-28002C, Requirements for Raster Graphics Representation in Binary Format d. SSP 41173, Space Station Quality Assurance Report e. SSP 30695, Acceptance Data Package Requirements Specification		7. Interrelationships (e.g., with other DRDs) (a) F-VE-09, Sustaining Engineering Drawings, Mod Kit Drawings and Associated Lists (b) VE32, Vehicle Engineering Data.	

8. PREPARATION INFORMATION: The contractor shall prepare the deliverables as follows:

SCOPE: This DR establishes the content, format, control, and maintenance of GFE/IP drawings, schematics, and associated lists to be converted and prepared for use and delivery to the VMDB. This DR also makes provisions for the contractor to have the capability to scan hardcopies and put drawings into the electronic format required by the VMDB.

CONTENT:

Raster images: Raster images are to be Group 4 raster images, prepared per MIL-PRF-28002C and applicable documents. The format and quality verification requirements for Raster images of engineering drawings and related documents shall be in conformance with MIL-PRF-28002C, section 6.4.5 (Ordering Data). Ordering data to be used for the interchange of engineering drawing and associated document images are as follows:

- a. The basic requirements for interchange of raster image of engineering drawings and related documents shall be in accordance with Military Specification, Requirements for Raster Graphics Representation in Binary Format, MIL-PRF-28002C.
- b. The type of raster graphics being procured is Type 1 (untiled).
- c. The delivery medium to be used shall be electronic transmission.
- d. Proper viewing orientation shall be based on a pixel element (pel) path direction of 0 degrees and a line progression direction of 270 degrees, as defined in section 6.4.6, and shown in Figures 1 and 2 of MIL-PRF-28002.
- e. Raster image pel spacing shall be 200 dots per inch (dpi) minimum.

- f. No over scanning is required beyond the drawing sizes listed in section 6.3.2; however, over scanning is encouraged to capture ancillary information that is placed outside the border, such as CAD file name or plot date.
- g. Bit ordering shall be MSB to LSB (most significant bit to least significant bit).
- h. Coding of background and foreground information. To the extent that a drawing represents lines on paper, the picture elements (pels) representing lines shall be coded as "black" and those pels representing the paper background shall be coded as "white". This coding convention shall hold, regardless of the colors used for display on any particular device, and regardless of the coding as "0" or "1" on any particular system. In this way, white pels (paper) may be processed as background, and black pels (lines) may be processed as foreground.

NOTE: The preceding definition of the convention for coding background and foreground has been provided because a choice of convention has not been defined in MIL-PRF-28002C or CCITT Recommendation T.6. This convention is needed to support processing of drawing images without human interpretation.

FORMAT: Delivery to NASA of drawings and associated lists will be made electronically. All drawings and associated lists, except for "A" size book form drawings shall be delivered bundled into .zip or .tar files. "A" size book form drawings may be delivered in an electronic format other than raster image as mutually agreed to by the NASA and Contractor organizations involved in the interchange. Drawings and associated lists shall be delivered in ASCII, HPGL, MS Excel or Raster Image format, provided the following criteria are met:

- a. Engineering flight drawings shall be in accordance with the intent of ASME Y14.100-2000. For inseparable, integral items, which require no intermediate maintenance activities upon installation and operation, specification of part marking and identification requirements in all applicable product drawings may be considered optional.
- b. Drawings for Ground Support Equipment (GSE), Functionally Equivalent Units, and Facility Outfitting shall be in accordance with the intent of ASME Y14.100-2000 and the specific tailoring shall be as defined by a Product Group-prepared and Contractor-approved GSE/TSE Tailoring Document submitted and maintained under the associated SDRL. Regardless of tailoring, the following requirements shall be met:

Drawings will be provided to the lowest level of assembly subject to replacement during maintenance. Existing drawing or catalog data may be provided for items incorporated without alteration into GSE design.

Processes shall be referenced to military specifications, described in the drawings, or when referenced to company standards, the standards shall be provided as part of the drawing package delivered per this DR.

ANSI standards shall be used for dimensions and tolerance.

- c. All design activities shall use the methods designated in ASTM-E380 to convert dimensional units from one system (SI or English) to another, where required for interfaces with International Partners.

- d. All design activities shall use the U.S. convention on third-angle projection in depicting views on drawings.
- e. Where design activity material or process specification numbers are called out, the equivalent Government or industry specification numbers shall accompany them wherever a Government or industry specification is applicable.
- f. Engineering parts list, bill of materials, and note format shall be consistent with ASME Y14.100-2000 and delivered in ASCII format, Raster Image or MS Excel with each drawing.
- g. Electronic formats shall provide for magnetic, optical media, or electronic transmission exchanges between the GFE/IP drawing systems.
- h. Delivery of drawings, and associated list files will be electronic bundled into .zip or .tar files.
- i. Drawing deliveries will be in one of the following formats: Raster image format, or HPGL plot files.
- j. Other associated lists shall be delivered in one of the following formats: ASCII text files, HPGL plot files, MS Excel files, or Raster Image format.

9. OPR: OM5, Assembly & Configuration Team

10. FIRST SUBMISSION DATE:

Frequency Of Submission: As drawings are released to manufacturing and whenever modified.

Additional Submissions: Additional submissions for any new hardware.

11. MAINTENANCE: (The document shall be maintained electronically.

Changes and/or updating of drawings and list shall be accomplished in accordance with the Contractor's engineering system and the provisions of the cited applicable documents. Drawings shall be maintained electronically.

12. COPIES/DISTRIBUTION:

1 record (hard copy): OH/Data Management

1 copy (electronic): Program authorized electronic library (VMDB or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION

1a. DRD Title: Launch Configuration Drawings or Models	2. Date of Current Version 10/01/10	3a. DRD No. F-VE-14	3b. RFP/Contract No. NAS 15-10000
1b. Data Type: 3			
4. Use: Launch Configuration Drawings or Models: Provide the engineering requirements as a means to ensure that manifested flight hardware is correctly configured for launch.			5. DRD Category <input checked="" type="checkbox"/> Technical <input type="checkbox"/> Administrative <input type="checkbox"/> SR&QA
10. References (a) Statement of Work (SOW); paragraph 3.3.2.9.3 ASME Y14.24-1999, Types and Applications of Engineering Drawings ASME Y14.35M-1997, Revisions of Engineering Drawings and Associated Documents ASME Y14.100-2000, Engineering Drawing Practices ASME Y14.34M-1996, Associated Lists ASME Y14.41-2003, Standard on Digital Production Definition Data Practices IEEE/ASTM SI 10-2002, SI 10, American National Standard for Use of the International System of Units (SI): The Modern Metric System MIL-PRF-28002C-1997, Requirements for Raster Graphics Representation in Binary Format			7. Interrelationships F-VE-09, Sustaining Engineering, New Development, and Mod kit Drawings and Associated Lists VE32, Vehicle Engineering Data

- 8. PREPARATION INFORMATION:** The contractor shall prepare the drawings and associated lists delivered per this DRD as follows:

SCOPE: This DRD establishes the content, format, control, and maintenance of Launch Configuration Drawings or Models and Associated Lists prepared by the contractor for manifested flight hardware items. These drawings or models are required for management control and are not part of the flight hardware's product structure. Per reference (d), these drawings or models are prepared to supplement the end product drawings or models. These drawings or models are also required for management control, logistics purposes, configuration management, and other similar functions as authorized by NASA. These drawings or models do not establish item identification accomplished by the applicable product structure drawings or models, prepared under F-VE-09, as applicable.

Specifically, Launch Configuration Drawings or Models shall provide the engineering requirements to:

- i. Ensure that manifested flight hardware is configured correctly for launch.
- ii. Provide approximate label locations.
- iii. Provide reference notes, including overall dimensions.

CONTENT: Raster images: Raster images are to be Group 4 raster images, prepared per MIL-PRF-28002C and applicable documents. The format and quality verification requirements for Raster images of engineering drawings and related documents shall be in conformance with MIL-PRF-28002C, section 6.4.5 (Ordering data). Ordering data to be used for the interchange of engineering drawing and associated document images are as follows:

- a. The basic requirements for interchange of Raster image of engineering drawings and related documents shall be in accordance with Military Specification MIL-PRF-28002C, Requirements for Raster Graphics Representation in Binary Format.
- b. The type of raster graphics being procured is Type 1 (untiled).
- c. The delivery medium to be used shall be either by magnetic or an electronic transmission.
- d. Proper viewing orientation shall be based on a pel path direction of 0 degrees and a line progression direction of 270 degrees, as defined in section 6.4.6, and shown in Figures 1 and 2 of MIL-PRF-28002C.
- e. Raster image pixel element (pel) spacing shall be a minimum of 200 dots per inch (dpi).
- f. No over scanning is required beyond the drawing sizes listed in section 6.4.2; however, over scanning is encouraged to capture ancillary information that is placed outside the border, such as CAD file name or plot date.
- g. Bit ordering shall be most significant big (MSB) to least significant bit (LSB).
- h. Coding of background and foreground information. To the extent that a drawing represents lines on paper, the pels representing lines shall be coded as "black" and those pels representing the paper background shall be coded as "white". This coding convention shall hold, regardless of the colors used for display on any particular device, and regardless of the coding as "0" or "1" on any particular system. In this way, white pels (paper) may be processed as background, and black pels (lines) may be processed as foreground.

NOTE: The preceding definition of the convention for coding background and foreground has been provided because a choice of convention has not been defined in MIL-PRF-28002C or CCITT Recommendation T.6. This convention is needed to support processing of drawing images without human interpretation.

FORMAT: Delivery to NASA of drawings or models and associated lists will be made electronically, to the NASA server bundled into a ". zip" or a ". tar" file, as mutually agreed to by the NASA and Contractor organizations involved in the interchange and consistent with the specific requirements discussed below. The file formats and structures of drawing and model delivery packages are defined in the attachment to F-VE-09.

Drawing deliveries will be in one of the following formats as mutually agreed to between the Contractor and NASA: Raster image format files, HPGL plot files, or Portable Document Format (PDF) files. Model deliveries will be in PDF files.

Other associated lists, including engineering Parts List (PL), Engineering Order (EO), Engineering Change Notice (ECN), Advanced Design Change Notice (ADCN), shall be delivered in one of the following formats as mutually agreed to between the Contractor and NASA: ASCII text files, MS Excel files, HPGL plot files, PDF files, or Raster image format files.

- a. Launch Configuration Drawings shall be Level 3 Production drawings and prepared in accordance with the intent of ASME Y14.100-2000. Models shall be Level 3 Production Models and prepared in accordance with the intent of ASME Y14.41-2003. For inseparable, integral items, which require no intermediate maintenance activities upon installation and operation, specification of part marking and identification requirements in all applicable product drawings may be considered optional.
- b. All design activities shall use the methods designated in IEEE/ASTM SI 10-2002 to convert dimensional units from one system (SI or English) to another, where required for interfaces with IPs.
- c. All design activities shall use the U.S. convention on third-angle projection in depicting views on drawings.
- d. Where design activity material or process specification numbers are called out on a drawing or associated list the call-out shall be in accordance with ASME Y14.100-2000 section 4.30 with the equivalent Government or industry specification numbers accompany them wherever a Government or industry specification is applicable.
- e. Engineering parts list, bill of materials, and note format shall be consistent with ASME Y14.34M-1996 and delivered in ASCII format, Raster Image, PDF or MS Excel format with each drawing.
- f. Electronic formats shall provide for magnetic, optical media, or electronic transmission exchanges between the NASA and Contractor computer systems.

9. OPR: OM5, Assembly and Configuration Team

10. FIRST SUBMISSION DATE:

Frequency Of Submission: Delivered for each flight upon an approved Manifest Request (MR) plus twelve (12) weeks unless an LCD was previously delivered. Drawings shall be delivered in electronic format to the VMDB.

Additional Submissions: After manifest reconciliation and before launch, if the hardware is modified or the launch configuration changes, then drawings or models will be revised and resubmitted to the VMDB.

11. MAINTENANCE: Changes and/or updating of drawings or models and associated lists shall be accomplished in accordance with the Contractor's engineering system and the provisions of the cited applicable documents through Sustaining Engineering. Drawings and models shall be maintained electronically. Changes and/or updating shall be accomplished by Contractor defined process.

12. COPIES/DISTRIBUTION:

1 electronic copy: to a Program authorized repository (VMDB or equivalent)

13. REMARKS: None

DATA REQUIREMENTS DESCRIPTION

1. DR Title: F-VE-15, ISS CoFR Validation Matrix
2. DRD Extension Number(s): None
3. TPR Code: Vehicle Integration, Integrated Test and Verification /OB
4. Data Type: 2
5. Frequency of Submission: CoFR Validation Planning Matrix delivered approximately 4 months before the first flight of a six month increment. CoFR Validation Matrix with attached reports delivered for all flights starting with first flight in FY'11 (40P+) as evidence for CoFR.
6. First Submission Date: June, 2010 (Planning matrix for flights occurring in FY'11 Q1 and Q2.
7. As-of-Date: N/A
8. Copies and Distribution: 1 copy distributed to each of the following:
 - (c) Team of Primary Responsibility (TPR)
 - (b) OH/Data Management
 - (c) Program-authorized electronic repository (EDMS or equivalent)
9. Remarks: NONE
10. Use:
 - (a) Provide NASA with a matrix of applicable requirements for each visiting vehicle flight to be implemented in order to satisfy CoFR objectives.
 - (b) Provide NASA with the results of integrated analyses and assessments to ensure ISS readiness to accept visiting vehicle flights and planned operations for the time period between visiting vehicle flights per the applicable requirements.
 - (b) Maintain analytical models to ensure proper structure and content.
11. References:
 - (a) Statement of Work (SOW); paragraphs 3.2.1.10, 3.2.1.11.1, 3.2.1.11.3.2, 3.4, 3.4.3
 - (b) Other: N/A
12. Inter-relationships:
13. Preparation Information:
- 13.1 Scope:
 - (a) The ISS CoFR Validation Matrix shall be a table of all ISS System Requirements that can be selected as applicable by the subsystems dependent upon the specific visiting vehicle and planned operations.

- (b) Analysis reports shall document all input data, assumptions and boundary conditions, analysis methodology, and analysis results for analyses intended to:
 - (1) Demonstrate vehicle performance and the performance of integrated subsystems with or without the effects of the visiting vehicles.
 - (2) Demonstrate that the planned ISS operations are within the capability ISS vehicle or subsystem per the requirements and/or actual on-orbit capability.
- (b) Analysis models that are developed for vehicle or subsystem end-to-end performance analysis shall be documented and submitted in accordance with this DR.

13.2 Format: The ISS CoFR Validation Matrix and analysis results and models shall be delivered in accordance with the following:

- (a) Results of analyses shall be documented in two data items:
 - (1) A completed ISS CoFR Validation Matrix for each visiting vehicle that indicates the applicability of specific requirements shall be submitted in electronic format. This completed matrix will be a preliminary submittal of VExx and electronically configuration controlled.
 - (2) A one- to two-page abstract/report of the analysis shall be added to the ISS CoFR Validation Matrix and be submitted in electronic format. This abstract/report shall be published in the formal submittal of VExx and electronically configuration controlled. This common abstract/report shall include the analysis title, author, and date as well as a description of the analysis including background, assumptions, analysis discussion, analytical models, operational constraints, issues, summary, and closure recommendations.
- (b) Models shall be documented with two data items.
 - (1) An informal copy of the team's internal memorandum or report documenting the models shall be submitted to the Boeing Systems Integration Team (VIPER) and should include the following information:
 - Inputs
 - Methodology
 - Results
 - Validation

This document will be retained by the Systems Integration team.

- (2) A separate report or a paragraph included in the abstract of the analysis per the content in 13.2.(2). This report shall be published in the formal submittal of VExx and electronically configured. This paragraph should name the analytical models used in the analysis and, if specifically developed for the analysis, the inputs, outputs, and limitations should be described. Evidence of model certification should be included and a description of the model and data configuration control and location.

13.3 Content: This DR includes:

- (a) The ISS CoFR Validation Matrix shall contain the following for the ISS System Specification, and other source documents as required, to be used to indicate applicability for the specific visiting vehicle flight and planned activities.
 - (1) Specification Title
 - (2) Section 3 paragraph #
 - (3) Section 3 requirement title
 - (4) Section 3 requirement text
 - (5) Initialization data needs
 - (6) Facilities/Tools/Models
 - (7) Success criteria
 - (8) Delivery schedule (L-minus)
 - (9) Closure report number and title
 - (10) Closure documentation
- (b) Analyses for ISS vehicle and subsystem functional performance under specified natural and induced environment conditions and operational conditions.
- (c) The Master Analysis Plan and Schedule (MAPS) documenting the end-to-end analysis assumptions. This plan will include (as a minimum):
 - Vehicle configuration and groundrules to be used in the analyses and assessments.
 - Identification and control of data to be used in the assessments.
 - Coverage matrix showing assessments conducted.

13.4 Maintenance: Deliverables shall be maintained electronically.

Contract NAS15-10000

Section J
Attachment J-5
Deliverable Items List

Contract End Items with delivery dates on or before 31 December 2003

Revision 102

LAST UPDATE - 9 December 2008 by D. Clemons Sr.

NOTE: See Attachment J-27 for Contract End Items with delivery dates after 31 December 2003

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
10xxx Series								
1000	CCM 580; CCM 2073; S/A 1114	USOS	1	EA	FLT	ORBT	12/31/03	
3xxx Series								
3003		LAB MODULE	1	EA	FLT	KSCX	09/24/98	
3057		GX1-01094 RACK SHIPPING CONTAINER	2	EA	GSE	MSFC	08/25/95	
3066	CCM 228	GF1-01138 COMMON BERTHING MECHANISM SIMULATOR	1	EA	GSE	KSCX	03/31/98	Change date
3078	CCM 228	GH1-01248 HATCH OPERATION KIT, 1g	2	EA	GSE	MSFC	08/30/96	CHANGED DATE AND QUANTITY
3084	CCM 228	GH1-01256 HATCH RESTRAINT FIXTURE	8	EA	GSE	MSFC	08/30/96	CHANGED DATE AND QUANTITY
3106	CCM 309	220G07694-007 PADS AND PROTECTIVE COVERS-HATCH SEAL PADS	2	EA	GSE	KSCX	05/31/97	
3108	CCM 309	220G07916-001 PADS AND PROTECTIVE COVERS-CBM & VESTIBLE	2	EA	GSE	KSCX	05/31/97	
3114	CCM 228	GA1-01291-9 ELEMENT ACCESS/TEST STAND (ROTATING MPLM)	1	EA	GSE	KSCX	04/01/99	CHANGED DATE AND DELIVERY SITE
3207	CCM 217	KNEE BRACES FOR MPLM 1	16	EA	FLT	MSFC	01/02/96	DATE CHANGED
3208	CCM 1866	KNEE BRACES KIT FOR MPLM 2	1	EA	FLT	KSCX	08/31/99	
3209		KNEE BRACES FOR MPLM 3	16	EA	FLT	KSCX	07/31/98	
3210		CPACS KIT (VER #1)	1	KT	FLT	JSCX	10/31/96	
3215	CCM 290	FLIGHT EXPERIMENT RACK	1	EA	FLT	MSFC	06/27/95	CHANGED NOMENCLATURE
3216	CCM 290	FLIGHT EXPERIMENT RACK	1	EA	FLT	MSFC	10/02/95	
3217	CCM 290	ISPR-4	1	EA	FLT	MSFC	01/06/97	CHANGED DATE
3218	CCM 290	ISPR-4	1	EA	FLT	MSFC	01/06/97	CHANGED DATE
3219	CCM 290	ISPR-4	1	EA	FLT	MSFC	02/03/97	CHANGED DATE
3220	CCM 290	ISPR-4	1	EA	FLT	MSFC	02/03/97	CHANGED DATE
3221	CCM 290	ISPR-4	1	EA	FLT	MSFC	04/02/97	CHANGE DATE PER CCM 290
3222	CCM 290	ISPR-4	1	EA	FLT	MSFC	04/28/97	CHANGE DATE PER CCM 290
3223	CCM 290	ISPR-4	1	EA	FLT	MSFC	04/28/97	CHANGE DATE PER CCM 290
3224	CCM 290	ISPR-4	1	EA	FLT	MSFC	05/22/97	CHANGE DATE PER CCM 290
3225	CCM 290	ISPR-4	1	EA	FLT	MSFC	05/22/97	CHANGE DATE PER CCM 290
3226	CCM 290	ISPR-4	1	EA	FLT	MSFC	06/16/97	CHANGE DATE PER CCM 290
3227	CCM 290	ISPR-4	1	EA	FLT	MSFC	06/16/97	CHANGE DATE PER CCM 290
3228	CCM 290	ISPR-4	1	EA	FLT	MSFC	10/13/97	CHANGE DATE PER CCM 290
3229	CCM 290	ISPR-4	1	EA	FLT	MSFC	10/13/97	CHANGE DATE PER CCM 290
3230	CCM 290	ISPR-4	1	EA	FLT	MSFC	10/13/97	CHANGE DATE PER CCM 290
3231	CCM 290	ISPR-4	1	EA	FLT	MSFC	12/22/97	CHANGE DATE PER CCM 290

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
3232	CCM 290	ISPR-4	1	EA	FLT	MSFC	12/22/97	CHANGE DATE PER CCM 290
3233	CCM 290	ISPR-4	1	EA	FLT	MSFC	12/22/97	
3234	CCM 290	ISPR-4	1	EA	FLT	MSFC	12/22/97	
3235	CCM 290	ISPR-4	1	EA	FLT	MSFC	01/28/98	
3236	CCM 290	ISPR-4	1	EA	FLT	MSFC	01/28/98	
3237	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/02/98	
3238	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/02/98	
3239	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/13/98	
3240	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/13/98	
3241	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/13/98	
3242	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/13/98	CHANGED DATE PER CCM 290
3243	CCM 290	ISPR-4	1	EA	FLT	MSFC	04/21/98	CHANGED DATE PER CCM 290
3244	CCM 290	ISPR-4	1	EA	FLT	MSFC	04/21/98	CHANGED DATE PER CCM 290
3245	CCM 290	ISPR-4	1	EA	FLT	MSFC	05/29/98	CHANGED DATE PER CCM 290
3246	CCM 290	ISPR-4	1	EA	FLT	MSFC	05/29/98	CHANGED DATE PER CCM 290
3247	CCM 290	ISPR-4	1	EA	FLT	MSFC	05/29/98	CHANGED DATE PER CCM 290
3248	CCM 290	ISPR-4	1	EA	FLT	MSFC	03/25/99	ADD PER CCM 290
3249	CCM 290	ISPR-4	1	EA	FLT	MSFC	04/22/99	ADD PER CCM 290
3272	CCM 228,2-1150-97-757	GA1-01291-9 ELEMENT ACCESS/TEST STAND (ROTATING MPLM)	1	EA	GSE	KSCX	09/01/98	Per Boeing Letter 2-1150-97-0757
3273	CCM 228	GA1-01291-9 ELEMENT ACCESS/TEST STAND (ROTATING MPLM)	1	EA	GSE	KSCX	12/15/97	CHANGE DATE PER CCM 228
3296		UPPER STRUCTURE ASSY (GH1-01289)	9	EA	GSE	MSFC	04/28/95	
3301	CCM 056	PORTABLE FIRE EXTINGUISHER PCA	1	KT	FLT	KSCX	06/01/98	
3303	CCM 290; CCM 4151	RESUPPLY STOWAGE RACK	3	EA	FLT	KSCX	03/23/01	Change per CCM 290
3377	CCM 1668	JOINT AIRLOCK	1	EA	FLT	KSCX	09/10/99	
3404		FSE-PDGF	1	EA	FLT	KSCX	08/11/98	
3412	CCM 309	220G07648-001 PADS AND PROTECTIVE COVERS-RACK FACE PADS	7	EA	GSE	KSCX	05/31/97	
3413	CCM 228	220G07648-001 PADS AND PROTECTIVE COVERS-RACK FACE PADS	7	EA	GSE	KSCX	12/15/97	CHANGED DATE/NOMENCLATURE
3423		UPPER STRUCTURE ASSY(GH1-01289)	9	EA	GSE	MSFC	04/26/96	
3425		GX1-01094 RACK SHIPPING CONTAINER	5	EA	GSE	MSFC	04/26/96	
3435		UPPER STRUCTURE ASSY(GH1-01289)	9	EA	GSE	MSFC	08/02/96	
3436		UPPER STRUCTURE ASSY(GH1-01289)	8	EA	GSE	MSFC	01/06/97	
3439	01-648	CBM IVA SEAL KIT	4	EA	FLT	KSCX	08/04/97	
3440		CBM IVA SEAL KIT #6-10	5	EA	FLT	KSCX	03/10/99	
3449	CCM 228	GH1-01324 PERSONNEL FLOOR	1	EA	GSE	KSCX	11/01/97	CHANGED DATE

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
3450	CCM 228	GH1-01324 PERSONNEL FLOOR	1	EA	GSE	KSCX	07/31/98	CHANGED DATE
3451	CCM 228	GH1-01324 PERSONNEL FLOOR	1	EA	GSE	KSCX	03/12/97	CHANGED DATE
3452	CCM 217	OP1-01007 ELECTRICAL FEED THRU UTILITY CAPS	1	SE	OSE	KSCX	05/30/97	DATE CHANGED
3454	CCM 153; MOD 135	OP1-01005-3 CUPOLA/LAB/HAB WINDOW CHANGE-OUT COVER	1	EA	OSE	KSCX	08/11/98	
3458	CCM 287	PMA 2 VESTIBULE OUTFITTING KIT	1	EA	FLT	JSC	06/02/97	ADD
3459	CCM 1401	Z1 TRUSS/PMA 3 VESTIBULE OUTFITTING KIT	1	EA	FLT	KSCX	12/14/98	
3460	Letter 01-0018	MPLM 1 VESTIBULE OUTFITTING KIT	1	KT	FLT	JSC	04/01/99	CHANGED DATE
3463	CCM 1401	LAB VESTIBULE OUTFITTING KIT	1	EA	FLT	KSCX	03/15/99	
3466	CCM 1401	AIRLOCK VESTIBULE OUTFITTING KIT	1	EA	FLT	KSCX	04/15/99	
3470	CCM 287;2-1150-99-0463 - 6/24/99	SPANNAR WRENCH	1	EA	OSE	KSCX	10/23/97	
3734	CCM 551; 01-995	ISPR OUTFITTING KIT #1 (HRF)	1	EA	FLT	B-MSFC	07/31/97	CHANGED NOMENCLATURE, DATE
3735	CCM 551; 01-995	ISPR OUTFITTING KIT #2-1 (EXPRESS)	1	EA	FLT	B-MSFC	08/15/97	CHANGED NOMENCLATURE, DATE
3736	CCM 551; 01-995	ISPR OUTFITTING KIT #2-2 (EXPRESS)	1	EA	FLT	B-MSFC	08/15/97	CHANGED NOMENCLATURE, DATE
3737	CCM 551; 01-995	ISPR OUTFITTING KIT #2-3 (EXPRESS)	1	EA	FLT	B-MSFC	08/15/97	CHANGED NOMENCLATURE, DATE
3738	CCM 551; 01-995	ISPR OUTFITTING KIT #2-4 (EXPRESS)	1	EA	FLT	B-MSFC	10/15/97	CHANGED NOMENCLATURE, DATE
3739	CCM 551	ISPR OUTFITTING KIT #2-5 (EXPRESS)	1	EA	FLT	MSFC	12/15/97	CHANGED NOMENCLATURE, DATE
3740	CCM 551; 01-995	ISPR OUTFITTING KIT #2-6 (EXPRESS)	1	EA	FLT	B-MSFC	12/15/97	CHANGED NOMENCLATURE, DATE
3741	CCM 551; 01-995	ISPR OUTFITTING KIT #2-7 (EXPRESS)	1	EA	FLT	B-MSFC	12/15/97	CHANGED NOMENCLATURE, DATE
3742	CCM 551; 01-995	ISPR OUTFITTING KIT #2-8 (EXPRESS)	1	EA	FLT	B-MSFC	12/15/97	CHANGED NOMENCLATURE, DATE
3743	CCM 551; 01-995	ISPR OUTFITTING KIT #3 (LSE)	1	EA	FLT	B-MSFC	12/15/97	CHANGED NOMENCLATURE, DATE
3744	CCM 551; 01-995	ISPR OUTFITTING KIT #4 (BRP)	1	EA	FLT	B-MSFC	03/15/98	CHANGED NOMENCLATURE, DATE
3745	CCM 551	ISPR OUTFITTING KIT #5 (FCF)	1	EA	FLT	LeRC	04/15/98	CHANGED NOMENCLATURE, DATE
3746	CCM 551; 01-995	ISPR OUTFITTING KIT #6 (BTF)	1	EA	FLT	B-MSFC	04/15/98	CHANGED NOMENCLATURE, DATE
3747	CCM 551	ISPR OUTFITTING KIT #7 (UX)	1	EA	FLT	MSFC	04/15/98	CHANGED NOMENCLATURE, DATE
3748	CCM 551; 01-995	ISPR OUTFITTING KIT #8 (SSFF)	1	EA	FLT	B-MSFC	04/15/98	CHANGED NOMENCLATURE, DATE
3752	CCM 263; Letter 00-1080	OP1-01006 TORQUE DEVICE	1	EA	OSE	JSC	09/26/97	
3810		MOCK-UP ASSEMBLY	1	EA	FEX	JSCX	01/11/95	
3815	CCM 287	GS1-01118, LEAK RATE TEST INTERFACE HARDWARE, MPLM	1	EA	GSE	KSCX	09/10/98	
3824	CCM 287	GQ1-01320, DUCT FLOW BALANCING KIT	9	EA	GSE	KSCX	01/20/98	
3846	CCM 1456	LAB SYSTEMS 1 CSCI(END-ITEM)	1	EA	FLT	JSCX	08/20/98	
3847	CCM 1456	LAB SYSTEMS 2 CSCI(END-ITEM)	1	EA	FLT	JSCX	08/20/98	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
3848		LAB SYSTEMS 3 CSCI(END-ITEM)	1	EA	FLT	JSCX	07/14/98	
3849	CCM 3247	INTERNAL SYSTEMS I (END-ITEM)	1	EA	FLT	JSCX	07/20/00	
3854		AIRLOCK SYSTEMS 1 CSCI(END-ITEM)	1	EA	FLT	JSCX	12/22/98	
3889		VTR CORE UNIT	4	EA	FLT	KSCX	07/01/98	
3899	CCM 273	FEU EM P/L-1	1	EA	FEU	MSFC	05/15/96	CHANGE
3901	CCM 290	RESUPPLY STOWAGE RACK (RSR)	4	EA	FLT	KSCX	12/10/98	Changed per CCM 290
3904		RACK VOLUME CLOSEOUT, SOFT	7	EA	FLT	KSCX	06/01/98	
3905	CCM 287	RESTRAINTS & MOBILITY AIDS, MPLM	1	EA	QUL	KSCX	06/01/97	
3906		PORTABLE FIRE EXTINGUISHER	1	EA	QUL	KSCX	04/01/97	
3907	CCM 189	VIBRATION ISOLATION SYSTEMS EXPERIMENT (ARIS)	1	EA	FEX	KSCX	05/01/96	
3930		SSPF BASE ASSY(GH1-01289)	8	EA	GSE	KSCX	04/28/95	
3931		SSPF BASE ASSY (GH1-01289)	1	EA	GSE	MSFC	04/28/95	
3932		STARBOARD CROSSOVER STRUCTURE ATTACH BRKTS KIT (GH1-01289)	1	KT	GSE	MSFC	04/26/96	
3933		SSPF BASE ASSY (GH1-01289)	4	EA	GSE	KSCX	04/26/96	
3934		PORT CROSSOVER STRUCTURE ATTACH BRKTS KIT (GH1-01289)	1	KT	GSE	MSFC	04/26/96	
3940		MSFC BASE ASSY (GH1-01289)	9	EA	GSE	MSFC	04/28/95	
3941		MSFC BASE ASSY (GH1-01289)	9	EA	GSE	MSFC	04/26/96	
3942		MSFC BASE ASSY (GH1-01289)	9	EA	GSE	MSFC	08/02/96	
3943		MSFC BASE ASSY (GH1-01289)	8	EA	GSE	MSFC	01/06/97	
3945	CCM 094: 01-384	HIGH PRESSURE GAS ADAPTER INSTL. KIT	1	EA	FLT	KSCX	01/11/99	
3946	CCM 290	NODE 1 RESUPPLY STOWAGE RACK	1	EA	FLT	KSCX	12/23/98	Changed per CCM 290
3947	CCM 056	RESUPPLY STOWAGE RACK (RSR) APM	1	EA	FLT	KSCX	03/02/98	
3952	CCM 056	FOOT PLATE ASSY LAB	8	EA	FLT	KSCX	03/03/97	
3954	CCM 056	FOOT LOOP ASSY LAB	8	EA	FLT	KSCX	03/03/97	
3956	CCM 056	BRACE ASSY, L/H LAB	4	EA	FLT	KSCX	03/03/97	
3957	CCM 056	BRACE ASSY, R/H LAB	4	EA	FLT	KSCX	03/03/97	
3958	CCM 056	RESTRAINT ASSY, FOOT SHORT-DUR LAB	10	EA	FLT	KSCX	03/03/97	
3959	CCM 056	RESTRAINT ASSY, FOOT-ANCHOR LAB	2	EA	FLT	KSCX	03/03/97	
3960	CCM 056	RESTRAINT ASSY, TORSO LAB	1	EA	FLT	KSCX	03/03/97	
3961	CCM 056	ANCHOR ASSY, EQUIPMENT-SEAT TRACK LAB	8	EA	FLT	KSCX	03/03/97	
3962	CCM 056	ANCHOR ASSY, EQUIPMENT-HANDRAIL LAB	7	EA	FLT	KSCX	03/03/97	
3963	CCM 056	POST ASSY, ARTICULATING LAB	6	EA	FLT	KSCX	03/03/97	
3964	CCM 263	ADJUSTABLE LENGTH TETHER ASSEMBLY	3	EA	FLT	KSCX	03/03/97	
3965	CCM 056	FIXED LENGTH TETHER ASSY LAB	2	EA	FLT	KSCX	03/03/97	
3966	CCM 056	EQUIPMENT BAG ASSY LAB	2	EA	FLT	KSCX	03/03/97	
3967	CCM 056	HANDRAIL ASSY, 21.5 INCHES LAB	19	EA	FLT	KSCX	03/03/97	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
3968	CCM 056	HANDRAIL ASSY, 8.5 INCHES LAB	7	EA	FLT	KSCX	03/03/97	
3969	CCM 056	PORTABLE SEAT TRACK ADAPTER LAB	1	EA	FLT	KSCX	03/03/97	
3970	CCM 056	RACK HANDLE ASSY LAB	2	EA	FLT	KSCX	03/03/97	
3984	CCM 056	RESTRAINT ASSY, FOOT SHORT-DUR, NODE 1	2	EA	FLT	JSCX	12/01/96	
3985	CCM 056	RESTRAINT ASSY, FOOT-ANCHOR NODE 1	2	EA	FLT	JSCX	12/01/96	
3986	CCM 056	ANCHOR ASSY, EQUIPMENT-SEAT TRACK NODE 1	1	EA	FLT	JSCX	12/01/96	
3987	CCM 056	ANCHOR ASSY, EQUIPMENT-HANDRAIL NODE 1	1	EA	FLT	JSCX	12/01/96	
3988	CCM 056	POST ASSY, ARTICULATING NODE 1	2	EA	FLT	JSCX	12/01/96	
3989	CCM 263	ADJUSTABLE LENGTH TETHER ASSEMBLY	3	EA	FLT	JSCX	12/01/96	
3990	CCM 056	FIXED LENGTH TETHER ASSY NODE 1	2	EA	FLT	JSCX	12/01/96	
3991	CCM 056	EQUIPMT BAG ASSY NODE 1	2	EA	FLT	JSCX	12/01/96	
3992	CCM 056	PORTABLE SEAT TRACK ADAPTER NODE 1	1	EA	FLT	JSCX	12/01/96	
3993	CCM 056	RACK HANDLE ASSY NODE 1	2	EA	FLT	JSCX	12/01/96	
3994	CCM 056, CCM 1727	RESTRAINT ASSY, FOOT SHORT-DUR. NODE 2	2	EA	FLT	BMSD	04/30/99	
3995	CCM 056, CCM 1727	RESTRAINT ASSY, FOOT-ANCHOR NODE 2	2	EA	FLT	BMSD	04/30/99	
3996	CCM 056, CCM 1727	RESTRAINT ASSY, TORSO NODE 2	1	EA	FLT	BMSD	04/30/99	
3997	CCM 056, CCM 1727	ANCHOR ASSY, EQUIPMENT-SEAT TRACK NODE 2	2	EA	FLT	BMSD	04/30/99	
3998	CCM 056, CCM 1727	ANCHOR ASSY, EQUIPMENT-HANDRAIL NODE 2	2	EA	FLT	BMSD	04/30/99	
3999	CCM 056, CCM 1727	POST ASSY, ARTICULATING NODE 2	2	EA	FLT	BMSD	04/30/99	
4xxx Series								
4001	CCM 056	INTEGRATED SEGMENT - P3/P4	1	EA	FLT	KSCX	10/21/99	
4002	CCM 056	INTEGRATED SEGMENT - S3/S4	1	EA	FLT	KSCX	07/13/00	
4003	CCM 056	PV MODULE SEGMENT S6	1	EA	FLT	KSCX	10/23/01	
4005	CCM 056	TRUSS SEGMENT - S5	1	EA	FLT	KSCX	07/05/01	
4009	CCM 228	DC POWER SOURCE, 20/40 KW	1	EA	GSE	KSCX	12/02/96	CHANGE QUANTITY AND DATE
4052	CCM 056	SOLAR ARRAY COUPONS	8	EA	QUL	LERC	04/29/94	
4053	CCM 056	SOLAR ARRAY PANEL	2	EA	QUL	LERC	06/30/94	
4057	CCM 056	ENGINEERING PROTOTYPE MODULES	1	EA	DEV	RSAP	06/15/94	
4058	CCM 056	PRODUCTION PROTOTYPE MODULES	4	EA	QUL	RSAP	08/18/94	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
4059	CCM 056	SOLAR CELL STANDARD	1	EA	DEV	RSAP	05/30/94	
4060	CCM 056	FLIGHT PANEL MODULES	45	EA	FLT	RSAP	12/16/94	
4063	CCM 056	FLIGHT PANEL MODULES	45	EA	FLT	RSAP	11/16/94	
4064	CCM 056	SOLAR CELL MODULE COUPONS	3	EA	DEV	RSAP	03/23/94	
4065	CCM 056	ENGINEERING PROTOTYPE MODULES	1	EA	DEV	RSAP	05/30/94	
4075	CCM 056	BATTERY CELLS - SAFT (4 @31% & 8 @26%)	12	EA	ENG	LERC	02/05/94	
4076	CCM 056; CCM 153; MOD 135	SAA INSTALLABLE GRAPPLE FIXTURE ADAPTER PLATE	2	EA	OSE	KSCX	09/24/97	
4077	CCM 056; CCM 580	PV RADIATOR GRAPPLE FIXTURE	1	EA	OSE	KSCX	10/01/99	
4080	CCM 056	BATTERY CELLS - EPI (4 @31% & 8 @26%)	12	EA	PRO	LERC	06/17/94	
4090	CCM 056	TRUSS SEGMENT - P5	1	EA	FLT	KSCX	01/06/00	
4091	CCM 056: Boeing letter 00-304	P6 CARGO ELEMENT ASSEMBLY	1	EA	FLT	KSCX	08/13/98	
4095	CCM 056	15-CELL THERMAL CYCLING COUPON	2	EA	DEV	RSAP	06/13/94	
4108	CCM 056	PV PANEL MODULE SIMULATORS	9	EA	MTA	RSAP	09/16/94	
4117	CCM 056	EVA DTO CABLE ASSEMBLIES	3	EA	FLT	JSC4	01/06/95	
4118	CCM 056	EVA DTO RECEPTACLES	3	EA	FLT	JSC4	01/06/95	
4119	CCM 056	EVA DTO CONNECTOR HANDLE	1	EA	FLT	JSC4	01/06/95	
4120	CCM 056	EVA DTO CABLE BRACKETS	6	EA	FLT	JSC4	01/06/95	
4123	CCM 056	PMCA CSCI (END-ITEM)	1	EA	FLT	JSCX	07/14/98	
4124	CCM 056	PVCA CSCI (END-ITEM)	1	EA	FLT	JSCX	07/01/98	
4127	CCM 056	Z1 INTEGRATED TRUSS	1	EA	FLT	KSCX	05/07/98	
4136	CCM 153; MOD 135	MAST CANISTER HANDLING TOOL	2	EA	OSE	KSCX	09/24/97	
4137	CCM 287	DDCU	1	EA	ENG	CSA/SPAR	04/15/97	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
4141	CCM 177	HI-FI BATTERY ORU SIMULATOR AND TWO ACME POST INTERFACES WETF	1	EA	DEV	JSCX	09/21/95	ADD
4142	CCM 177	BATTERY ORU SIMULATOR ASSEMBLY WITH BALLAST	1	EA	FLT	JSCX	03/12/96	ADD
4143	CCM 177	HI-FI CHIA INTERFACE PLATE ASSEMBLY WITH INTEGRATED ACME POSTS AND GUIDES FOR SINE SWEEP TEST	1	EA	DEV	JSCX	12/01/95	ADD
4144	CCM 177	CHIA-ADAPTER PLATE ASSEMBLY	1	EA	FLT	JSCX	03/12/96	ADD
4145	CCM 177	BATTERY ENGINEERING MODEL FOR SINE SWEEP TEST	1	EA	DEV	JSCX	10/01/95	ADD
4210	CCM 228	DC LOAD - PLRPC TE4-46039	1	EA	GSE	KSC	12/02/96	ADD PER CCM 228
4225	CCM 244	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	6	EA	FLT	MSFC	10/01/97	ADD PER CCM 244
4226	CCM 244	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	5	EA	FLT	MSFC	10/30/97	ADD PER CCM 244
4227	CCM 244	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	4	EA	FLT	MSFC	11/13/97	ADD PER CCM 244
4230	CCM 425	20/40 KW POWER SUPPLY MOD KIT	1	EA	GSE	KSC	07/01/97	ADD/CHANGE PER CCM 425
4231	CCM 399	ECOMM CONNECTOR BACKSHELL	2	EA	FLT	JSC	02/15/97	
4232	CCM 399	ECOMM CONNECTOR BACKSHELL	1	EA	FLT	JSC	02/15/97	
4233	CCM 399	ECOMM CONNECTOR BACKSHELL	1	EA	FLT	JSC	02/15/97	
4239	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	2	EA	FLT	BMSD	04/30/99	
4240	CCM 561	DC TO DC CONVERTER UNIT, (DDCU) 6.25 KW - INTERNAL (DDCU-I)	2	EA	FLT	BMSD	02/01/99	
4241	CCM 561	DC TO DC CONVERTER UNIT (DDCU) 6.25 KW - INTERNAL (DDCU - I)	2	EA	FLT	BMSD	05/03/99	
4242	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	2	EA	FLT	BMSD	03/26/99	
4243	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	2	EA	FLT	BMSD	03/26/99	
4244	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	2	EA	FLT	BMSD	04/30/99	
4245	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	6	EA	FLT	BMSD	04/30/99	
4246	CCM 561	DC TO DC CONVERUNIT (DDCU) 6.25 KW - INTERNAL (DDCU - I)	2	EA	FLT	BMSD	06/01/99	
4247	CCM 561; 02-572; 03-0230	DC TO DC CONVERUNIT (DDCU) 6.25 KW - INTERNAL (DDCU - I)	1	EA	FLT	BCP	03/01/99	
4249	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP TYPE V	2	EA	FLT	BMSD	05/28/99	
4250	CCM 561	REMOTE POWER CONTROLLER MODULE (RPC-M) 25 AMP TYPE VI	2	EA	FLT	BMSD	04/30/99	
4257	CCM 102	DC TO DC CONVERTER UNIT, HEAT PIPE (DDCU-HP)	2	EA	FLT	KSC	03/24/98	ADD
4258	CCM 458	CARGO HANDLING INTERFACE ADAPTER (CHIA) DDCU-HP	2	EA	FSE	KSC	06/30/98	CHANGED DATE

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
4265	CCM 561; 1-1150-99-0394	RPCM MOUNTING BRACKET	1	EA	FLT	BMSD/BHSV	10/31/98	
4277	CCM 896	AMMONIA SERVICER OSE	1	EA	OSE	KSC	09/13/99	
4280	CCM 859; 02-729	DC TO DC CONVERTER UNIT (DDCU) 6.25 KW - INTERNAL (DDCU - I)	4	EA	FLT	BCP	05/31/00	
4281	CCM 859	REMOTE POWER CONTROLLER MODULE (RPCM) 25 AMP TYPE VI	3	EA	FLT	HSV	05/31/00	
4282	CCM 859	REMOTE POWER CONTROLLER MODULE (RPCM) 50 AMP TYPE III	1	EA	FLT	HSV	05/31/00	
4283	CCM 859; 01-468	REMOTE POWER CONTROLLER MODULE (RPCM) 3.5 AMP TYPE V	19	EA	FLT	HSV	05/31/00	
4284	CCM 859	REMOTE POWER CONTROLLER MODULE (RPCM) 25 AMP TYPE II	1	EA	FLT	HSV	05/31/00	
4291	CCM 937	Y BYPASS JUMPER CABLE	2	EA	FLT	JSC	10/10/98	ADD
4293	CCM 986	CID CONNECTOR KIT	1	EA	FLT	LERC	09/01/98	ADD
4294	CCM 1194	PUMP AND FLOW CONTROL SUBASSEMBLY (PFCS)	1	EA	FLT	KSC	04/07/99	
4295	CCM 1124	REMOTE POWER CONTROLLER MODULE (RPC-M) 50 AMP, TYPE III	2	EA	FLT	MSFC	05/31/00	
4296	CCM 1124	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP, TYPE V	2	EA	FLT	MSFC	05/31/00	
4297	CCM 1124	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP, TYPE V	7	EA	FLT	MSFC	05/31/00	
4298	CCM 1124	REMOTE POWER CONTROLLER MODULE (RPC-M) 3.5 AMP, TYPE V	1	EA	FLT	MSFC	05/31/00	
4299	CCM 1318; 2-1150-99-503	DDCU-E	1	EA	FLT	KSC	07/12/99	
4300	CCM 1318; 2-1150-99-503	BMRRM	1	EA	FLT	KSC	07/12/99	
4301	CCM 1318	SSU	1	EA	FLT	KSC	01/04/99	
4304	CCM 1318; 2-1150-99-503	ECU	1	EA	FLT	KSC	11/09/99	
4305	CCM 1318; 2-1150-99-503	DDCU-I	1	EA	FLT	KSC	11/09/99	
4306	CCM 1318; 2-1150-99-503	RPCM-E TYPE V	1	EA	FLT	KSC	11/09/99	
4307	CCM 1318; 2-1150-99-503	RPCM-I TYPE V	1	EA	FLT	KSC	11/09/99	
4308	CCM 1318; 2-1150-99-503	DCSU	1	EA	FLT	JSC	08/03/99	
4332	CCM 1455	P6 LONG SPACER AMMONIA JUMPER MOD KIT	1	EA	FLT	KSC	04/16/99	
4342	CCM 1420	PMCA CSCI	1	EA	FLT	JSC	02/04/02	
4351	CCM 1316	IMV FAN	1	EA	FLT	BMSD	04/28/01	
4360	CCM 2222	P6 SVS TARGET ACCOMODATIONS KIT	1	EA	FLT	KSC	09/30/99	
4361	CCM 2541	RPCM LEAF SPRING MOD KIT (TYPE 5)	2	EA	FLT	BCP	08/06/99	
4362	CCM 2541	RPCM LEAF SPRING MOD KIT (TYPE 6)	2	EA	FLT	BCP	08/06/99	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
4363	CCM 2541	RPCM LEAF SPRING MOD KIT (Z1)	1	EA	FLT	KSC	08/17/99	
4364	CCM 2692	Z1 QD COLLAR MOD KIT	1	EA	FLT	KSC	10/21/99	
4365	CCM 2638	SOLAR ARRAY ADAPTER GRAPPLE FIXTURE ASSEMBLIES	2	EA	FLT	KSC	12/01/00	
4369	CCM 2734	SSU ACME SCREW MOD KIT	9	EA	FLT	RDYN	10/01/01	
4370	CCM 2624	CIDS INTERFERENCE MOD KIT	1	EA	FLT	BCP	12/31/99	
4374	CCM 2851	POWER MANAGEMENT CONTROL UNIT APPLICATION (PMCUA)	1	EA	FLT	JSC	12/17/99	
4375	CCM 2827; Boeing Letter 00-782	SSU MOD KIT (FOR MOUNTING MIRCO SQUARE SCREWS AND ESD LABEL)	1	EA	FLT	KSC	07/28/00	
4376	CCM 2641; Boeing letter 00-772	PMA-1 H-JUMPER MOD KIT	1	EA	FLT	KSC	09/12/00	
4378	CCM 2870	LAB DDCU RACK JUMPER	1	EA	FLT	KSC	12/20/00	
4379	CCM 2870	NODE 1 TO LAB FORWARD SPDA JUMPER	1	EA	FLT	KSC	10/31/00	
4394	CCM 2363	AAA-6 RESISTOR MOD KITS	4	EA	FLT	HAMSTD	06/28/00	
4395	CCM 2189	Z1 PROTECTIVE COVERS MOD KIT	1	EA	FLT	KSC	03/24/00	
4396	CCM 2638	H'FIXTURE BASE PLATE MOD KIT	1	EA	FLT	KSC	09/05/00	
4397	CCM 2638	PDGF SUPPORT PLATE MOD KIT	1	EA	FLT	KSC	09/05/00	
4398	CCM 3015	Z1 CABLE ASSEMBLY TWX MOD KIT	1	EA	FLT	KSC	03/31/00	
4399	CCM 3156	Z1 QUICK RELEASE PIN MOD KIT	1	EA	FLT	KSC	05/05/00	
4400	CCM 2363	AAA-6 RESISTOR MOD KITS	23	EA	FLT	RDYN	06/28/00	
4402	CCM 3478	Z1 MOD KIT	1	EA	FLT	KSC	07/14/00	
4403	CCM 3246	DC SWITCHING UNIT (DCSU) FIRMWARE MOD	2	EA	FLT	KSC	TBD	
4412	CCM 4307	SEQUENTIAL SHUNT UNIT	1	EA	FLT	BCP	11/04/00	
4413	CCM 4307	ENVIRONMENTAL CONTROL UNIT	1	EA	FLT	BCP	11/04/00	
4416	CCM 4307	DC SWITCHING UNIT	1	EA	FLT	BCP	11/04/00	
4417	CCM 4307	DC TO DC CONVERTER UNIT (EVA)	1	EA	FLT	BCP	11/04/00	
4419	CCM 4307	BATTERY CHARGE/DISCHARGE UNIT (BCDU)	1	EA	FLT	BCP	11/04/00	
4420	CCM 4307	BATTERY CHARGE/DISCHARGE UNIT (BCDU)	1	EA	FLT	BCP	11/04/00	
4421	CCM 4307	BATTERY CHARGE/DISCHARGE UNIT (BCDU)	1	EA	FLT	BCP	11/04/00	
4422	CCM 4307	BATTERY	1	EA	FLT	BCP	11/04/00	
4423	CCM 4307	BATTERY	1	EA	FLT	BCP	11/04/00	
4424	CCM 4100	EVA FRIENDLY, DUMMY CONNECTOR SIZE 1, PL	4	EA	FLT	KSC	11/07/00	
4429	CCM 4307	CANNON CONNECTOR HANDLE	2	EA	FLT	KSC	10/13/00	
4432	CCM 2870	LAB DDCU RACK JUMPER	1	EA	FLT	KSC	12/20/00	
4436	CCM 4704	DDCU - I MOD KIT	1	EA	FLT	KSC	12/15/00	
4437	CCM 4704	DDCU - I MOD KIT	1	EA	FLT	KSC	12/15/00	
4438	CCM 4704	DDCU - I MOD KIT	1	EA	FLT	BMSD	02/15/01	
4439	CCM 4704	DDCU - I MOD KIT	1	EA	FLT	BMSD	02/15/01	
4440	CCM 4704	DDCU - I MOD KIT	1	EA	FLT	BMSD	02/15/01	
4441	CCM 4704	DDCU - I MOD KIT	1	EA	FLT	BMSD	02/15/01	
4443	CCM 4681	BETA GIMBAL BMRRM MOD KIT	2	EA	FLT	KSC	08/31/01	
4444	CCM 5040	EAS JUMPER EXTENSION MODIFICATION KIT	1	EA	FLT	KSC	02/16/01	
4445	02-037	DDCU - I MOD KIT	1	EA	FLT	KSC	02/15/01	
4446	02-037	DDCU - I MOD KIT	1	EA	FLT	KSC	02/15/01	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
4447	01-0265; CCM 5170	EAS REASSEMBLY MOD KIT	1	EA	FLT	KSC	06/01/01	
4448	01-0481	DCSU REIDENTIFICATION MOD KIT	1	EA	FLT	KSC	04/13/01	
4449	01-0481	DCSU REIDENTIFICATION MOD KIT	1	EA	FLT	SPEL	04/13/01	
4450	01-0481	SCA REIDENTIFICATION MOD KIT	6	EA	FLT	KSC	10/01/01	
4451	01-0481	DCSU/SCA REIDENTIFICATION MOD KIT	2	EA	FLT	KSC	10/01/01	
4452	01-474; CCM 4307	BCDU (BATTERY CHARGE/DISCHARGE UNIT)	1	EA	FLT	BOE/CPRK	04/20/01	
4457	01-691; CCM 5596	TERMINATOR ASSEMBLY BMRRM Bus Size 19	1	EA	FLT	KSC	07/06/01	
4458	01-691; CCM 5596	TERMINATOR ASSEMBLY BMRRM Bus Size 25	1	EA	FLT	KSC	07/06/01	
4459	01-691; CCM 5596	PLUG PROTECTIVE COVER	1	EA	FLT	KSC	07/06/01	
4460	02-0102; CCM 6109	RTD TEMP SENSOR MOD KIT	8	EA	FLT	KSC	05/01/02	
4463	02-658 R1	INLET FAN	1	EA	FLT	HAMSTD	12/13/02	
4464	02-658 R1	INLET TEMPERATURE SENSOR	1	EA	FLT	KSC/PPS	12/13/02	
4465	02-658 R1	WATER SEPARATOR	1	EA	FLT	HAMSTD	12/13/02	
4466	02-658 R1	ELECTRIC INTERFACE BOX	1	EA	FLT	KSC/PPS	12/13/02	
4467	02-658 R1	HEAT EXCHANGER	1	EA	FLT	KSC/PPS	12/13/02	
4470	02-760	LIQUID SENSOR	1	EA	FLT	KSC/PPS	12/31/02	
4471	S/A 1176 - CCM 7473	RPCM TYPE V MOD KIT (EXTERNAL)	1	EA	FLT	KSC	01/24/03	
4472	S/A 1176 - CCM 7473	RPCM TYPE V MOD KIT (EXTERNAL)	1	EA	FLT	KSC	09/26/03	
4473	S/A 1176 - CCM 7473	RPCM TYPE V MOD KIT (EXTERNAL)	1	EA	FLT	KSC	09/26/03	
4474	S/A 1176 - CCM 7473	RPCM TYPE V MOD KIT (EXTERNAL)	1	EA	FLT	KSC	09/26/03	
4480	S/A 1120 -CCM 4480	LOCAL DATA INTERFACE (LDI) ASSEMBLY MODIFICATION KIT	1	KT	FLT	B-CP	07/01/03	
30xxx Series								
30001	CCM 561	ADJUSTABLE LENGTH TETHER ASSEMBLY	3	EA	FLT	BMSD	04/30/99	
30002	CCM 561	FIXED LENGTH TETHER ASSY NODE 2	2	EA	FLT	BMSD	04/30/99	
30003	CCM 561	PORTABLE SEAT TRACK ADAPTER NODE 2	1	EA	FLT	BMSD	04/30/99	
30004	CCM 561	RACK HANDLE ASSY NODE 2	2	EA	FLT	BMSD	04/30/99	
30010	CCM 056	RESTRAINT ASSY, FOOT SHORT-DUR. MPLM	6	EA	FLT	KSCX	08/01/97	
30011	CCM 056	RESTRAINT ASSY, FOOT-ANCHOR MPLM	2	EA	FLT	KSCX	08/01/97	
30012	CCM 056	ANCHOR ASSY, EQUIPMENT-SEAT TRACK MPLM	8	EA	FLT	KSCX	08/01/97	
30013	CCM 056	ANCHOR ASSY, EQUIPMENT-HANDRAIL MPLM	8	EA	FLT	KSCX	08/01/97	
30014	CCM 056	POST ASSY, ARTICULATING MPLM	2	EA	FLT	KSCX	08/01/97	
30015	CCM 263	ADJUSTABLE LENGTH TETHER ASSEMBLY	8	EA	FLT	KSCX	08/01/97	
30016	CCM 056	FIXED LENGTH TETHER ASSY MPLM	8	EA	FLT	KSCX	08/01/97	
30017	CCM 056	HANDRAIL ASSY, 21.5 INCHES MPLM	12	EA	FLT	KSCX	08/01/97	
30018	CCM 056	HANDRAIL ASSY, 8.5 INCHES MPLM	5	EA	FLT	KSCX	08/01/97	
30019	CCM 056	RACK HANDLE ASSY MPLM	2	EA	FLT	KSCX	08/01/97	
30023	MOD 120	AVIONICS AIR ASSEMBLY (AAA)	1	EA	FEX	MSFC	10/03/95	
30024	MOD 120	-7 COLDPLATE	1	EA	FEX	MSFC	07/30/95	
30025	CCM 153; MOD 135	OP1-01005-4 CUPOLA/LAB/HAB WINDOW CHANGE-OUT COVER	1	EA	OSE	KSCX	08/11/98	
30026	CCM 153; MOD 135	OPTICAL POWER METER	1	EA	OSE	KSCX	08/11/98	
30029	CCM 228	FLUID QD'S & FLIGHT ELECTRICAL CONNECTORS	1	SE	FLT	KSCX	12/12/96	CHANGED DATE/NOMENCLATURE

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30035	CCM 1289;2-1150-00-586	ARIS KIT 1 - EXPRESS	1	KT	FLT	BMSD	11/18/99	
30036	CCM 1289;2-1150-00-586	ARIS KIT 2 - EXPRESS	1	KT	FLT	BMSD	12/17/99	
30037	CCM 1289;2-1150-00-586	ARIS KIT 3 - EXPRESS	1	KT	FLT	BMSD	12/17/99	
30038	CCM 1289;2-1150-00-586	ARIS KIT 4 - EXPRESS	1	KT	FLT	MSFC	12/17/99	
30039	CCM 1289; CCM 5477	ARIS KIT - MSRR	1	KT	FLT	MSFC	07/31/02	
30040	CCM 1289; CCM 5477	ARIS KIT - ISPR	1	KT	FLT	KSC	09/30/02	
30041	CCM 1289; CCM 5477	ARIS KIT - FCF (FIR)	1	KT	FLT	GRC	09/30/02	
30050	CCM 1289; 2-1150-00-586	ARIS INTEGRATED RACK 1 - EXPRESS	1	EA	FLT	BMSD	11/18/99	
30051	CCM 1289; 2-1150-00-586	ARIS INTEGRATED RACK 2 - EXPRESS	1	EA	FLT	BMSD	01/31/00	
30052	CCM 1289; 2-1150-00-586	ARIS INTEGRATED RACK 3 - EXPRESS	1	EA	FLT	BMSD	08/28/00	
30053	CCM 1289; 2-1150-00-586	ARIS INTEGRATED RACK 4- EXPRESS	1	EA	FLT	BMSD	12/15/00	
30160	CCM'S 1727, 2879, 5776, S/A 1109	NH3/H2O HX HEATER/TEMPERATURE SENSOR ASSY	1	EA	FLT	BMSFC	06/28/02	
30223	CCM 287	P/L MATE SIMULATION	1	EA	FEU	KSC	04/21/97	
30237	CCM 228	GH1-01248 HATCH OPERATION KIT, IG	1	EA	GSE	KSC	08/30/96	ADD
30238	CCM 287	GH1-01256 HATCH RESTRAINT FIXTURE	2	EA	GSE	KSC	08/30/96	ADD
30240	CCM 177	CHIA-SUBCARRIER ASSEMBLY	1	EA	FLT	JSCX	03/12/96	ADD
30241	CCM 177	DRY CARGO CARRIER TO CHIA ASSEMBLY INTERFACE HARDWARE	1	EA	FLT	JSCS	03/12/96	ADD
30244	CCM 263	MANUAL BERTHING MECHANISM	1	EA	FLT	KSC	02/02/98	
30246	CCM 290	RESUPPLY STOWAGE RACK (RSR)	1	EA	FLT	KSC	12/10/98	ADD PER CCM 290
30247	CCM 290	RESUPPLY STOWAGE RACK (RSR)	1	EA	FLT	KSC	01/11/99	ADD PER CCM 290
30248	CCM 290	RESUPPLY STOWAGE RACK (RSR)	1	EA	FLT	KSC	03/23/01	ADD PER CCM 290
30349	CCM 301	RHA RETROFIT KITS	8	EA	FLT	MSFC	01/02/99	Quantity change per Boeing letter 2-1150-06-0151, concurred by NASA on 7/19/06; ADD
30351	CCM 347	AUAI JUMPER CABLE FOR EARLY S-BAND	1	EA	FLT	KSC	09/01/98	ADD
30352	CCM 1400	CBM - PE IVA SEAL KIT- PASSIVE #1-#7	7	EA	FLT	JSC	08/01/98	
30353	CCM 1400;Boeing Letter 99-825	CBM - PE IVA SEAL KIT - PASSIVE #8-#14	7	EA	FLT	KSC	03/10/99	
30354	CCM 1400	CBM - PE IVA SEAL KIT - ACTIVE #1 - #7	7	EA	FLT	JSC	08/01/98	
30355	CCM 399	ECOMM CONNECTOR	2	EA	FLT	JSC	04/01/97	
30356	CCM 399	ECOMM CONNECTOR	1	EA	FLT	JSC	04/01/97	
30357	CCM 399	ECOMM CONNECTOR	1	EA	FLT	JSC	04/01/97	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30359	CCM 399	ECOMM CONNECTOR	1	EA	FLT	JSC	04/01/97	
30364	CCM 399	ECOMM CONNECTOR	2	EA	FLT	JSC	04/01/97	
30365	CCM 427	FOOT PLATES, G11F5026-15	8	EA	FLT	KSC	03/17/97	ADD
30366	CCM 427	FOOT LOOPS, G11F5006-1	8	EA	FLT	KSC	03/17/97	ADD
30368	CCM 358	IMV VALVE CAP (NO HOLE)	2	EA	FLT	JSC	09/01/97	
30369	CCM 399	HATCH WINDOW KIT	2	EA	FLT	JSC	12/18/98	
30370	CCM 551; 01-960	ISPR OUTFITTING KIT #9 (MSFC KIT)	1	EA	FLT	BMSD	07/15/98	ADD
30380	CCM 561	AREA SMOKE DETECTOR	2	EA	FLT	BMSD	04/30/99	
30381	CCM 561	PORTABLE FIRE EXTINGUISHER ASSEMBLY	1	EA	FLT	BMSD	01/31/00	
30382	CCM 561	SAMPLE PROBE KIT	1	EA	FLT	BMSD	04/30/99	
30383	CCM 561	IMV FAN ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30384	CCM 561	RESISTOR, VARIABLE COMPOSITION	1	EA	FLT	BMSD	04/30/99	
30385	CCM 561	GENERAL LUMINAIRE LAMP HOUSING ASSY	8	EA	FLT	BMSD	04/30/99	
30386	CCM 561; CCM 1706	VALVE, THREE WAY, 0.125 INCH	4	EA	FLT	BMSD	07/16/99	
30388	CCM 561	CABIN AIR BACTERIA FILTER/HOUSING	4	EA	FLT	BMSD	04/30/99	
30389	CCM 561	MANUAL VALVE, 0.125 INCH	5	EA	FLT	BMSD	04/30/99	
30390	CCM 561	IMV FAN SILENCER ASSEMBLY	2	EA	FLT	BMSD	04/30/99	
30391	CCM 561	EMERGENCY EGRESS LIGHTING, LIGHT STRIP (57")	2	EA	FLT	BMSD	04/30/99	
30392	CCM 561	REMOTE POWER SOURCE, EEL	2	EA	FLT	BMSD	12/23/99	
30393	CCM 561	VARIABLE AIR VOLUME DAMPER ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30394	CCM 561	PUMP PACKAGE ASSY	2	EA	FLT	BMSD	09/20/99	
30395	CCM 561	SYSTEM FLOW CONTROL ASSY	2	EA	FLT	BMSD	04/30/99	
30396	CCM 561, CCM 1727	3 - WAY MIX VALVE	3	EA	FLT	BMSD	04/29/00	
30397	CCM 561	MANUAL FLOW CONTROL VALVE ASSEMBLY	3	EA	FLT	BMSD	04/30/99	
30398	CCM 561; CCM 5389; CCM 4122	UOP (NODE 2)	1	EA	FLT	KSC	12/01/01	
30399	CCM 561	NITROGEN INTERFACE ASSEMBLY	2	EA	FLT	BMSD	04/30/99	
30400	CCM 561	TEMPERATURE SENSOR	15	EA	FLT	BMSD	04/30/99	
30401	CCM 561	AUDIO BUS COUPLER	2	EA	FLT	BMSD	04/30/99	
30402	CCM 561	CABIN AIR SUPPLY DIFFUSER ASSEMBLY	4	EA	FLT	BMSD	04/30/99	
30403	CCM 561	COMMON VIDEO INTERFACE UNIT	2	EA	FLT	BMSD	04/30/99	
30404	CCM 561	IMV DIFFUSER ASSY	3	EA	FLT	BMSD	04/30/99	
30405	CCM 561	VIDEO SWITCH UNIT	1	EA	FLT	BMSD	04/30/99	
30408	CCM 561	POSITIVE PRESSURE RELIEF VALVE	2	EA	FLT	BMSD	04/30/99	
30409	CCM 561	NEGATIVE PRESSURE RELIEF VALVE	3	EA	FLT	BMSD	04/30/99	
30410	CCM 561	GENERAL LUMINAIRE BASEPLATE BALLAST ASSY	8	EA	FLT	BMSD	04/30/99	
30411	CCM 561	AUDIO TERMINAL UNIT	1	EA	FLT	BMSD	04/30/99	
30412	CCM 561	HANDRAIL ASSEMBLY, 21.5 INCHES	5	EA	FLT	BMSD	04/30/99	
30413	CCM 561	HANDRAIL ASSEMBLY, 8.5 INCHES	2	EA	FLT	BMSD	04/30/99	
30415	CCM 561	HANDRAIL ASSEMBLY, 41.5 INCHES	2	EA	FLT	BMSD	04/30/99	
30423	CCM 561; CCM 1001; CCM 1959	NODE 2-1 CSCI (N2SYS1)	1	EA	FLT	BMSD	03/21/00	
30424	CCM 561; CCM 1001; CCM 1959	NODE 2-2 CSCI (NCSYS20	1	EA	FLT	BMSD	03/21/00	
30427	CCM 561; CCM 1001	INTERNAL SYSTEMS 10A CSCI	1	EA	FLT	BMSD	08/01/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30429	CCM 561	IMV RETURN GRILLE (NODE 2)	6	EA	FLT	BMSD	04/30/99	
30430	CCM 561	IMV DUCT (NODE 2)	9	EA	FLT	BMSD	04/30/99	
30431	CCM 561	IMV SCREEN ASSEMBLY (NODE 2)	6	EA	FLT	BMSD	04/30/99	
30440	S/A 720	CBM RING/SEAL KIT (Aft) - PASSIVE	1	EA	FLT	BMSD	01/30/99	
30441	S/A 720	CBM MECHANISM KIT (Aft) - PASSIVE	1	EA	FLT	BMSD	01/30/99	
30443	S/A 720	KNEE BRACE KIT	4	EA	FLT	BMSD	02/22/99	
30445	CCM 561	RACK STRUCTURE	4	EA	FLT	BMSD	02/22/99	
30449	CCM 1727	MANUAL FLOW CONTROL VALVE	2	EA	FLT	BMSD	09/13/00	
30460	CCM 438	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	JSC	12/19/97	
30461	CCM 438	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	MSFC	04/30/98	
30462	CCM 438	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	LERC	04/30/98	
30463	CCM 438	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	MSFC	07/15/98	
30464	CCM 438	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	MSFC	12/18/98	
30466	CCM 438	SUITCASE TEST ENVIRONMENT FOR PAYLOADS S/W	2	EA	GSE	JSC	12/19/97	
30475	CCM 561	IMV VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30476	CCM 561	IMV CAP	4	EA	FLT	BMSD	08/31/99	
30477	CCM 561	INTRA VEHICULAR ANTENNA ASSY (PATCH)	1	EA	FLT	BMSD	04/30/99	
30478	CCM 561	NODE 2 VESTIBULE OUTFITTING KIT	1	EA	FLT	BMSD	07/14/00	
30479	CCM 561, CCM 1727	JEM VESTIBULE OUTFITTING KIT	1	EA	FLT	BMSD	07/14/00	
30480	CCM 561, CCM 1727	APM VESTIBULE OUTFITTING KIT	1	EA	FLT	BMSD	07/14/00	
30482	CCM 561, CCM 1727	CAM VESTIBULE OUTFITTING KIT	1	EA	FLT	BMSD	07/14/00	
30498	CCM 561	HATCH ASSY, AXIAL	1	EA	FLT	BMSD	01/30/99	
30499	CCM 561	HATCH ASSY, AXIAL	1	EA	FLT	BMSD	01/30/99	
30500	CCM 561, CCM 1727	HATCH KIT, RADIAL	2	EA	FLT	BMSD	01/30/99	
30503	CCM 561	INTERNAL VIDEO CAMERA I/F PORT	1	EA	FLT	BMSD	04/30/99	
30504	CCM 561	WASTE WATER CHECK VALVE	2	EA	FLT	BMSD	04/30/99	
30508	CCM 561	MANUAL FLOW CONTROL VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30509	CCM 561	COLD PLATE - 1	2	EA	FLT	BMSD	04/30/99	
30510	CCM 561	COLD PLATE - 6	2	EA	FLT	BMSD	04/30/99	
30511	CCM 561	MANUAL FLOW CONTROL VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30512	CCM 561	COLD PLATE - 1	2	EA	FLT	BMSD	04/30/99	
30513	CCM 561	COLD PLATE - 6	2	EA	FLT	BMSD	04/30/99	
30514	CCM 561	MANUAL FLOW CONTROL VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30515	CCM 561	COLD PLATE - 1	2	EA	FLT	BMSD	04/30/99	
30516	CCM 561	COLD PLATE - 6	1	EA	FLT	BMSD	04/30/99	
30517	CCM 561	MANUAL FLOW CONTROL VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30518	CCM 561	COLD PLATE - 1	2	EA	FLT	BMSD	04/30/99	
30519	CCM 561	COLD PLATE -6	1	EA	FLT	BMSD	04/30/99	
30520	CCM 561	TEMPERATURE SENSOR	1	EA	FLT	BMSD	04/30/99	
30521	CCM 561	TEMPERATURE SENSOR	1	EA	FLT	BMSD	04/30/99	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30522	CCM 561	TEMPERATURE SENSOR	1	EA	FLT	BMSD	04/30/99	
30523	CCM 561	TEMPERATURE SENSOR	1	EA	FLT	BMSD	04/30/99	
30524	CCM 561	COLD PLATE - 8	2	EA	FLT	BMSD	04/30/99	
30525	CCM 561	COLD PLATE - 8	3	EA	FLT	BMSD	04/30/99	
30526	CCM 561	SUIT PROCESSING COOLING UNIT (SPCU)	1	EA	FLT	BMSD	04/30/99	
30527	CCM 561, CCM 1727	WELDED T RECEPTACLE 1"	8	EA	FLT	BMSD	04/30/99	
30528	CCM 561	WELDED T RECEPTACLE 0.75"	3	EA	FLT	BMSD	04/30/99	
30529	CCM 561	WELDED T RECEPTACLE 0.5"	4	EA	FLT	BMSD	04/30/99	
30537	CCM 552	PRESSURE PANE ASSEMBLY (PART # 683-11405-2)	1	EA	QUAL	JSC	03/20/98	
30538	CCM 552	TEST FIXTURE (PART # LR7223-002)	1	EA	TSE	JSC	03/20/98	
30539	CCM 817	CPACS KIT (VER # 1.1)	1	EA	GDU	JSC	09/30/97	
30540	CCM 458	SPDU EVA CONNECTORS	3	EA	FLT	BNA/DWNY	07/10/98	
30541	CCM 458	SPDU EVA CONNECTORS	3	EA	FLT	BNA/DWNY	07/10/98	
30542	CCM 561	IMV VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30543	CCM 561	IMV VALVE ASSEMBLY	2	EA	FLT	BMSD	04/30/99	
30544	CCM 561	IMV VALVE ASSEMBLY	4	EA	FLT	BMSD	04/30/99	
30545	CCM 561	IMV VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30546	CCM 561	IMV VALVE ASSEMBLY	2	EA	FLT	BMSD	04/30/99	
30547	CCM 561	IMV VALVE ASSEMBLY	1	EA	FLT	BMSD	04/30/99	
30548	CCM 561	INV CAP	7	EA	FLT	BMSD	04/30/99	
30549	S/A 720, CCM 1727	CBM RING/SEAL KIT, ACTIVE - (AXIAL)	1	EA	FLT	BMSD	01/30/99	
30550	S/A 720	CBM MECHANISM KIT (Starboard) - ACTIVE	1	EA	FLT	BMSD	01/30/99	
30594	CCM 859/CCM 1554	RACK POWER SWITCH, RH W/O LED (AVIONICS)	2	EA	FLT	BMSD	04/01/00	
30596	CCM 859	COLD PLATES - 1	1	EA	FLT	BMSD	12/01/00	
30597	CCM 859	RACK STRUCTURE (4-POST)	1	EA	FLT	BMSD	12/01/00	
30598	CCM 859	RACK STRUCTURE (4-POST)	1	EA	FLT	BMSD	12/01/00	
30599	CCM 859	RACK STRUCTURE (6 - POST)	1	EA	FLT	BMSD	12/01/00	
30600	CCM 859	RACK STRUCTURE (6 - POST)	1	EA	FLT	BMSD	12/01/00	
30601	CCM 859	RACK STRUCTURE (6 - POST)	1	EA	FLT	BMSD	12/01/00	
30602	CCM 859	RACK STRUCTURE (6 - POST)	1	EA	FLT	BMSD	12/01/00	
30603	CCM 859	RACK STRUCTURE (6 - POST)	1	EA	FLT	BMSD	12/01/00	
30605	CCM 859	RPDA (1-SLOT)	3	EA	FLT	BMSD	12/01/00	
30609	CCM 859	AAA - FAN	3	EA	FLT	BMSD	12/01/00	
30610	CCM 859	AREA SMOKE DETECTOR	3	EA	FLT	BMSD	12/01/00	
30611	CCM 859	RPDA (2 - SLOT)	1	EA	FLT	BMSD	12/01/00	
30612	CCM 859; CCM 5389; CCM 4122	UOP (NODE 3)	1	EA	FLT	KSC	12/01/01	Reduced Qty from 4 to 1 per on Boeing letter 2-1150-006-24; NASA concurred on 11/14/06; definitized on mod 1406
30613	CCM 859	GENERAL LUMINAIRE LAMP HOUSING ASSEMBLY	8	EA	FLT	BMSD	12/01/00	
30614	CCM 859	EMERGENCY EGRESS LIGHTING REMOTE POWER SOURCE	2	EA	FLT	BMSD	12/01/00	
30615	CCM 859; Letter 01-278; 01-831	EMERGENCY EGRESS LIGHTING STRIP - 36"	1	EA	FLT	BMSD	12/01/00	
30616	CCM 859	EMERGENCY EGRESS LIGHTING STRIP - 57"	2	EA	FLT	BMSD	12/01/00	
30618	CCM 859; 01-831	AUDIO TERMINAL UNIT	2	EA	FLT	BMSD	12/01/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30619	CCM 859	AUDIO BUS COUPLER	2	EA	FLT	BMSD	12/01/00	
30620	CCM 859	VIDEO SWITCH UNIT	1	EA	FLT	BMSD	12/01/00	
30621	CCM 859	DOCKED AUDIO INTERFACE UNIT	1	EA	FLT	BMSD	12/01/00	
30622	CCM 859	AUDIO INTERFACE UNIT	1	EA	FLT	BMSD	12/01/00	
30623	CCM 859; CCM 6647	COMMON VIDEO INTERFACE UNIT	1	EA	FLT	BMSD	12/01/00	
30624	CCM 859	3 WAY SAMPLE VALVE	6	EA	FLT	BMSD	12/01/00	
30627	CCM 859	SAMPLE PROBE KIT	1	EA	FLT	BMSD	12/01/00	
30628	CCM 859	CO2 VENT AND VALVE	1	EA	FLT	BMSD	12/01/00	
30630	CCM 859; CCM 6854' 03-0462	VESTIBULE OUTFITTING KIT (N3 - N1)	1	EA	FLT	BMSFC	07/11/03	
30633	CCM 859	VESTIBULE OUTFITTING KIT (N3 - CUPOLA)	1	EA	FLT	BMSD	12/01/00	
30634	CCM 859	WASTE WATER CHECK VALVE	1	EA	FLT	BMSD	12/01/00	
30635	CCM 859; CCM 6647	PRESSURE CONTROL PANEL	1	EA	FLT	BMSD	12/01/00	
30637	CCM 859	MANUAL AIR SAMPLING VALVES	4	EA	FLT	BMSD	12/01/00	
30638	CCM 859	IMV FAN	6	EA	FLT	BMSD	12/01/00	
30639	CCM 859	IMV VALVE	1	EA	FLT	BMSD	12/01/00	
30641	CCM 859	VARIABLE AIR VOLUME DAMPER ASSEMBLY	1	EA	FLT	BMSD	12/01/00	
30642	CCM 859	CABIN AIR BACTERIA/FILTER ASSEMBLY	4	EA	FLT	BMSD	12/01/00	
30643	CCM 859	PORTABLE FIRE EXTINGUISHER	1	EA	FLT	BMSD	12/01/00	
30644	CCM 859	N2 INTERFACE ASSEMBLY	2	EA	FLT	BMSD	12/01/00	
30645	CCM 859	THREE WAY MIX VALVE	3	EA	FLT	BMSD	12/01/00	
30646	CCM 859	RACK FLOW CONTROL ASSEMBLY	5	EA	FLT	BMSD	12/01/00	
30647	CCM 859	PUMP PACKAGE ASSEMBLY	2	EA	FLT	BMSD	12/01/00	
30648	CCM 859	INTERNAL REGENERATIVE HEAT EXCHANGER (SPCU)	1	EA	FLT	BMSD	12/01/00	
30649	CCM 859	SYSTEM FLOW CONTROL ASSEMBLY	2	EA	FLT	BMSD	12/01/00	
30650	CCM 859	PASSIVE CBM (ASSOCIATED H/W) AXIAL	1	EA	FLT	BMSD	12/01/00	
30651	CCM 859	ACTIVE CBM (ASSOCIATED H/W) AXIAL	1	EA	FLT	BMSD	12/01/00	
30652	CCM 859; 01-799	PASSIVE CBM RING & SEAL KIT HARDWARE	1	EA	FLT	BMSD	12/01/00	
30653	CCM 859	HATCH ASSEMBLY KIT (AXIAL)	2	EA	FLT	BMSD	12/01/00	
30654	CCM 859; 03-0498	ACTIVE CBM MECHANISM KIT	1	EA	FLT	BMSD	12/01/00	
30655	CCM 859	HATCH ASSEMBLY KIT (RADIAL)	4	EA	FLT	BMSD	12/01/00	
30657	CCM 859/CCM 1554	RACK POWER SWITCH, RH WITH LED (ECLSS)	3	EA	FLT	BMSD	12/01/00	
30658	CCM 859	RACK POWER SWITCH, RH WITH LED (W&HC)	1	EA	FLT	BMSD	06/01/00	
30661	CCM 859	RPDA (1 SLOT)	1	EA	FLT	BMSD	12/01/00	
30662	CCM 859	DETECTOR	2	EA	FLT	BMSD	12/01/00	
30663	CCM 859	SMOKE DETECTOR	1	EA	FLT	BMSD	12/01/00	
30664	CCM 859	MANUAL FLOW CONTROL VALVE	19	EA	FLT	BMSD	12/01/00	
30666	CCM 859	IVA ANTENNA	1	EA	FLT	BMSD	12/01/00	
30669	CCM 859	COLD PLATES - 4	10	EA	FLT	BMSD	12/01/00	Reduced Qty from 12 to 10 per credit proposal #4 on Boeing letter 2-1150-06-0194 defintized on Mod 1406
30670	CCM 859	COLD PLATES - 6	4	EA	FLT	BMSD	12/01/00	
30671	CCM 859	COLD PLATES - 7	5	EA	FLT	BMSD	12/01/00	
30672	CCM 859	COLD PLATES - 8	2	EA	FLT	BMSD	12/01/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30673	CCM 859	COLD PLATES - 10	1	EA	FLT	BMSD	12/01/00	Reduced Qty from 2 to 1 per DILCredit Proposal #5 defintized on Mod 1557.
30682	CCM 1682	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	JSC	12/18/98	
30685	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	MSFC	12/08/98	
30720	CCM 458	CONTACTS	72	EA	FLT	BNA/DWNY	07/10/98	
30721	CCM 458	SEAL PLUGS	12	EA	FLT	BNA/DWNY	07/10/98	
30722	CCM 458	INSERTION TOOL	1	EA	FLT	BNA/DWNY	07/10/98	
30723	CCM 458	REMOVAL TOOL	1	EA	FLT	BNA/DWNY	07/10/98	
30724	CCM 458	EVA CONNECTOR	2	EA	FLT	BNA/DWNY	07/10/98	
30725	CCM 458	EVA CONNECTOR	2	EA	FLT	BNA/DWNY	07/10/98	
30726	CCM 458	PINS	52	EA	FLT	BNA/DWNY	07/10/98	
30730	CCM 976	IVA HATCH WINDOW COVERS	4	EA	FLT	JSC	07/31/98	
30731	CCM 976	EVA HATCH WINDOW COVERS	4	EA	FLT	JSC	07/31/98	
30732	CCM 976	IVA HATCH WINDOW COVERS	18	EA	FLT	JSC	12/15/98	
30733	CCM 976	EVA HATCH WINDOW COVERS	18	EA	FLT	JSC	12/15/98	
30734	CCM 967;CCM 1470	ARIS/EXPRESS INSTALLATION & MAINTENANCE TRAINER	1	EA	TEST	JSC	08/10/99	
30736	CCM 1068	FLUID FEEDTHROUGHS	1	EA	FLT	KSC	04/16/98	
30737	CCM 1068	FLUID FEEDTHROUGHS	1	EA	FLT	KSC	04/16/98	
30738	CCM 1068	FLUID CONNECTORS	1	EA	FLT	KSC	04/22/98	
30739	CCM 1068	FLUID CONNECTORS	1	EA	FLT	KSC	04/22/98	
30742	S/A 720, CCM 1727	ACTIVE CBM M/D HARDWARE KIT - AXIAL	1	EA	FLT	BMSD	02/22/00	
30743	S/A 720	ACTIVE CBM M/D HARDWARE KIT -RADIAL	4	EA	FLT	BMSD	01/30/99	
30745	CCM 561	O-RING	7	EA	FLT	BMSD	01/30/99	
30746	CCM 561	O-RING	7	EA	FLT	BMSD	01/30/99	
30747	CCM 561	HATCH, RADIAL	2	EA	FLT	BMSD	06/30/99	
30748	CCM 561	IMV V-BAND CLAMP (CAP CLAMPS)	12	EA	FLT	BMSD	04/30/99	
30751	CCM 561	IMV V-BAND CLAMP (INTERNAL CLAMPS)	12	EA	FLT	BMSD	04/30/99	
30753	CCM 561, CCM 1727	BULKHEAD FLUID FEED THRU KIT (AFT)	1	EA	FLT	BMSD	01/20/00	
30754	CCM 561, CCM 1727	BULKHEAD FLUID FEED THRU KIT (FWD)	1	EA	FLT	BMSD	01/20/00	
30755	CCM 561	BULKHEAD FLUID FEED THRU KIT (STARBOARD)	1	EA	FLT	BMSD	01/20/00	
30756	CCM 561, CCM 1727	BULKHEAD FLUID FEED THRU KIT (PORT)	1	EA	FLT	BMSD	01/20/00	
30757	CCM 561, CCM 1727	BULKHEAD FLUID FEED THRU KIT (NADIR)	1	EA	FLT	BMSD	01/20/00	
30758	CCM 561, CCM 1727	FULKHEAD FLUID FEED THRU KIT (ZENITH)	1	EA	FLT	BMSD	01/20/00	
30759	CCM 561, CCM 1727	BULKHEAD AVIONICS FEED THRU KIT (AFT)	1	EA	FLT	BMSD	04/12/00	
30760	CCM 1435, CCM 1727	BULKHEAD AVIONICS FEED THRU KIT (FWD)	1	EA	FLT	BMSD	04/12/00	
30761	CCM 561, CCM 1727	BULKHEAD AVIONICS FEED THRU KIT (STRBD)	1	EA	FLT	BMSD	04/12/00	
30762	CCM 561, CCM 1727	BULKHEAD AVIONICS FEED THRU KIT (PORT)	1	EA	FLT	BMSD	04/12/00	
30763	CCM 561, CCM 1727	BULKHEAD AVIONICS FEED THRU KIT (NADIR)	1	EA	FLT	BMSD	04/12/00	
30764	CCM 737, CCM 1727	BULKHEAD AVIONICS FEED THRU KIT (ZENITH)	1	EA	FLT	BMSD	04/12/00	
30769	S/A 720, CCM 1727	CBM MECHANISMS KIT, ACTIVE (ZENITH)	1	EA	FLT	BMSD	08/30/00	
30771	CCM 719	MPEV MUFFLER	1	EA	FLT	JSC	09/10/98	
30772	CCM 719	MPEV MUFFLER	1	EA	FLT	JSC	01/04/99	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30773	CCM 561	IVA ANTENNA TERMINATOR	4	EA	FLT	BMSD	04/30/99	
30774	CCM 561	IVA ANTENNA COUPLER	1	EA	FLT	BMSD	04/30/99	
30775	CCM 859	GENERAL LUM, BASEPLATE ASSEMBLY	8	EA	FLT	BMSD	12/01/00	
30778	CCM 859	IMV VALVE	4	EA	FLT	BMSD	12/01/00	
30779	CCM 859	IMV VALVE	1	EA	FLT	BMSD	12/01/00	
30780	CCM 859	IMV VALVE	2	EA	FLT	BMSD	12/01/00	
30781	CCM 859	IMV VALVE	1	EA	FLT	BMSD	12/01/00	
30787	CCM 859	FEEDTHRU CONNECTOR	1	EA	FLT	BMSD	12/01/00	
30788	CCM 859	FEEDTHRU CONNECTOR	1	EA	FLT	BMSD	12/01/00	
30789	CCM 859	VENT RELIEF VALVE	1	EA	FLT	BMSD	12/01/00	
30790	CCM 859	ACTIVE CBM M/D HARDWARE (RADIAL)	4	EA	FLT	BMSD	12/01/00	
30791	CCM 859	ACTIVE CBM M/D HARDWARE (AXIAL)	1	EA	FLT	BMSD	12/01/00	
30792	CCM 697; CCM 6451	REFRIGERATOR/FREEZER RACK STRUCTURE	3	SET	FLT	MSFC	10/24/02	
30795	CCM 697	REFRIGERATOR/FREEZER RACK STRUCTURE (SPARE)	1	SET	FLT	MSFC	03/02/01	
30797	CCM 1001	AUDIO TERMINAL UNIT	1	EA	FLT	BMSD	08/01/01	
30798	CCM 1001; CCM 4122; CCM 5389	UOP (NODE 2)	1	EA	FLT	BMSFC	01/26/02	
30801	CCM 1001, CCM 1727	RACK FLOW CONTROLLER ASSY	1	EA	FLT	BMSD	04/29/00	
30819	CCM 1318; 2-1150-99- 503	IVA SEAL KIT - 1	1	EA	FLT	KSC	07/12/99	
30822	CCM 1318; 2-1150-99- 503	POWERED BOLT/NUT ASSY	1	EA	FLT	KSC	09/27/99	
30823	CCM 1318; 2-1150-99- 503	POWERED BOLT ASSY	1	EA	FLT	KSC	09/27/99	
30843	CCM 1205;1529	KNEEBRACE BOLT ACTION REPLACEMENT - KIT 1 (USL & IHI KBAR)	1	EA	FLT	KSC	06/30/00	
30844	CCM 1205;1529	KNEEBRACE BOLT ACTION REPLACEMENT - KIT 2 (CAPTURE MECHANISM & USL & IHI KBARS)	1	EA	FLT	KSC	06/30/00	
30849	CCM 1225	ARIS GSE UMBILICAL SET	1	EA	GSE	MSFC	01/12/99	
30850	CCM 1225; 03-0279	ARIS GSE UMBILICAL SET	1	EA	GSE	BHOU	08/01/99	
30851	CCM 1225	ARIS GSE UMBILICAL SET	1	EA	GSE	LERC	08/01/99	
30852	CCM 1225; CCM 1816	ARIS GSE UMBILICAL SET	1	EA	GSE	KSC	12/15/99	
30863	CCM 1456	LOOP CROSS-OVER ASSEMBLY JUMPER KIT	2	EA	FLT	KSC	07/01/99	
30864	CCM 1456	COLD PLATE JUMPER ASSEMBLY KIT	2	EA	FLT	KSC	07/01/99	
30865	CCM 1456	AIRLOCK/LAS6 JUMPER ASSEMBLY KIT	1	EA	FLT	KSC	08/01/99	
30866	CCM 1456; 01-600	AIRLOCK/LAS6 JUMPER QD ADAPTERS ASSEMBLY	2	EA	FLT	KSC	07/01/99	
30877	(CCM 1259) Reinstate	STA WINDOW GLASS - CUPOLA	1	SE	FLT	BMSD	05/23/00	
30879	CCM 1259	PCBM RING AND SEAL KIT	1	EA	FLT	BHSV	08/30/00	
30880	CCM 1259	PCBM MECHANICAL COMPONENTS KIT	1	EA	FLT	BHSV	10/30/00	
30881	CCM 1259	AUDIO TERMINAL UNIT	1	EA	FLT	BHSV	01/30/02	
30882	CCM 5389; CCM 4122	UOP (CUPOLA)	2	EA	FLT	KSC	01/30/02	
30892	CCM 958; CCM 3024; letter 01-306	ARIS ISS CHARACTERIZATION EXPERIMENT (ICE) MISSION EQUIPMENT	1	EA	FEX	KSC	07/14/00	
30893	CCM 1289	ARIS STOWED ITEMS - EXPRESS	1	SET	FLT	MSFC	11/18/99	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
30894	CCM 1289; 01-783; CCM 5477	ARIS STOWED ITEMS - EXPRESS	1	KT	FLT	KSC	11/30/01	
30895	CCM 1289; 01-783; CCM 5477	ARIS STOWED ITEMS - EXPRESS	1	KT	FLT	KSC	06/28/02	
30896	CCM 1289; 01-783; CCM 5477	ARIS STOWED ITEMS - EXPRESS	1	KT	FLT	KSC	07/31/02	
30899	CCM 1289; CCM 5477	ARIS STOWED ITEMS - ISPR	1	KT	FLT	KSC	10/31/02	
30903	CCM 1233	PRCU UIP Z-PANEL MOCKUP KIT	3	EA	GSE	MSFC	06/30/99	
30904	CCM 1233	PRCU UOP EMULATION KIT	2	EA	GSE	MSFC	08/30/99	
30910	CCM 1184	RAIU INTERFACE CABLE ASSEMBLY	1	EA	FLT	KSC	12/31/98	
30911	CCM 859	ACTIVE CBM MECHANISM KIT	1	EA	FLT	BMSD/BHSV	12/01/00	
30912	CCM 859	ACTIVE CBM MECHANISM KIT	1	EA	FLT	BMSD/BHSV	12/01/00	
30913	CCM 859	ACTIVE CBM MECHANISM KIT	1	EA	FLT	BMSD/BHSV	12/01/00	
30914	CCM 859	ACTIVE CBM MECHANISM KIT	1	EA	FLT	BMSD/BHSV	12/01/00	
30915	CCM 859	ACTIVE CBM RING AND SEAL KIT (AXIAL)	1	EA	FLT	BMSD/BHSV	12/01/00	
30916	CCM 1238	BACTERIA FILTER, CATALYST ELEMENT	8	EA	FLT	KSC	11/19/99	
30918	CCM 737	WASHER	2	EA	FLT	ALENIA	06/28/99	
30921	CCM 1259	PCBM RING AND SEAL KIT (STA)	1	EA	FLT	BHSV	05/30/00	
30925	CCM 1420	N3SYS1 CSCI	1	EA	FLT	ALENIA	09/28/01	
30926	CCM 1420	N3SYS2 CSCI	1	EA	FLT	ALENIA	09/28/01	
30927	CCM 1420	INTSYS 20A CSCI	1	EA	FLT	JSC	04/26/02	
30929	CCM 1272a	VACUUM ACCESS JUMPER - 35 FT	1	EA	FLT	KSC	02/05/99	
30930	CCM 1272a	VACUUM ACCESS JUMPER - 35 FT	1	EA	FLT	KSC	05/28/99	
30931	CCM 1272a	VACUUM ACCESS JUMPER 5 FT	1	EA	FLT	KSC	02/05/99	
30933	CCM 1745	NODE 2/3 ELEMENT ROTATION STAND	1	EA	FEQ	KSC	08/15/00	
30934	S/A 720	CBM RING/SEAL KIT (ACTIVE) - RADIAL	4	EA	FLT	BMSD/BHSV	01/30/99	
30935	S/A 720	CBM MECHANISM KIT (NADIR) - ACTIVE	1	EA	FLT	BMSD/BHSV	01/30/99	
30936	S/A 720	CBM MECHANISM KIT (PORT) - ACTIVE	1	EA	FLT	BMSD/BHSV	01/30/99	
30937	S/A 720, CCM 1727	CBM MECHANISM KIT ACTIVE (FORWARD)	1	EA	FLT	BMSD/BHSV	08/30/00	
30952	CCM 1727	GORE PANEL FLUID FEED THRU KIT (FWD & AFT)	1	EA	FLT	BMSD/BHSV	04/12/00	
30953	CCM 1727	GORE PANEL AVIONICS FEED THRU KIT (FWD & AFT)	1	EA	FLT	BMSD/BHSV	04/12/00	
30958	CCM 1727	COLD PLATE - 4	2	EA	FLT	BMSD/BHSV	03/13/01	
30961	CCM 1727	TEMPERATURE SENSOR	1	EA	FLT	BMSD/BHSV	09/13/00	
31033	S/A 1362; 2-1150-05- 0214; CCM 1316	SMOKE DETECTOR	1	EA	FLT	BMSD/BHSV	12/21/01	Qty reduction per credit proposal on Boeing letter 2-1150-05-0214 definitized on S/A 1362
31036	CCM 1316	AUDIO TERMINAL UNIT	2	EA	FLT	BMSD/BHSV	05/28/01	
31037	CCM 1316	COMMON VIDEO INTERFACE UNIT	2	EA	FLT	BMSD/BHSV	05/28/01	
31038	CCM 1951	TRUNION PIN COVER MOD KIT	1	EA	FLT	JSC	03/26/99	
31041	CCM 1727	MDM CONNECTOR PLATE	2	EA	FLT	BMSD/BHSV	06/30/00	
31042	CCM 1727	GENERAL LUMINAIRE LAMP HOUSING ASSY	2	EA	FLT	BMSD/BHSV	06/13/00	
31044	CCM 1727	GENERAL LUMINAIRE BASEPLATE BALLAST ASSY	2	EA	FLT	BMSD/BHSV	06/13/00	
31045	CCM 1727	WELDED T RECEPTACLE 0.75"	7	EA	FLT	BMSD/BHSV	01/31/00	
31046	CCM 1727	IMV CAP	5	EA	FLT	BMSD/BHSV	02/29/00	
31047	CCM 1727	HANDRAIL ASSEMBLY, 41.5"	11	EA	FLT	BMSD/BHSV	06/13/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31049	CCM 1727	PCBM CONTAMINATION COVER KIT	1	EA	FLT	BMSD/BHSV	11/30/00	
31050	CCM 1727	SHIELD ASSEMBLY KIT - FWD ENDCONE	1	EA	FLT	BMSD/BHSV	07/31/00	
31051	CCM 1727	RADIAL PORT CLOSEOUT SHIELD KIT	4	EA	FLT	BMSD/BHSV	08/15/00	
31053	CCM 1727	ELECTRICAL CONNECTOR, STRAIGHT PLUG	12	EA	FLT	BMSD/BHSV	01/25/00	
31055	CCM 1561	DASA SSQ CONNECTOR	10	EA	FLT	JSC	06/01/00	
31056	CCM 1561	DASA SSQ CONNECTOR	10	EA	FLT	JSC	06/01/00	
31057	CCM 1561	DASA SSQ CONNECTOR	10	EA	FLT	JSC	06/01/00	
31058	CCM 1959	KBAR ATTACHMENT	4	EA	FLT	BMSD/BHSV	06/30/00	
31059	CCM 1959	KBAR CAPTURE MECHANISM	8	EA	FLT	BMSD/BHSV	06/30/00	
31063	CCM 1727	INTERFACE ASSY, ELECTRICAL	1	EA	FLT	BMSD	08/13/99	
31064	02-735	SENSOR, LIQUID	1	EA	FLT	BMSD	08/13/99	
31065	02-735	INLET, CABIN AIR	1	EA	FLT	BMSD	08/13/99	
31066	CCM 1727	HEAT EXCHANGER	1	EA	FLT	BMSD	08/13/99	
31067	CCM 1727	WATER SEPARATOR	1	EA	FLT	BMSD	08/13/99	
31068	CCM 1727	SENSOR, TEMPERATURE	1	EA	FLT	BMSD	08/13/99	
31075	CCM 1727	O-RING	5	EA	FLT	BMSD	12/15/99	
31076	CCM 1727	O-RING	5	EA	FLT	BMSD	12/15/99	
31079	CCM 1529; CCM 4407	APM ACCOMMODATION HARDWARE	1	EA	FLT	KSC	11/30/02	
31080	CCM 1529; CCM 4407	JEM ACCOMMODATION HARDWARE	1	EA	FLT	KSC	11/30/02	
31081	CCM 1529; CCM 4407	JEM ACCOMMODATION UMBILICALS	1	EA	FLT	KSC	11/30/02	
31082	CCM'S 1727, 2879, 5776, S/A 1109	NH3/H2O HX HEATER/TEMPERATURE SENSOR ASSY	1	EA	FLT	BMSFC	06/28/02	
31083	CCM 1727	CCAA MOUNTING HARDWARE KIT	1	EA	FLT	BMSD	02/14/00	
31085	CCM 1259	RWS CABLE (14 FT.)	1	EA	FLT	BHSV	01/30/02	
31090	CCM 1959	KBAR ATTACHMENT	6	EA	FLT	BMSD/BHSV	06/30/00	
31091	CCM 1959; CCM 4370	CAPTURE MECHANISM, MOD KIT, LEFT	8	EA	FLT	MSFC	06/28/01	
31092	CCM 1959	KBAR ATTACHMENT	4	EA	FLT	BMSD/BHSV	06/30/00	
31093	CCM 1959	KBAR ATTACHMENT	6	EA	FLT	BMSD/BHSV	06/30/00	
31094	CCM 1959	KBAR CAPTURE MECHANISM	8	EA	FLT	BMSD/BHSV	06/30/00	
31095	CCM 1959; CCM 4370	CAPTURE MECHANISM, MOD KIT, RIGHT	8	EA	FLT	MSFC	06/28/01	
31096	CCM 1866	KNEE BRACE KIT FOR MPLM 1	1	EA	FLT	KSC	06/19/99	
31097	CCM 1866	KNEE BRACE KIT FOR MPLM 3	1	EA	FLT	KSC	10/01/99	
31102	CCM 2160	HATCH OPERATION KIT (MOD KIT)	1	EA	GSE	KSC	10/15/99	ADD
31103	CCM 1554	RACK POWER SWITCH, RH W/O LED	4	EA	FLT	BMSD/BHSV	04/01/00	
31104	CCM 1554; 01-1012	RACK POWER SWITCH, RH WITH LED (CREW QUARTERS)	4	EA	FLT	B-MSFC	11/01/99	
31105	CCM 1554; 01-1053	RACK POWER SWITCH, RH WITH LED (GALLEY)	1	EA	FLT	BMSFC		
31111	CCM 2199	LAB SCRATCH PANE ASSEMBLY, STA	1	EA	STA	KSC	03/30/00	
31112	CCM 2199	LAB SCRATCH PANE ASSEMBLY, MOD KIT	1	EA	FLT	KSC	03/30/00	
31113	CCM 2199	LAB SCRATCH PANE ASSEMBLY, SPARE	1	EA	FLT	KSC	03/30/00	
31114	CCM 2199	CUPOLA SCRATCH PANE ASSEMBLY, STA-TOP	1	EA	STA	BMSD	05/25/00	
31115	CCM 2199; S/A 1125 - CCM 6512	CUPOLA SCRATCH WINDOW ASSEMBLY, TOP	1	EA	FLT	BMSFC	10/10/02	
31116	CCM 2160; 02-583	HATCH OPERATION KIT (MOD KIT)	2	EA	GSE	BMSFC	03/15/00	ADD
31117	01-768	CO2 VALVE	2	EA	FLT	BMSD	12/01/02	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31120	CCM 2406; 01-794; 02-037	ON-ORBIT CONTINGENCY LAB ARS RACK JUMPER	1	EA	FLT	KSC	08/15/01	
31121	02-554	HATCH OPERATIONS BRACKET KIT (MOD KIT)	1	EA	GSE	BMSFC	05/10/00	
31122	02-554	HATCH OPERATIONS BRACKET KIT (MOD KIT)	1	EA	GSE	BMSFC	05/10/00	
31123	CCM 2452	POSITIVE PRESSURE RELIEF ASSY	3	EA	FLT	KSC	11/01/99	
31124	CCM 2452	POSITIVE PRESSURE RELIEF ASSY	3	EA	FLT	KSC	11/01/99	
31125	CCM 2452	POSITIVE PRESSURE RELIEF ASSY	3	EA	FLT	KSC	11/01/99	
31126	CCM 2452	POSITIVE PRESSURE RELIEF ASSY(SPARE)	1	EA	FLT	KSC	11/01/99	
31127	CCM 2479	STOWAGE TRAY S-10	13	EA	FLT	KSC	02/14/00	
31128	CCM 2479	STOWAGE TRAY S-17	22	EA	FLT	KSC	02/14/00	
31129	CCM 2479	STOWAGE TRAY S-30	10	EA	FLT	KSC	02/14/00	
31130	CCM 2479	STOWAGE TRAY S-34	8	EA	FLT	KSC	02/14/00	
31131	CCM 2479	STOWAGE TRAY D-10	13	EA	FLT	KSC	02/14/00	
31132	CCM 2479	STOWAGE TRAY D-17	8	EA	FLT	KSC	02/14/00	
31133	CCM 2479	STOWAGE TRAY D-30	5	EA	FLT	KSC	02/14/00	
31134	CCM 2479	STOWAGE TRAY D-34	6	EA	FLT	KSC	02/14/00	
31135	CCM 2479	STOWAGE TRAY T-17	5	EA	FLT	KSC	02/14/00	
31136	CCM 2479	STOWAGE TRAY T-30	5	EA	FLT	KSC	02/14/00	
31137	CCM 2479	STOWAGE TRAY T-34	3	EA	FLT	KSC	02/14/00	
31138	CCM 2479	STOWAGE TRAY S-10	11	EA	FLT	KSC	04/21/00	
31139	CCM 2479	STOWAGE TRAY S-17	13	EA	FLT	KSC	04/21/00	
31140	CCM 2479	STOWAGE TRAY S-30	5	EA	FLT	KSC	04/21/00	
31141	CCM 2479	STOWAGE TRAY S-34	5	EA	FLT	KSC	04/21/00	
31142	CCM 2479	STOWAGE TRAY D-10	11	EA	FLT	KSC	04/21/00	
31143	CCM 2479	STOWAGE TRAY D-17	6	EA	FLT	KSC	04/21/00	
31144	CCM 2479	STOWAGE TRAY D-30	5	EA	FLT	KSC	04/21/00	
31145	CCM 2479	STOWAGE TRAY D-34	6	EA	FLT	KSC	04/21/00	
31146	CCM 2479	STOWAGE TRAY T-17	4	EA	FLT	KSC	04/21/00	
31147	CCM 2479	STOWAGE TRAY T-30	4	EA	FLT	KSC	04/21/00	
31148	CCM 2479	STOWAGE TRAY T-34	2	EA	FLT	KSC	04/21/00	
31149	CCM 2479	STOWAGE TRAY S-10	12	EA	FLT	KSC	06/23/00	
31150	CCM 2479	STOWAGE TRAY S-17	13	EA	FLT	KSC	06/23/00	
31151	CCM 2479	STOWAGE TRAY S-30	5	EA	FLT	KSC	06/23/00	
31152	CCM 2479	STOWAGE TRAY S-34	5	EA	FLT	KSC	06/23/00	
31153	CCM 2479	STOWAGE TRAY D-10	12	EA	FLT	KSC	06/23/00	
31154	CCM 2479	STOWAGE TRAY D-17	7	EA	FLT	KSC	06/23/00	
31155	CCM 2479	STOWAGE TRAY D-30	5	EA	FLT	KSC	06/23/00	
31156	CCM 2479	STOWAGE TRAY D-34	6	EA	FLT	KSC	06/23/00	
31157	CCM 2479	STOWAGE TRAY S-10	12	EA	FLT	KSC	08/25/00	
31158	CCM 2479	STOWAGE TRAY S-17	13	EA	FLT	KSC	08/25/00	
31159	CCM 2479	STOWAGE TRAY S-30	5	EA	FLT	KSC	08/25/00	
31160	CCM 2479	STOWAGE TRAY S-34	5	EA	FLT	KSC	08/25/00	
31161	CCM 2479	STOWAGE TRAY D-10	12	EA	FLT	KSC	08/25/00	
31162	CCM 2479	STOWAGE TRAY D-17	7	EA	FLT	KSC	08/25/00	
31163	CCM 2479	STOWAGE TRAY D-30	5	EA	FLT	KSC	08/25/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31164	CCM 2479	STOWAGE TRAY D-34	6	EA	FLT	KSC	08/25/00	
31165	CCM 2199	CUPOLA SCRATCH PANE ASSEMBLY, STA-SIDE	1	EA	STA	BMSD	05/25/00	
31166	CCM 2199; S/A 1125 - CCM 6512	CUPOLA SCRATCH PANE ASSEMBLY, SIDE	6	EA	FLT	BMSFC	12/03/02	
31167	CCM 2199 - S/A 1125 - CM 6512	CUPOLA SCRATCH WINDOW ASSEMBLY, TOP SPARE	1	EA	FLT	KSC	09/05/02	
31171	01-548; CCM 2137	GROUND STUD, ALTERED ITEM	10	EA	FLT	KSC	08/31/01	
31172	01-548; CCM 2137	RETAINING RING	14	EA	FLT	KSC	08/31/01	
31173	CCM 2137	GROUND STUD, ALTERED ITEM	10	EA	FLT	NASDA	11/30/01	
31174	CCM 2137	RETAINING RING	13	EA	FLT	KSC	11/30/01	
31175	CCM 2137	GROUND STUD, ALTERED ITEM	10	EA	FLT	DASA	11/30/01	
31176	CCM 2137	RETAINING RING	15	EA	FLT	DASA	11/30/01	
31177	01-548; CCM 2137	GROUND STUD, ALTERED ITEM	4	EA	FLT	ALENIA	09/25/00	
31178	01-548; CCM 2137	RETAINING RING	6	EA	FLT	ALENIA	05/09/00	
31179	CCM 2137	GROUND STUD, ALTERED ITEM	19	EA	FLT	BMSD	11/30/01	
31180	CCM 2137	RETAINING RING	43	EA	FLT	BMSD	11/30/01	
31187	CCM 2406	PUMP PACKAGE BYPASS VALVE	2	EA	FLT	BMSD	08/15/01	
31188	CCM 2406	N3 CONTINGENCY THERMAL JUMPER	1	EA	FLT	BMSD	08/15/01	
31189	CCM 2406	N3 CONTINGENCY THERMAL JUMPER	1	EA	FLT	BMSD	08/15/01	
31190	01-548; CCM 2137	US LAB MOD KIT	1	EA	FLT	BMSD	10/03/00	
31192	CCM 2857	LAB ITCS COOLANT SAMPLING TOOL MOD KIT (1/2")	1	EA	FLT	KSC	12/18/00	
31193	CCM 2823	PAYLOAD EXECUTIVE PROCESSOR (PEP) CSCI (R2)	1	EA	FLT	KSC	09/15/00	
31194	CCM 2451	PORTABLE FIRE EXTINGUISHER	2	EA	FLT	JSC	12/01/00	
31195	CCM 2778; Letter 01-30	US LAB UTILITY JUMPER MOD INSTALLATION KIT	1	EA	FLT	KSC	08/31/00	
31197	CCM 1727	CONTROL ASSEMBLY, VAVDA	1	EA	FLT	BMSD	12/15/00	
31198	CCM 1727	VAVDA CONTROL CABLE CONNECTOR KIT	1	EA	FLT	BMSD	12/15/00	
31207	01-600	SPDU WIRE HARNESSSES	1	SE	FLT	BMSD/BHSV	12/21/00	
31208	CCM 2611	WINDOW DEBRIS PANE CHANGEOUT	1	EA	FTL	KSC	10/31/00	
31209	CCM 2137	GROUND STUD, ALTERED ITEM	17	EA	FLT	KSC	11/30/01	
31210	CCM 2137	RETAINING RING	25	EA	FLT	KSC	11/30/01	
31211	01-548; CCM 2137	GROUND STUD, ALTERED ITEM	8	EA	FLT	KSC	09/29/00	
31212	01-548; CCM 2137	RETAINING RING	11	EA	FLT	KSC	08/24/00	
31213	01-548; CCM 2137	GROUND STUD, ALTERED ITEM	5	EA	FLT	KSC	08/31/01	
31214	01-548; CCM 2137	RETAINING RING	8	EA	FLT	KSC	08/31/01	
31215	CCM 2993	LONGERON FITTING MOD KIT	1	EA	FLT	KSC	05/15/00	
31216	CCM 2868	VESTIBULE BARRIER MOD KIT	1	EA	FLT	KSC	06/23/00	
31217	CCM 2868	VESTIBULE BARRIER MOD KIT	1	EA	FLT	KSC	10/06/00	
31218	01-0520; CCM 3028	SYSTEM REMOTE ON/OFF CONTROL ASSEMBLY UPGRADE	2	EA	FLT	KSC	11/15/00	
31219	01-0520; CCM 3028	SYSTEM REMOTE ON/OFF CONTROL ASSEMBLY UPGRADE	3	EA	FLT	BMSD	11/15/00	
31220	01-0520; 01-848; CCM 3028	SYSTEM REMOTE ON/OFF CONTROL ASSEMBLY UPGRADE	3	EA	FLT	BMSD	11/15/00	
31221	CCM 2825	EVA HANDRAIL INSTALLATION MOD KIT	1	EA	FLT	KSC	05/31/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31222	CCM 3071; Boeing letter 00-807	CONDENSATE TANK RACK "T" CONNECTION KIT	1	EA	FLT	JSC	11/01/00	
31299	CCM 3010; Letter 00-1008	GAMAH SEAL MAINTENANCE KIT	1	EA	FLT	JSC	05/01/01	
31316	CCM 3210	ZERO - G STOWAGE RACK WITH INSERT B (TRAINING)	1	EA	FLT	JSC	06/15/00	
31317	CCM 3210	INSERT, C (TRAINING)	1	EA	FLT	JSC	06/15/00	
31318	CCM 3210	INSERT, D (TRAINING)	1	EA	FLT	JSC	06/15/00	
31319	CCM 3210	INSERT, D (DOOR) (TRAINING)	1	EA	FLT	JSC	06/15/00	
31320	CCM 3210	SHIELD (TRAINING)	1	EA	FLT	JSC	06/15/00	
31321	CCM 3210	INSERT CONTAMINANT KIT (TRAINING)	1	EA	FLT	JSC	06/15/00	
31322	CCM 3210	ZERO - G STOWAGE RACK WITH INSERT B KIT	6	EA	FLT	KSC	06/15/00	
31323	CCM 3210	ZERO - G STOWAGE RACK WITH INSERT C/D KIT	3	EA	FLT	KSC	06/15/00	
31324	CCM 3210	ZERO - G STOWAGE RACK SHIELD KIT	4	EA	FLT	KSC	06/15/00	
31325	CCM 3210	INSERT CONTAMINANT KIT	4	EA	FLT	KSC	06/15/00	
31326	CCM 3210; CCM 5796	ZERO - G STOWAGE RACK WITH INSERT B KIT	6	EA	FLT	KSC	08/01/02	
31327	CCM 3210; CCM 5796	ZERO - G STOWAGE RACK WITH INSERT C/D KIT	6	EA	FLT	KSC	08/01/02	
31328	CCM 3210; CCM 5796	ZERO - G STOWAGE RACK SHIELD KIT	4	EA	FLT	KSC	08/01/02	
31341	CCM 2857	ITCS COOLANT SAMPLING TOOL (1/2")	2	EA	TNG	JSC	12/18/00	
31342	CCM 2857	ITCS COOLANT SAMPLING TOOL (1/2")	2	EA	FLT	MSFC	12/18/00	
31343	CCM 2857	ITCS COOLANT SAMPLING TOOL (1/2")	5	EA	FLT	BMSD	07/17/00	
31344	CCM 2857	ITCS COOLANT SAMPLING TOOL (3/4")	2	EA	FLT	BMSD	07/17/00	
31345	CCM 3113	ATU/EACP Y-CABLE MODE KIT (AIRLOCK)	1	EA	FLT	KSC	07/16/02	
31346	CCM 2375	NASA INSIGNIA EMBLEM LABEL - MPLM	3	EA	FLT	KSC	08/01/00	
31347	CCM 3020; S/A 1125 - CCM 6512	WINDOW ASSY, DEBRIS, SIDE PANE, CUPOLA	6	EA	FLT	BMSFC	09/24/02	
31348	CCM 3020; 01-868	WINDOW ASSY, DEBRIS, SIDE PANE, CUPOLA	1	EA	STA	BMSD	02/16/01	
31349	CCM 3020; S/A 1125 - CCM 6512; 02-300	WINDOW ASSY, DEBRIS, SIDE PANE, CUPOLA (SPARE)	1	EA	FLT	B-MSFC	07/09/02	
31351	CCM 3020; S/A 1125 - CCM 6512	WINDOW ASSY, DEBRIS, TOP PANE, CUPOLA	1	EA	FLT	BMSFC	12/10/02	
31352	CCM 3020; 01-868	WINDOW ASSY, DEBRIS, TOP PANE, CUPOLA	1	EA	STA	BMSD	02/16/01	
31353	CCM 3020; S/A 1125 - CCM 6512	WINDOW ASSY, DEBRIS, TOP PANE, CUPOLA (SPARE)	1	EA	FLT	KSC	12/16/02	
31355	CCM 2758	INSTALLATION, SVS TARGET SHIELD PLATE MOD KIT	1	EA	FLT	KSC	09/28/00	
31356	CCM 2758	INSTALLATION, SVS TARGET SUPPORT BRACKETS MOD KIT	1	EA	FLT	KSC	10/26/00	
31357	CCM 2758	INSTALLATION, MLI ASSEMBLY MOD KIT	1	EA	FLT	KSC	10/05/00	
31360	CCM 2375	NASA INSIGNIA EMBLEM LABEL MOD KIT, LAB	1	EA	FLT	KSC	06/30/00	
31361	CCM 2375	NASA INSIGNIA EMBLEM LABEL MOD KIT, AIRLOCK	1	EA	FLT	KSC	07/14/00	
31362	CCM 2375	NASA INSIGNIA EMBLEM LABEL, SPARE	1	EA	FLT	KSC	08/15/00	
31369	CCM 2825	WIF INSTALLATION MOD KIT	1	EA	FLT	KSC	05/31/00	
31373	CCM 2778	JUMPER BRACKET ASSEMBLY	4	EA	FLT	KSC	07/28/00	
31375	CCM 2857	ITCS COOLANT SAMPLING TOOL (3/4")	1	EA	FLT	BMSD	07/17/01	
31376	CCM 2857	ITCS COOLANT SAMPLING TOOL (3/4")	1	EA	TNG	JSC	12/18/00	
31378	CCM 5765	PCBM M/D SKIRT KIT	1	EA	FLT	BHSV	12/21/01	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31449	CCM 3587	AIR VELOCITY CLOSEOUTS (AVCO)	1	EA	MCK	JSC	10/06/00	
31453	CCM 3314	NODE 1 MOD KIT	1	EA	FLT	KSC	06/01/01	
31454	01-866; 01-884	WIRE HARNESS ASSEMBLY - C&T UHF JUMPER	2	EA	FLT	KSC	10/22/01	
31467	CCM 2879	MLI BERTHING MECHANISM	1	EA	FLT	BMSD	03/04/02	
31468	CCM 2879	MLI BERTHING MECHANISM (BLANKETS)	4	EA	FLT	BMSD	03/04/02	
31469	CCM 2879	MLI ASSEMBLY LAB A, BERTHING	4	EA	FLT	BMSD	03/04/02	
31471	CCM 5477	ARIS MODIFIED RACK - FCF (CIR)	1	EA	FLT	GRC	10/31/02	
31472	CCM 5477	ARIS MODIFIED RACK - MSRR	1	EA	FLT	MSFC	08/30/02	
31473	CCM 5477	ARIS MODIFIED RACK - FCF (FIR)	1	EA	FLT	GRC	10/31/02	
31474	CCM 5477	ISPR POST BOLT SET	1	KIT	FLT	GRC	09/30/02	
31479	CCM 2879	IMV DIFFUSER ASSEMBLY	3	EA	FLT	BMSD	10/24/01	
31485	CCM 3113	ATU/EACP Y-CABLE MOD KIT (SPARE)	1	EA	FLT	KSC	07/16/02	
31489	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSFC	06/28/02	
31490	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSFC	06/28/02	
31491	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSFC	06/28/02	
31492	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSVC	06/28/02	
31493	CCM 056; Boeing Letter 00-811	RAIL ASSEMBLY	4	EA	FLT	JSC	10/13/00	
31496	CCM 4122	UTILITY OUTLET PANEL MOD KIT	8	EA	FLT	KSC	02/16/01	
31501	Letter 2-1150-00-939	Headset Control Unit	2	EA	FLT	JSC	11/30/00	
31502	Letter 2-1150-00-939	Headset Extension Cable	2	EA	FLT	JSC	11/30/00	
31503	Letter 2-1150-00-939	Crew Communication Headset	2	EA	FLT	JSC	11/30/00	
31504	Letter 2-1150-00-939	Headset Cotrol Unit	3	EA	FLT	KSC	11/30/00	
31505	Letter 2-1150-00-939	Headset Extension Cable	3	EA	FLT	KSC	11/30/00	
31506	Letter 2-1150-00-939	Crew Communication Headset	3	EA	FLT	KSC	11/30/00	
31507	Letter 2-1150-00-939; 02- 398	Headset Control Unit	3	EA	FLT	KSC	02/15/01	
31508	Letter 2-1150-00-939; 02- 398	Headset Extension Cable	3	EA	FLT	KSC	02/15/01	
31509	Letter 2-1150-00-939; 02- 398	Crew Communication Headset	3	EA	FLT	KSC	02/15/01	
31515	CCM 4740	SEAL LEAK CHECK SET	1	EA	FLT	KSC	01/10/01	
31516	CCM 4740	SEAL LEAK CHECK SET	1	EA	FLT	KSC	05/29/01	
31523	Letter 00-1008; 02-263	GAMAH SEAL MAINTENANCE KIT	1	EA	FLT	KSC	03/15/01	
31524	DDP 001 - MOD 29, Letter 01-196	PORTABLE MICROPHONES	2	EA	FLT	KSC	01/31/01	
31525	DDP 001 - MOD 29, Letter 01-196	PORTABLE MICROPHONES	3	EA	FLT	KSC	04/01/01	
31530	CCM 4862	VS EQUALIZATION TOOL	1	EA	FLT	JSC	12/29/00	
31531	CCM 4862	VES/VRS JUMPER	1	EA	FLT	JSC	12/29/00	
31532	CCM 4862	ITCS RECONFIGURATION LAB JUMPER	2	EA	FLT	JSC	12/29/00	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31544	CCM 4740	FUSE	3	EA	FLT	KSC	01/16/01	
31545	CCM 4740	FUSE	3	EA	FLT	KSC	01/16/01	
31546	CCM 4471; 01-930	SPCU HEAT EXCHANGER MOD KIT	1	EA	FLT	BMSD	03/16/01	
31547	CCM 4959	PORTABLE FIRE EXTINGUISHER	1	EA	FLT	KSC	02/02/01	
31548	CCM 4923	UNIVERSAL QD ORIFICE ADAPTER	1	EA	FLT	KSC	01/26/01	
31549	CCM 4923	UNIVERSAL QD ORIFICE ADAPTER	1	EA	FLT	KSC	01/26/01	
31552	CCM 4370	CAPTURE MECHANISM, MOD KIT, LEFT	8	EA	FLT	MSFC	06/28/02	
31553	CCM 4370	CAPTURE MECHANISM, MOD KIT, RIGHT	8	EA	FLT	MSFC	06/28/02	
31558	CCM 5080; 01-470; 01-539R1;	7A ON-ORBIT INSTL. AIRLOCK-EXTERNAL KIT	1	EA	FLT	KSC	05/04/01	
31560	CCM 4923	GAS TRP FILL DEVICE	1	EA	FLT	KSC		
31562	CCM 5109	CDRA CABLE	1	EA	FLT	KSC	03/02/01	
31577	CCM 2879	PRESSURE CAP	4	EA	FLT	BMSD	10/11/01	
31578	CCM 2879	PIVOT PIN BRACKET ASSEMBLY	8	EA	FLT	BMSD	10/24/01	
31579	CCM 2879	PIVOT PIN BRACKET ASSEMBLY	8	EA	FLT	BMSD	10/24/01	
31580	CCM 2879	MLI INSTALLATION HARDWARE KIT	1	EA	FLT	BMSD	03/14/02	
31581	01-0519; CCM 5190	ARIS VACUUM EXHAUST UMBILICAL	1	EA	FLT	KSC	05/07/01	
31582	01-0519; CCM 5190	ARIS MOD TEMP TCS SUPPLY UMBILICAL	1	EA	FLT	KSC	05/07/01	
31583	01-0519; CCM 5190	ARIS MOD TEMP TCS RETURN UMBILICAL	1	EA	FLT	KSC	05/07/01	
31587	01-577	KIT, FLUIDS-NODE 1 TO AIRLOCK	1	EA	FLT	JSC	05/10/01	
31588	CCM 4407	COLUMBUS (APM) PIVOT HARDWARE	1	EA	FLT	KSC	11/30/02	
31589	CCM 4407	WORF RETRAINT HARDWARE	1	EA	FLT	KSC	09/09/02	
31590	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSFC	06/28/02	
31591	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSD	12/03/01	
31592	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSD	12/03/01	
31593	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSD	12/03/01	
31594	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSD	12/03/01	
31595	CCM'S 2879, 5776; S/A 1109	NH3/H2O HX HEATER/TEMP SENSOR ASSY	1	EA	FLT	BMSD	12/03/01	
31596	01-591; CCM 5080	STOWED HARDWARE KIT	1	EA	FLT	KSC	05/18/01	
31600	CCM 5385	ON-ORBIT INSTALLATION/CONFIGURATION KIT	1	EA	FLT	KSC	09/30/01	
31612	01-616	Cabin Air Inlet ORU Mod Kit	1	EA	FLT	BMSD	06/01/01	
31613	S/A 1097 - CCM 5488	WIRE HARNESS INSTALLATION-SECONDARY HEATER POWER, CONTINGENCY, AIRLOCK MOD KIT	1	EA	FLT	KSC	10/15/01	
31624	CCM 5477	ARIS BONDING STRAPS	3	EA	FLT	KSC	09/30/02	
31625	CCM 5714	EXTENSION, SAMPLE PORT, AIRLOCK - MODIFICATION KIT	1	EA	FLT	KSC	07/10/01	
31626	01-717	PCP Duct Assembly	1	EA	FLT	BOE/HSV	07/23/01	
31627	CCM 4407	NASDA ISPR ACCOMODATION HARDWARE	1	EA	FLT	KSC	11/30/02	
31631	01-760	VIDEO TAPE RECORDER	1	EA	QUAL	BOE/HSV	08/01/01	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31632	CCM 5715	ITCS INSULATION REPAIR KIT	1	EA	FLT	KSC	12/14/01	
31633	CCM 5769	CDRA #2 STAGE PUMP MOD KIT	1	EA	FLT	KSC	04/15/02	
31634	CCM 5769	CDRA #2 STAGE PUMP MOD KIT	1	EA	FLT	KSC	04/15/02	
31635	01-780; 02-0010	SEAL EXTRACTION TOOL KIT	2	EA	FLT	BMSFC	12/21/01	
31636	01-780	RING INSTALLATION/REMOVAL KIT	2	EA	FLT	KSC	02/01/02	
31637	01-803; 01-1000	TORQUE DEVICE	1	EA	FLT	KSC	09/13/01	
31638	01-803	TORQUE DEVICE	1	EA	FLT	JSC	10/12/01	
31639	CCM 5715	ITCS INSULATION REPAIR KIT	2	EA	TNG	JSC	12/14/01	
31641	02-400; CCM 5870	CUPOLA PRESSURE PANE (TOP)	2	EA	FLT	MSFC	06/28/02	
31642	02-400 - s/a 1148; CCM 6958 - s/a 1146; CCM 5870	CUPOLA PRESSURE PANE (TOP)	12	EA	FLT	MSFC	09/16/02	
31643	CCM 5851	MCA ORU 2 MOD KIT	3	EA	FLT	In place OSC	12/11/01	
31644	CCM 5389	UOP (LAB)	1	EA	FLT	WILDWOOD	11/07/01	
31645	CCM 5389	UOP (NODE 3)	1	EA	FLT	KSC	07/26/02	
31646	CCM 5389	MOD KIT UOP (CUPOLA)	1	EA	FLT	WILDWOOD	09/30/02	
31647	CCM 5389	MOD KIT UOP (LAB)	1	EA	FLT	WILDWOOD	02/18/02	
31648	CCM 5389	MOD KIT UOP (LAB)	1	EA	FLT	WILDWOOD	02/18/02	
31649	CCM 5389	MOD KIT UOP (LAB)	1	EA	FLT	WILDWOOD	02/18/02	
31650	CCM 5389	MOD KIT UOP (MSS CUPOLA)	1	EA	FLT	WILDWOOD	02/18/02	
31651	CCM 5389	MOD KIT UOP (NODE 1)	1	EA	FLT	WILDWOOD	10/29/01	
31652	CCM 5389	MOD KIT UOP (LAB)	1	EA	FLT	WILDWOOD	10/29/01	
31653	CCM 5389	MOD KIT UOP (LAB)	1	EA	FLT	WILDWOOD	02/18/02	
31654	CCM 5389	MOD KIT UOP (NODE 2)	1	EA	FLT	WILDWOOD	09/30/02	
31655	CCM 5389	MOD KIT UOP (CUPOLA)	1	EA	FLT	WILDWOOD	09/30/02	
31656	CCM 5389	MOD KIT UOP (NODE 3)	1	EA	FLT	WILDWOOD	07/26/02	
31657	02-0138; CCM 5897	PUSHROD PROTECTIVE COVERS	1	EA	FLT	BMSFC	06/28/02	
31662	CCM 4370	KBAR ASSEMBLY, MOD KIT, ISPR - LEFT	4	EA	FLT	MSFC	06/28/02	
31663	CCM 4370	KBAR ASSEMBLY, MOD KIT, ISPR - RIGHT	4	EA	FLT	MSFC	06/28/02	
31664	CCM 4370; CCM 6647	KBAR ASSEMBLY, MOD KIT , ISPR - LEFT	6	EA	FLT	MSFC	06/28/02	
31665	CCM 4370; CCM 6647	KBAR ASSEMBLY, MOD KIT, ISPR - RIGHT	6	EA	FLT	MSFC	06/28/02	
31667	CCM 5892	CDRA FILTER MOD KIT	1	EA	FLT	KSC	01/18/02	
31668	CCM 5892	CDRA FILTER REPLACEMENT KIT	2	EA	FLT	KSC	01/18/02	
31671	CCM 5932	EUTAS PASSIVE PLUG MOD KIT P3/P4	1	EA	FLT	KSC	12/06/02	
31672	CCM 5932	EUTAS PASSIVE PLUG, S1 MOD KIT	1	EA	FLT	KSC	06/17/02	
31673	CCM 5932	EUTAS PASSIVE PLUG, P1 MOD KIT	1	EA	FLT	KSC	07/15/02	
31674	01-1063; 02-0021	PUSHROD	2	EA	FLT	KSC	01/15/02	
31676	CCM 5389	UOP	1	EA	FLT	KSC	02/25/02	
31677	CCM 5389; 03-088	UOP	1	EA	FLT	BMFSC	07/26/02	
31678	CCM 6180	MBSU FSE INSTALLATION KIT	1	EA	FLT	KSC	01/06/03	
31690	CCM 5932	EUTAS PASSIVE PLUG MOD KIT P5	1	EA	FLT	KSC	12/06/02	
31691	CCM 5932	EUTAS PASSIVE PLUG MOD KIT S3/S4	1	EA	FLT	KSC	12/06/02	
31692	CCM 5932	EUTAS PASSIVE PLUG MOD KIT S5	1	EA	FLT	KSC	12/06/02	
31696	S/A 1125 - CCM 6512	CUPOLA SCRATCH WINDOW ASSEMBLY, SIDE SPARE	1	EA	FLT	KSC	09/27/02	
31699	02-400; S/A 1148	CUPOLA TOP PRESSURE PANE MOD KIT	1	EA	FLT	MSFC	07/26/02	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31700	CCM 5718	ARIS SNUBBERS KIT	1	EA	FLT	KSC	04/30/03	
31701	CCM 5718	MODIFICATION KIT - ISPR - ARIS	1	EA	FLT	KSC	04/30/03	
31702	CCM 5718; 03-148	MODIFICATION KIT - ISPR - ARIS	1	EA	FLT	BMSFC	07/31/03	
31703	CCM 5718 03-0337	ARIS PPS PARTS	1	EA	FLT	KSC	07/31/03	
31704	CCM 5718; 03-132	CIR/Paris STOWAGE ITEMS KIT	1	EA	FLT	BHOU	08/14/03	
31705	CCM 6757 - S/A 1146	RECHARGE OXYGEN ORIFICE BYPASS ASSEMBLY - MOD KIT	1	EA	FLT	JSC	03/07/03	DEST'N change per Boeing Ltr 2-1150-05-0015.
31706	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSFC	10/04/02	
31707	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSFC	10/04/02	
31708	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSFC	10/04/02	
31709	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSFC	10/04/02	
31710	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSFC	10/04/02	
31711	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSFC	10/04/02	
31712	CCM 6328	PRCU CONNECTOR SAVER EXTENDER SET	1	EA	GSE	BMSVC	10/04/02	
31713	02-610; CCM 6848	MODIFICATION KIT-NODE 2 STARBOARD ACBM	1	EA	FLT	BMSFC	08/30/02	
31714	02-610; CCM 6848	MODIFICATION KIT-NODE 2 PORT ACBM	1	EA	FLT	BMSFC	08/30/02	
31715	02-610; CCM 6848	MODIFICATION KIT-NODE 2 FORWARD ACBM	1	EA	FLT	BMSFC	08/30/02	
31716	CCM 6135 - S/A 1167; 04-0160	NODE 2 CENTER DISK COVER KITS	4	EA	FLT	KSC	08/01/03	DEST'N change per Boeing Ltr 2-1150-04-0160
31717	CCM 6135 - S/A 1167; 04-0160	NODE 1 PORT CENTER DISK COVER MOD KIT	1	EA	FLT	KSC	07/11/03	DEST'N change per Boeing Ltr 2-1150-04-0160
31718	CCM 6135 - S/A 1167	CBCS PCBM HATCH TARGET MOD KIT	1	EA	FLT	BMSFC	04/21/03	
31719	CCM 6135 - S/A 1167	CBCS ACBM HATCH FITTING MOD KIT	5	EA	FLT	BMSFC	04/21/03	
31720	CCM 6135 - S/A 1167	NODE 2 FORWARD HATCH THERMAL COVER MOD KIT	1	EA	FLT	BMSFC	08/01/03	
31722	S/A 1275; CCM 6135 - S/A 1167; 04-0160	THERMAL MD SHROUD MOD KIT	3	EA	FLT	KSC	07/11/03	Qty Change per Boeing Ltr 2-1150-04-0432, concurred by NASA 09/27/04; DEST'N change per Boeing Ltr 2-1150-04-0160
31724	CCM 6245	CBCS PCBM HATCH MOD KIT	1	EA	FLT	KSC	10/30/03	
31727	CCM 6647	RPDA 2 SLOT	1	EA	FLT	BMSFC	07/23/03	
31729	CCM 6647	IMV DIFFUSER ASSEMBLY	2	EA	FLT	BMSFC	08/29/03	
31730	CCM 6647	IMV TRANSITION DUCT	7	EA	FLT	BMSFC	08/29/03	
31731	CCM 6647	IMV SCREEN ASSEMBLY	5	EA	FLT	BMSFC	08/29/03	
31732	CCM 6647	IMV RETURN GRILLE	5	EA	FLT	BMSFC	08/29/03	
31733	CCM 6647	THREADED FLUID FITTING	1	EA	FLT	BMSFC	08/29/03	
31734	CCM 6647	THREADED FLUID FITTING	1	EA	FLT	BMSFC	08/29/03	
31735	CCM 6647	THREADED FLUID FITTING	3	EA	FLT	BMSFC	08/29/03	
31736	CCM 6647	THREADED FLUID FITTING	2	EA	FLT	BMSFC	08/29/03	
31737	CCM 6647	THREADED FLUID FITTING	1	EA	FLT	BMSFC	08/29/03	
31738	CCM 6647	THREADED FLUID FITTING	2	EA	FLT	BMSFC	08/29/03	
31739	CCM 6647	THREADED FLUID FITTING	1	EA	FLT	BMSFC	08/29/03	
31740	CCM 6647	THREADED FLUID FITTING	1	EA	FLT	BMSFC	08/29/03	
31742	CCM 6647	WASHER	2	EA	FLT	BMSFC	06/27/03	
31743	CCM 6647	CLAMP ASSEMBLY, KIT MODEL	28	EA	FLT	BMSFC	07/24/03	
31746	CCM 6647	WELDED T TEMP SENSOR RECEPTACLE .75"	3	EA	FLT	BMSFC	07/29/03	
31747	CCM 6647	BONDING STRAP, KIT MODEL	4	EA	FLT	BMSFC	07/25/03	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31749	03-0067; 03-085; CCM 6647	CLAMP, ROUND, V-BAND	1	EA	FLT	BMSFC	07/25/03	
31750	CCM 6647	CLAMP, RETANGULAR, V-BAND	2	EA	FLT	BMSFC	07/10/03	
31751	01-680	ECOM FSE ADAPTER PLATES	2	EA	FSE	KSC	11/22/02	
31752	01-0680	ECOM FSE ADAPTER PLATES	2	EA	FSE	KSC	11/22/02	
31755	CCM 6647	IMV CAP	2	EA	FLT	BMSFC	12/19/03	
31756	CCM 6647	IMV CAP	10	EA	FLT	BMSFC	12/19/03	
31757	CCM 6647	IMV CAP	2	EA	FLT	BMSFC	12/19/03	
31762	CCM 6647	MLI BERTHING MECHANISM (BLANKETS)	4	EA	FLT	BMSFC	12/19/03	
31763	CCM 6647	MLI ASSEMBLY LAB A BERTHING	4	EA	FLT	BMSFC	12/19/03	
31764	CCM 6647	ARIS PIVOT PIN (LEFT)	8	EA	FLT	BMSFC	12/19/03	
31765	CCM 6647	ARIS PIVOT PIN (RIGHT)	8	EA	FLT	BMSFC	12/19/03	
31784	CCM 6647	RPS BRACKET ASSEMBLY	3	EA	FLT	BMSFC	12/19/03	
31790	CCM 6624, 2-1150-04-0123	WINDOW PRESSURE COVER MOD KIT	1	KT	FLT	BMSFC	09/06/02	Added per Boeing Ltr 2-1150-04-0123 concurred by NASA on 4/15/04.
31791	CCM 6052 - S/A 1183	CBCS PCBM HATCH MOD KIT	1	EA	FLT	KSC	07/01/03	
31792	CCM 6052 - S/A 1183	CBCS PCBM HATCH MOD KIT	1	EA	FLT	KSC	07/01/03	
31793	CCM 6052 - S/A 1183	CBCS PCBM HATCH MOD KIT (for HTV-Dem)	1	EA	FLT	KSC	11/01/03	
31794	CCM 6052 - S/A 1183	CBCS PCBM HATCH MOD KIT (for JEM PS)	1	EA	FLT	KSC	11/01/03	
31795	CCM 6052 - S/A 1183	CBCS PCBM HATCH MOD KIT (for CAM)	1	EA	FLT	KSC	11/01/03	
31798	03-0063	CARBON DIOXIDE REMOVAL ASSEMBLY (CDRA)	1	EA	FLT	BMSFC	02/28/03	
31799	CCM 6854	MOD KIT - VBA - NODE 2	1	EA	FLT	B-MSFC	08/30/03	Destination change per Boeing Ltr 2-1150-04-0026 dated 01-30-04.
31800	CCM 6854	MOD KIT - VBA - APM	1	EA	FLT	B-MSFC	08/30/03	Destination change per Boeing Ltr 2-1150-04-0026 dated 01-30-04.
31801	CCM 6854	MOD KIT - VBA - MPLM	1	EA	FLT	KSC	08/30/03	
31802	CCM 6854	MOD KIT - VBA - PMA2	1	EA	FLT	KSC	08/30/03	
31803	CCM 6854	MOD KIT - VBA - PMA3	1	EA	FLT	KSC	08/30/03	
31804	CCM 7554; 03-0466; 03-0488	CUPOLA TOP PRESSURE PANE REFURBISHMENT MODIFICATION KIT	1	EA	FLT	B-MSFC	07/29/03	
31805	CCM 7554; 03-0466; 03-0488; 04-0089	CUPOLA SIDE PRESSURE PANE REFURBISHMENT MODIFICATION KIT	1	EA	FLT	B-MSFC	09/17/03	Name change per Boeing Ltr 2-1150-04-0089 - was"CUPOLA TOP PRESSURE PANE REFURBISHMENT MODIFICATION KIT"
31806	CCM 7554; 03-0466; 03-0488; 04-0089	CUPOLA SIDE PRESSURE PANE REFURBISHMENT MODIFICATION KIT	1	EA	FLT	B-MSFC	10/01/03	Name change per Boeing Ltr 2-1150-04-0089 - was"CUPOLA TOP PRESSURE PANE REFURBISHMENT MODIFICATION KIT"
31807	CCM 6983	ESA COLUMBUS EXTERNAL PAYLOAD ADAPTER (CEPA)	2	EA	FLT	KSC	10/14/03	
31809	CCM 7370	MODIFICATION KIT, MCA ORU 01, SCPs 406 & 412R1	2	EA	FLT	HSSS	05/05/03	
31810	CCM 7370	MODIFICATION KIT, MCA ORU 01, SCPs 361A3 & 365	1	EA	FLT	HSSS	05/05/03	
31811	CCM 7214	MODIFICATION KIT, MCA ORU 02, SCP415	3	EA	FLT	HSSS	07/31/03	
31812	CCM 7360	REMOTE ELECTRONICS UNIT MODIFICATION KIT - MSRR	3	EA	FLT	BMSFC	08/29/03	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
31813	CCM 7360	REMOTE ELECTRONICS UNIT MODIFICATION KIT	13	EA	FLT	BMSFC	09/30/03	
31817	CCM 6983	SOLAR PAYLOAD SHEAR PIN	2	EA	FLT	KSC	10/14/03	
31819	03-206	1 IN. QD COMPLETE ASSEMBLY	4	EA	FLT	BMSFC	08/30/02	
31820	03-206	1 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	BMSFC	08/30/02	
31821	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31822	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31823	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31824	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31825	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31826	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31827	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31828	CCM 7591	MOD KIT, NODE 2 MIL-STD-1553 TERMINATION ASSEMBLIES	1	EA	FLT	BMSFC	06/06/03	
31835	CCM 7792 03-0469	MODIFICATION KIT, HATCH INSTALLATION	1	EA	FLT	KSC	12/12/03	
31837	CCM 7390;04-0227	AL1D2 BETA CLOSEOUT PANEL	1	EA	FLT	JSC	10/14/03	Changed DIL number from 31807 to 31837 per Boeing Ltr 2-1150-04-0227 concurred by NASA on 5/12/04
31838	CCM 7792 03-0469	MODIFICATION KIT, HATCH INSTALLATION	1	EA	FLT	KSC	12/12/03	
31839	CCM 7792 03-0469	MODIFICATION KIT, HATCH INSTALLATION	1	EA	FLT	KSC	12/12/03	
50xxx Series								
50004	CCM 555	C&C MDM CSCI R1 (F)	1	EA	FLT	JSCX	03/30/99	CHANGED DELIVERY DATE
50005		C&C MDM CSCI R2 (FQT)	1	EA	FLT	JSCX	07/30/99	Admin (Added a zero to front of ID #)
50006		C&C MDM CSCI R3 (FQT)	1	EA	FLT	JSCX	01/30/00	Admin (Added a zero to front of ID #)
50007		C&C MDM CSCI R4 (FQT)	1	EA	FLT	JSCX	12/31/00	Admin (Added a zero to front of ID #)
50008		C&C MDM CSCI R5 (FQT)	1	EA	FLT	JSCX	12/30/01	Admin (Added a zero to front of ID #)
50009	CCM 232	MIL-STD 1553 CABLE/COUPLER ASSEMBLY	2	SET	FEU	RSA	09/30/96	ADD(REV A)/CHANGE DATE (REV B)
50010	CCM 232	MIL-STD 1553 CABLE/COUPLER ASSEMBLY	1	SET	FLT	RSA	12/30/96	ADD(REV A)/CHANGE DATE (REV B)
50013	CCM 218	NODE 1/PMA MDM SIM S/W	1	EA	DEV	RSE-E	05/06/96	ADD PER CCM 218
50014	CCM 218	NODE 1/PMA MDM SIM S/W	1	EA	DEV	RSE-E	09/09/96	ADD PER CCM 218
50015	CCM 218	NODE 1/PMA MDM FLT S/W	1	EA	FQT	RSE-E	03/31/97	ADD PER CCM 218
50016	CCM 218	NODE 1/PMA MDM SIM S/W	1	EA	FQT	RSE-E	03/31/97	ADD PER CCM 218

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50018	CCM 218	C & C MDM FLT S/W	1	EA	DEV	RSE-E	10/14/96	ADD PER CCM 218
50019	CCM 218	C & C MDM SIM S/W	1	EA	DEV	RSE-E	10/14/96	ADD PER CCM 218
50020	CCM 218	C & C MDM SIM S/W	1	EA	DEV	RSE-E	12/02/96	ADD PER CCM 218
50021	CCM 218	C & C MDM FLT S/W	1	EA	DEV	RSE-E	12/02/96	ADD PER CCM 218
50022	CCM 218	NODE 1/PMA MDM FLT S/W	1	EA	DEV	RSE-E	05/06/96	ADD PER CCM 218
50023	CCM 218	NODE 1/PMA MDM FLT S/W	1	EA	DEV	RSE-E	09/09/96	ADD PER CCM 218
50029	CCM 273	NCS CSCI (FINAL)	1	EA	FLT	JCSX/C&DH	04/22/97	ADD
50030	CCM 273	NES CSCI (FINAL)	1	EA	FLT	JSCX/C&DH	04/22/97	ADD
50031	CCM 271	FEU BACKSHELL FOR TVPS CONNECTOR, E4001S21062S1251E	4	EA	FEU	RSC-E	06/30/96	Add
50032	CCM 271	FEU PROTECTIVE CAP, 6 INCH TETHER,10-552943-15G	4	EA	FEU	RSC-E	06/30/96	Add
50033	CCM 271	FLIGHT PCR CONNECTOR NATC00T15N97SN	2	EA	FLT	RSC-E	06/30/96	Add
50034	CCM 271	FLIGHT BACKSHELL FOR NATC CONNECTOR, NZGA-SG- 15-N-12	2	EA	FLT	RSC-E	06/30/96	Add
50035	CCM 271	FLIGHT PROTECTIVE CAP, 6 INCH TETHER, NATC-RPC-N- 15-6	2	EA	FLT	RSC-E	06/30/96	Add
50036	CCM 271	FEU PCR CONNECTOR, TVPS00RF-15-97S-(453)	16	EA	FEU	RSC-E	06/30/96	Add
50037	CCM 271	FEU BACKSHELL FOR TVPS CONNECTOR, E4001S21062S1251E	16	EA	FEU	RSC-E	06/30/96	Add
50038	CCM 271	FEU PROTECTIVE CAP, 6 INCH TETHER,10-552943-15G	16	EA	FEU	RSC-E	06/30/96	Add
50039	CCM 271	FLIGHT PCR CONNECTOR NATC00T15N97SN	2	EA	FLT	RSC-E	06/30/96	Add
50040	CCM 271	FLIGHT BACKSHELL FOR NATC CONNECTOR, NZGA-SG- 15-N-12	2	EA	FLT	RSC-E	06/30/96	Add
50041	CCM 271	FLIGHT PROTECTIVE CAP, 6 INCH TETHER, NATC-RPC-N- 15-6	2	EA	FLT	RSC-E	06/30/96	Add
50042	CCM 271	FLIGHT PCR CONNECTOR NATC00T15N97SN	6	EA	FLT	RSC-E	06/30/96	Add
50043	CCM 271	FLIGHT BACKSHELL FOR NATC CONNECTOR, NZGA-SG- 15-N-12	6	EA	FLT	RSC-E	06/30/96	Add
50044	CCM 271	FLIGHT PROTECTIVE CAP, 6 INCH TETHER, NATC-RPC-N- 15-6	6	EA	FLT	RSC-E	06/30/96	Add
50045	CCM 271	20 GAGE CONTACTS, NZGC-C-2022 S B	132	EA	FLT	RSC-E	06/30/96	Add
50046	CCM 271	16 GAGE CONTACTS, NZGC-C-1620 S B	132	EA	FLT	RSC-E	06/30/96	Add
50047	CCM 271	20 GAGE SEALING PLUG, NZGSP-20	132	EA	FLT	RSC-E	06/30/96	Add
50048	CCM 271	20 GAGE SEALING PLUG REMOVAL TOOL, 10-589512-20	2	EA	FLT	RSC-E	06/30/96	Add

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50049	CCM 271	20 GAGE INSERTION/REMOVAL TOOL, 10-589507-20	10	EA	FLT	RSC-E	06/30/96	Add
50050	CCM 271	16 GAGE INSERTION/REMOVAL TOOL, 10-589507-16	10	EA	FLT	RSC-E	06/30/96	Add
50051	CCM 271	FEU PCR CONNECTOR, TVPS00RF-15-97S-(453)	4	EA	FEU	RSC-E	06/30/96	Add
50052	CCM 271	SSQ 21655 1553 NETWORK WIRE, NDBC-TEF-22S2SJ-75	1000	FT	FLT	RSC-E	06/30/96	Add
50053	CCM 271	20 GAGE WIRE FOR POWER & GROUND, 22759/11-20	9000	FT	FLT	RSC-E	06/30/96	Add
50056	CCM 287	NIMA (DELIVERY 1)	1	EA	FLT	JSCX/CDH	09/09/97	ADD
50057	CCM 287	NIMA (DELIVERY 2)	1	EA	FLT	JSCX/CDH	10/02/97	ADD
50058	CCM 287	SMC (DELIVERY 0.A)	1	EA	FLT	JSCX/CDH	09/09/97	ADD
50059	CCM 287	SMC (DELIVERY 1.A)	1	EA	FLT	JSCX/CDH	06/04/98	ADD
50060	CCM 287	SMC (DELIVERY 2.A)	1	EA	FLT	JSCX/CDH	03/03/99	ADD
50061	CCM 287	SMC (DELIVERY 3.A)	1	EA	FLT	JSCX/CDH	05/01/00	ADD
50062	CCM 287	SMC (DELIVERY 4.A)	1	EA	FLT	JSCX/CDH	06/01/01	ADD
50063	CCM 287	SMC (DELIVERY 5.A)	1	EA	FLT	JSCX/CDH	12/02/01	ADD
50065	CCM 287	SMC (DELIVERY 0.C)	1	EA	FLT	JSCX/CDH	04/02/98	ADD
50066	CCM 287	SMC (DELIVERY 0.D)	1	EA	FLT	JSCX/CDH	06/04/98	ADD
50067	CCM 287	SMC (DELIVERY 1.B)	1	EA	FLT	JSCX/CDH	07/09/98	ADD
50070	CCM 952; CCM 4199	MCOR ASSEMBLY	1	EA	FLT	KSC	10/16/00	
50071	CCM 952	HIGH RATE COMMUNICATION OUTAGE RECORDER (HCOR)	1	EA	PRF	KSC	07/30/01	
50073	CCM 952	HIGH RATE COMMUNICATION OUTAGE RECORDER (HCOR)	1	EA	ENGR	JSC/ISIL	07/03/01	
50111	CCM 2854	P/L CREW AIDS KIT 1 (2 SETS OF EXTENDERS, 2 MRB AND 1 SET OF SNUBBER CUP INSERTS)	1	EA	TNG	JSC	12/15/99	
50112	CCM 952; CCM 4199	MCOR ON-ORBIT INSTALLATION	1	EA	FLT	KSC	10/16/00	
50118	CCM 1581	NCS BOOT SW 106 PATCH	1	EA	FLT	BOE/HOU	11/02/98	
50119	CCM 1581	NCS HEATER CONTROL ADT PATCH	1	EA	FLT	BOE/HOU	11/02/98	Corrected DIL Item number.
50120	CCM 1581	RT COMM FAILURE FLAGS PATCH	1	EA	FLT	BOE/HOU	11/02/98	
50121	CCM 1581	FIRE/SMOKE PATCH	1	EA	FLT	BOE/HOU	11/02/98	
50122	CCM 1581	RSA CONTROLLING VEHICLE PATCH	1	EA	FLT	BOE/HOU	04/15/99	
50123	CCM 1581	RPCM LOADSHED & FDIR CONTROL TABLE PPL'S (8 INSTANCES)	1	EA	FLT	BOE/HOU	11/20/98	
50125	CCM 1581	NCS OIU TELEMETRY FORMAT PPL (1.1Nv2) (2 INSTANCES)	1	EA	FLT	BOE/HOU	11/20/98	
50126	CCM 1581	STATION CONFIGURATION PPL	1	EA	FLT	BOE/HOU	04/15/99	
50127	CCM 1581	APID TABLE PPL	1	EA	FLT	BOE/HOU	04/15/99	
50128	CCM 1694	PAYLOAD RACK CHECKOUT UNIT (PRCU)	1	EA	GSE	JSC1	11/09/98	
50129	CCM 1694	PAYLOAD RACK CHECKOUT UNIT (PRCU)	1	EA	GSE	MSFC	12/18/98	
50130	CCM 1694	PAYLOAD RACK CHECKOUT UNIT (PRCU)	1	EA	GSE	KSCX	05/30/99	
50131	CCM 1694	PAYLOAD RACK CHECKOUT UNIT (PRCU)	1	EA	GSE	LERC	07/15/99	
50132	CCM 1694	PAYLOAD RACK CHECKOUT UNIT (PRCU)	1	EA	GSE	MSFC	12/30/99	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50138	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	KSC	01/29/99	
50140	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	MSFC	09/30/99	
50141	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	JSC1	05/29/99	
50143	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (STEP)	1	EA	GSE	JSC1	01/31/00	
50145	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	JSC1	04/30/99	
50146	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	2	EA	GSE	JSC1	04/30/99	
50147	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	MSFC	04/30/99	
50148	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	LERC	04/30/99	
50149	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	MSFC	04/30/99	
50150	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	MSFC	04/30/99	
50151	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	MSFC	04/30/99	
50152	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	KSC	04/30/99	
50153	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	JSC	05/29/99	
50154	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	MSFC	09/30/99	
50155	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS (S/W)	1	EA	GSE	MSFC	01/31/00	
50161	CCM 1420	HCZ R1 CSCI	1	EA	FLT	ALENIA	02/04/02	
50163	CCM 1694	SUITCASE TEST ENVIRONMENT FOR PAYLOADS S/W	2	EA	GSE	JSC1	08/31/99	
50164	CCM 1581	N1-1 AND N1-2 CONFIGURATION TABLES WITH LDP 21 IN HEADER (2 INSTANCES)	1	EA	FLT	BOE/HOU	12/16/98	
50168	CCM 1727	PMCU PPL	1	EA	STE	ALENIA	05/01/00	
50169	CCM 1727	CCS CSCI	1	EA	FLT	ALENIA	05/01/00	
50170	CCM 1727	CCS PPL	1	EA	FLT	ALENIA	05/01/00	
50171	CCM 1727	CCS SIM	1	EA	STE	ALENIA	05/01/00	
50188	CCM 901	HIGH FIDELITY TPAD	1	EA	NUB	JSC	11/05/98	
50192	CCM 901; CCM 2671	FRAM NBL EVALUATION UNIT	1	EA	NUB	JSC	03/30/00	
50200	CCM 901; CCM 2671	FRAM ENGINEERING DEVELOPMENT UNIT	1	EA	MCK	JSC	09/29/00	
50208	CCM 1921	NCS OIU TELEMETRY FORMAT PPL (1.1NV2) (2 INSTANCES)	1	EA	FLT	JSC	03/12/99	
50272	CCM 1815 MOD	ASSEMBLY, STOWAGE PLATFORM, EXTERNAL	1	EA	FLT	KSC	08/15/00	
50296	CCM 2099	AVIONICS LOGISTICS BOARD	2	EA	ENG	JSC	01/07/00	
50299	CCM 2244	MPLM CROSS CONNECT JUMPER	1	EA	FLT	KSC	12/22/99	
50300	CCM 2317	S0 CROSS CHANNEL CABLE INTERCONNECT C-JUMPER	1	EA	FLT	KSC	01/04/00	
50301	CCM 2317	CHANNEL 1/4 RACU RESTART JUMPER	1	EA	FLT	KSC	01/04/00	
50302	CCM 2317	CHANNEL 2/3 RACU RESTART JUMPER	1	EA	FLT	KSC	01/04/00	
50303	CCM 2317	SECONDARY POWER FEEDBACK JUMPER	1	EA	FLT	KSC	01/04/00	
50306	CCM 2487	PMA TARGET SUPPORT STRUCTURE, PMA-2	1	EA	FLT	KSC	01/25/00	
50307	CCM 2487; Boeing letter 00-266	PMA TARGET SUPPORT STRUCTURE, PMA - 3	1	EA	FLT	JSC	03/05/00	
50308	CCM 2487	PMA TARGET SUPPORT STRUCTURE (SPARE)	1	EA	FLT	JSC	01/14/00	
50309	CCM 2487	PMA TARGET SUPPORT STRUCTURE, (TRAINING)	1	EA	TNG	JSC	03/06/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50313	CCM 2487	THERMAL COVER MOD KIT, NODE 1	1	EA	FLT	JSC	01/14/00	
50314	CCM 2487	WIRE HARNESS, CENTERLINE CAMERA (SPARE)	2	EA	FLT	JSC	01/14/00	
50315	CCM 2487	FITTING ASSEMBLY	32	EA	FLT	JSC	01/14/00	
50316	CCM 1411; CCM 6127	PASSIVE RACK ISOLATION SYSTEM (PaRIS)	1	EA	FLT	KSC	07/31/02	
50317	CCM 1411;CCM 6328; 03-134	PASSIVE RACK ISOLATION SYSTEM (PaRIS)	1	EA	FLT	BHOU	03/20/03	
50318	CCM 1411; CCM 6127	PaRIS SPARES KIT (CONSISTING OF (4) EA. ISOLATOR; (1) EA. LTL UMBILICAL - SUPPLY; (1) EA. LTL UMBILICAL - RETURN	1	EA	FLT	KSC	07/31/02	
50319	CCM 952	HIGH RATE COMMUNICATION OUTAGE RECORDER (HCOR)	1	EA	PRF	KSC	08/27/01	
50320	CCM 1503	6B BOX CLASS ORU PROTECTIVE COVER ASSEMBLY (MDM-10CE, BSP AND SBT EVA PROTECTIVE)	1	SET	FLT	KSC	10/06/99	
50321	CCM 1503	STANCHION COVER KIT (SSU, DDCU-E, DCSU, AND EVA COVER)	1	SET	FLT	KSC	05/05/00	
50322	CCM 1503	COVER ASSEMBLY MDM LOWER (MDM LOWER EVA PROTECTIVE COVER)	1	SET	FLT	KSC	12/22/99	
50323	CCM 1503; Boeing letter 00-806	PROTECTIVE COVER KIT BMRRM ORU	1	SET	FLT	KSC	04/01/00	
50324	CCM 1503; Boeing letter 00-806	KIT, SASA BLANKET	1	SET	FLT	KSC	03/20/00	
50325	CCM 1503	COVER ASSEMBLY, FLAP (1/2" FLAP EVA PROTECTIVE COVER X2)	2	SET	FLT	KSC	12/22/99	
50326	CCM 1503 050326	COVER ASSEMBLY, FLAP (3/4" FLAP EVA PROTECTIVE COVER X2)	2	SET	FLT	KSC	12/22/99	
50327	CCM 1503	COVER ASSEMBLY, FLAP (1" FLAP EVA PROTECTIVE COVER X2)	2	SET	FLT	KSC	12/22/99	
50328	CCM 1503; Boeing letter 00-806	S-BAND ANTENNA SUPPORT ASSEMBLY FLIGHT SUPPORT EQUIPMENT, (SASA FSE with THERMAL BLANKET)	1	SET	FLT	KSC	04/18/00	
50329	CCM 1503; Boeing letter 00-806	PUMP FLOW CONTROL SUBASSEMBLY FLIGHT SUPPORT EQUIPMENT, (PFCS FSE with THERMAL BLANKET)	1	SET	FLT	KSC	04/18/00	
50330	CCM 1503; Boeing letter 00-806	DC SWITCHING UNIT FLIGHT SUPPORT EQUIPMENT (DCSU FSE with THERMAL BLANKET)	1	SET	FLT	KSC	04/18/00	
50331	CCM 1503; letter 00- 806; 00-874	SIDE WALL CARRIER MGSE KIT (CRANE/DOLLY for PFCS, DCSU and SASA)	1	GSE	FLT	KSC	03/17/00	
50333	CCM 2487	GROMMET, RUBBER	20	EA	FLT	JSC	02/28/00	
50334	CCM 2487	FASTENER, 1/4 TURN	20	EA	FLT	JSC	03/06/00	
50335	CCM 2487	WIRE HARNESS, CENTERLINE CAMERA (SPARE)	1	EA	FLT	JSC	03/06/00	
50338	CCM 2512	ACTIVE FLIGHT RELEASABLE ATTACHMENT (FRAM)	1	EA	FLT	KSC	09/29/00	
50339	CCM 2512	PASSIVE FLIGHT RELEASABLE ATTACHMENT (FRAM)	1	EA	FLT	KSC	09/29/00	
50340	CCM 2671; 01-979	ACTIVE FRAM QUAL UNIT	1	EA	QUL	TBE	09/19/00	
50341	CCM 2671; 01-979	PASSIVE FRAM QUAL UNIT	1	EA	QUL	TBE	09/19/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50345	CCM 2512; Letter 01-41	ACTIVE FRAM ADAPTER PLATE ASSEMBLY	1	EA	FLT	KSC	09/29/00	
50346	CCM 2512; Letter 01-41	PASSIVE FRAM ADAPTER PLATE ASSEMBLY	1	EA	FLT	KSC	09/29/00	
50347	CCM 2512	ACTIVE FRAM ADAPTER PLATE GSE BRACKET SET	1	EA	GSE	KSC	09/29/00	
50348	CCM 2512	PASSIVE FRAM ADAPTER PLATE GSE BRACKET SET	1	SE	GSE	KSC	09/29/00	
50349	CCM 2512	6A FRAM SIDEWALL CARRIER NBL UNIT UPGRADE KIT	1	SE	NUB	JSC	03/30/00	
50351	CCM 3103; per s/a 992	KBAR ADAPTER KIT (NODE 1)	2	EA	FLT	JSC	12/21/00	
50352	CCM 3103	KBAR ADAPTER KIT (MOCK-UP)	1	EA	TNG	JSC	12/21/00	
50353	CCM 2854	P/L CREW AIDS KIT 2 (20 SETS OF EXTENDERS, 13 MRB & 11 SETS OF SNUBBER CUP INSERTS)	1	EA	FLT	JSC	03/31/00	
50354	CCM 2487	FITTING ASSEMBLY	8	EA	FLT	JSC	03/06/00	
50355	CCM 2487	FASTENER, 1/4 TURN	12	EA	FLT	JSC	03/10/00	
50356	CCM 2487	GROMMET, RUBBER	12	EA	FLT	JSC	03/10/00	
50357	CCM 3275	BLANKET THERMAL, LCA	1	EA	FLT	KSC	01/05/01	
50359	CCM 2605	ACTIVE ESPAD ASSEMBLY	1	EA	FLT	KSC	06/25/02	
50360	CCM 2605	PASSIVE ESPAD ASSEMBLY	1	EA	FLT	KSC	06/25/02	
50370	CCM 3072	BCDU FSE INSTALLATION KIT	1	EA	FSE	KSC	07/31/02	
50371	CCM 3072	UTA FSE INSTALLATION KIT	1	EA	FSE	KSC	07/31/02	
50372	CCM 3072	PUMP MODULE FSE INSTALLATION KIT	1	EA	FSE	KSC	11/30/02	
50375	CCM 3072	PLASMA CONTACTOR FSE INSTALLATION KIT	1	EA	FSE	KSC	10/22/02	
50376	CCM 3072	BATTERY ASSEMBLY FSE INSTALLATION KIT	1	EA	FSE	KSC	06/30/03	
50377	CCM 3072	CMG FSE INSTALLATION KIT	1	EA	FSE	KSC	10/30/02	
50378	CCM 3072	MT/TUS REEL FSE INSTALLATION KIT	1	EA	FSE	KSC	04/30/03	
50381	CCM 3072	KU-BAND SGANT FSE INSTALLATION KIT	1	EA	FSE	KSC	08/30/02	
50383	CCM 3072	PASSIVE FLIGHT RELEASABLE ATTACHMENT MECHANISM (P-FRAM) INSTALLATION KIT	2	EA	FSE	KSC	07/31/01	
50386	CCM 3783	UTAS PASSIVE PLUGS, Z1 MOD KIT	1	EA	FLT	KSC	08/18/00	
50387	CCM 3783	UTAS PASSIVE PLUGS, P6 MOD KIT	1	EA	FLT	KSC	09/09/00	
50389	Letter 01-277	CONNECTOR COVER (DDCU J1/J2)	2	EA	FLT	KSC	10/01/00	
50390	Letter 01-277	CONNECTOR COVER (DDCU J3)	1	EA	FLT	KSC	10/01/00	
50391	CCM 3696	ARIS EXPRESS INSTALLATION MAINTENANCE TRAINER (AEIMT) MOD KIT	1	EA	TNG	JSC	12/08/00	
50399	CCM 4003	NODE-1 CMG HTR PATCH CABLE	1	EA	FLT	KSC	09/15/00	
50402	CCM 4199	MCOR ASSEMBLY	1	EA	FLT	KSC	10/16/00	
50413	CCM 4313; 02-270	STANCHION SUPPORT STRUCTURE	4	EA	FSE	KSC	10/01/02	
50414	CCM 3103; per s/a 992	KBAR ADAPTER KIT (NODE 1)	2	EA	FLT	JSC	12/21/00	
50416	CCM 4293	ARIS-ICE SHAKER CONTROLLER LABEL MOD KIT	1	EA	FLT	KSC	11/30/00	
50417	CCM 4104	ACTIVE UNIVERSAL TRUNNION ATTACHMENT SYSTEM (UTAS)	1	EA	FLT	KSC	01/22/01	
50420	CCM 2605	ESP2 MOD KIT	1	EA	FLT	KSC	01/19/01	
50422	Letter 01-41	Passive FRAM Adapter Plate GSE Assembly	1	EA	GSE	KSC	01/19/01	
50423	CCM 3072	GSE PASSIVE FRAM ADAPTER PLATE ASSEMBLY	2	EA	GSE	KSC	06/30/01	
50424	CCM 3072	COMMON LIFT BEAM ASSEMBLY GSE	1	EA	GSE	KSC	09/30/01	
50425	CCM 3072	FLEX HOSE ROTARY COUPLER FSE INSTALLATION KIT	1	EA	FSE	KSC	09/30/02	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50437	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	12/02/02	
50438	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	12/02/02	
50439	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	08/30/02	
50440	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	09/30/02	
50441	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	09/30/02	
50442	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	10/31/02	
50443	CCM 4374	TEST SUPPORT EQUIPMENT ESSMDM	1	EA	GSE	JSC	10/31/02	
50444	CCM 4374	TEST SUPPORT EQUIPMENT SSMDM	1	EA	GSE	JSC	12/02/02	
50445	CCM 4374	TEST SUPPORT EQUIPMENT SSMDM	1	EA	GSE	JSC	12/02/02	
50446	CCM 3072	LOW LEVEL ANALOG STIFFNER & CARD LOCKS	4	EA	GSE	JSC	07/02/02	
50447	CCM 4374	HIGH LEVEL ANALOG STIFFNER & CARD LOCKS	3	EA	GSE	JSC	12/02/02	
50448	CCM 4374	DISCRETE IN & OUT STIFFNER & CARD LOCKS	6	EA	GSE	JSC	12/02/02	
50449	CCM 4374	HRDL I/O	2	EA	GSE	JSC	12/02/02	
50450	CCM 4374	HRDL PROCESSOR	2	EA	GSE	JSC	12/02/02	
50451	CCM 4374	SIGNAL DISCRETE OUTPUT	2	EA	GSE	JSC	12/02/02	
50452	CCM 2605	AIRLOCK TRUNNION PLUG INST. KIT	1	EA	FLT	KSC	03/16/01	
50454	CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	2	EA	FSE	KSC	03/30/03	
50455	CCM 3072	MEDIUM ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	03/30/03	
50456	03-124	LARGE ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	03/30/03	
50457	S/A 1275; CCM 5216	W/H ASSY, POWER-UOP BYPASS	3	EA	FLT	KSC	04/09/01	Change number (requirement) change per Boeing Ltr 2-1150-03-0584 concurred by NASA on 08/16/04.
50458	CCM 5216	W/H ASSY, DATA-UOP BYPASS	3	EA	FLT	KSC	04/09/01	
50461	01-649; CCM 4218	SNUBBER CUP ISOLATORS	20	EA	FLT	KSC	06/02/01	
50463	CCM 5259	8 GAGE ARIS ICE J1 UMBILICAL LOOPED	1	EA	FEX	KSC	06/22/01	
50464	CCM 5268	CABLE ASSEMBLY, VIDEO JUMPER-LAB	2	EA	FLT	GSE	04/12/01	
50465	CCM 5259	8 GAGE ARIS ICE J1 UMBILICAL UNLOOPED	1	EA	FEX	KSC	06/22/01	
50466	CCM 5474	LOOSE ITEMS KIT, 1553 N1 TO LAB, NCS TO S-BAND	1	EA	FLT	KSC	06/08/01	
50469	CCM 4635; 02-0023	MSS CONTINGENCY CABLE KIT	1	EA	FLT	KSC	12/04/01	Hardware Type change per Boeing Ltr 2-1150-03-0584 concurred by NASA on
50470	CCM 5666	HCOR OUTPUT ATTENUATOR CABLE	1	EA	FLT	KSC	12/31/01	
50516	CCM 3072	PASSIVE FLIGHT RELEASABLE ATTACHMENT MECHANISM (P-FRAM) INSTALLATION KIT	5	EA	FSE	KSC	03/31/02	
50517	CCM 2605	LOOSE ITEMS KIT, ESPAD	1	EA	FLT	KSC	06/25/02	
50518	CCM 2605	ESP2 ON-ORBIT POWER CABLE KIT	1	EA	FLT	KSC	06/25/02	
50519	01-907; CCM 5190	HOSE ASSEMBLY - ARIS GN2 UMBILICAL	1	EA	FLT	KSC	10/12/01	
50520	CCM 2879	WS/CHX 2-HOSE	1	EA	FLT	BMSD	10/01/01	
50521	CCM 2879	WS/CHX 2-HOSE	1	EA	FLT	BMSD	10/01/01	
50523	CCM 2879	WS/CHX 2-HOSE	1	EA	FLT	BMSD	10/01/01	
50524	CCM 2879	WS/CHX 2-HOSE	1	EA	FLT	BMSD	10/01/01	
50526	01-825	PASSIVE FRAM ALIGNMENT FIXTURE	1	EA	GSE	KSC	09/19/01	
50527	01-825	ACTIVE FRAM ALIGNMENT FIXTURE	1	EA	GSE	KSC	09/19/01	
50528	01-825	PASSIVE FRAM DRILL TEMPLATE	1	EA	GSE	KSC	09/19/01	
50529	01-825	ACTIVE FRAM DRILL TEMPLATE	1	EA	GSE	KSC	09/19/01	
50530	CCM 2605; 02-254	ENHANCED UTAS	2	EA	FLT	KSC	01/31/02	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50531	CCM 4407	NASA IHI/MHI PIVOTS	1	EA	FLT	KSC	03/11/02	
50532	CCM 5811	PASSIVE COMMON ATTACH SYSTEM SIMULATOR	1	EA	STE	BHOU	02/18/02	
50533	S/A 1097 - CCM 6032	BGA MLI BLANKETS MOD KITS	2	EA	FLT	KSC	10/31/01	
50534	S/A 1097 - CCM 6032	BGA MLI BLANKETS	1	EA	TSE	JSC	10/25/01	
50535	CCM 3072	PASSIVE FRAM ALIGNMENT FIXTURE	1	EA	GSE	KSC	06/30/02	
50536	CCM 3072	ACTIVE FRAM ALIGNMENT FIXTURE	1	EA	GSE	KSC	06/30/02	
50537	CCM 3072	PASSIVE FRAM DRILL TEMPLATE	1	EA	GSE	KSC	06/30/02	
50538	CCM 3072	ACTIVE FRAM DRILL TEMPLATE	1	EA	GSE	KSC	06/30/02	
50539	CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50540	CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50541	CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50542	CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50543	CCM 3072	PHOTO VOLTAIC RADIATOR FSE INSTALLATION KIT	1	EA	FSE	KSC	10/31/02	
50544	CCM 3072	LIGHTWEIGHT ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50545	CCM 3072	LIGHTWEIGHT ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50546	03-192; CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50547	03-192; CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50548	03-192; CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50549	03-192; CCM 3072	SMALL ADAPTER PLATE ASSEMBLY	1	EA	FSE	KSC	04/30/03	
50551	S/A 1124 - CCM 5985	SSU MLI BLANKET MOD KIT (P4)	2	EA	FLT	KSC	07/19/02	
50554	S/A 1124 - CCM 5985	ECU MLI BLANKET MOD KIT (P4)	2	EA	FLT	KSC	07/19/02	
50555	CCM 5942	BRACKET WIF ADAPTER PLATE MOD KIT	1	EA	FLT	KSC	03/28/03	
50557	CCM 3072	EUTAS, PASSIVE, SO MOD KIT	1	EA	FSE	KSC	01/31/02	
50558	S/A 1124 - CCM 5985	SSU MLI BLANKET MOD KIT (S4)	2	EA	FLT	KSC	07/19/02	
50560	S/A 1124 - CCM 5985	ECU MLI BLANKET MOD KIT (S4)	2	EA	FLT	KSC	07/19/02	
50561	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	02/11/02	
50562	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	02/11/02	
50563	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	02/11/02	
50564	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	02/11/02	
50565	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	02/11/02	
50566	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	02/11/02	
50567	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	05/06/02	
50568	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	05/06/02	
50569	02-0063; CCM 6484	FGB ENCLOSURE KIT	1	EA	FLT	KSC	05/06/02	
50570	02-0063; S/A 6484	FGB ENCLOSURE KIT (ZONE 9)	1	EA	FLT	KSC	05/06/02	
50571	02-0063; CCM 6484	FGB ENCLOSURE KIT (ZONE 22)	1	EA	FLT	KSC	05/06/02	
50572	02-0063; CCM 6484	FGB ENCLOSURE KIT (ZONE 10 & 12)	1	EA	FLT	KSC	05/06/02	
50573	02-0063; CCM 6484	FGB ENCLOSURE KIT (ZONE 10 & 12)	1	EA	FLT	KSC	05/06/02	
50574	02-0063; CCM 6484	FGB ENCLOSURE KIT (ZONE 10 & 12)	1	EA	FLT	KSC	05/06/02	
50575	02-0063; CCM 6484	FGB ENCLOSURE KIT (ZONE 16 & 19)	1	EA	FLT	KSC	05/06/02	
50576	02-0063; CCM 6484	FGB ENCLOSURE KIT (ZONE 16 & 19)	1	EA	FLT	KSC	05/06/02	
50577	CCM 3605	P6 LONG SPACER (SHROUD) MOD KIT	1	EA	FLT	KSC	09/30/02	
50578	S/A 1124 - CCM 5985	P4 GROUNDING LUG MOD KIT	1	EA	FLT	KSC	07/19/02	Corrected CCM number.
50580	S/A 1124 - CCM 5985	S4 GROUNDING LUG MOD KIT	1	EA	FLT	KSC	07/19/02	
50584	CCM 6823	MDM RADIATOR FSE INSTALLATION KIT (Nadir)	1	EA	FLT	KSC	12/23/03	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50585	S/A 1126 - CCM 6486	BGA BLANKET MOD KIT P4	1	EA	FLT	KSC	07/19/02	
50586	S/A 1126 - CCM 6486	BGA BLANKET MOD KIT S4	1	EA	FLT	KSC	07/19/02	
50587	S/A 1126 - CCM 6486	BGA BLANKET MOD KIT S6	1	EA	FLT	KSC	07/19/02	
50589	CCM 6328	PaRIS CIR KIT	1	EA	FLT	BHOU	12/03/02	
50590	02-270	EVA FLIGHT RELEASABLE ATTACHMENT MECHANISM (EFRAM)	1	EA	FSE	KSC	10/02/02	
50593	S/A 1132 - CCM 5434	BACKSHELL	3	EA	FLT	KSC	10/07/02	
50595	S/A 1132 - CCM 5434	BACKSHELL	4	EA	FLT	KSC	10/07/02	
50596	S/A 1132 - CCM 5434	BACKSHELL (VCSA)	1	EA	FLT	KSC	10/07/02	
50599	S/A 1132 - CCM 5434	BACKSHELL	1	EA	FLT	KSC	10/07/02	
50600	S/A 1132 - CCM 5434	BACKSHELL	1	EA	FLT	KSC	10/07/02	
50601	S/A 1132 - CCM 5434	BACKSHELL	1	EA	FLT	KSC	10/07/02	
50603	S/A 1132 - CCM 5434	BACKSHELL	2	EA	FLT	KSC	10/07/02	
50604	S/A 1132 - CCM 5434	BACKSHELL	2	EA	FLT	KSC	10/07/02	
50606	S/A 1132 - CCM 5434	BACKSHELL	1	EA	FLT	KSC	10/07/02	
50608	S/A 1132 - CCM 5434	PLUG CONNECTOR	1	EA	FLT	KSC	08/19/02	
50609	S/A 1132 - CCM 5434	PLUG CONNECTOR	1	EA	FLT	KSC	08/19/02	
50610	S/A 1132 - CCM 5434	PLUG CONNECTOR	3	EA	FLT	KSC	08/19/02	
50613	S/A 1132 - CCM 5434	PLUG CONNECTOR	1	EA	FLT	KSC	08/19/02	
50614	S/A 1132 - CCM 5434	CONNECTOR CAPS	32	EA	FLT	KSC	10/07/02	
50615	S/A 1132 - CCM 5434	CONNECTOR CAPS	34	EA	FLT	KSC	10/07/02	
50616	S/A 1132 - CCM 5434	CONNECTOR CAPS	2	EA	FLT	KSC	10/07/02	
50617	S/A 1132 - CCM 5434	CONNECTOR CAPS	1	EA	FLT	KSC	10/07/02	
50618	S/A 1132 - CCM 5434	CONNECTOR CAPS	4	EA	FLT	KSC	10/07/02	
50619	S/A 1132 - CCM 5434	CONNECTOR CAPS	7	EA	FLT	KSC	10/07/02	
50620	S/A 1132 - CCM 5434	SEALING PLUG	410	EA	FLT	KSC	10/07/02	
50622	S/A 1132 - CCM 5434	CONNECTOR	2	EA	FLT	KSC	02/14/03	
50623	S/A 1132 - CCM 5434	CONNECTOR	4	EA	FLT	KSC	02/28/03	
50624	S/A 1132 - CCM 5434	CONNECTOR	3	EA	FLT	KSC	02/14/03	
50625	S/A 1132 - CCM 5434	CONNECTOR	1	EA	FLT	KSC	02/14/03	
50626	S/A 1132 - CCM 5434	CONNECTOR	15	EA	FLT	KSC	02/14/03	
50627	S/A 1132 - CCM 5434	CONNECTOR	10	EA	FLT	KSC	02/14/03	
50628	S/A 1132 - CCM 5434	CONNECTOR	1	EA	FLT	KSC	02/14/03	
50629	S/A 1132 - CCM 5434	CONNECTOR	1	EA	FLT	KSC	02/14/03	
50630	S/A 1132 - CCM 5434	CONNECTOR	1	EA	FLT	KSC	02/14/03	
50631	S/A 1132 - CCM 5434	CONNECTOR	3	EA	FLT	KSC	02/14/03	Reduced Qty from 5 to 3 per credit proposal #4 on Boeing letter 2-1150-06-0194 defintized on Mod 1406
50632	S/A 1132 - CCM 5434	CONNECTOR	2	EA	FLT	KSC	02/14/03	
50633	S/A 1132 - CCM 5434	CONNECTOR	10	EA	FLT	KSC	02/14/03	
50634	S/A 1132 - CCM 5434	CONNECTOR	2	EA	FLT	KSC	02/14/03	
50635	S/A 1132 - CCM 5434	CONNECTOR	6	EA	FLT	KSC	02/14/03	Reduced Qty from 7 to 6 per credit proposal #4 on Boeing letter 2-1150-06-0194 defintized on Mod 1406
50636	S/A 1132 - CCM 5434	CONNECTOR	3	EA	FLT	KSC	02/14/03	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50638	S/A 1132 - CCM 5434	CONNECTOR	2	EA	FLT	KSC	02/14/03	
50639	S/A 1132 - CCM 5434	CONNECTOR	3	EA	FLT	KSC	02/14/03	
50640	S/A 1132 - CCM 5434	CONNECTOR	2	EA	FLT	KSC	02/14/03	
50641	S/A 1132 - CCM 5434	CONNECTOR	1	EA	FLT	KSC	02/14/03	
50643	S/A 1132 - CCM 5434	BACKSHELL	1	EA	FLT	KSC	10/07/02	
50644	S/A 1132 - CCM 5434	BACKSHELL	2	EA	FLT	KSC	10/07/02	
50646	S/A 1132 - CCM 5434	CONNECTOR CAP	1	EA	FLT	KSC	10/07/02	
50648	S/A 1132 - CCM 5434	SEALING PLUG	100	EA	FLT	KSC	10/07/02	
50650	S/A 1132 - CCM 5434	BACKSHELL, 90 DEG	2	EA	FLT	KSC	10/07/02	
50660	S/A 1134 - CCM 6637	PASSIVE FRAM MOD KIT	1	EA	FLT	KSC	05/31/02	
50661	CCM 6612	PASSIVE FRAM MOD KIT	2	EA	FLT	KSC	12/20/02	
50662	CCM 6612; 03-106	SMALL ADAPTER PLATE ASSEMBLY (SAPA) MOD KIT	2	EA	FLT	KSC	12/20/02	
50665	CCM 6612	PASSIVE FRAM CONNECTOR ALIGNMENT TOOLING	1	EA	FLT	KSC	12/20/02	
50667	02-320	MT/MBS CROSS CONNECTION MOD KIT	1	EA	FLT	MSFC	05/28/02	
50668	S/A 1134 - CCM 6817	THERMOSTAT BOX MLI BLANKET MOD KIT	1	EA	FLT	KSC	07/10/02	
50669	CCM 6328	USL NADIR WINDOW HEATER MOD KIT	1	EA	FLT	KSC	08/02/02	
50673	02-509	THERMAL COVER EXTENSION MOD KIT	1	EA	FLT	KSC	09/05/02	
50674	02-509	THERMAL COVER EXTENSION TRAINING UNIT	2	EA	FLT	JSC	09/16/02	
50676	02-509	THERMAL COVER EXTENSION MOD KIT	1	EA	FLT	KSC	09/13/02	
50677	S/A 1275; CCM 7053	MODIFICATION KIT, NITROGEN TANK ASSEMBLY	2	KT	FLT	JSC	09/30/03	Nomenclature AND Unit of measure change per Boeing Ltr 2-1150-04-0413 concurred by NASA on 09-10-04.
50678	S/A 1275; CCM 7053	MODIFICATION KIT, NITROGEN TANK ASSEMBLY	1	KT	FLT	JSC	09/30/03	Nomenclature AND Unit of measure change per Boeing Ltr 2-1150-04-0413 concurred by NASA on 09-10-04.
50680	CCM 6998; 02-569	1 INCH QUICK DISCONNECT MOD KIT	12	EA	FLT	BMSFC	10/10/02	
50682	02-620; CCM 7114-S/A1155	LAB-TRUSS CONTINGENCY POWER JUMPER CABLE	1	EA	FLT	KSC	10/24/02	
50683	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P1)	5	EA	FLT	KSC	10/14/03	
50685	02-568; 02-585	SECONDARY OUTER SPOOL SEAL	63	EA	FLT	BMSFC	10/04/02	
50686	02-568/02-585 - CCM 6998	TEFLON BACKUP RING	63	EA	FLT	BMSFC	10/04/02	
50690	03-177; CCM 7125	ESPAD CLAMP AND SHROUD MOD KIT, P5 SHORT SPACER	1	EA	FLT	KSC	04/18/03	
50691	03-177; CCM 7125	ESPAD CLAMP AND SHROUD MOD KIT, S5 SHORT SPACER	1	EA	FLT	KSC	04/18/03	
50692	03-177; CCM 7125	S6 WIRE HARNES MOD KIT	1	EA	FLT	KSC	10/17/03	
50694	CCM 6647	INTERNAL, SELF SEALING, FLUID, QUICK DISCONNECT COUPLING	4	EA	FLT	BMSFC	10/17/03	
50695	CCM 6647	INTERNAL, SELF SEALING, FLUID, QUICK DISCONNECT COUPLING	4	EA	FLT	BMSFC	10/17/03	
50696	CCM 6647	INTERNAL, SELF SEALING, FLUID, QUICK DISCONNECT COUPLING	2	EA	FLT	BMSFC	10/17/03	
50697	CCM 6647	COUPLING QD, MALE, AMMONIA EXTERNAL (1 IN.)	4	EA	FLT	BMSFC	10/17/03	
50698	CCM 6647	MDM CONNECTOR MOUNTING PLATE	2	EA	FLT	BMSFC	10/17/03	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50699	CCM 6647	COUPLING, AD, FEMALE, 125 INCH. FEEDTHROUGH-MOUNTED MATED PAIR	4	EA	FLT	BMSFC	12/11/03	
50701	CCM 7164	FLUSHED MOUNTED EVA HAND RAIL MOD KIT	2	EA	FLT	KSC	01/06/03	
50713	CCM 7258	MODIFICATION KIT, SHUNT JUMPER-N2 LOOP A	1	EA	FLT	KSC	03/07/03	
50714	CCM 7221	CUPOLA AUDIO TERMINAL UNIT ADDRESS CONNECTOR	1	EA	FLT	KSC	04/14/03	
50716	CCM 6031	US LAB ISPR MOD KIT	3	EA	FLT	KSC	06/02/03	
50717	03-105	PASSIVE FRAM MOD KIT	4	EA	FLT	KSC	03/07/03	
50718	03-105	SMALL ADAPTER PLATE ASSEMBLY MOD KIT	1	EA	FLT	KSC	03/07/03	
50719	30-105; 03-104; 03-0249	SMALL ADAPTER PLATE ASSEMBLY MOD KIT	1	EA	FLT	KSC	03/07/03	
50720	CCM 7543 03-087; 03-0104	MOD KIT, PaRIS KIT ASSEMBLY	2	EA	FLT	BHOU	02/28/03	
50723	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P2)	5	EA	FLT	KSC	10/14/03	
50724	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P2)	5	EA	FLT	KSC	10/14/03	
50725	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P7)	5	EA	FLT	KSC	10/14/03	
50726	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P9)	5	EA	FLT	KSC	10/14/03	
50727	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P11)	5	EA	FLT	KSC	10/14/03	
50728	CCM 6983	TYPE D CONNECTOR, RECEPTACLE (mates with P12)	5	EA	FLT	KSC	10/14/03	
50729	CCM 6983	CONTACT, SOCKET 12 AWG	70	EA	FLT	KSC	10/14/03	
50730	CCM 6983; 03-0516	CONTACT, SOCKET 22 AWG	450	EA	FLT	KSC	10/14/03	
50731	CCM 6983; 03-0516	CONTACT, PIN 22 AWG	622	EA	FLT	KSC	10/14/03	
50732	CCM 6983; 03-0516	SEALING PLUG 12 AWG	49	EA	FLT	KSC	10/14/03	
50733	CCM 6983; 03-0516	SEALING PLUG 22 AWG	718	EA	FLT	KSC	10/14/03	
50736	CCM 6983; 03-0516	BACKSHELL (P7, P9, P11, P12)	40	EA	FLT	KSC	10/14/03	
50737	CCM 6983; 03-0516	BACKSHELL (P4)	8	EA	FLT	KSC	10/14/03	
50738	SSCN 7076B	CONTROL MOMENT GYRO ASSY, SPARE	1	EA	OPD	L3COM	11/30/03	
50739	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J1)	3	EA	FLT	KSC		
50740	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J2)	3	EA	FLT	KSC		
50741	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J4)	3	EA	FLT	KSC		
50742	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J7)	3	EA	FLT	KSC		
50743	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J9)	3	EA	FLT	KSC		
50744	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J11)	3	EA	FLT	KSC		
50745	CCM 6983	TYPE C CONNECTOR, PLUG (mates w/J12)	3	EA	FLT	KSC		
50746	CCM 6983	CONTACT, PIN 12 AWG	37	EA	FLT	KSC		
50754	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/05/03	
50755	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/06/03	
50756	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/07/03	
50757	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/08/03	
50758	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/09/03	
50759	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/10/03	
50760	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/11/03	
50761	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/12/03	
50762	CCM 7553	FGB CARGO STORAGE ENCLOSURES	1	EA	FLT	B-MOSCOW	12/13/03	
50763	CCM 7601	SOLAR ARRAY WING, BETA GIMBAL	1	EA	FLT	KSC	05/21/03	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
50770	03-206	1 IN. QD COMPLETE ASSEMBLY	1	EA	FLT	KSC	08/30/02	
50771	03-206	1 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
50774	S/A 1275; CCM 7654	MOD KIT, ACBSP TEMP SENSOR AND ENCODER BOARD AC TERMINATOR	3	EA	FLT	GDDS	09/19/03	Nomenclature change per Boeing Ltr 2- 1150-04-0412 concurred by NASA on 09- 07-04.
50775	CCM 6823 03-0318	FHRC ADJUSTABLE STRUT	2	EA	FSE	KSC	10/18/03	
50776	CCM 6823 03-0318	FHRC FSE INSTALLATION KIT	1	EA	FSE	KSC	10/18/03	
50777	CCM 6823 03-0318	PUMP MODULE FSE INSTALLATION KIT	1	EA	FSE	KSC	10/18/03	
50778	CCM 7810 03-0293; 03- 0519; 03-0538	MODIFICATION KIT, CDRA 1.5 INCH FILTERS	1	KT	FLT	JSC/FPEC	10/24/03	
50785	CCM 7305 03-0389-1	FOOT RESTRAINT BRACKET	8	EA	FLT	KSC	10/28/03	
50786	CCM 7305 03-0389-1	RETAINER, WIRE FOOTPLATE	8	EA	FLT	KSC	10/28/03	
50787	CCM 7305 03-0389-1	DETAILS, FOOT RESTRAINT ASSEMBLY, SHORT DURATION	8	EA	FLT	KSC	10/28/03	
50788	CCM 7305 03-0389-1	FOOTLOOP ASSEMBLY, FOOT RESTRAINT	8	EA	FLT	KSC	10/28/03	
50789	CCM 7305 03-0389-1	FOOT RESTRAINT BRACKET	8	EA	FLT	KSC	10/28/03	
50790	CCM 7305 03-0389-1	RETAINER, WIRE FOOTPLATE	8	EA	FLT	KSC	10/28/03	
50791	CCM 7305 03-0389-1	DETAILS, FOOT RESTRAINT ASSEMBLY, SHORT DURATION	8	EA	FLT	KSC	10/28/03	
50792	CCM 7305 03-0389-1	FOOTLOOP ASSEMBLY, FOOT RESTRAINT	8	EA	FLT	KSC	10/28/03	
50793	CCM 7594; S/A 1205	MOD KIT, H FIXTURE FOR S4 ELEMENT (AS INSTALLED)	1	EA	FLT	KSC	08/15/03	
50794	CCM 7594; S/A 1205	MOD KIT, H FIXTURE FOR P4 ELEMENT (AS INSTALLED)	1	EA	FLT	KSC	08/15/03	
50798	CCM 7810; 03-0554	FILTER ASSEMBLY, DESICCANT BED, 1.5-INCH	4	EA	FLT	KSC	10/24/03	
50799	CCM 7810; 03-0554	FILTER ASSEMBLY DUCT, 1.5-INCH	4	EA	FLT	KSC	10/24/03	
50800	CCM 4079, 03-0429	PCU MOD KIT	2	EA	FLT	JSC	06/30/01	
50801	CCM 4079, 03-0429	PCU PART MARKING MOD KIT	2	EA	FLT	KSC	06/30/01	
50802	CCM 8206; 03-0479	PROGRESS KIT, MCA ANALYZER ASSEMBLY	1	KT	FSE	JSC/FPEC	10/20/03	
50808	CCM 8206; 03-0506	PROGRESS KIT, MCA ANALYZER ASSEMBLY	1	KT	FSE	HSSS	11/05/03	
50846	CCM 8280; S/A 1228	CABLE ASSEMBLY, AUDIO, FIBER OPTIC - NODE 2	2	EA	FLT	KSC	12/19/03	
50847	CCM 8280; S/A 1228	CABLE ASSEMBLY, AUDIO, FIBER OPTIC - NODE 2	6	EA	FLT	KS	12/19/03	
100xxx Series								
100015		INTEGRATED TRUSS SEGMENT P1	1	EA	FLT	KSCX	09/23/99	
100017	CCM 1577	INTEGRATED TRUSS SEGMENT S0	1	EA	FLT	KSCX	06/30/00	
100027	CCM 309; CCM 1582	ELEMENT ASSEMBLY, NODE 1	1	EA	FLT	KSCX	04/17/98	
100029	CCM 309	PRESSURIZED MATING ADAPTER #1	1	EA	FLT	KSCX	04/17/98	
100030	CCM 309	PRESSURIZED MATING ADAPTER #2	1	EA	FLT	KSCX	04/17/98	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100031	CCM 056	PRESSURIZED MATING ADAPTER #3	1	EA	FLT	KSCX	05/07/98	
100081	CCM 228	GE2200237 APCU-I (CITE)	2	EA	FLT	KSCX	06/15/97	Change date per CCM 228
100083	CCM 153; MOD 135	EXT. TCS (AMMONIA) VALVE SAVER	1	EA	GSE	KSCX	04/15/99	
100086	CCM 228	GS220061 INTERNAL TCS COOLING SERVICER	1	EA	GSE	KSCX	09/01/97	PER CCM 228
100087	CCM 228	GS220060 INTERNAL TCS SERVICING UNIT	1	EA	GSE	KSCX	09/01/97	PER CCM 228
100090		GQ220138 SPACE-TO-GROUND SUBSYS TEST SET (KU BAND T)	1	EA	GSE	KSCX	07/01/97	
100093		GQ220121 VIDEO TEST SET	1	EA	GSE	KSCX	02/28/97	
100113		ACS ANTENNA BOOM STUB	1	EA	FLT	JSCX	12/19/94	
100117		ZERO-G CONNECTOR PASSIVE HALF RECEPTACLE	24	EA	FLT	JSCX	01/16/95	
100119		FLUID HOSE JUMPER ASSEMBLY WITH 2 ACTIVE HALF FLUID CONNECTORS	3	EA	FLT	JSCX	01/16/95	
100120		FLUID HOSE PIGTAILS WITH 1 ACTIVE HALF FLUID CONNECTOR	2	EA	FLT	JSCX	01/16/95	
100124		ZERO-G CONNECTOR PASSIVE HALF RECEPTACLE	3	EA	FEU	JSCX	01/16/95	
100125		FLUID LINE PIGTAILS INCLUDES 1 ACTIVE HALF SYMMETRIC CONNECTOR	2	EA	QUL	JSCX	01/16/95	
100165	S/A 408	G N & C CSCI	1	EA	FLT	JSC	04/10/00	
100166	CCM 536	GN&C CSCI (FQT) (8A)	1	EA	FLT	JSCX	06/01/98	CHANGED NOMENCLATURE, DATE
100174		S0 MDM CSCI R1 (F)	1	EA	FLT	JSCX	10/01/98	
100180		S1/P1 MDM CSCI R1 (F)	1	EA	FLT	JSCX	04/01/99	
100184		STR/PTR MDM CSCI R1 (F)	1	EA	FLT	JSCX	04/01/99	
100190		S3/P3 CSCI R1 (F)	1	EA	FLT	JSCX	10/30/99	
100213		INTEGRATED TRUSS SEGMENT S1 (OLD#100111)	1	EA	FLT	KSCX	06/17/99	
100214	CCM 155	GE2200237 APCU-I	2	EA	FLT	KSCX	05/01/98	
100232	CCM 189	MIR STRUCTURAL DYNAMICS EXPERIMENT - MAS UNIT	1	EA	FEX	JSCX	05/31/96	
100234		ACS ANTENNA BOOM STUB INTERFACE PLATE ASSEMBLY, TASK BOARD INTERFACE	1	EA	FLT	JSCX	12/19/94	
100235		AVIONICS HARNESS ASSEMBLY FOR FREE UMBILICAL CADDY, NO PLUGS	1	EA	FLT	JSCX	12/19/94	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100236		AVIONICS HARNESS ASSEMBLY FOR RIGID UMB HINGE, NO CONNECTORS	12	EA	FLT	JSCX	01/16/95	
100237		AVIONICS HARNESS ASSEMBLY FOR RIGID UMB HINGE, NO CONNECTORS	12	EA	QUL	JSCX	01/16/95	
100238		AVIONICS HARNESS ASSEMBLY FOR SEG-SEG, 1 PLUG	9	EA	FLT	JSCX	01/16/95	
100239		AVIONICS HARNESS ASSEMBLY FOR SURF, 1 PLUG (RIGID UMBILICAL SHORT END)	3	EA	QUL	JSCX	01/16/95	
100240		AVIONICS HARNESS ASSEMBLY FOR SURF, 1 PLUG (RIGID UMBILICAL SHORT END)	3	EA	FLT	JSCX	01/16/95	
100241		FLUID CONNECTOR PASSIVE HALF	10	EA	FLT	JSCX	01/16/95	
100242		FLUID CONNECTOR PASSIVE HALF	2	EA	QUL	JSCX	01/16/95	
100243		FLUID HOSE, NO CONNECTORS	2	EA	FLT	JSCX	01/16/95	
100244		FLUID HOSE, NO CONNECTORS	2	EA	QUL	JSCX	01/16/95	
100245		FULL SEGMENT LENGTH LINES	2	EA	FLT	JSCX	01/16/95	
100246		FULL SEGMENT LENGTH LINES	2	EA	QUL	JSCX	01/16/95	
100247		RECEPTACLE PROTECTIVE CAP	4	EA	FLT	JSCX	01/16/95	
100249	CCM 174	AVIONICS HARNESS ASSEMBLY	1	EA	FLT	JSCX	04/07/95	
100250	CCM 174	AVIONICS HARNESS ASSEMBLY	1	EA	FLT	JSCX	04/07/95	
100251	CCM 287; CCM 898	MODULE TO TRUSS STRUCTURAL ATTACH SYSTEM- PASSIVE (MTSAS-P)	1	EA	FLT	KSC	10/20/98	
100299	CCM 142	SSMDM-16 KSC-1 (LA-3)	1	EA	FEU	KSCX	07/31/95	
100300	CCM 239	ESSMDM P/L KSC-1	1	EA	FEU	KSCX	09/01/96	Change date per CCM 239
100301	CCM 142	ESSMDM C&C JSC-1	1	EA	FEU	JSCX	04/01/96	
100302	CCM 239	MULTI FEU SSMDM JSC-1	1	EA	FEU	JSCX	05/06/96	
100303	CCM 142	MULTI FEU SSMDM JSC-1	1	EA	FEU	KSCX	04/30/96	
100304	CCM 142	MDM UTILITIES SW VERSION US102	1	EA	FEU	KSCX	08/31/95	
100305	CCM 142	MDM UTILITIES SW VERSION US102	1	EA	SW	JSCX	08/31/95	
100310	CCM 142	MDM BOOT/DIAG SW VERSION BS102	1	EA	SW	KSCX	08/31/95	
100311	CCM 142	MDM BOOT/DIAG SW VERSION BS102	1	EA	SW	JSCX	08/31/95	
100316	CCM 100	RTD	1	EA	QUL	CSA/SPAR	06/28/96	
100317	CCM 100	RTD (1F08041)	5	EA	FLT	CSA/SPAR	06/28/96	
100318	CCM 100	RTD (118MF100A)	2	EA	PRO	CSA/SPAR	08/25/95	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100319	CCM 119	MT/MBS TOOLING PLATE	1	EA	TOOL	CSA/SPAR	01/04/96	
100328	CCM 155	GE2200237 APCU-I	2	EA	FLT	KSCX	02/24/98	
100329	CCM 155	GE2200237 APCU-I	2	EA	FLT	KSCX	12/18/97	
100330	CCM 155	APCU INTERCONNECT HARNESS	1	EA	FLT	KSCX	06/13/97	
100331	CCM 155	APCU INTERCONNECT HARNESS	1	EA	FLT	KSCX	12/18/97	
100332	CCM 155	APCU INTERCONNECT HARNESS	1	EA	FLT	KSCX	02/24/98	
100333	CCM 155	APCU INTERCONNECT HARNESS	1	EA	FLT	KSCX	05/01/98	
100335	CCM 189	MIR STRUCTURAL DYNAMICS EXPERIMENT -- MAS-- DIMENSIONAL	1	EA	MCK	JSCX	12/01/95	
100353	CCM 158	MATE-3 (HW UPGRADE) KSC	1	EA	STE	KSC	06/19/95	ADD
100354	CCM 158	MATE-3 (HW UPGRADE) KSC SPDSU	1	EA	STE	KSC	12/15/95	ADD
100355	CCM 158	MATE-3 (HW UPGRADE) KSC	1	EA	STE	KSC	03/31/96	ADD (REV A)/CHANGE(REV B)
100369	CCM 158	MATE SW FUNCTIONAL UPDATE RELEASE V3.0C	2	EA	STE	KSC	03/31/95	ADD (REV A)/CHANGE(REV B)
100370	CCM 158	MATE SW FUNCTIONAL UPDATE RELEASE V3.0D	2	EA	STE	KSC	05/15/95	ADD (REV A)/CHANGE(REV B)
100371	CCM 158	MATE SW FUNCTIONAL UPDATE RELEASE V3.1A	2	EA	STE	KSC	08/15/95	ADD (REV A)/CHANGE(REV B)
100372	CCM 158	MATE SW FUNCTIONAL UPDATE RELEASE V3.1B	2	EA	STE	KSC	12/15/95	ADD (REV A)/CHANGE(REV B)
100373	CCM 158	MATE SW FUNCTIONAL UPDATE RELEASE V3.1C	2	EA	STE	KSC	01/31/96	ADD (REV A)/CHANGE(REV B)
100374	CCM 158	MATE-3 SOFTWARE V3.1	2	EA	STE	KSC	06/19/95	ADD (REV A)/CHANGE(REV B)
100381	CCM 239	MATE KSC H/W UPGRADE (AUTO INDEXING)	1	EA	STE	KSC	07/10/97	
100387	CCM 142	MDM UTILITIES SW VERSION US101	1	EA	SW	KSCX	05/31/95	
100388	CCM 142	MDM UTILITIES SW VERSION BS101	1	EA	SW	KSCX	05/31/95	
100389	CCM 070	ALSYS COMPILER	1	EA	SW	KSC	09/18/95	
100390	CCM 070	ALSYS COMPILER	1	EA	SW	JSC	09/18/95	
100415	CCM 102	EMDM UTILITIES UE1092 FUNCTIONAL UPDATE RELEASE (FUR)	1	EA	DEV	KSC	01/31/96	ADD
100416	CCM 102	EMDM UTILITIES UE1092 FUNCTIONAL UPDATE RELEASE (FUR)	1	EA	DEV	JSC	01/31/96	ADD
100417	CCM 102	MDM BOOT/DIA BE102 FUNCTIONAL UPDATE RELEASE (FUR)	1	EA	DEV	KSC	01/31/96	ADD
100418	CCM 102	MDM BOOT/DIA BE102 FUNCTIONAL UPDATE RELEASE (FUR)	1	EA	DEV	JSC	01/31/96	ADD
100425	CCM 102	MDM UTILITIES US103	2	EA	FLT	RSA	04/11/96	ADD
100426	CCM 102	MDM BOOT AND DIAGNOSTIC BS103	2	EA	FLT	RSA	04/11/96	ADD
100427	CCM 102	H101A HDRL SOFTWARE	1	EA	FLT	JSC	05/21/96	ADD
100430	CCM 102	MDM UTILITIES US103	1	EA	FLT	JSC	04/11/96	ADD

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100431	CCM 102	MDM BOOT AND DIAGNOSTIC BS103	1	EA	FLT	JSC	04/11/96	ADD
100432	CCM 102	H101A HDRL SOFTWARE	1	EA	FLT	KSC	05/21/96	ADD
100435	CCM 102	MDM UTILITIES US103	1	EA	FLT	KSC	04/11/96	ADD
100436	CCM 102	MDM BOOT AND DIAGNOSTIC BS103	1	EA	FLT	KSC	04/11/96	ADD
100439	CCM 239	SPD 1553 UPGRADE (P/L-KSC-1)	3	EA	FEU	KSC	10/30/96	ADD
100513	CCM 060	CONNECTOR (P300)	1	EA	FLT	CSAP	08/01/96	
100514	CCM 060	CONNECTOR (P301)	1	EA	FLT	CSAP	08/01/96	
100515	CCM 060	CONNECTOR (P303)	1	EA	FLT	CSAP	08/01/96	
100516	CCM 060	CONNECTOR (P304)	1	EA	FLT	CSAP	08/01/96	
100521	CCM 228	PAYLOAD ETHERNET HUB/GATEWAY (PEGH) FEU W/FIRMWARE	1	EA	FEU	KSC	02/19/97	ADD
100522	CCM 228	PMA SLING SET	1	EA	TSE	KSC	07/15/97	ADD
100525	CCM 586	ESSMDM UTILITIES UE103A	1	EA	FLT	JSC	05/21/96	ADD
100526	CCM 586	ESSMDM UTILITIES UE103A	1	EA	FLT	KSC	05/21/96	ADD
100529	CCM 102	ESSMDM BOOT AND DIAGNOSTIC BS103	1	EA	FLT	JSC	05/21/96	ADD
100530	CCM 102	ESSMDM BOOT AND DIAGNOSTIC BS103	1	EA	FLT	KSC	05/21/96	ADD
100567	CCM 1090;2-1150-00- 827	FLRK, TEMPORARY PORTION	1	KT	FLT	JSC	01/29/99	CHANGE PER CCM 1090
100569	CCM 287	MATE-3 HW UPGRADE KSC (PEM)	1	EA	STE	KSC	07/11/96	ADD
100578	CCM 287	MATE-3 SW VERSION 3.3	1	EA	STE	KSC	01/27/97	ADD
100580	CCM 287	MATE-3 HW UPGRADE KSC (SPDSU)	1	EA	STE	KSC	08/13/96	ADD
100585	CCM 287	MATE-3 SW VERSION 3.2A MPE (FUNCTIONAL UPGRADE RELEASE)	1	EA	STE	KSC	11/27/96	ADD
100587	CCM 305	1553 BUS SWITCH/PMA 2 APAS FLT UNITS	4	EA	FLT	RSC-E	09/01/96	ADD
100588	CCM 305	1553 BUS SWITCH/PMA 3 APAS FLT UNITS	4	EA	FLT	RSC-E	12/02/96	ADD
100591	CCM 303	VIDEO FIBER OPTICS CABLE FOR FGB PDGF VSC TO SO INTERFACE	1	EA	FLT	JSC	01/09/98	ADD
100608	CCM 305	MATE SITE SUPPORT KIT	1	KIT	STE	KSC	11/01/96	ADD
100610	CCM 450	EARLY OPS JUMPERS (1 & 2)	2	EA	FLT	KSC	09/01/97	ADD
100611	CCM 399	ECOMM MOUNTING PLATE	1	EA	FLT	JSC	10/01/97	
100612	CCM 399	ECOMM CONNECTOR	4	EA	FLT	JSC	04/01/97	
100613	CCM 399	ECOMM CONNECTOR BACKSHELL	1	EA	FLT	JSC	04/01/97	
100614	CCM 399	ECOMM CONNECTOR BACKSHELL	1	EA	FLT	JSC	04/01/97	
100615	CCM 399	ECOMM CONNECTOR BACKSHELL	6	EA	FLT	JSC	06/20/97	
100616	CCM 399	PINS	20	EA	FLT	JSC	04/01/97	
100617	CCM 399	PINS	84	EA	FLT	JSC	04/01/97	
100618	CCM 399	PINS	12	EA	FLT	JSC	04/01/97	
100619	CCM 399	SHIELD - TERMINATING BANDS	1	EA	FLT	JSC	04/01/97	
100621	CCM 305	MATE STD 1553 UPGRADE KIT	1	KIT	STE	KSC	12/10/96	ADD
100625	CCM 395	MATE ENHANCED 1553 UPGRADE KIT	1	KIT	STE	KSC	12/10/96	ADD
100632	CCM 399	ECOMM CONNECTOR	4	EA	FLT	JSC	04/01/97	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100633	CCM 303	NZGA-SX-25-N-20Z, BACKSHELL (FGB COAX CABLE)	3	EA	FLT	JSC	02/01/97	ADD
100634	CCM 303	NZGC-X50-8PB-3, CONTACTS (FGB COAX CABLE)	5	EA	FLT	JSC	02/01/97	ADD
100635	CCM 303	NZGC-X50-8SB-3, CONTACTS (FGB COAX CABLE)	5	EA	FLT	JSC	02/01/97	ADD
100636	CCM 303	INTERNAL DRAG THROUGH 1553 CABLE ASSY	2	EA	FLT	NASA	08/05/97	ADD
100637	CCM 303	MATING HALF 1553 CONNECTOR W/PIGTAILS FOR LAB/NODE 1 SIDE OF INTERNAL DRAG THROUGH	2	EA	FLT	NASA	08/05/97	ADD
100640	CCM 303	AIRLOCK COAXIAL CABLE, NRFC-50-COAX-3, 100 METERS	1	EA	FLT	NASA	01/24/97	ADD
100641	CCM 303	NZGL-06G-2525-N8PN, CONNECTOR (AIRLOCK COAX CABLE)	1	EA	FLT	NASA	02/15/97	ADD
100642	CCM 303	NZGL-06G-2525-N20SA, CONNECTOR (AIRLOCK COAX CABLE)	1	EA	FLT	NASA	05/15/97	ADD
100644	CCM 358; 2-1150-00-96	PMA IMV DUCT EXTENSION KIT	1	EA	FLT	KSC	09/01/97	
100647	CCM 539	STANDARD BOOT (BS104A)	1	EA	FLT	JSC	05/12/97	
100648	CCM 539	STANDARD BOOT (BS104A)	1	EA	FLT	KSC	05/12/97	
100650	CCM 539	ENHANCED BOOT (BE104)	1	EA	FLT	JSC	05/20/97	
100651	CCM 539	ENHANCED BOOT (BE104)	1	EA	FLT	KSC	05/20/97	
100652	CCM 358	PPRV CAPS - LARGE	2	EA	FLT	JSC	09/01/97	
100655	02-0144	UMBILICAL MECHANISM ASSEMBLY (PASSIVE HALF)	1	EA	FLT	KSC	04/01/02	
100656	02-0144	UMBILICAL MECHANISM ASSEMBLY (PASSIVE HALF)	1	EA	FLT	KSC	04/01/02	
100657	02-0144	UMBILICAL MECHANISM ASSEMBLY (PASSIVE HALF)	1	EA	FLT	KSC	04/01/02	
100658	02-0144	UMBILICAL MECHANISM ASSEMBLY (PASSIVE HALF)	1	EA	FLT	KSC	04/01/02	
100659	02-0144	UMBILICAL MECHANISM ASSEMBLY (PASSIVE HALF)	1	EA	FLT	KSC	04/01/02	
100665	CCM 561	RPCM MOUNTING BRACKETS	17	EA	FLT	BMSD	02/02/98	
100670	CCM 561	MDM - 16 (N2 -1) (WITH BACKPLANE)	1	EA	FLT	BMSD	05/15/99	
100680	CCM 303	NZGSP-8C, SEALING PLUG	15	EA	FLT	JSC	06/25/97	ADD
100681	CCM 303	NZGSP-12, SEALING PLUG	6	EA	FLT	JSC	06/25/97	ADD
100682	CCM 303	NZGSP-16, SEALING PLUG	15	EA	FLT	JSC	06/25/97	ADD
100683	CCM 303	NZGSP-20, SEALING PLUG	12	EA	FLT	JSC	06/25/97	ADD
100684	CCM 303	NATCO7T11N35PA, LOOSE CONNECTOR FOR ECOMM	1	EA	FLT	JSC	06/25/97	ADD
100685	CCM 303	NATCO7T11N98SN, LOOSE CONNECTOR FOR ECOMM	1	EA	FLT	JSC	06/25/97	ADD
100686	CCM 303	NZGA-SG-11-N-16, BACKSHELLS FOR ECOMM CONNECTORS	2	EA	FLT	JSC	06/25/97	ADD
100687	CCM 303	77KM-1850N-610, CONNECTOR SAVER (RETURN 105934 PIGTAIL W/US TEST CONNECTOR ADDED)	1	EA	FLT	JSC	08/05/97	ADD
100688	CCM 303	77KM-1850N-620, CONNECTOR SAVER (RETURN 105935 PIGTAIL W/US TEST CONNECTOR ADDED)	1	EA	TEST	JSC	08/05/97	ADD
100689	CCM 561	NH3/H2O HEAT EXCHANGE ORU (LOW LOAD)	1	EA	FLT	BMSD	05/15/99	
100690	CCM 561	NH3/H2O HEAT EXCHANGE ORU (HIGH LOAD)	5	EA	FLT	BMSD	05/15/99	
100691	CCM 561	MDM - 16 (N2-2) (WITH BACKPLANE)	1	EA	FLT	BMSD	05/15/99	
100692	CCM 561	ABSOLUTE PRESSURE TRANSDUCER (0-20 PSIA)	1	EA	FLT	BMSD	11/03/97	
100693	CCM 561	TEMPERATURE SENSOR (RTD 1K OHM)	12	EA	FLT	BMSD	11/03/97	
100694	CCM 1434; 2-1150-99- 0394	UTILITY RAIL (1F97036-1)	1	EA	FLT	BMSD/BHSV	05/01/99	

INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100695	CCM 1434; 2-1150-99-0394	UTILITY RAIL (1F97039-1)	2	EA	FLT	BMSD/BHSV	05/01/99	
100696	CCM 1434; 2-1150-99-0394	UTILITY RAIL (1F97042-1)	1	EA	FLT	BMSD/BHSV	05/01/99	
100697	CCM 1434; 2-1150-99-0394	UTILITY RAIL (1F97048-1)	1	EA	FLT	BMSD/BHSV	05/01/99	
100698	CCM 561; 01-962	VESTIBULE AVIONICS JUMPER SET (N2 TO LAB)	1	EA	FLT	BMSD	08/01/98	
100699	CCM 1434; 2-1150-99-0394	VESTIBULE AVIONICS JUMPER SET (N2 TO JEM)	1	EA	FLT	BMSD/BHSV	08/01/99	
100700	CCM 561; 2-1150-99-0394	VESTIBULE AVIONICS JUMPER SET (N2 TO APM)	1	EA	FLT	BMSD/BHSV	08/01/99	
100701	CCM 561; 2-1150-99-0394	VESTIBULE AVIONICS JUMPER SET (N2 TO MPLM)	1	EA	FLT	BMSD/BHSV	08/01/99	
100702	CCM 561; 2-1150-99-0394	VESTIBULE AVIONICS JUMPER SET (N2 TO CAM)	1	EA	FLT	BMSD/BHSV	08/01/99	
100705	CCM 399	ECOMM TRAINING MOUNTING PLATE	1	EA	FLT	JSC	08/15/97	
100706	CCM 303	MATING HALF 1553 CONNECTOR W/PIGTAILS FOR LAB/NODE 1 SIDE OF INTERNAL DRAG THROUGH	2	EA	TEST	JSC	08/05/97	ADD
100707	CCM 399	ECOMM BRACKET/MOUNTING BEAMS	1	EA	FLT	KSC	10/01/97	
100708	CCM 303	NZGC-X50-8PB-3, CONTACTS (FGB COAX CABLE)	11	EA	FLT	JSC	08/15/97	ADD
100709	CCM 303	NZGC-X50-8SB-3, CONTACTS (FGB COAX CABLE)	11	EA	FLT	JSC	08/15/97	ADD
100714	CCM 561; 2-1150-99-0394	MDM INSTALLATION TOOL	1	EA	FLT	BMSD/BHSV	05/15/99	
100718	CCM 640	SGTRC - PROTOFLIGHT	1	EA	FLT	KSC	04/02/99	
100719	CCM 640	SGANT - PROTOFLIGHT	1	EA	FLT	KSC	04/02/99	
100720	CCM 640	ACBSP - PROTOFLIGHT	1	EA	FLT	KSC	02/15/99	
100721	CCM 640	SASA - PROTOTYPE (WITH ACRFG)	1	EA	FLT	KSC	04/28/99	
100722	CCM 640	TRANSPONDER - PROTOFLIGHT	1	EA	FLT	KSC	02/15/99	
100723	CCM 640	VSW - (E) - PROTOFLIGHT	1	EA	FLT	KSC	01/26/00	
100724	CCM 640	ETVCG - PROTOFLIGHT	1	EA	FLT	KSC	04/03/00	
100725	CCM 640	LUMINAIRE - PROTOFLIGHT	1	EA	FLT	KSC	04/03/00	
100726	CCM 640	HRM - PROTOFLIGHT	1	EA	FLT	KSC	06/01/99	
100727	CCM 640	HRFM - PROTOFLIGHT	1	EA	FLT	KSC	06/01/99	
100728	CCM 640	VBSP - PROTOFLIGHT	1	EA	FLT	KSC	06/01/99	
100781	CCM 399	ECOMM MOUNTING PLATE	1	EA	FLT	JSC	01/30/98	ADD
100782	CCM 856	LCZ-1 ESSMDM	1	EA	FLT	HI/GLEND	04/01/00	
100783	CCM 856	LCZ-2 ESSMDM	1	EA	FLT	HI/GLEND	04/01/00	
100784	CCM 856	NODE 3-1 SSMDM	1	EA	FLT	HI/GLEND	04/01/00	
100785	CCM 856	NODE 3-2 SSMDM	1	EA	FLT	HI/GLEND	04/01/00	
100786	CCM 859	CAUTION AND WARNING PANEL	1	EA	FLT	ALENIA	12/01/00	
100787	CCM 859	HEAT EXCHANGER ASSEMBLY	2	EA	FLT	HSV	12/31/99	
100788	CCM 859	SO TO N3 JUMPERS (AVIONICS)	1	EA	FLT	ALENIA	12/01/00	
100791	CCM 1033	MATE 3.3A SOFTWARE	1	EA	STE	KSC	02/28/98	
100792	CCM 1033	MATE 3.3A SOFTWARE	1	EA	STE	JSC	02/28/98	
100797	CCM 1046	SPD 1553 SOFTWARE	1	EA	FLR	JSC	03/14/98	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100798	CCM 1046	SPD 1553 FIRMWARE (S105)	1	EA	FLR	RSC-E	04/10/98	
100799	CCM 1046	SPD 1553 FIRMWARE (S105)	1	EA	FLR	KSC	03/14/98	
100802	CCM 640	VCSA - FLT (INCLUDES BOOM & HARNESS)	1	EA	FLT	KSC	04/03/00	
100803	CCM 1068	EVA RECEPTACLES	2	EA	FLT	KSC	04/22/98	
100804	CCM 1068	EVA RECEPTACLES	2	EA	FLT	KSC	04/22/98	
100805	CCM 1068	EVA RECEPTACLES	2	EA	FLT	KSC	04/22/98	
100806	CCM 1068	EVA RECEPTACLES	2	EA	FLT	KSC	04/22/98	
100807	S/A 1327; CCM 1068	EVA RECEPTACLES	1	EA	FLT	KSC	04/22/98	Quantity change per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA); Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327
100808	CCM 1068	EVA RECEPTACLES	2	EA	FLT	KSC	04/22/98	
100809	CCM 1068	EVA RECEPTACLES	2	EA	FLT	KSC	04/22/98	
100811	CCM 1068	EVA ADAPTER (DUMMY RECEPTACLES)	2	EA	DEV	KSC	04/22/98	
100812	S/A 1327; CCM 1068	EVA ADAPTER (DUMMY RECEPTACLES)	1	EA	DEV	KSC	04/22/98	Quantity change per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA); Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327
100813	CCM 1068	EVA ADAPTER	2	EA	FLT	KSC	04/22/98	
100814	CCM 1068	EVA ADAPTER	2	EA	FLT	KSC	04/22/98	
100815	CCM 1068	EVA ADAPTER	2	EA	FLT	KSC	04/22/98	
100816	CCM 1068	EVA ADAPTER	2	EA	FLT	KSC	04/22/98	
100817	CCM 1068	EVA ADAPTER	2	EA	FLT	KSC	04/22/98	
100818	CCM 1068	EVA ADAPTER	2	EA	FLT	KSC	04/22/98	
100819	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100820	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100821	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100822	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100823	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100824	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100825	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100826	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100827	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100828	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100829	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100830	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100831	CCM 1068	ELECTRICAL /AVIONICS CONNECTORS	1	EA	FLT	KSC	04/07/98	
100832	CCM 737; 2-1150-99-0394	AFT DEBRIS SHIELD UMBILICAL JAM NUT CONNECTOR KIT	1	EA	FLT	BMSD/BHSV	08/06/99	
100835	CCM 1396	SMDM BOOT AND DIAGNOSTIC BS105	1	EA	FLT	JSC	06/30/98	
100837	CCM 1396	SMDM BOOT AND DIAGNOSTIC BS105	1	EA	FLT	JSC	06/30/98	
100839	CCM 1396	SMDM BOOT AND DIAGNOSTIC BS105	2	EA	FLT	JSC	07/06/98	
100843	CCM 1001	CAUTION AND WARNING PANEL	1	EA	FLT	BMSD	06/30/99	
100846	CCM 1318	AMMONIA TANK ASSEMBLY	1	EA	FLT	KSC	06/01/01	
100849	CCM 1318	MDM 10 CE ASSEMBLY	1	EA	FLT	KSC	11/03/98	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100880	CCM 1582	STAGE KIT, FLIGHT 2A	1	EA	FLT	JSC	10/15/98	
100881	CCM 1582	INSTALLATION KIT, AVIONICS - FLIGHT 5A	1	EA	FLT	KSC	08/26/99	
100882	CCM 1582	INSTALLATION KIT, AVIONICS - FLIGHT UF1	1	EA	FLT	JSC	02/10/00	
100883	CCM 1582	INSTALLATION KIT, AVIONICS - FLIGHT 7A	1	EA	FLT	JSC	11/24/99	
100884	CCM 1582; 01-960	INSTALLATION KIT, AVIONICS - FLIGHT 10A	1	EA	FLT	BMSD	07/19/01	
100885	CCM 1582	INSTALLATION KIT, AVIONICS - FLIGHT 16A	1	EA	FLT	BMSFC	11/20/03	DEST'N changed per Boeing Ltr 2-1150-04-0153 concurred by NASA on 4/7/04.
100893	CCM 1426	FGB PDGF FIBER OPTIC CABLE	1	EA	FLT	JSC	01/30/99	
100902	CCM 1560	EXT MDM CSCI (R1)	1	EA	FLT	JSC	05/01/99	
100903	CCM 1560	EXT MDM CSCI (R2)	1	EA	FLT	JSC	11/01/99	
100904	CCM 1560	EXT MDM CSCI (R3)	1	EA	FLT	JSC	05/01/00	
100905	CCM 1259	CUPOLA INTERFACE CONNECTORS (NODE 1 INTERFACE ONLY)	1	SET	FLT	BHSV	12/30/99	
100910	02-281	NODE 1 LABEL "UNITY"	5	EA	TRNG	JSC	01/25/99	
100915	CCM 1727	NH3 LINE QD'S (N2 HALF) (1" FEMALE)	16	EA	FLT	BMSD	11/30/99	
100917	CCM 1946	RACKBAY, INSTALLATION (RACK PIVOT WEDGE ASSEMBLY)	1	EA	FLT	KSC	04/14/99	
100920	CCM 1500	EPS NODE 1 PATCH PANEL Y CABLE	1	EA	FLT	KSC	10/02/99	
100921	CCM 1500	LAB SPDA JUMPER	1	EA	FLT	KSC	10/02/99	
100924	CCM 1969	MATE - 3.3B2	1	EA	STE	JSC	03/30/99	
100926	CCM 1969	MATE - 3.3B2	1	EA	STE	KSC	03/30/99	
100929	CCM 1969	MATE - 3.3B2	1	EA	STE	ALENIA	03/30/99	
100930	CCM 1727	GORE PANEL TO UMBILICAL STANCHION HARNESS CONNECTOR KIT (FWD & AFT)	1	EA	FLT	BMSD	02/29/00	
100931	CCM 1727	LINEAR DIFFUSER	2	EA	FLT	BMSD	07/30/99	
100932	CCM 1727	NH3 QD RETROFIT KIT (FEMALE)	16	EA	FLT	BMSD	11/30/99	
100933	CCM 1727	NH3 LINE QD'S (N2 HALF) (1" MALE)	8	EA	FLT	BMSD	11/30/99	
100934	CCM 1727	NH3 QD CAPS	6	EA	FLT	BMSD	11/30/99	
100935	CCM 1727	MDM WEDGE CLAMP KIT	14	EA	FLT	BMSD	12/23/99	
100942	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	
100943	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	
100944	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	
100945	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	
100946	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100947	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100948	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100949	CCM 2017	CONNECTOR	3	EA	FLT	BMSD	04/01/99	
100950	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100952	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100953	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	
100954	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100955	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100956	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	
100957	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100958	CCM 2017	CONNECTOR	2	EA	FLT	BMSD	04/01/99	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
100959	CCM 2017	CONNECTOR	1	EA	FLT	BMSD	04/01/99	
100965	CCM 2017	SEALING PLUG	500	EA	FLT	BMSD	04/01/99	
100967	CCM 1727	PDGF CONNECTOR CAP KIT	1	EA	FLT	BMSD	04/11/00	
100968	CCM 1494	FEU ESSMDM - 1	1	EA	FEU	KSC	09/30/99	
100970	CCM 1494	MATE TAPE DRIVE	2	EA	STE	ALENIA	03/31/99	
100971	CCM 1494	MDM -10I ADAPTER TRAY (WITH CABLES)	1	EA	STE	ALENIA	05/30/99	
100972	CCM 1847	SSMMU UPGRADE C&C-1	1	EA	FLT	KSC	07/31/01	
100973	CCM 1847	SSMMU UPGRADE C&C-2	1	EA	FLT	KSC	07/31/01	
100974	CCM 1847	SSMMU UPGRADE C&C-3	1	EA	FLT	KSC	08/31/01	
100975	CCM 1847	SSMMU UPGRADE P/L-1	1	EA	FLT	KSC	08/31/01	
100976	CCM 1847	SSMMU UPGRADE P/L-2	1	EA	FLT	KSC	08/31/01	
100977	CCM 1847	SSMMU UPGRADE FLIGHT SPARE	1	EA	FLT	KSC	09/30/01	
100978	CCM 1847	SSMMU UPGRADE FLIGHT SPARE	1	EA	FLT	KSC	09/30/01	
100979	CCM 1383	MDM SOFTWARE LOADER UTILITY	1	EA	FLT	JSC	03/30/00	
100980	CCM 1383	MDM SOFTWARE LOADER UTILITY	2	EA	FLT	KSC	03/30/00	
100981	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD	1	EA	FLT	KSC	02/20/00	
100982	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD (SPARE)	1	EA	FLT	KSC	03/03/00	
100983	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD	1	EA	FLT	KSC	07/28/00	
100984	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD	1	EA	FLT	KSC	10/22/99	
100985	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD	1	EA	FLT	KSC	02/20/00	
100986	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD (SPARE)	3	EA	FLT	KSC	04/03/00	
100987	CCM 1383	ENHANCED IOCU CCA MOD KIT - SOFTWARE LOAD (SPARE)	2	EA	FLT	KSC	04/03/00	
100988	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD (SPARE)	1	EA	FLT	KSC	04/03/00	
100989	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD (SPARE)	8	EA	FLT	KSC	04/03/00	
100990	CCM 1383	IOCU CCA MOD KIT - SOFTWARE LOAD (SPARE)	2	EA	FLT	KSC	04/03/00	
100993	CCM 2200	APCU MOD KIT (FLIGHT)	1	EA	FLT	KSC	09/30/99	
100994	CCM 2200	APCU MOD KIT (FLIGHT)	1	EA	FLT	KSC	09/30/99	
100995	CCM 2200	APCU MOD KIT (CITE)	1	EA	GSE	KSC	09/30/99	
100996	CCM 2200	APCU MOD KIT (CITE)	1	EA	GSE	KSC	09/30/99	
100997	CCM 1703	SSMDM - 4 E TYPE 9 TEFLON TAPE MODIFICATION	1	EA	FLT	KSC	06/30/99	
100998	CCM 1703	SSMDM - 4 E COVER TEFLON TAPE MODIFICATION	1	EA	FLT	KSC	11/01/99	
100999	CCM 1703	SSMDM - 4E CHASSIS TEFLON TAPE MODIFICATION	1	EA	FLT	KSC	11/01/99	
101001	CCM 2241	VIDEO CAMERA SUPPORT ASSEMBLY	1	EA	DEV	JSC	12/20/99	
101002	CCM 2241; 02-164	VIDEO CAMERA SUPPORT ASSEMBLY	7	EA	FLT	KSC	03/01/00	
101003	CCM 2241; 02-164	W8200 CABLE	1	EA	DEV	KSC	11/01/99	
101004	CCM 2241; 02-164	W8200 CABLE	2	EA	QUL	KSC	03/01/00	
101006	CCM 1966	NODE 3 - 1 SSMDM (16I TYPE 23)	1	EA	FLT	JSC	04/01/00	
101007	CCM 1966	NODE 3-2 SSMDM (16I TYPE 24)	1	EA	FLT	JSC	04/01/00	
101008	CCM 1966	SSMDM LLA CCA (SPARE)	2	EA	FLT	JSC	04/01/00	
101009	CCM 1966	SSMDM HLA CCA (SPARE)	4	EA	FLT	JSC	04/01/00	
101010	CCM 1966	SSMDM AIO CCA (SPARE)	4	EA	FLT	JSC	04/01/00	
101011	CCM 1966	SSMDM DIO CCA (SPARE)	7	EA	FLT	JSC	04/01/00	
101012	CCM 1966	SSMDM SDO CCA (SPARE)	2	EA	FLT	JSC	04/01/00	
101013	CCM 1966	SSMDM SPD 1553 CCA (SPARE)	4	EA	FLT	JSC	04/01/00	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
101014	CCM 1966	SSMDM - 161 CHASSIS/ORU HARNESS ASSY (SPARE)	2	EA	FLT	JSC	04/01/00	
101015	CCM 1966	SSMDM IOCU CCA (SPARE)	2	EA	FLT	JSC	04/01/00	
101016	CCM 1966	SSMDM PS CCA (SPARE)	2	EA	FLT	JSC	04/01/00	
101017	CCM 2238	STAGE KIT, FLIGHT 4A	1	EA	FLT	KSC	02/01/00	
101018	CCM 1577	CONTINGENCY JUMPER CABLE KIT	1	EA	OSE	KSC	02/29/00	
101019	CCM 2166	SSMDM BOOT AND DIAGNOSTIC BS107	1	EA	FLT	JSC	01/31/00	
101020	CCM 2166	ESSMDM BOOT AND DIAGNOSTIC BE107	1	EA	FLT	JSC	01/31/00	
101036	CCM 2430	UTILITY RAIL ASSEMBLY, NODE 3, TYPE A	1	EA	FLT	BMSD	07/20/01	
101037	CCM 2430; 03-0278	UTILITY RAIL ASSEMBLY, NODE 3, TYPE B	2	EA	FLT	BMSD	07/20/01	
101038	CCM 2430	UTILITY RAIL ASSEMBLY, NODE 3, TYPE C	1	EA	FLT	BMSD	07/20/01	
101039	CCM 1727	BULKHEAD AVIONICS SET (N2 TO PMA 2)	1	EA	FLT	BMSD	09/29/00	
101040	CCM 1727	VESTIBULE AVIONICS SET (N2 TO ELM)	1	EA	FLT	BMSD	09/29/00	
101041	CCM 1727	UTILITY RAIL	1	EA	FLT	BMSD	09/04/00	
101042	CCM 1727	EVA CLAMPS	40	EA	FLT	BMSD	09/29/00	
101044	CCM 2939	MDM HRDL SOFTWARE - H103	1	EA	FLT	JSC1	12/20/99	
101045	CCM 2841	GNC PA CEI	1	EA	FLT	JSC1	04/10/00	
101046	CCM 2841	GNC PA CEI	1	EA	FLT	JSC1	02/16/01	
101047	CCM 1847	HRDL SOFTWARE UPGRADE	1	EA	FLT	MBF	08/31/01	
101048	CCM 1847	MDMLU SOFTWARE UPGRADE	1	EA	FLT	MBF	09/30/01	
101049	CCM 1847	SSMMU SOFTWARE RELEASE	1	EA	FLT	MBF	07/30/01	
101071	CCM 2879	ADAPTER - GSE/FLIGHT INTERFACE, MALE (NH3/N2)	8	EA	GSE	BMSD	12/17/01	
101072	CCM 2879	ADAPTER - GSE/FLIGHT INTERFACE, FEMALE (NH3/N2)	4	EA	GSE	BMSD	12/17/01	
101136	CCM 2759	FLIGHT TEST SET	1	EA	FLT	KSC	06/30/01	
101141	CCM 3397	OPTICAL TIME DOMAIN REFLECTOMETER KIT	1	EA	FLT	KSC	07/22/00	
101157	CCM 4311	VENT TOOL ASSEMBLY	1	EA	FLT	JSC	10/20/00	
101158	CCM 4311	VENT TOOL ASSEMBLY	1	EA	FLT	KSC	10/20/00	
101159	CCM 4311	VENT TOOL ASSEMBLY	1	EA	FLT	JSC	04/01/01	
101160	CCM 4311	VENT TOOL ASSEMBLY	1	EA	FLT	JSC	04/01/01	
101161	CCM 4311	VENT TOOL ASSEMBLY	1	EA	FLT	JSC	04/01/01	
101162	CCM 4311	VENT TOOL ASSEMBLY	1	EA	FLT	JSC	11/01/00	
101163	CCM 1500; Boeing letter 00-522	CONNECTOR ASSEMBLY, DEAD FACE	1	EA	FLT	JSC	05/12/00	
101286	CCM 2759	FLIGHT TEST SET	1	EA	FLT	KSC	01/30/01	
101290	CCM 3817	FIBER OPTIC CABLE	2500	EA	FLT	MDAC	09/29/00	
101307	CCM 3368; 01-1016	FIBER OPTIC CABLE TEST ASSY. KIT	1	EA	FLT	KSC	03/31/01	
101308	CCM 4181	CONTROL MOMENT GYRO (CMG) MOD KIT	6	EA	FLT	BHB	08/01/01	
101309	CCM 4555	ODDM CSCI	1	EA	FLT	MBF	02/01/01	
101310	CCM 4555	HRDL H105	1	EA	FLT	MBF	02/01/01	
101312	CCM 3369	FIBER OPTIC CABLE	5000	FT	FLT	JSC	08/31/01	
101320	CCM 4556	1 1/2 IN. QD COMPLETE ASSEMBLY	2	EA	FLT	KSC	08/30/02	
101321	CCM 4556	1 1/2 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
101322	CCM 4556	1 1/2 IN. QD COMPLETE ASSEMBLY	2	EA	FLT	KSC	08/30/02	
101323	CCM 4556	1 1/2 IN. QD COMPLETE ASSEMBLY	2	EA	FLT	KSC	08/30/02	
101324	CCM 4556	1 1/2 IN. QD COMPLETE ASSEMBLY	2	EA	FLT	KSC	08/30/02	
101325	CCM 4556; 02-600	1 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
101327	CCM 4556	1 IN. QD COMPLETE UNASSEMBLED COMPONENTS	2	EA	FLT	KSC	08/30/02	
101328	CCM 4556	1 IN. QD COMPLETE UNASSEMBLED COMPONENTS	2	EA	FLT	KSC	08/30/02	
101329	CCM 4556	1 IN. QD COMPLETE UNASSEMBLED COMPONENTS	4	EA	FLT	KSC	08/30/02	
101330	CCM 4556 03-0004	1 IN. QD COMPLETE UNASSEMBLED COMPONENTS	4	EA	FLT	KSC	08/30/02	
101331	CCM 4556	1 IN. QD COMPLETE ASSEMBLY	6	EA	FLT	KSC	08/30/02	
101333	CCM 4556	1 IN. QD COMPLETE ASSEMBLY	4	EA	FLT	KSC	08/30/02	
101334	CCM 4556	1 IN. QD COMPLETE ASSEMBLY	4	EA	FLT	KSC	08/30/02	
101335	CCM 4556	3/4 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
101336	CCM 4556	3/4 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
101337	CCM 4556	3/4 IN. QD COMPLETE UNASSEMBLED COMPONENTS	2	EA	FLT	KSC	08/30/02	
101338	CCM 4556	3/4 IN. QD COMPLETE UNASSEMBLED COMPONENTS	2	EA	FLT	KSC	08/30/02	
101339	CCM 4556	1/2 IN. QD COMPLETE ASSEMBLY	2	EA	FLT	KSC	08/30/02	
101340	CCM 4556	1/2 IN. QD COMPLETE ASSEMBLY	2	EA	FLT	KSC	08/30/02	
101341	CCM 4556	1/2 IN. QD COMPLETE UNASSEMBLED COMPONENTS	1	EA	FLT	KSC	08/30/02	
101342	CCM 4556	1/2 IN. QD COMPLETE UNASSEMBLED COMPONENTS	1	EA	FLT	KSC	08/30/02	
101343	CCM 4556	1/4 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
101344	CCM 4556	1/4 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
101345	CCM 4556	1/4 IN. QD COMPLETE UNASSEMBLED COMPONENTS	1	EA	FLT	KSC	08/30/02	
101369	01-547	STAGE KIT - FLIGHT 8A	1	EA	FLT	KSC	06/29/01	
101370	CCM 5046	EBCS MODIFICATION KIT	1	EA	FLT	KSC	03/06/02	
101396	01-669R	IVA HANDLES, AVIONICS BOX	2	EA	FLT	KSC	07/01/01	
101397	01-669R	IVA HANDLES, AVIONICS BOX	2	EA	FLT	JSC	07/01/01	
101398	01-669R	IVA BRACKETS, AVIONICS BOX	33	EA	FLT	KSC	07/01/01	
101399	01-669R	IVA BRACKETS, AVIONICS BOX	3	EA	FLT	JSC	07/01/01	
101400	01-690	AMMONIA TANK ASSEMBLY (ATA)	1	EA	FLT	KSC	08/31/02	
101401	01-690	NITROGEN TANK ASSEMBLY (NTA)	1	EA	FLT	KSC	09/30/01	
101402	01-769	MOOT SYSTEM SOFTWARE IMAGE, VERSION 2.0	1	EA	FLT	JSC	08/15/01	
101403	01-769	SSMMU SOFTWARE CSCI	1	EA	FLT	JSC	08/15/01	
101407	CCM 4667	SSMMU DAUGHTER BOARD INSERTION/EXTRACTION TOOL	1	EA	FLT	HONEYWELL	08/24/01	
101408	CCM 4667	SSMMU DAUGHTER BOARD INSERTION/EXTRACTION TOOL	1	EA	FLT	JSC	08/24/01	
101409	CCM 4667	SSMMU DAUGHTER BOARD INSERTION/EXTRACTION TOOL	1	EA	FLT	JSC	10/01/01	
101417	CCM 5807	(+) Z RJMC REMOVABLE MLI BLANKET	1	EA	FLT	KSC	08/31/02	
101418	CCM 5807	(-) Z RJMC REMOVABLE MLI BLANKET	1	EA	FLT	KSC	08/31/02	
101419	CCM 6164: 01-1099	External Television Camera Group	1	EA	FLT	KSC	12/20/01	
101420	CCM 6164: 01-1099	External Television Camera Group	1	EA	FLT	KSC	12/20/01	
101421	02-0062; CCM 6164	External Television Camera Group	1	EA	FLT	KSC	02/06/02	
101422	02-0022; CCM 6164	External Television Camera Group	1	EA	FLT	KSC	02/06/02	
101423	CCM 6164: 01-1099	Video Camera Luminaire	2	EA	FLT	KSC	12/01/01	
101424	CCM 4823	S1 MLI BLANKET	6	EA	FLT	KSC	03/29/02	
101425	CCM 4823	P1 MLI BLANKET	6	EA	FLT	KSC	03/29/02	
101426	CCM 4823	ACRFG S1 BLANKET	1	EA	FLT	KSC	03/29/02	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
101433	CCM 6105	S1 PM FLOW METER MODIFICATION/VERIFICATION INSPECTION KIT	2	EA	FLT	INTEK	01/15/02	
101434	CCM 6105	P1 PM FLOW METER MODIFICATION/VERIFICATION INSPECTION KIT	2	EA	FLT	INTEK	01/15/02	
101435	CCM 6105	SPARES FLOW METER MODIFICATION/VERIFICATION INSPECTION KIT	2	EA	FLT	INTEK	01/15/02	
101436	CCM 6164: 01-1099	VIDEO CAMERA LUMINAIRE	2	EA	FLT	KSC	01/31/02	
101437	CCM 6164: 01-1099	CETA Luminaire	2	EA	FLT	KSC	12/20/01	
101438	CCM 6164: 01-1099	Connective Covers Size 15	4	EA	FLT	KSC	12/20/01	
101439	CCM 6164	CONNECTIVE COVERS SIZE 15	2	EA	FLT	KSC	01/31/02	
101440	CCM 6164	SSAS EVA CONT. BOLTS	8	EA	FLT	KSC	05/31/02	
101441	CCM 6164	SSAS EVA CONT. BOLTS	8	EA	FLT	KSC	05/31/02	
101442	CCM 6164	ON-ORBIT RESTRAINT ASSY-RT. HAND	2	EA	FLT	KSC	05/31/02	
101443	CCM 6164	ON-ORBIT RESTRAINT ASSY-LFT HAND	2	EA	FLT	KSC	05/31/02	
101444	CCM 6164	ADJUSTABLE GRAPPLE BAR KIT - ORU	2	EA	FLT	KSC	05/31/02	
101445	CCM 6164	GRAPPLE BAR KIT - ATA ORU	2	EA	FLT	KSC	05/31/02	
101446	CCM 6164	RADIATOR ORU GRAPPLE BAR KIT	1	EA	FLT	KSC	08/15/03	Corrected quantity and updated delivery date per Boeing letter 2-1150-05-0009 concurred by NASA 3/7/05.
101447	02-0732	CETA LUMINAIRE	2	EA	FLT	KSC	12/13/02	
101451	02-600	1 IN. QD COMPLETE ASSEMBLY	3	EA	FLT	KSC	08/30/02	
300xxx Series								
331841	03-0477	MAJOR CONSTITUENT ANALYZER (MCA) ASSEMBLY (ORU 2)	1	EA	FLT	BMSFC	10/20/03	
400xxx Series								
400001	CCM 038/Mod 227 (reinstate)	FGB	1	EA	FLT	KHSC	07/18/98	
400019	CCM 943	HARMFUL CONTAMINATION FILTER REPLACEMENT BOX	3	EA	FLT	JSC/FEPC	05/01/98	
400020	CCM 1075	RACU	2	EA]	KSC	04/15/98	
400021	CCM 1075	CABLE HARNESS	2	EA	FLT	KSC	04/15/98	
400022	CCM 1821	FGB STOWAGE FASTENER KIT	1	EA	FLT	JSC	04/09/99	
400023	CCM 1821	FGB MOCKUP OUTFITTING KIT	1	EA	FLT	JSC	04/30/99	
400024	CCM 1821	FGB MOCKUP OUTFITTING KIT	1	EA	ENG	JSC	04/30/99	
400025	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 1)	1	EA	FLT	KSC	10/02/99	
400026	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 1)	1	EA	TNG	JSC	10/02/99	
400027	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 3)	1	EA	FLT	KSC	10/02/99	
400028	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 3)	1	EA	TNG	JSC	10/02/99	
400029	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 4)	1	EA	FLT	KSC	10/02/99	
400030	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 4)	1	EA	TNG	JSC	10/02/99	

**INTERNATIONAL SPACE STATION PROGRAM
J-5 DELIVERABLE ITEMS LIST (DIL) -
REVISION 102**

NAS15-10000
MOD 1557

J-5 DIL - ACTIVE LINE ITEMS								
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS
400031	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 14)	1	EA	FLT	KSC	10/02/99	
400032	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 14)	1	EA	TNG	JSC	10/02/99	
400033	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 17)	1	EA	FLT	KSC	10/02/99	
400034	CCM 2401	STOWAGE ENCLOSURE (FGB ZONE 17)	1	EA	TNG	JSC	10/02/99	
400050	CCM 2913	RADIOTELEMETRY SYSTEM (PTC), MEMORY UNIT EA025M	1	EA	FLT	KSC	02/23/00	
End of List								

98; MOD (S/A) 1406	1/25/2007
--------------------	-----------

1. (DELETE) DIL Items 100833, 50621, 50637, 100517, 100518, 100519, 100520 deleted per credit proposal #4 on Boeing letter 2-1150-06-0194 definitized on S/A 1406.
2. (ACTIVE) DIL Item 30669, qty reduction (12 to 10) per credit proposal #4 on Boeing letter 2-1150-06- definitized on S/A 1406
3. (ACTIVE) DIL Item 50631, qty reduction (5 to 3) per credit proposal #4 on Boeing letter 2-1150-06- definitized on S/A 1406
4. (ACTIVE) DIL Item 50635, qty reduction (7 to 6) per credit proposal #4 on Boeing letter 2-1150-06- definitized on S/A 1406
5. (ACTIVE) DIL item 30612, qty reduction (4 to 1) per letter number 2-1150-06-0246. NASA concurrence recieved on 11/14/06.

Washko, C.

J-5 DIL - LINE ITEMS TRANSFERRED TO J-27												
CHANGE NUMBER	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	DD250 DATE	REMARKS	DEVELOPER INDIVID/ORG	RECEIVER INDIVID/ORG	FLT. NO.	RECVD. DATE (AF)	HARDWARE ACCEPT. DISP. REQMT
4xxx Series												
CCM 843	OFFSET TOOL	2	EA	OSE	CSAP	03/31/00	DD250 date change per SSCN 10008 definitized on MOD 1376.	SAUCIER/LP/S5 SAUC	SAUCIER/LP/S5 SAUC	1J/A		
01-670	MT CETA RAILS (STARBOARD)	1	EA	FLT	KSC	05/07/04						
CCM 6647	RPCM TYPE II INTERNAL	1	EA	FLT	BMSFC	02/16/04						
CCM 7786 03-0380	DDCU-I SPECIAL PURPOSE CONNECTOR MOD KIT (US LAB)	2	KT	FLT	KSC	01/30/04						
CCM 7786 03-0380	DDCU-I SPECIAL PURPOSE CONNECTOR MOD KIT (NODE 2)	4	KT	FLT	KSC	01/30/04						
CCM 7786 03-0380; 03-0397	DDCU-I SPECIAL PURPOSE CONNECTOR MOD KIT (NODE 3)	4	KT	FLT	KSC	01/30/04						
CCM 7786 03-0380	DDCU-I SPECIAL PURPOSE CONNECTOR MOD KIT	2	KT	FLT	KSC	01/30/04						
CCM 7828; S/A 1230	FET CONTROLLER HYBRID	700	EA	FLT	B-CP	10/11/05						
CCM 7828; S/A 1230	FET CONTROLLER HYBRID	50	EA	FLT	B-CP	10/11/05						
30xxx Series												
CCM 859; CCM 6160	ARS RACK (INCLUDES - 4 COLDPLATE)	1	EA	FLT	BMSD	09/30/02	Transferred to J-27 per mod 1496.					
CCM 859	IMV VALVE	1	EA	FLT	BMSD	12/01/00	Transferred to J-27 per mod 1489.					
SSCN 8236; CCM 1289; CCM 5477	ARIS STOWED ITEMS - ISPR	1	KT	FLT	KSC	08/30/02						
SSCN 8236; CCM 1289; CCM 5477	ARIS STOWED ITEMS - ISPR	1	KT	FLT	KSC	09/30/02						
CCM 3314	CABIN AIR INLET ORU MOD KIT (WASHER/SPRING)	4	EA	FLT	KSC	12/12/05						
CCM 3314; 01-616	CABIN AIR INLET ORU MOD KIT (INSPECTION)	3	EA	FLT	KSC	12/12/05						
CCM 3314	HEAT EXCHANGER ORU MOD KIT (WASHER/SPRING)	3	EA	FLT	KSC	12/12/05						
CCM 3314	HEAT EXCHANGER ORU MOD KIT (INSPECTION)	2	EA	FLT	KSC	12/12/05						
CCM 3314	HEAT EXCHANGER LIQUID SENSOR ORU MOD	4	EA	FLT	KSC	12/12/05						
CCM 3314	HEAT EXCHANGER LIQUID SENSOR ORU MOD KIT (INSPECTION)	4	EA	FLT	KSC	12/12/05						
S/A 1275; CCM 7121 - S/A 1166	ITCS NiRA TOOL	1	EA	FLT	MSFC	08/15/03	DD250 date change per Boeing Ltr 2-1150-04-0335 concurred by NASA 09/03/04.					
S/A 1275; CCM 7121 - S/A 1166	ITCS NiRA	1	EA	FLT	MSFC	08/15/03	DD250 date change per Boeing Ltr 2-1150-04-0335 concurred by NASA 09/03/04.					
CCM 6647	VENT RELIEF ASSEMBLY KIT	1	EA	FLT	BMSFC	01/16/04						
CCM 6647	IMV VALVE	1	EA	FLT	BMSFC	02/23/04						
CCM 6647	IMV VALVE	1	EA	FLT	BMSFC	02/23/04						
CCM 6647	IMV FAN SILENCER ASSEMBLY	9	EA	FLT	BMSFC	09/11/04						
CCM 5547	MCA VENT ASSEMBLY KIT - EXTERNAL	2	EA	FLT	BMSFC	06/14/04						
CCM 6647	SHIELD ASSEMBLY KIT-FWD ENDCONE	1	EA	FLT	BMSFC	02/10/04						
CCM 6647	PCBM CONTAMINATION COVER KIT	1	EA	FLT	BMSFC	S/B 2/17/2004 per SSCM	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647	RADIAL PORT CLOSEOUT SHIELD KIT	4	EA	FLT	BMSFC	02/03/04						
CCM 6647	PCBM M/D SHIELD KIT	1	EA	FLT	BMSFC	03/22/04						
CCM 6647	MLI INSTALLATION HARDWARE KIT	1	EA	FLT	BMSFC	03/22/04						
CCM 6647	THREADED FLUID FITTING	2	EA	FLT	BMSFC	04/09/04						
CCM 6647	THREADED FLUID FITTING	11	EA	FLT	BMSFC	04/09/04						
CCM 6647	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	1	EA	FLT	BMSFC	06/02/04						
CCM 6647	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	1	EA	FLT	BMSFC	06/02/04						
CCM 6647	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	1	EA	FLT	BMSFC	06/02/04						
CCM 6647	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	1	EA	FLT	BMSFC	03/20/04						

CCM 6647	COAXIAL LOOP BACK ASSEMBLY	1	EA	FLT	BMSFC	04/09/04						
CCM 6647	DEAD FACE CONNECTOR ASSEMBLY	2	EA	FLT	BMSFC	03/17/04						
CCM 6647	DEAD FACE CONNECTOR ASSEMBLY	5	EA	FLT	BMSFC	03/17/04						
CCM 6647	DEAD FACE CONNECTOR ASSEMBLY	1	EA	FLT	BMSFC	04/09/04						
CCM 6647	CABLE 1553 TERMINATION ASSEMBLY	2	EA	FLT	BMSFC	04/09/04						
CCM 6647	CABLE 1553 TERMINATION ASSEMBLY	2	EA	FLT	BMSFC	04/09/04						
CCM 6647	CABLE 1553 TERMINATION ASSEMBLY	2	EA	FLT	BMSFC	07/19/04						
CCM 6647	ANTENNA COUPLER	1	EA	FLT	BMSFC	04/13/04						
CCM 6647	CABIN AIR LINEAR DIFFUSERS	2	EA	FLT	BMSFC	04/09/04						
CCM 6647	CONTROL ASSEMBLY VARIABLE AIR VOLUME DAMPER ASSEMBLY	1	EA	FLT	BMSFC	03/17/04						
CCM 6647	AAA MOUNTING BRACKET	2	EA	FLT	BMSFC	01/15/04						
CCM 6647	THREADED FLUID FITTING	2	EA	FLT	BMSFC	02/05/04						
CCM 6647	WIRE HARNESS ASSY. W7002	2	EA	FLT	BMSFC	03/17/04						
CCM 6647	WIRE HARNESS ASSY. W7001	2	EA	FLT	BMSFC	03/17/04						
CCM 6647	EVA CLAMPS	24	EA	FLT	BMSFC	04/28/04						
CCM 7792	MODIFICATION KIT, HATCH SEAL	4	EA	FLT	KSC	03/26/04						
CCM 7792	HATCH SEAL (SPARES)	8	EA	FLT	KSC	05/28/04						
CCM 8020; S/A 1235	MODIFICATION KIT, FSS, VAJ LEAK TEST HOSES	1	KT	FLT	KSC	10/30/04						
50xxx Series												
CCM 1576	ACAS SIMULATOR ASSEMBLY, FULL UP	2	EA	GSE	KSC	12/19/03	DD250 date change per Boeing Ltr 2-1150-04-0354 concurred by NASA 12/08/04.					
CCM 6179 03-0388	SMALL ADAPTER PLATE ASSEMBLIES	16	EA	FSE	KSC	04/29/05						
CCM 6179 03-0388	MEDIUM ADAPTER PLATE ASSEMBLIES	1	EA	FSE	KSC	12/23/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6179 03-0388	LARGE ADAPTER PLATE ASSEMBLIES	1	EA	FSE	KSC	12/23/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6179 03-0388	PASSIVE FRAMS	13	EA	FSE	KSC	04/29/05						
CCM 3370	USOS INTERNAL CABLE MOD KIT	1	EA	FLT	KSC	12/31/03	DD250 date change per Boeing Ltr 2-1150-04-0471 concurred by NASA 11/08/04.					
CCM 3370	USOS EXTERNAL CABLE MOD KIT	1	EA	FLT	KSC	12/31/03	DD250 date change per Boeing Ltr 2-1150-04-0471 concurred by NASA 11/08/04.					
CCM 6647	COLD PLATE - 6	3	EA	FLT	BMSFC	07/11/04						
CCM 6647	COLD PLATE - 1	2	EA	FLT	BMSFC	07/11/04						
CCM 6647	INTERNAL , SELF SEALING, FLUID, QUICK DISCONNECT COUPLING	4	EA	FLT	BMSFC	11/05/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647	INTERNAL , SELF SEALING, FLUID, QUICK DISCONNECT COUPLING	8	EA	FLT	BMSFC	11/05/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647; 03-0386	NON-PROPULSIVE VENT ASSEMBLY	1	EA	FLT	BMSFC	11/05/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647	INTERNAL, SELF SEALING, FLUID, QUICK DISCONNECT COUPLING	2	EA	FLT	BMSFC	10/17/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647	PCA ELECTRICAL CABLE (NODE 3 UNIQUE LENGTH)	1	EA	FLT	BMSFC	10/17/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647	PCA ELECTRICAL CABLE (NODE 3 UNIQUE LENGTH)	1	EA	FLT	BMSFC	10/17/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 6647	DUCT, NON-AIRLOCK	1	EA	FLT	BMSFC	02/06/04						
CCM 6647	METAL SEALS, SPECIAL (SPARES)	12	EA	FLT	BMSFC	05/14/04						
CCM 6952	ARIS UMBILICAL MOD KIT	1	EA	FLT	KSC	01/30/04						
CCM 6952	ARIS UMBILICAL MOD KIT	2	EA	FLT	KSC	01/30/04						
CCM 6952	ARIS UMBILICAL MOD KIT	1	EA	FLT	KSC	01/30/04						
CCM 7076 - S/A 1183	CONTROL MOMENT GYRO ASSY, SPARE	1	EA	FLT	L3COM	10/31/03	Delivery date (reflected on SSCM) is after Jan 1, 2004					
CCM 2632	MOD KIT, WIRE HARNESSES INTERNAL, NODE-1	1	EA	FLT	KSC	12/19/03	Delivery date changes; per email from NASA dated 12/14/05; STOP WORK per NASA Ltr BG-04-307 dated 11-04-04.					
	MOD KIT, CONNECTOR FEEDTHROUGH, NADIR PORT BLKD, NODE-1	1	EA	FLT	KSC	12/19/03	Delivery date changes; per email from NASA dated 12/14/05.					

CCM 1128	RADIATOR ASSY., ORU, MDM - ZENITH	1	EA	FLT	KSC	07/01/01						
CCM 1128	RADIATOR ASSY., ORU, MDM - NADIR	1	EA	FLT	KSC	07/01/01						
CCM 5778	ACBSP (3 DES)	1	EA	FLT	KSC	02/28/04						
CCM 5778	ACBSP (3 DES)	1	EA	FLT	KSC	07/30/04						
CCM 5778	ACBSP (3 DES)	1	EA	FLT	KSC	02/28/05						
CCM 5778	TRANSPONDERS (LOW RATE VOICE)	1	EA	FLT	KSC	02/28/04						
CCM 5778	TRANSPONDERS (LOW RATE VOICE)	1	EA	FLT	KSC	07/30/04						
CCM 5778	TRANSPONDERS (LOW RATE VOICE)	1	EA	FLT	KSC	02/28/05						
CCM 5778	ACBSP (3 DES) MOD KIT	1	EA	FLT	KSC	02/28/04						
CCM 5778	ACBSP (3 DES) MOD KIT	1	EA	FLT	KSC	07/30/04						
End of List												

J-5 DIL - DELETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	QTY
3xxx Series			
3453	CCM 153; MOD 135; 03-0573	OP1-01005-1 CUPOLA/ LAB/HAB WINDOW CHANGE-OUT COVER (TOP)	1
3721		OZ1-01008-1 PRESSURE WALL REPAIR KIT (6 IN)	1
3722		OZ1-01008-2 PRESSURE WALL REPAIR	1
3723		OZ1-01008-2 PRESSURE WALL REPAIR KIT (1IN)	1
3724		OZ1-01008-2 PRESSURE WALL REPAIR KIT (1IN)	1
3796	CCM 153; MOD 135; 03-0573	OP1-01005-2 CUPOLA/ LAB/HAB WINDOW CHANGE-OUT COVER (SIDE)	1
3820		OP1-01013, NON-PROPULSIVE VENT CAP	1
3877	03-0573	HAB SYSTEM 1 CSCI (END-ITEM)	1
3900		FEU EM P/L-2	1
3909	03-0573	HAB SYSTEM RACK	1
3910	03-0573	HAB SYSTEM RACK	1
3911	03-0573	HAB SYSTEM RACK	1
3912	03-0573	HAB SYSTEM RACK	1
3913	03-0573	HAB SYSTEM RACK	1
3914	03-0573	HAB SYSTEM RACK	1
3944		OZ1-01008-2 PRESSURE WALL REPAIR KIT (1 IN)	1
3953	CCM 056; 03-0573	FOOT PLATE ASSY HAB	2
3955	CCM 056; 03-0573	FOOT LOOP ASSY HAB	2
3971	CCM 056; 03-0573	BRACE ASSY, L/H HAB	1
3972	CCM 056; 03-0573	BRACE ASSY, R/H HAB	1
3973	CCM 056; 03-0573	RESTRAINT ASSY, FOOT SHORT-DUR, HAB	24
3974	CCM 056; 03-0573	RESTRAINT ASSY, FOOT-ANCHOR	2
3975	CCM 056; 03-0573	ANCHOR ASSY, EQUIPMENT-SEAT TRACK HAB	4

3976	CCM 056; 03-0573	ANCHOR ASSY, EQUIPMENT-HANDRAIL HAB	4
3977	CCM 056; 03-0573	POST ASSY, ARTICULATING HAB	2
3978	CCM 263	ADJUSTABLE LENGTH TETHER ASSEMBLY	3
3979	CCM 056; 03-0573	FIXED LENGTH TETHER ASSY HAB	2
3980	CCM 056; 03-0573	HANDRAIL ASSY, 21.5 INCHES HAB	21
3981	CCM 056; 03-0573	HANDRAIL ASSY, 8.5 INCHES HAB	9
3982	CCM 056; 03-0573	PORTABLE SEAT TRACK ADAPTER HAB	1
3983	CCM 056; 03-0573	RACK HANDLE ASSY HAB	2
4xxx Series			
4278	CCM 896	AMMONIA SERVICER HANDLING SET	1
4302	CCM 1318; 2-1150-99-503	MDM ASSEMBLY, LOWER	1
4333	CCM 986	CIRCUIT INTERRUPT DEVICE - Z1/LAB	6
4334	CCM 986	CIRCUIT INTERRUPT DEVICE - SO	2
4433	CCM 4079	PCU MOD KIT	2
4434	CCM 4079	Z1 MOD KIT	2
4435	CCM 4079	PCU PART MARKING MOD KIT	2
4455	Ltr 01-670	MT CETA RAILS (PORT)	1
30xxx Series			
30162	CCM 1727	PLATE, IDENTIFICATION	1
30242	CCM162	CAM STORAGE RACK	2
30245	CCM 290	CUPOLA TO ULC INTERFACE KIT	1
30592	CCM 859	SPDA (4 - SLOT)	6
30617	CCM 859	SYSTEM REMOTE CONTROL ASSEMBLY	3
30625	CCM 859	MANUAL PRESSURE EQUALIZATION VALVE	6
30631	CCM 859	VESTIBULE OUTFITTING KIT (N3 - CRV)	1
30917	S/A 1275; CCM 737	GORE PANEL FEED THRU	2

30928	CCM 1706	VALVE REPLACEMENT KIT - ON ORBIT	1
31034	CCM 1316	MANUAL PRESSURE EQUALIZATION VALVE	1
31035	CCM 1316	IMV VALVE	2
31119	CCM 2482	OXYGEN RECHARGE COMPRESSOR ASSEMBLY (ORCA)	1
31455	S/A 1275; CCM 2680	VALVE, 0.5 INCH SOLENOID	2
31456	S/A 1275; CCM 2680	VALVE, 0.5 INCH SOLENOID (SPARE)	1
50xxx Series			
50064	S/A 1372; CCM 287	SMC (DELIVERY 0.B)	1
50183	S/A 1275; CCM 901	POPS	1
50203	S/A 1275; CCM 901	EDO CARRIER PALLET	1
50379	CCM 3072	LINDEAR DRIVE UNIT FSE INSTALLATION KIT	1
50418	CCM 4104	UTAS ANTI-ROTATIONAL RESTRAINT STRUCTURE	1
50468	S/A 1275; CCM 4635	MSS CONTINGENCY CABLE KIT	1
50556	S/A 1368; CCM 3072	ADJUSTABLE GRAPPLE BAR THERMAL COVER	1
50621	S/A 1132 - CCM 5434	COAX CONTACT	8
50637	S/A 1132 - CCM 5434	CONNECTOR	1
50653	CCM 6625	MODIFICATION KIT, ELEMENT ASSY, CARGO - S1	1
50654	CCM 6625	MODIFICATION KIT, ELEMENT ASSY, CARGO - P1	1
50667	S/A 1275; 02-320; CCM 6790	MT/MBS CROSS CONNECTION MOD KIT	1
50747	S/A 1275; CCM 6983	CONTACT, PIN 22 AWG	86
100xxx Series			
100059	S/A 1275	AVIONICS JUMPER HARNESS SET	1
100060	S/A 1275	AVIONICS JUMPER HARNESS SET	1
100092	CCM 287	UMA GROUND CONNECTOR ASSY ACTIVE	1
100323	CCM 104	NODE 1 - MPLM FLIGHT JUMPER CABLE	1
100324	CCM 104	NODE 2 - MPLM FLIGHT JUMPER CABLE	1

100325	CCM 104	NODE 2 - JEM PM FLIGHT JUMPER CABLE	1
100517	CCM 060	CONNECTOR (P300 DR)	1
100518	CCM 060	CONNECTOR (P301 DR)	1
100519	CCM 060	CONNECTOR (P303 DR)	1
100520	CCM 060	CONNECTOR (P304 DR)	1
100810	S/A 1327; CCM 1068	EVA RECEPTACLES	2
100833	CCM 1124	ETCS AMMONIA TUBE SET	1
100873	CCM 1021	PAYLOAD ETHERNET HUB GATEWAY (PEHG)	1
100896	CCM 1426	ORLAN/ECOMM CONNECTOR THERMAL COVERS	2
100897	CCM 1426	ORLAN/ECOMM CONNECTOR CAPS WITH TETHER	2
100914	02-338	LAB TO N3 JUMPER HIGH PRESSURE (AMMONIA)	1
100951	S/A 1327; CCM 2017	BACKSHELL	1
100960	CCM 2017	CONNECTOR	3
100961	CCM 2017	BACKSHELL	2
100962	CCM 2017	BACKSHELL	2
100963	CCM 2017	BACKSHELL	2
100964	CCM 2017	BACKSHELL	3
End of List			

EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00
EA	FLT	KSCX	05/25/00



EA	FLT	KSC	09/13/99
EA	FLT	KSC	07/12/99
EA	TRNG	JSC	10/01/98
EA	TRNG	JSC	10/01/98
EA	FLT	KSC	06/30/01
EA	FLT	KSC	06/30/01
EA	FLT	KSC	06/30/01
EA	FLT	KSC	05/02/03



EA	FLT	BMSD	08/13/99
EA	FLT	KSC	02/01/01
KIT	FSE	KSC	07/02/01
EA	FLT	BMSD	12/01/00
EA	FLT	BMSD	12/01/00
EA	FLT	BMSD	12/01/00
EA	FLT	BMSD	12/01/00
EA	FLT	ALENIA	06/28/99

EA	FLT	KSC	11/19/99
EA	FLT	BMSD/BH SV	12/21/01
EA	FLT	BMSD/BH SV	12/21/01
EA	QUL	JSC	11/20/99
EA	FLT	BMSD	06/03/02
EA	FLT	BMSD	06/03/02

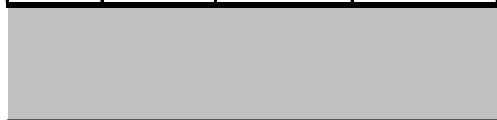


EA	FLT	JSCX/CD H	01/08/98
EA	NUB	JSC	02/23/99
EA	FLT	JSC	11/05/98
EA	FSE	KSC	04/30/03
EA	FLT	KSC	03/29/01
EA	FLT	JSC	12/04/01
EA	FSE	KSC	11/30/02
EA	FLT	KSC	10/07/02
EA	FLT	KSC	02/14/03
EA	FLT	KSC	09/10/02
EA	FLT	KSC	09/16/02
EA	FLT	KSC	05/28/02
EA	FLT	KSC	



EA	FLT	KSCX	02/28/99
EA	FLT	ESAP	06/30/00
EA	GSE	KSCX	07/06/99
SE	FLT	ASIP	10/01/98
SE	FLT	ASIP	10/01/98

SE	FLT	ASIP	11/01/99
EA	DEV	KSCX	05/01/98
EA	DEV	KSCX	05/01/98
EA	DEV	KSCX	05/01/98
EA	DEV	KSCX	05/01/98
EA	FLT	KSC	04/22/98
EA	FLT	HI/GLENN	04/01/00
EA	FLT	DASA	05/15/00
EA	FLT	JSC	01/30/99
EA	FLT	JSC	01/30/99
EA	FLT	BBMSD	01/27/03
EA	FLT	BMSD	04/01/99
EA	FLT	BMSD	04/01/99
EA	FLT	BMSD	04/01/99
EA	FLT	BMSD	04/01/99
EA	FLT	BMSD	04/01/99
EA	FLT	BMSD	04/01/99



Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-04-0351 concurred by NASA on 12/13/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3
Deleted per Boeing Ltr 2-1150-03-0573 concurred by NASA on 3/15/04	WOOD/LP/S3	WOOD/LP/S3



Deleted per Boeing Ltr 2-1150-06-0198 concurred by NASA on 8/18/06.		
Deleted per Boeing Ltr 07-0270.		
Deleted per NASA email, dated 03/11/05 -- Note: This item is being delivered by NASA Glenn Research Center.		
Deleted per NASA email, dated 03/11/05 -- Note: This item is being delivered by NASA Glenn Research Center.		
Deleted per Boeing Ltr 03-0429 and replaced by 50800.		
Deleted per Boeing Ltr 2-1150-04-0192 concurred by NASA on 10/25/04.		
Deleted per Boeing Ltr 03-0429 and replaced by 50801.		
Deleted per Mod 1431.		



Deleted per Boeing Ltr 2-1150-04-0366 concurred by NASA on 12/13/04		
Deleted per Mod 1532.		
Deleted per Boeing Ltr 2-1150-05-0023 concurred by NASA 2/22/05.		
Deleted per Boeing Ltr 2-1150-06-0097 concurred by NASA on 9/11/06.		
Deleted per Boeing Ltr 2-1150-04-0610 concurred by NASA on 02/03/05		
Deleted per Boeing Ltr 2-1150-04-0586 concurred by NASA on 1/18/05		
Deleted per credit proposal on Boeing letter 2-1150-05-0214 definitized on S/A 1362.		
Deleted per Boeing Ltr 2-1150-04-0368 concurred by NASA on 8/30/04.		

Deleted per SSCN 8376, definitized on S/A 1297.		
Deleted per credit proposal on Boeing letter 2-1150-05-0214 definitized on S/A 1362.		
Deleted per SSCN 3140, definitized on S/A 1316, dated 06/22/05.		
Deleted per Boeing Ltr 2-1150-04-0417 concurred by NASA on 10/05/04.		
Deleted per SSCN 8143, definitized on S/A 1275		
Deleted per SSCN 8143, definitized on S/A 1275		

Deleted per Boeing Ltr 2-1150-06-0145 concurred by NASA on 06/20/06.; ADD		
Deleted per Boeing Ltr 2-1150-04-0283 concurred by NASA on 8/26/04.		
Deleted per Boeing Ltr 2-1150-04-0283 concurred by NASA on 8/26/04.		
Transferred to J-27 due to date change per Boeing Letter 2-1150-05-0115 concurred by NASA on 05/02/05.		
Deleted per credit proposal on Boeing letter 2-1150-05-0214 definitized on S/A 1362.		
Deleted per Boeing Ltr 2-1150-03-0584 concurred by NASA on 8/16/04.		
Deleted per Boeing ltr. 2-1150-06-0046 definitized on S/A 1368.		
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406		
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406		
Deleted per Boeing Ltr 2-1150-05-0083 concurred by NASA on 4/19/05.		
Deleted per Boeing Ltr 2-1150-05-0083 concurred by NASA on 4/19/05.		
Deleted per Boeing Ltr 2-1150-04-0350 concurred by NASA on 8/30/04.		
Deleted per Boeing Ltr 2-1150-04-0071 concurred by NASA on 8/26/04.		

Deleted per Boeing Ltr 2-1150-04-0349 concurred by NASA on 8/30/04.	CONLEY/LP/S6 CONL	CONLEY/LP/S6 CONL
Deleted per Boeing Ltr 2-1150-04-0349 concurred by NASA on 8/30/04.	CONLEY/LP/S6 CONL	CONLEY/LP/S6 CONL
Deleted per Boeing Ltr 2-1150-06-0123 concurred by NASA on 8/22/06.		
Deleted per Boeing Ltr 2-1150-05-0233 concurred by NASA on 09/29/05.	WOOD/LP/S3 WOOD	WOOD/LP/S3 WOOD
Deleted per Boeing Ltr 2-1150-05-0233 concurred by NASA on 09/29/05.	WOOD/LP/S3 WOOD	WOOD/LP/S3 WOOD

Deleted per Boeing Ltr 2-1150-05-0233 concurred by NASA on 09/29/05.	WOOD/LP/S3 WOOD	WOOD/LP/S3 WOOD
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406	HATFIELD LP4	
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406	HATFIELD LP4	
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406	HATFIELD LP4	
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406	HATFIELD LP4	
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		
Deleted per credit proposal # on Boeing letter 2-1150-06-0194 defintized on Mod 1406		
Deleted per Boeing Letter 2-1150-05-0300 concurred by NASA 1/27/06		
Deleted per Boeing Letter 2-1150-05-0300 concurred by NASA 1/27/06		
Deleted per SSCN 8644, definitized on S/A 1306		
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		
Deleted per Boeing Proposal Ltr 2-1150-05-0203 definitized on MOD 1327 (SA).		



[illegible]

--

--

1J/A		
UF-3		
2A		
10A	5/18/1994	COMPLETE

10A		

ATTACHMENT J-6
APPLICABLE DOCUMENTS LIST

ATTACHMENT J-6
APPLICABLE DOCUMENTS LIST

The specifications, standards, and handbooks set forth in SSP 50257, Program Controlled Document Index, and the following documents form a part of this contract to the extent specified in other Contract Clauses, General Provisions, SOW and DRDs.

SSP 50257 may only be revised by a NASA/Boeing approved SSCN Change Request (CR), with approval documented on an SSCN Change Directive (CD). Changes to the documents listed in SSP 50257 that are initiated solely for the purpose of Configuration Management Technical Baseline Control of program controlled documentation pursuant to SOW Section 1.1.3 Configuration Management, that do not necessitate equitable adjustment of the contract as determined by Boeing, are incorporated into this contract upon SSCN Change Directive (CD) review and approval by Boeing and the responsible NASA Panel or Board/COTR authorizing document incorporation into SSP 50257. The most current version of SSP 50257 shall be used in performance of this contract.

NOTE: Previous Revision R of SSP 50257 incorporated SSCN 2627, which is subject to the understanding that SSCN 2627 has been placed in an "Overcome By Events" status in that the specific document being invoked by this change, SSP 30223 Problem Reporting and Corrective Action for the Space Station Program Revision H, has been replaced by the approved SSP 30223 Revision J in accordance with SSCN 2945.

NHB 9501.2	Procedures for Contractor Reporting of Correlated Cost and Performance Data
(Unnumbered)	Intergovernmental Agreement (IGA) (Foundation for Freedom Program)
(Unnumbered)	Interim Agreement Between NASA and RSA (Will lead to MOU)
(Unnumbered)	Memorandum of Understanding Between NASA and ASI
(Unnumbered)	Memorandum of Understanding Between NASA and CSA (Formerly MOSST)
(Unnumbered)	Memorandum of Understanding Between NASA and ESA
(Unnumbered)	Memorandum of Understanding Between NASA and NASDA
(Unnumbered)	NASA/CSA Agreement In Principle (Goldin/Campbell) - Descope of MOU
(Unnumbered)	NASA IS VMDB Implementation Plan
(Unnumbered)	Vehicle Data Management Plan

(END OF ATTACHMENT)

Attachment J-7

Management Information System Description

1.0 INTRODUCTION

As stated in the IS Plan, the vision for the ISSA-IS is that of a system consisting of a common, integrated data structure and a set of logically independent application modules that access the data as a shared resource. This vision encompasses the following architectural domains interacting through standards.

- (D 1) **Applications:** In the target system, this component will consist of small, task-oriented modules. Each module will perform a well defined function. The goal is for no two modules to perform the same function and for each module to be logically independent yet complementary of the others. This will always remain the goal, even though it may never be completely realized in practice.
- (D2) **Data:** In the target system, this component will consist of an integrated data structure through which the application modules share data. No non-key data elements should be duplicated, and all tables should be normalized to the appropriate normal form. These criteria will be applied to all new database design activities in the ISSA-IS.
- (D3) **Delivery Systems:** In the target system, this component will consist of the workstations, processors, low-level software, and the network infrastructure required to provide a flexible environment for the application modules and the integrated data structure.

This document deals with the architecture of the applications, data, and delivery systems domain.

The IS Plan also describes a strategy of phased migration from a baseline set of legacy systems to a new architecture for the future. A schematic representation of the target architecture is provided in Figure 1.0-1. Given the overriding objective of cost effectiveness, each opportunity to change the ISSA-IS configuration will be subjected to careful cost/benefit analysis. Those opportunities where the benefits outweigh the costs will be viewed as opportunities to make improvements to the architecture.

From an applications perspective, it is expected that the ISSA-IS configuration will evolve in the manner depicted in Figure 1.0-2. The four steps delineated in the figure should be understood as follows:

Step 1: Implement Available Best Fit.

During the transition from the Space Station Freedom Program (SSFP) to ISSA, the intent is to establish a fully functional information systems environment at minimum cost and within a very short time-frame. This is to be accomplished through the selection of systems that are available and do not require development.

The selection process will be undertaken by the Program Integrated Product Teams (IPTs) and Analysis and Integration Teams (AITs) and will involve the review of applications developed for SSFP's Technical and Management Information System (TMIS), as well as commercially available products, and products available from the various Program participants (e.g., the Boeing Defense & Space Group (D&SG)).

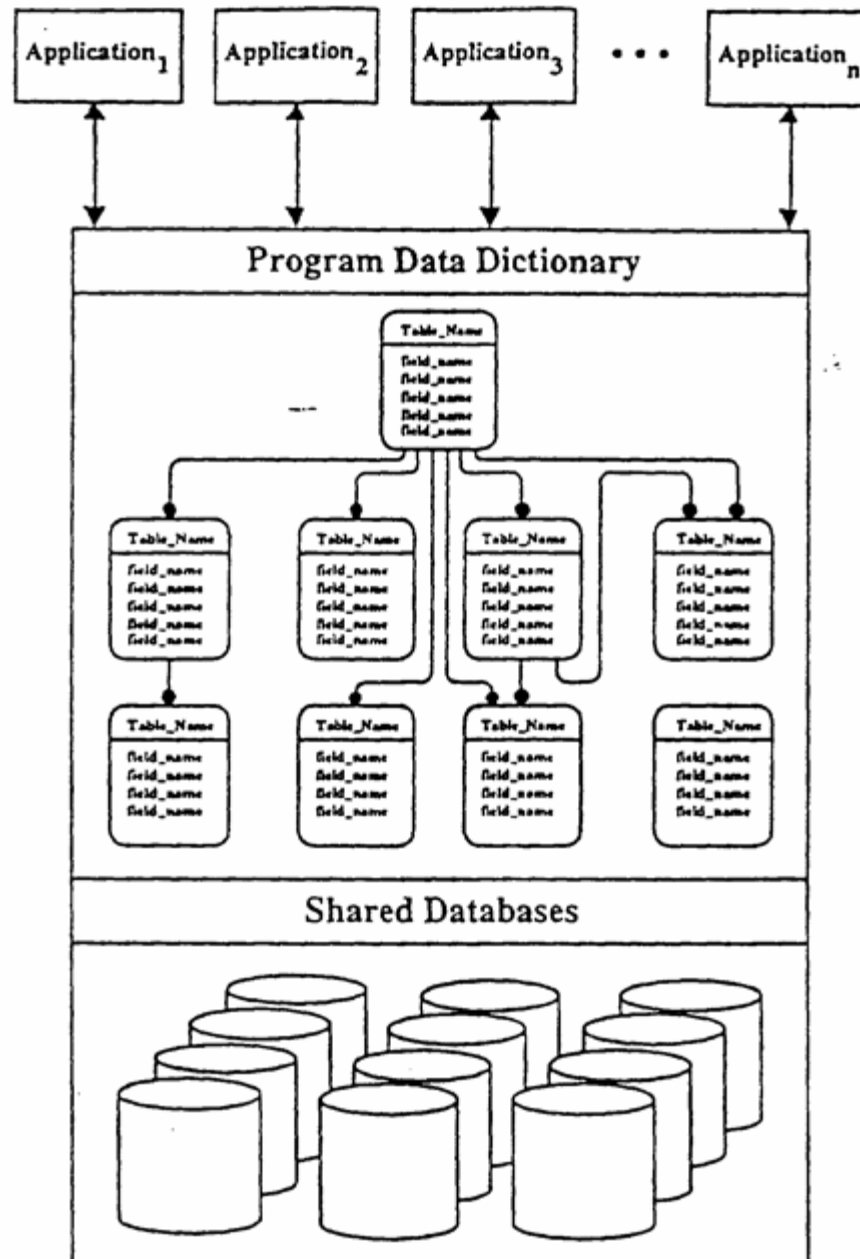


Figure 1.0-1: ISSA-IS Target Architecture

In some cases, the selected systems will be implemented with the knowledge that they will have to be upgraded, replaced, or enhanced later in the Program.

Step 2: Adopt the DM2000 Concept

DM2000 is a data-driven information system that has been in use in the Boeing D&SG since 1990. DM2000 was developed from a top-down, enterprise-wide design perspective with explicit architecture principles in mind. It provides an enterprise-wide data model and an integrated data dictionary, and it supports data integration across multiple applications. In short, it is an instance of the type of system that was depicted in Figure 1.0-1.

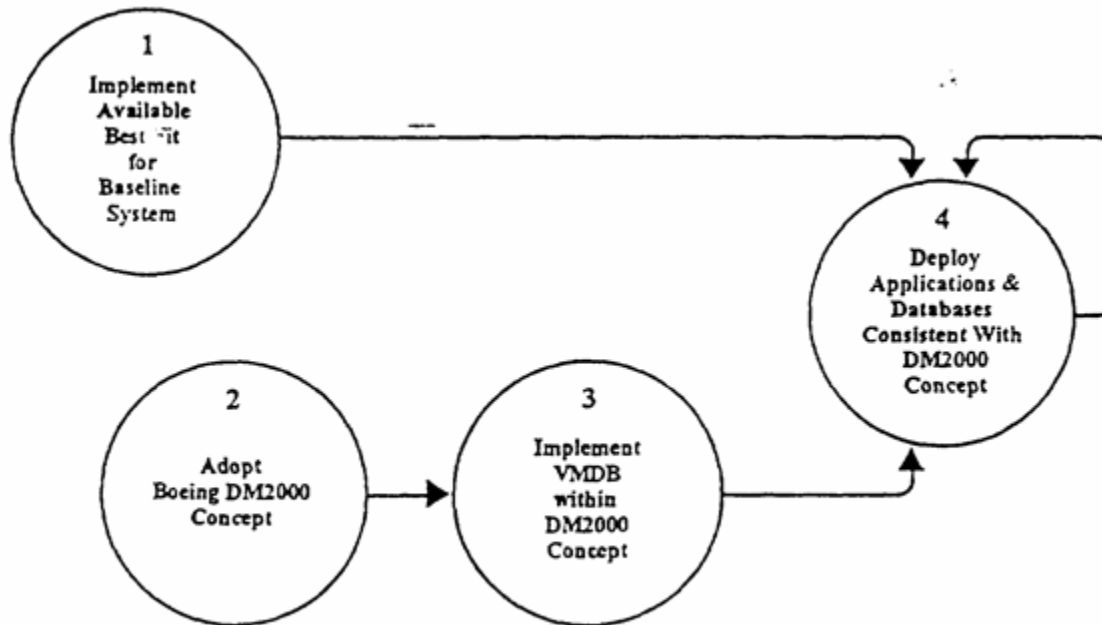


Figure 1.0-2: ISSA-IS Architecture Migration Steps

Step 3: Implement the ISSA Vehicle Master Database (VMDB) as an Instantiation of the DM2000 Concept.

There is an opportunity to minimize development effort and achieve architectural compliance by using the DM2000 concept as the basis for the creation of the VMDB data structure.

Step 4: Acquire or Build Applications Consistent with Architecture Principles.

Once VMDB is in place and new applications are being added to the ISSA-IS and old ones are being replaced, the intent is to provide applications that will be compliant with the concept of DM2000.

From a Data Resource Management (DRM) perspective, it is expected that the ISSA-IS configuration will evolve as follows:

- Step 1** Develop an ISSA enterprise model, a high-level information model of the Program as a whole.
- Step 2** Adopt the DM2000 concept, including the high- and low-level data models, data dictionary, and database implementations.
- Step 3** Map the ISSA enterprise model to the high- and low-level data models. Adopt all DM2000 concepts that can be used for ISSA. Initiate data modeling efforts for all ISSA enterprise areas.
- Step 4** Leverage the results of Steps 1, 2, and 3 into a Program Integrated Data Model (PIDM). The PIDM will be a key-based model, fully attributed, with all many-to-many relationships resolved. It is recognized that the PIDM will continue to evolve throughout the life of the Program. In other words, this step will overlap with the steps enumerated below.
- Step 5** Implement the Vehicle Master Database (VMDB) as an instantiation of the DM2000 concept.
- Step 6** For each new application that must be developed, ensure that the following steps govern the design phase:
 - (a) Document the data requirements for the new application.
 - (b) Map these requirements to the PIDM.
 - (c) Ensure that the ISSA-PIDM serves as the database for the new application. In general, no application developed or sanctioned by the ISSA-IS organization should be supported by its own dedicated database. Exceptions must be thoroughly justified, carefully documented, and approved by the ISSA-IS Data Management organization.

If Steps 1 through 6 are followed, the ISSA-IS will evolve toward "data integration across multiple applications".

Step 7

As the ISSA-PIDM concept grows in scope, opportunities for retiring legacy database will arise. The opportunity for a retirement will exist whenever all (or most) of the data elements and relationships in a legacy database are found in the PIDM. When such an opportunity is identified, the legacy database should be retired as follows:

- (a) Load the ISSA-PIDM from the legacy database and use the data for batch-oriented reporting functions. The frequency of the loads will be determined by the frequency of the batch jobs.
- (b) Recode the data capture and input functions so that they feed the ISSA-PIDM directly, and provide logic for the ISSA-PIDM to feed the legacy database. Blockpoint and implement.

The ISSA-PIDM is now feeding the legacy database.

- (c) Recode the online query and reporting functions so that they access the ISSA-PIDM rather than the legacy database.

The legacy database is no longer providing any service.

- (d) Retire the legacy database

As stated in the IS Plan, a strategy of phased migration from a set of legacy systems to a more integrated architecture will be pursued over the life of the Program. Given the overriding objective of cost effectiveness, each opportunity to change the ISSA configuration will be scrutinized. Those opportunities in which the benefits outweigh the costs will be viewed as opportunities to make improvements to the architecture. Unlike the data and applications architecture, changes to the delivery system architecture may be initiated without explicit direction from user requirements. As advances are made in technology, cost effective modifications to the existing architecture may be undertaken by the ISSA-IS organization simply to improve the infrastructure and reduce costs.

To the extent that opportunities are presented, it is expected that the ISSA-IS delivery systems architecture will evolve along a path as follows:

- Implement the most readily available solution that can be agreed upon, spending as little money as possible.
- Minimize the number of solutions that satisfy the same set of requirements.
- Adopt open systems standards.
- Perform trade studies before purchasing delivery system components. Acceptable support must be available over the life of the product/component.
- Always consider using existing hardware resources.
- Focus on technologies that have a high probability of satisfying specific Program needs with a minimum of risk of impact on the existing computing environment.
- Ensure that delivery systems components will not inhibit the satisfaction of Program or contractual data security requirements.
- Buy delivery system components that are consistent with architecture principles and standards.

ISSA-IS will forecast and execute upgrades, improvements and additions to the computing resource base by utilizing the following:

- System utilization reports and utilization trends,
- Computing resource capacities, and
- Program goals and projections.

1.1 SCOPE

This document contains information for applications, data, and delivery systems that are necessary to support the activities of the ISSA Program Office (Boeing) and those applications, data, delivery systems that are Program-wide (support the entire Program). This document will not address the application, data, delivery systems environments of the Product Groups or International Partners except to the extent necessary to accurately describe the ISSA application architecture or the interfaces to the information systems of the participants.

1.2 PRECEDENCE

This document contains the requirements for ISSA-IS deliverables.

2.0 APPLICABLE DOCUMENTS

The following documents of the date and issue shown include specifications, models, standards, guidelines, handbooks, and other special publications. These documents were utilized in the development of ISSA-IS requirements, standards, and principles and are applicable to the extent specified herein. Inclusion of applicable documents in this list does not in any way supersede the order of precedence.

DOCUMENT NUMBER	TITLE
SSP 50013 July 1994	ISSA Information Systems Plan
D658-10283-01 July 1993	Information Systems Technical Reference Model
D684-10064-01 June 1994	ISSA IS Application Architecture
D684-10065-01 June 1994	ISSA IS Data Architecture
D684-10066-01 June 1994	ISSA IS Delivery Systems Architecture
NHB 2410.9A July 1993	NASA Automated Information Systems (AIS) Security Handbook
SSP 50020 TBD	VMDB Plan
D684-10017-01 April 1994	Software Development Plan
TSS 30551 No date	Space Station Freedom Program Office Data Naming Standards
MDC 91H0544, Rev C September 1993	JSC Data Support System (DSS) System Configuration Document

3.0 CURRENT APPLICATION CONFIGURATION

The baseline set of applications to be employed by ISSA consists of a heterogeneous set of legacy applications that were built to different sets of architectural ground rules and that reflect a variety of architectural orientations. This variety makes it difficult to describe the baseline ISSA-IS applications architecture and to organize its components into logical categories.

It is the intent of the ISSA-IS organization to implement architectural principles and standards over the life of the ISSA Program to minimize the variability of the configuration. The purpose of this is to introduce greater and greater consistency and thereby to increase flexibility and maintainability. Figure 3.0-1 illustrates the complexity of the current configuration and compares this with the simplicity and consistency desired for the future.

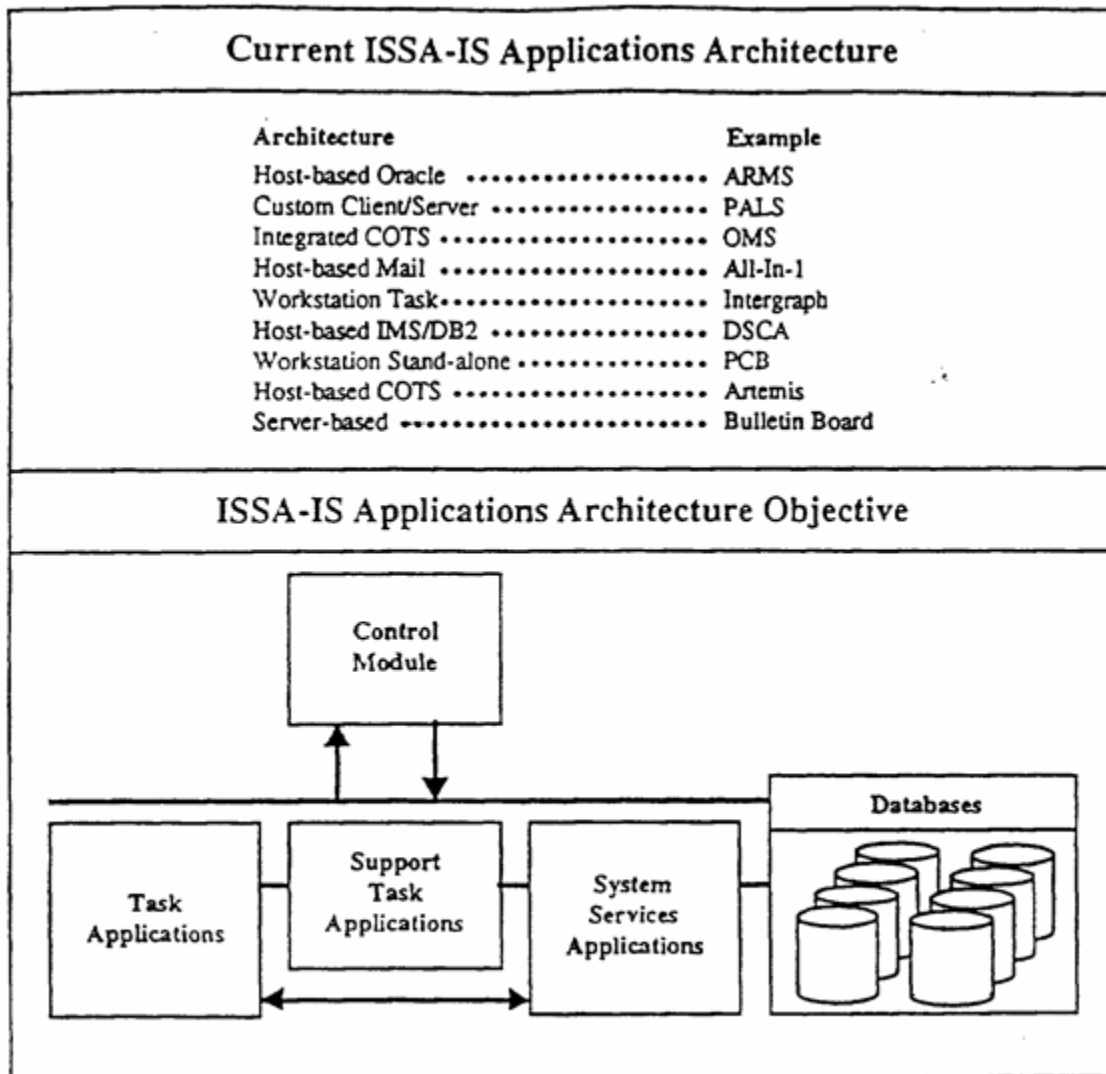


Figure 3.0-1: Current and Planned ISSA-IS Architecture

As the figure indicates, in the current configuration the applications are so tightly bound with the hardware and lower-level software that support them that they cannot be described without identifying these underlying elements. A major architectural objective is to separate the applications from these elements. When this is achieved, the applications can be described solely in terms of their functionality and structure, independent of the underlying components that support them.

3.1 LISTING OF CURRENT APPLICATIONS

Tables 3.1-1, and 3.1-2 identify the "current" and "baseline" applications. The "current" applications are in use by the Program today, during the transition phase. The "baseline" applications reflect the initial operational application environment for ISSA. When the current and baseline are the same, it implies that there are no major changes planned for this area. These tables will be updated as the configuration changes over time. A task sheet is found for each subject area identified in the tables. If the current system is

the same as the baseline system, the task sheet will identify the sustaining level of effort for the application. If the current system is different from the baseline, the task sheet will contain the cost and schedule for implementation of the baseline system. In addition, the change will be documented in Section 5.

Office automation (workstation) software is generally outside the scope of the application architecture. In those case where the workstation software is an integral part of the business process application (e.g., Interleaf), it will be included in this document; but standard Commercial-Off-The-Shelf (COTS) tools such as Microsoft Word and Excel will not be addressed.

As mentioned in the IS Plan, it is our intent to use the Host Center (JSC) standards whenever possible at the workstation and server levels to satisfy Space Station requirements. To the extent that a specific support structure is established to accommodate the implementation or maintenance of workstation applications, it will be addressed in this document.

3.1.1 Non-Boeing Program Office Applications

Non-Boeing Program Office applications are not the property of the Boeing Company and they support general Program Office functions. These applications are delineated in Table 3.1-1 and described in Section 3.2-1.

3.1.2 Program-Wide Applications

Program-wide applications are listed in Table 3.1-2 and described in Section 3.2-2. A Program-wide application is defined as an application that is supported by the ISSA-IS organization for use by some or all of the organizations participating in the Program.

As with Program Office applications, a task sheet is found for each subject area. If the current system is the same as the baseline system, the task sheet will identify the sustaining level of effort for the application.

If the current system is different from the baseline, the task sheet will contain the cost and schedule for implementation of the baseline system; and the change will be documented in Section 5.

3.2 DESCRIPTION OF APPLICATIONS

The following paragraphs contain brief descriptions of the applications identified in the preceding tables. The entries in this section are grouped as Boeing applications, non-Boeing Program Office applications, and Program-Wide applications. The entries within each group are organized alphabetically by acronym.

Program Office Application (non-Boeing)					
Subject Area	Responsible Manager	Requirements Interface	Current System	Baseline System	Task Sheet
Action/Issue Tracking	Padgett	BM-AIT	Various	ATA	1
Bulletin Board	Padgett	BM-AIT	BB	BB	2
Change Management	Wood	SS-AIT	AITs	CACTIS	4
Configuration Management	Wood	SS-AIT	SSE-CM	CACTIS	6
Correspondence Management	Wood	BM-AIT	CTS	CTS	8
Data Requirement	Padgett	BM-AIT	DRT	DRT	56
Design Analysis Environment	Morrow	V-IPT	RDD-100 CAFTA RPP RMA PLATO	RDD-100 TBD TBD TBD TBD PDS RBDA	57
Engineering Drawing Environment	Morrow	V-IPT	EMDB	CADSYS EDLS	58
Integration/Verification Environment	Morrow	V-IPT	RTM	RTM ICDSYS	59
Logistics	Wood	V-IPT	ALSTAR	SIMSYLS ALSTAR	20
Metrics Data	Padgett	BM-AIT	N/A	MDR	23
Micro-Gravity Environment	Morrow	V-IPT	NASTRAN TRASYS GRASP IDEAS IDEAS2	NASTRAN TBD TBD TBD TDB	60
Mission Build Environment	Morrow	V-IPT	None IDEAS2	MBF GRDS	61
Mission Planning & Operations Environment	Morrow	OPS-IPT	None	AAA MMPL TPS UMPL	62
Parts Management	Morrow	OPS-IPT	None	EPIMS EPSA	28
Program Management Tool	Padgett	BM-AIT	PCB OMS	PCB PFI PPI	33
continued					

Table 3.1-1: Non-Boeing Program Office Applications

Program Office Application (non-Boeing, continued)					
Subject Area	Responsible Manager	Requirements Interface	Current System	Baseline System	Task Sheet
Publishing	Wood	SS-AIT	ITPS	ITPS	35
Scheduling	Padgett	BM-AIT	Various	ISPA	39
SRM&QA	Wood	SS-AIT	None	PRACA RBDA CAFTA	40
Supplier Data Tracking	Padgett	BM-AIT	SDST	SDST	41
Tier III CUI	Wood	BM-AIT	TMIS CUI	ISSA CUI	44

Table 3.1-1: Non-Boeing Program Office Applications

Program-Wide Applications					
Subject Area	Responsible Manager	Requirements Interface	Current System	Baseline System	Task Sheet
Documentation Management	Wood	SS-AIT	PALS	PALS	50
E-Mail	Wood	SS-AIT	SSFPMail		51
Requirements Traceability	Padgett	SS-AIT	ARMS		108
Review Management (RID Tracking)	Wood	SS-AIT	ARTS	ARTS	53

Table 3.1-2: Program-Wide Applications

3.2.1 Non-Boeing Program Office Applications

3.2.1.1 AAA - Automated Assembly Assessment

The AAA uses the connectivity information of the Paths Data System (PDS), a rules-based fault propagation algorithm and the Mission Operations Directorate (MOD) Activation and Checkout (A&C) Procedures to provide assessment file listings for each A&C step and the faults which cause mission success or ISSA survival criteria not to be met.

3.2.1.2 ATA - Action Tracking Application

The ATA will be the primary application used for tracking and reporting Program Office action items. This application will be a modification of one of the existing action tracking application to integrate all SSPO requirements for action tracking into a single application. This integration will result in lower application maintenance costs by reducing the quantity of applications ISSA-IS is required to maintain. It will be a relational database application for actions assigned by organizations throughout the Program Office. ATA will be the single authoritative source for storage, retrieval, and progress reporting of action items. It tracks the point of origin, action description, due date, individuals assigned, closure date, current status, comments, etc. The application will include a set of reports accessible to all users that can be expanded as program requirements evolve. ATA will provide the capability for users to execute interactive queries on the data to request specific action items by number, date, organization, or assigned individual.

3.2.1.3 BB - Bulletin Board

The ISSA BB is the ISSA-IS implementation of MOSAIC. The MOSAIC toolset is a public domain, client server group of products that operate in a number of environments (UNIX, DOS, Macintosh etc.) to provide a system for information exchange. BB provides a tool to assist ISSA staff in the exchange and sharing of information in a bulletin board like environment. The information is grouped by subject and organized in a hierarchical manner. Products can be hyperlinked to other products in the bulletin board to provide expanded information on any subject without requiring the duplication of data. The server operation system and security systems are provided the JSC Information Systems Directorate (ISD).

3.2.1.4 CACTIS - Change And Commitment Tracking Information System

CACTIS is a new application, still in the analysis stage, being developed for use by both the Program Change Management Group and the Configuration Management (CM) Group. The application is being developed using Oracle 7 and Oracle SQL *Forms 4.0. Oracle's Report Writer, Data Browser, Graphics, and Oracle Book will also be used. CACTIS will identify and track the engineering change data from assignment of the Space Station Change Number (SSCN) number through the completion of all actions for the directive.

The CACTIS Engineering Release is currently scheduled for late May 1994, on the Boeing Is RS-6000. Production release on the RS-6000 is expected in early August 1994, and transfer to a VAX platform will occur in September 1994.

3.2.1.5 CADYS - Computer Aided Design System

The CADYS is a toolset used to support Computer Aided Design (CAD) and drafting activities for mechanical, electrical and other systems for the ISSA. The toolset provides capabilities to design and develop mechanical and electrical systems, check interfaces, select standard parts and output drawings, design reports, indentured parts list, parts list for assembly and where used data. The underlying hardware and software for CADSYS is Intergraph. The Database Management System (DBMS) is Informix.

3.2.1.6 CAFTA - Computer Aided Fault Tree Analysis

The Safety Group within Safety, Reliability, Maintainability & Quality Assurance (SRM&QA) will be using CAFTA, a safety analysis tool that performs fault-detection, isolation, and recovery functions. The system is designed to identify top undesired events and the secondary events causing the top undesired events. The source of the data for CAFTA includes circuit designs, typing and instrumentation drawings, and data compiled by the safety analysis. CAFTA is a PC-based application.

3.2.1.7 CTS - Correspondence Tracking System

CTS is used to collect information about and maintain a record of certain types of contractual documentation such as Outgoing Correspondence, Incoming Mail, etc. By entering this correspondence data into an online Oracle database, current status information, assignment information, completion date information, etc. is available to all personnel.

3.2.1.8 CUI - ISSA Common User Interface

The ISSA CUI was developed to support the JSC standard PC configuration and to provide Space Station employees at JSC access to program applications through a standard, user-friendly interface. The CUI is Windows-based and icon-driven. The CUI supports scripts.

3.2.1.9 CUI - TMIS Common User Interface

The TMIS CUI was used on PC workstation at JSC throughout the period of transition from SSFP to ISSA. The TMIS CUI was included with the equipment that the TMIS contract had provided for the SSPO. The TMIS CUI is currently being replaced at JSC by the ISSA CUI in order to utilize standard JSC supported PC Products.

3.2.1.10 DRT - Data Requirements Tracking System

Boeing Prime Contract data requirements are tracked and reported via the DRT application, a database application developed in the Artemis 9000/EX software. It provides Program Data Management the Capability to track Boeing Prime Contract data deliverables. The application provides storage, retrieval, and reporting of the due date, status, responsible management, and approval status. The DRT application offers a simple menu interface for entering/updating information, viewing information on-line, and printing pre-defined reports. DRT provides on-line data entry/update forms and allows on-line interactive queries.

3.2.1.11 EDLS - Engineering Drawing Library System

EDLS is a drawing raster viewing application program.

3.2.1.12 EMDB - Engineering Master Database

The EMDB allows for the viewing and management of top level assembly drawings. EMDB is currently used in the Engineering Drawing Environment to create interface control drawings. It will be used during the transition period and eventually replaced by the Computer-Aided Design System (CADSYS).

3.2.1.13 EPIMS - Electrical, Electronic, and Electromagnetic (EEE) Parts Information Management System

The functionality of the EPIMS application, implemented on Ingress, can be grouped into three high-level categories:

- EEE Parts Reference Information,
- Analysis Tools - Cross referencing alerts, advisories, and problem reports to parts lists,
- Information Capture - Various types of parts lists.

3.2.1.14 EPSA - Electrical Power System Application

The EPSA application, implemented in the Oracle DBMS, was developed at Rocketdyne. The system provides engineering data, CM, EEE parts lists, and product assurance. A future release will also contain surveys, Non-Standard Part Approval Request (NSPARs), and failure analysis capability data.

3.2.1.15 GRASP - Grumman Robotic Analysis Simulation Program

GRASP is a software simulation program that was used for analyzing the robotic arms on the SSFP. It is currently being considered for use on the ISSA Program.

3.2.1.16 GRDS - Ground Reconfiguration Data System

The GRDS will be a toolset to support the development, maintenance, and control of their configuration tables for the Multiplexer/Demultiplexers (MDMs). This toolset and tables will support production of flight software for test, simulations, training and flight. Current planning is to use the Oracle DBMS.

3.2.1.17 ICDSYS - Interface Control Document System

The ICDSYS will be a toolset of support the development, maintenance, and control of the ISSA software Interface Control Documents (ICDs). The toolset will consist of Teamwork, Interleaf and an Oracle database supported by appropriately configured server/workstations. The ICDSYS will interface with the VMDB and place documents in the Program Automated Library System (PALS).

3.2.1.18 IDEAS

IDEAS is a software for Computer Aided Model (CAM) development that is used in conjunction with NASA Structural Analysis (NASTRAN). The application is used to view solid models provided other applications in support of stress and load point analyses.

3.2.1.19 ISPA - Integrated Scheduling and Planning Application

ISPA is the application for integrated analysis, maintenance, tracking and status reporting of Program schedules. It supports the Program Planning & Control (PP&C) staff in the integration of the Product Group schedules with the Prime milestones and schedule to create the overall ISSA Program schedule. It performs critical path analysis on Program activities networked together by their interdependencies and forecasts future activity timelines based upon progress achieved. The ISPA provides a menu interface for access to reports (tabular and graphic), data entry screens, data review and update screens, and the execution of analytical computations. This application is based on the Artemis 9000EX software.

3.2.1.20 ITPS - Interleaf Technical Publishing Software

ITPS is an electronic publishing system that allows users to create, revise, illustrate, share, manage, and print professional-looking documents. It allows you to intersperse complex graphics and charts created in Interleaf or images scanned and incorporated into documents. It is used by the Space Station Program as the baseline documentation software. In Space Station at JSC, Interleaf is run off RISC6000 servers and can be accessed from any type of workstation including HP/Apollos, PCs and Macintoshes.

3.2.1.21 MBF - Mission Build Facility for Flight Software

The MBF will aid the Prime Contractor to achieve full breath integration to control flight software and data and to accept, integrate, and test flight software products from multiple sources. The MBF supports software and data for testing, training, and delta flight loads; supports building interfaces to Control Center Complex (CCC), Payload Operations Integration Center (POIC), Test, Checkout, and Monitoring System (TCMS), International Partners/participants, and Space Station Verification and Training Facility (SSVTF); provides sources of flight software, flight data, and SSVTF simulations and loads information for onboard data systems; and provides status, issues, impacts, and resolutions to participant organizations.

3.2.1.22 MDR - Metrics Data Repository

The ISSA Program Office requires a repository to integrate, store, retrieve, and report metrics data provided by the product groups. The MDR provides these functions and provides automated and manual loading of formatted metric data from throughout the Program (i.e., cost, schedule, quality, weight, power, etc.) into a relational DBMS. The MDR provides an easy to use menu driven system capable of reporting the information in hard copy, on line, and it exports defined sets of graphical reports for storage and viewing in the Program Control Book (PCB).

3.2.1.23 MMPL - Mission Management Plan

MMPL is the central repository for acquisition and storage of information required to support Space Station payload integration, tactical planning, operations summary document development, and logistics planning. The MMPL will be supported with a Mission Management database using Oracle products.

3.2.1.24 NASTRAN - NASA Structural Analysis

NASTRAN is a finite element analysis modeling software program that supports structural dynamics modeling and provides data and plot information based on the behavior of these models.

3.2.1.25 OMS - Office Management System

The OMS is an integrated suite of office tools to provide a simple user interface to workstation and server tools, electronic mail, server based hypercard stacks (database like entities), and databases. This tool was developed for the ISSA Program Office and is not a Program-wide tool. It automates the connection to ISSA host computers and servers, provides automated initialization of workstation software (word processors, spread sheets, etc.) for the user regardless of the location of the software (server or local), and provides the hypercard stacks for the SSPO physical file index, and the SSPO telephone directory, and the database for SSPO action items.

3.2.1.26 PCB - Program Control Book

The ISSA Program Office requires an application for authorized Space Station Program personnel to store and retrieve multi-media Program data via a graphical user interface. The PCB provides these functions. It employs integrated view tools to effectively display charts, drawings, text, and pictures on the computer video display. It provides on-line access and improved reconfiguration capability for Program data (i.e., management emphasis items, AIT and IPT activity, Program top-level schedules, etc.) used in the management of the Program. The PCB is designed to store the information currently displayed in hard copy format in the Space Station Program Office Management Information Center (MIC), located at the NASA/JSC.

3.2.1.27 PDS - Paths Data System

The PDS provides the capability to capture hardware/software connectivity information including wiring interconnects, fluid/gas plumbing, air ducts, network data and control connections and software interfaces. The PDS maintains needed data to support analyses and assessments of ISSA connectivity, logistics, fault tolerance, safety and mission assurance, and flight operations. The PDS will interface with the VMDB. PDS is implemented in 4th Dimension.

3.2.1.28 PLATO - Power Loads Analysis for Timeline Operations

PLATO is a software program that was used to support power loads and timeline analyses on the SSFP. It is currently being considered for use on the ISSA Program.

3.2.1.29 PRACA - Problem Reporting And Corrective Action

The PRACA database system was developed by TMIS to support the recording of design, manufacturing, and operational discrepancies and reportable problems identified during NASA Acceptance and Certification Testing throughout the life of SSFP.

As a reporting and corrective action system, PRACA allows problem reporting, action tracking, analysis, resolution, and trending. The application also provides a repository for nonconformance data.

Every problem input to PRACA must have a Responsible Center identified upon entry. This is the center with responsibility for problem investigation and closure. Users must report to one Responsible Center and one organization. They may view data that has been input from many sources. However, users may update fields that correspond with their privileges.

The PRACA process includes the following:

- Initiation of the nonconformance
- Automatic notification to the Responsible Center
- Comments and updates by authorized personnel
- Viewing and reporting by general users

3.2.1.30 RBDA - Reliability Block Diagram Analysis

RBDA has been requested by the Reliability Group of SRM&QA. The application is PC-based and requires a high-end Machine. The system performs reliability modeling using block diagrams with elements of functionality and failure rates being primary outputs. Input data such as mission length and varying scenarios can be varied by the user. RBDA is compatible with the PDS for hardware connectivity information.

3.2.1.31 RDD-100 - Requirements Driven Design

RDD-100 is a COTS product consisting of an Element/Relationship/Attribute database and tools to support integrated system and behavioral modeling for operational scenarios based on functional decomposition of requirements and specifications, dynamic verification modeling based on behavioral simulations, report generation capabilities and interface capabilities to Teamwork and Interleaf. RDD will also interface with RTM.

3.2.1.32 RMA - Reliability Maintainability Assessment

The RMA application supports maintainability allocations across the ISSA elements and the assessment of these allocations. It works with the Reliability Prediction Program (RPP). It is currently being considered for use on the ISSA Program. 3.2.1.33 RPP - Reliability Prediction Program RPP is a prediction model. It works with the reliability allocations from RMA. It is currently being considered for use on the ISSA Program.

3.2.1.33 RPP - Reliability Prediction Program

RPP is a prediction model. It works with the reliability allocations from RMA. It is currently being considered for use on the ISSA Program.

3.2.1.34 RTIVI - Requirements and Traceability Manager

RTM supports the traceability and connectivity of requirements through the various levels of specifications. RTM supports extension of this traceability and connectivity to test specifications, test procedures, and supports verification closure. RTM provides for partitioning of the database to support management of requirements from various sources and platforms. The RTM implementation architecture is depicted in Figure 3.2.1.35-1.

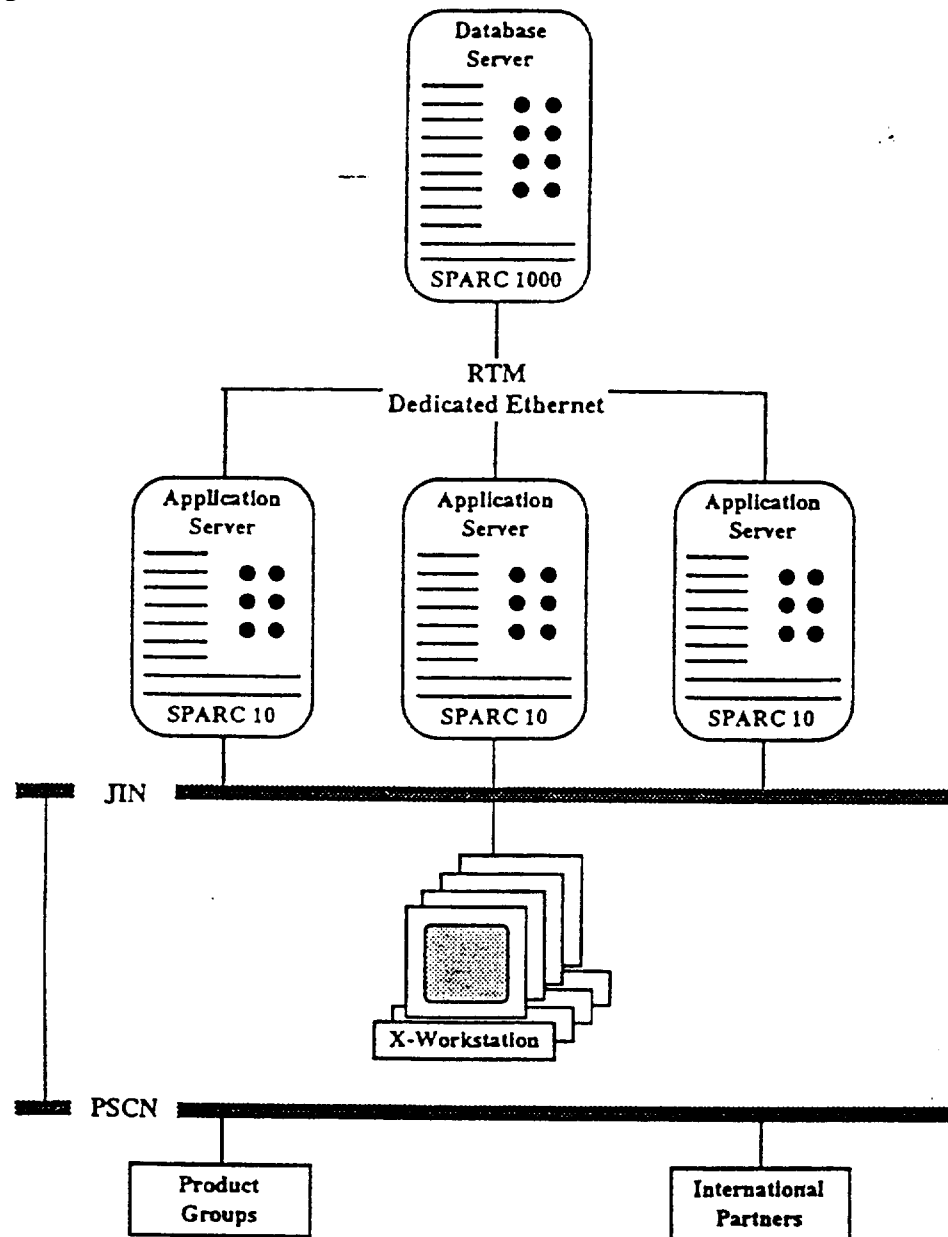


Figure 3.2.1.35-1: RTM Architecture

The implementation is based on a database server and three application servers. Remote access may be provided over the Program Support Communications Network (PSCN) for the Product Groups and the International Partners/Participants. If they so desire, Product

Groups and International Partners/Participants can install RTM at their sites; but they must do so at their own expense.

3.2.1.35 SDST - Supplier Data Sheet Tracking

Supplier data sheets are tracked and reported via the SDST application developed in the Artemis 9000/EX software. This application provides the Program Data Management organization the capability to track Product Group deliverables. The application provides storage, retrieval, and reporting of the due date, date received, and internal Boeing review/response date and item disposition. SDST provides a simple menu user interface for entering/updating information, viewing information on-line, and printing pre-defined reports. SDST provides on-line data entry/update forms and allows on-line interactive queries.

3.2.1.36 SIMSYLS - Simulation of Manned Space Station Logistics Support

The SIMSYLS application, which will [also] be used as a baseline system, is a simulation analysis tool used to model resupply/return demand and orbital operations during the Station acquisition stage. The model simulates operations which pertain to the on-board maintainability and logistics support adequacy of study data:

- Consumables: gases, fluids, and other expendable items during Space Station operation and maintenance,
- Experiments to be changed out on a scheduled basis,
- Scheduled maintenance information including task frequency and time and crew size required to perform a task,
- Mission parameters and requirements,
- Orbital Replacement Unit (ORU) information such as failure and repair rates, support resources, statistics, and criticality to success of the mission.

3.2.1.37 SSE-CM - Software Support Environment Configuration Management

The SSE-CM application will be used by the CM organization as the interim CM tool beginning March 21, 1994. The system will run on a Boeing IS-assigned VAX and be used for change tracking. The specifics of which portions of the application will actually be used are currently being defined.

3.2.1.38 TRASYS - Thermal Radiation Analysis System

The TRASYS application was used to support thermal radiation analysis on the SSFP. It is currently being considered for use on the ISSA Program.

3.2.1.39 UMPL - User Mission Plan

The UMPL provides payload tactical and strategic parameters and supports primary payload tactical integration functions leading to the development of utilization sequences, integration documentation, and payload inputs into the Tactical Operations Plan (TOP). The UMPL will be supported by a User Mission Database using Oracle products.

3.2.2 Program - Wide Applications

3.2.2.1 ARMS - Automated Requirements Management System

ARMS is an interactive system which manages Program requirements, allows traceability from the highest-level to the lowest and demonstrates conformance of lower to higher-level requirements. The primary objective of ARMS is to provide an interactive system which is easy to use and supports tracing and controlling functions without encumbering the requirements development process. The system incorporates menus, outline-style requirement selection, and custom report specifications.

3.2.2.2 ARTS - Advanced RID Tracking System

ARTS is the primary application used to create Review Item Discrepancies (RIDs), track RID dispositions, and track Review Board approved actions. The application provides users with the capability to create, submit, evaluate, disposition, and close RIDs and the capability to have online reporting and review stage traceability. The application also provides the electronic migration of Review Board assigned actions into Directives.

3.2.2.3 PALS - Program Automated Library System

PALS provides the Program with document management capability. PALS is used to store, search, and relieve files that have been placed in defined user collections within logical libraries. The PALS architecture is depicted in Figure 3.2.2.3-1

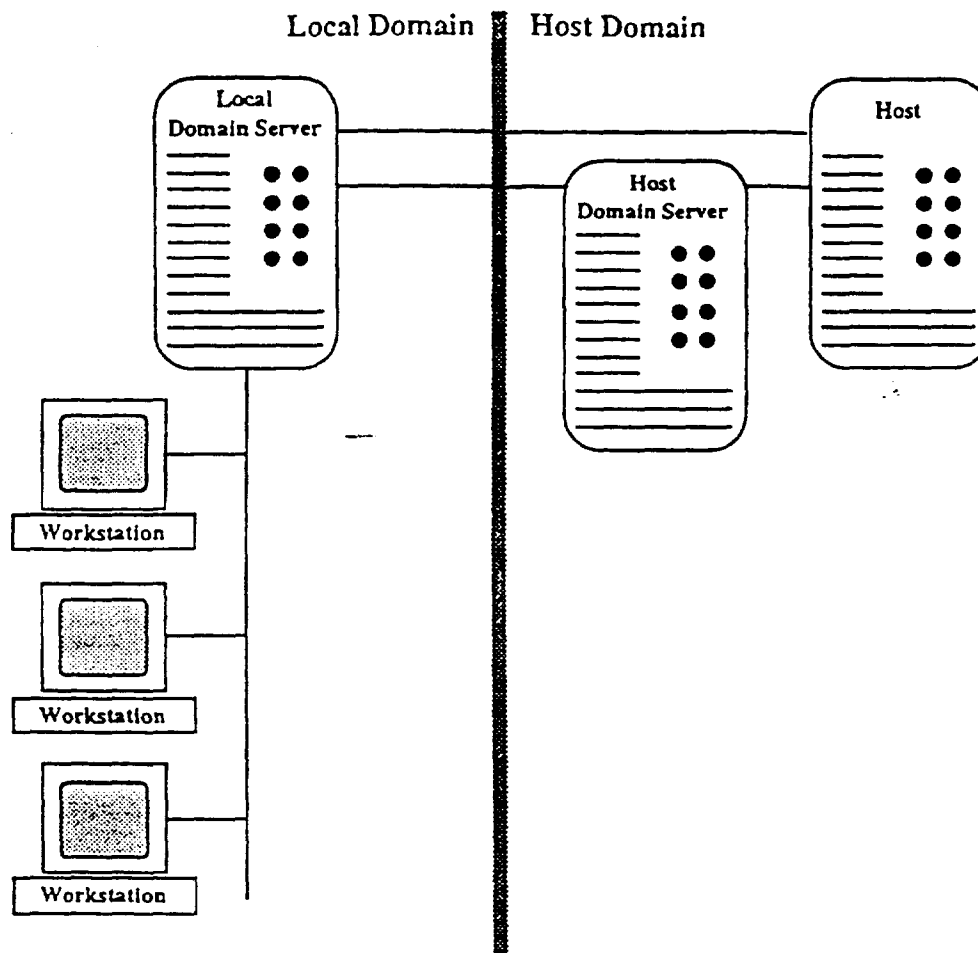


Figure 3.2.2.3-1: PALS Architecture

The architecture consists of a *local domain* for each site, and a central *host domain* for all sites. The local domain consists of user workstations, running either X-windows or character mode, and a local domain server (currently an RS6000). The local domain server supports the user interface via XVT and provides storage for local files. The local domain server can also communicate directly with the host via FTP. The host domain consists of a host domain server (currently an RS6000) and the host itself (currently an ES 9000). User requests for data typically go through the host domain server, which houses the search engine (search logic and indices) for the host. The host is used for actual document storage and security.

3.2.2.4 SSPMAIL - Space Station Program Mail

SSPMail is a program-wide electronic mail system that supports the exchange of information between all of the program's participants. SSPMail is a customization of the DEC All-in-1 product that provides for the creation, addressing, delivery, recipient, response, individual user distribution lists, automated delivery receipts and read receipts, mail forwarding, and it automatically maintains the user directory for All-in-1 users at ISSA SSPO, Product Groups 1, 2 and 3 (McDonnell Douglas, Rocketdyne, and Boeing), MSFC, and LeRC. SSPMail is currently operating as a single integrated E-Mail system for these locations.

SSPMail is currently slated for phase-out. It will be replaced in the Program Office environment by a COTS product, Microsoft Mail. There will be no Program-wide E-Mail application.

4.0 ARCHITECTURE PRINCIPLES AND STANDARDS

This section of the document will discuss the architecture principles and standards that will be followed when making changes to the current/baseline applications.

As described in the IS Plan, Section 5, architecture principles are statements of direction for application analysts developing or modifying IS applications. Principles are also used as decision rules in subject areas where competing but equally valid design solutions are available. Principles are intended to produce applications of consistent architecture which will support the architecture objectives of scalability, interoperability, and maintainability.

Standards, as defined in this document, are those international, industry, and proprietary standards, and in some cases product standards, that are adhered to in application development and maintenance.

4.1 ARCHITECTURE PRINCIPLES

4.1.1 Application Acquisition

As stated in the IS Plan, Section 4, a fundamental application strategy is to integrate existing applications rather than create applications. This leads to a fundamental principle: *Whenever possible, acquire application software; do not build from scratch.*

4.1.2 Hardware Independence

An major objective of the ISSA-IS is to be platform independent. The implementation of open systems by the hardware vendors will accomplish this over time. In the interim the following principle is required: *Buy, and if necessary, build software to be hardware independent.*

4.1.3 Separation of Applications and Data

Another major objective is to achieve independence of applications from specific data and data structures. The principle for achieving this is as follows: *Embed no data in applications and make applications independent of data structure.*

4.1.4 Non-Duplication of Data

Elimination of data duplication and inconsistency is another major goal. This implies the following principle: *Data elements should be entered once and used many times, and applications should interact with one another through shared databases.*

4.1.5 Office Automation Software

Workstation and office automation software is maturing and is being introduced rapidly. This leads to the following principle: *Buy office automation software.*

4.1.6 Utilize Current Program Inventory

Workstation software is rapidly becoming platform independent or being supplied to run on multiple platforms. This leads to the following principle: *Buy or build only software that executes on workstations in the Program inventory.*

4.1.7 Software Development Life-Cycle (SDLC) Methodology

Although it is expected that there will be minimal systems development, there will be some, leading to the following principle: *The Boeing D&SG software development methodology, defined in D658-10283-01, will be employed.*

4.1.8 Operating Systems

A major objective is to minimize the variability of the IS environment. Implementation of client/server applications will assist. In addition, the variability of the delivery system contributes to the complexity; therefore, the principle: *Do not introduce new operating systems at the server and host levels.*

4.1.9 Training

Any application that is put on a computer to be used must be supported by training of some sort; therefore, the principle: *If we provide the application, we will support the training.*

4.1.10 Derive Database Table Design From the PIDM

If database table design is driven by the requirements of particular application programs, a set of non-integrated, application-specific databases will result. This would be contrary to the long-range goals for ISSA-IS. On the other hand, if database table design is derived from the PIDM, integrated databases will result. This implies the following principle: *Derive database table design from the PIDM--not from the requirements of particular application programs.*

4.1.11 Avoid Data Duplication

If data are to be shared across multiple applications in a reliable, consistent manner, it is preferred that there be only one occurrence of each non-key data element. Otherwise, it will be possible for one application to update one occurrence of the data element and another application to update another occurrence in an inconsistent manner. This leads to the following principle: *Avoid duplication of non-key data elements in ISSA-IS databases.*

Decisions to duplicate data elements (e.g., to enhance performance) must be reviewed and approved by the ISSA-IS Data Management organization.

4.1.12 Normalize the Data

Poor database design can lead to the both loss of information and to the creation of redundant information during update operations. The so-called anomalies of deletion and insertion will occur in databases that are not designed in accordance with the rules of normalization. Therefore, *normalize ISSA-IS database tables to the appropriate canonical form.*

Decisions to de-normalize (e.g., to enhance performance) must be reviewed and approved by the ISSA-IS Data Management organization.

4.1.13 Strive for Platform Independence

A major objective for the ISSA-IS is to be platform independent. This implies the following principle: *Search for middleware that eliminates DBMS-platform coupling. In the absence of such middleware, select DBMS products that run in a wide variety of hardware platforms.*

4.1.14 Minimize the Variety of DBMSs

Another major objective of the ISSA-IS is to minimize the variability of the IS environment. Variability has a direct impact on maintenance, training, and staffing costs. The following principle will contribute to the minimization of variability: *Minimize the number of DBMS products in use.*

4.1.15 Delivery System Objectives

The delivery systems objectives for the ISSA Program are as follows:

- The delivery system will support the requirement for a flexible and scaleable solution.
- The delivery system will provide required levels of reliability, availability, accessibility, security, and cost performance.
- Future systems will be distributed, and based on client/server architecture when possible.
- Industry standards will be used for user interface components.
- The ability to replace individual delivery system components will not be constrained by other components.
- Variability will be minimized and unnecessary variety will be eliminated to limit costs.

4.1.16 Delivery System Strategies

The delivery systems strategies for the ISSA-IS are as follows:

- Ensure cost effectiveness through standards on workstations, LANs and servers.
- Use server-based software to limit procurement costs.
- Utilize ISD services and standards.
- Share devices and systems when possible.

4.2 APPLICATION, DATA, DELIVERY SYSTEMS STANDARDS

Standards will be employed during the life cycle of the applications developed or maintained by the ISSA-IS organization.

As of this writing, there are few, if any, industry or national standards that address the subject of applications. D658-10283-01, Information Systems Technical Reference Model, will serve as the source for direction for the design of new applications for ISSA. As applications standards are developed, they will be included in the Technical Reference Model and in this document.

Given the absence of industry-recognized standards, the ISSA-IS organization will employ product standards as a key strategy for posturing for future industry standards. Minimizing the variety of programming languages and DBMSs will provide a solid base for implementation of standards when they become available, and will minimize the training requirements of the IS organization.

- New information systems will implement an application client server model as documented in D658-10283-01.
- The Open Database Connectivity (ODBC) standard will be used for Database access.
- C will be the standard programming language for server-based and host-based applications.
- In the near term, the standard DBMS for new development will be Rdb.

4.2.1 The Relational Database Model

The relational database model is the standard high-level database model for ISSA-IS databases. All new database design will conform to this model.

4.2.2 Database Design and Implementation Procedures

Database Design: Data requirements for all new ISSA-IS application must be coordinated with the ISSA-IS Data Management organization. This organization will assist the application developers in the database design.

The data requirements for a new application will be mapped to the PIDM.

- If the requirements exceed the current scope of the PDM, the PIDM will be revised to accommodate them.
- For requirements that can be satisfied by existing PIDM database tables, those tables will be used for the new application, and no new database design will be pursued.

If new database design is required, it will proceed from the top down: through the instantiation of the appropriate entities and associations documented in the PIDM

All ISSA-IS database designs will be documented in fully attributed data models with all many-to-many relationships resolved. These data models will be placed under configuration control.

Database Implementation and Maintenance: Database table definitions and Data Definition Language (DDL) source code will be under configuration control. All new tables will be created by the ISSA-IS Data Management organization, and initial loads will be coordinated by the ISSA-IS organization. All Database Administration (DBA) functions will be performed by the ISSA-IS Data Management organization.

New databases will be implemented as shared-resource database. In accordance with Section 1.0 above, newly developed ISSA-IS databases will not be owned by individual applications.

4.2.3 Naming Standards

Database names and fields names must meet the standards set forth in TSS 30551, Space Station Freedom Program Office Data Naming Standards.

4.2.4 Standard Products

4.2.4.1 DBMS

In the near term, the standard the standard DBMS for new development will be Rdb, to maintain consistency with existing PIDM databases. At the appropriate time, the ISSA-IS DBMS standard will be reviewed and, probably, revised.

4.2.4.2 Data Modeling

The standard tool for configuration controlled ISSA-IS data models is Oracle CASE*Designer. Prototyping may be clone with other tools (e.g., ERWin/ERX), but configuration controlled designs must be documented in CASE*Designer.

4.2.4.3 Data Dictionary

The standard data dictionary tool is Oracle CASE* Designer. The PIDM will be used to generate the Program Data Dictionary (PDD).

5.0 REQUIREMENTS AND IN-PROCESS/PLANNED CHANGES

This section of the document identifies the in-process and planned changes to the application configuration. There are separate subsections for Boeing applications, non-Boeing Program Office applications, and Program-side applications. Each subsection is arranged alphabetically by subject area.

This section also identifies the data-related activities that are either currently in process or planned for the near future. These activities fall into three categories: (1) DRM, (2) New Database Development, and (3) Data Interface Definition. A separate task sheet is provided for each of these categories.

The referenced task sheets will be the source for cost and schedule information.

5.1 NON-BOEING PROGRAM OFFICE APPLICATIONS

5.1.1 Action/Issue Tracking (ATA) -

In the first quarter of Fiscal Year (FY) 1995 ISSA-IS will integrate the requirements of the three existing action item tracking systems and select one of the three applications for modification such that it will satisfy all SSPO action tracking requirements. The modified application will be the ATA application. Data from the existing application will be transferred to the integrated system and the other systems will be discontinued. The ATA will meet specific SSPO requirements for: the assignment of actions to organizations and subsequent reassignment by the organizational manager to the appropriate individual; generic data entry/update screen forms; specific hard copy report formats; and identification of user roles and their associated write/delete privileges.

5.1.2 Bulletin Board (BB) -

The ISSA on-line BB is in the start up phase. The client and server products are public domain and available on the Internet. The client software requires compilation, linking, configuration, testing, and user IDs and password setup. This activity has been completed on a Unix platform and the initial BB is operational. These tasks are in process on the VMS host. Upon completion of the VMS setup and test ISSA-IS will select a host and, if the VMS host is selected, transfer the then current BB content. The client software is in use on the PC and Macintosh platforms. The PC client requires some modification and reconfiguration to establish the program security requirements. The Macintosh client software is performing satisfactorily and no changes are in work or planned.

5.1.3 Change Management -

CM personnel require an action item tracking system, to be satisfied by the Action Item Tracking System (AITS); and they need to participate with CM to implement CACTIS. (See Section 5.2.4 below.) AITS will be maintained through FY 1994. In the first quarter of FY 1995, ISSA-IS will integrate the requirements of the three existing action item tracking systems and select one of these three applications for modification such that it will satisfy all SSPO action tracking requirements. Data from the existing application will be transferred to the integrated system and the other systems will be discontinued.

5.1.4 Configuration Management (CACTIS) -

The CM Group is in the process of redefining their baseline systems. The initial interim application of choice was Configuration Status Accounting System (CMSAS). In recent days a decision was made to move to the SSE-CM application while the new baseline system, CACTIS, is prepared for release. A decision is also forthcoming on the Automated Configuration Status Accounting System (ACSAS).

CACTIS is a new application, currently in the requirements gathering and analysis phase of development. CACTIS will be used by both the Program Change Management Group and the CM Group. The CACTIS application requirements will be evaluated against current DM2000 production capabilities

5.1.5 Correspondence Management -

Sustaining activity only.

5.1.6 Data Requirements -

Sustaining activity only.

5.1.7 Design Analysis Environment -

The Design Analysis Environment focuses on evaluation of the ISSA design and how that design will perform in an operational environment. The applications and processes provide for:

- Assessing design to specifications
- Fault tree analysis
- Reliability allocations
- Maintainability allocations
- Power loads timeline analysis
- Failure modes effect analysis
- Critical item identification analysis
- Operational effectiveness
- Connectivity analysis
- Parts management analysis

The environment consists of numerous applications. Some of these are stand-alone applications while others are integrated and share common Databases. The "assessment of design to specifications" will be supported by the COTS product RDD-100 and will interface to the COTS product RTM. "Connectivity analysis" will be supported by PDS. In other areas of the Design Analysis Environment, final selections for the baseline application has not been completed. Multigraph may be the desired product for "failure, modes effect analysis" or some other existing product such as the Mission Operations Directorate's (MODs) Failure Environment Analysis Tool (FEAT). Some other candidate tools for the Design Analysis Environment are:

- CAFTA
- RPP
- RMA
- PLATO

The Design Analysis Environment applications will be a user and provider of data in the VMDB and provide documents and reports to PALS.

Current effort is the procurement of the RDD-100 software product to replace those on loan to the ISSA and replacement of loaned equipment with equipment from the SSFP inventory. This product will be used by the Prime Contractor and the Product Groups for consistency of results. SSFP Licenses for this product are being reviewed for applicability. The product will be rehosted on HP equipment if available. Current budget estimates assume a complete buy of the RDD-100 product and processes are included in this effort

Another effort is the development of PDS currently being done by General Research Corporation (GRC) and transitioning this system to IS. Three releases of the PDS are planned with an option for a fourth release if needed. GRC is currently under contract to deliver this product.

Intermediate plans are to develop a more effective interface between RDD-100 and RTM, offload some of the Interleaf requirements to the Interleaf servers, continue improving print capabilities, balance the workload more efficiently and improve system administration processes, and continue identification and evaluation of tools to support the remaining functions of the Design Analysis Environment.

Future plans call for determining and establishing the interfaces to other systems such as CM in order to follow changes to specifications and design. Vendor upgrades of products supporting the Design Analysis Environment are planned on an annual basis occurring during the first quarter of each fiscal year. Hardware for this environment is expected to be replaced during the life-cycle of the ISSA.

In addition to the normal workforce assigned to this environment, it is supported by an Engineering Support Team responsible for backup and disaster recovery, use of nonstandard loads on workstations, including user assistance, quick resolution to problems, system administration of in-place Unix-based platforms, and assembly, load, and test of Unix platforms.

5.1.8 Engineering Drawing Environment -

The Engineering Drawing Environment consists of applications and processes to provide for:

- Drawing Creation
- Drawing Revisions
- Drawing Control
- Drawing Data Management
- Drawing Viewing
- Element Integration
- Integrated Schematics
- Design Interfaces
- Drawing Releases

The environment is a CAD tool set and databases providing interactive drawing capability, parts information, parts lists for assembly, indented parts lists, "where used" information, and other drawing information.

Current efforts in this environment are the installation of the Intergraph servers and plotters, replacement of loaned equipment with equipment from SSFP, transference of the transition database from the Huntsville server to the Houston server, support for integrated schematics from the Prime Contractor, interfacing this environment with the EDLS for loading, unloading, and viewing of drawings, Intergraph system administration, and Informix database administration and programming.

Intermediate plans are to support a drawing release process for the Prime and to develop prototype processes for interfacing with the VMDB including viewing of drawings from Product Groups and other sources. Continue to support special request for drawings.

Longer range plans are to mature the interface and interaction with the VMDB, develop and provide reports as required, and support special request for drawings. Sustaining engineering will be provided and include system administration, database administration/maintenance and user support. Vendor upgrades are planned on an annual basis, generally during the first quarter of each fiscal year. It is expected that the Intergraph equipment will be replaced during the life-cycle of the ISSA.

In addition to the normal workforce assigned to this environment, it is supported by an Engineering Support Team responsible for backup and disaster recovery and quick resolution to printing and plotting problems.

5.1.9 Integration/Verification Environment -

The Integration/Verification Environment consists of applications and processes tracing requirements through the various levels of specifications, relating these to design and verification processes and supports verification closure. The environment provides for:

- Requirements Management
- Test Plan/Execution/Tracking/Reporting
- Verification Closure
- Interface Maintenance

The environment consists primarily of two major applications built around COTS products.

- RTM
- ICDSYS

Requirements management and verification closure will be supported by RTM. RTM depends on the Oracle RDBMS for Database management and Interleaf for report and document production. RTM will interface with RDD. Interface control and maintenance will be supported by a system built around Teamwork, Interleaf and an Oracle Database to manage Interface Control Documents. The Integration/Verification Environment will interface with the VMDB and PALS.

Current efforts in this environment include development of the RTM system. This requires replacement of loaned hardware and software with equipment from SSFP, acquisition of some additional hardware and the RTM software, development of the RTM servers for the Prime and the Product Groups, development of servers and engineering workstations. To support RTM, transitioning system administration to IS personnel, and development of the processes required for this database system to support the verification process effectively.

The procurement and installation of RTM product requires an initial buy of hardware in addition to procurement of the RTM product. This initial buy is for two two-processor servers for the Prime Contractor's database server. These servers are planned to be upgraded to four-processor servers in the future and as loading increases. This initial buy also includes consulting services from the vendor which will be required as this system is being constructed from mixed SSFP equipment. Also included is training for the RTM product.

A recent effort is the development of the system to support the ISSA Software Interface Control Documents. This system will require Teamwork, Oracle products, Interleaf, and interface to VMDB and PALS. The Interface Control Document System (ICDSYS) will be built from existing SSFP HP hardware and software for which licenses exist. However, the HP platforms will require memory expansions and the addition of some tape drives to support backup and disaster recovery. These servers and workstations are planned to be replaced in later years.

Longer range plans require development of the interfaces and procedures between RTM and CM. Vendor upgrades to the products supporting the Integration/Verification Environment are planned on an annual basis, generally during the third quarter of the fiscal year.

In addition to the normal workforce assigned to this environment, it is supported by an Engineering Support Team. This team is responsible for backup and disaster recovery, nonstandard loads on workstations, user assistance, system administration of in-place UNIX-based platforms, and assembly, load, and test of UNIX platforms.

5.1.10 Logistics (SIMSYLS) -

SIMSYLS is a simulation analysis tool used to model resupply/return demand and orbital operations requirements. SIMSYLS is maintained and administered at KSC. SSPO personnel access SIMSYLS through Telnet and FTP via the existing PSCN environment. The ISSA-IS organization will support the use of SIMSYLS by coordinating network connectivity from JSC to the PSCN link.

5.1.11 Metrics Data (MDR)

MDR as a component of the overall ISSA-IS is required to meet the unique requirements of the SSPO metrics user Community. It is a flexible, segmented, expandable database developed on an RDBMS and is capable of operating on a Unix or VMS host. Metric data is created in a number of COTS products (Excel, MS Word, Lotus, etc.) and custom applications (ISPA, SDST, DRT, etc.) and the MDR is the repository for those metrics required by Program Management to the Program and the ISSA resources. The development effort is focused on delivering a prototype system, gathering user input relative to the prototype, and then updating the prototype in accordance with the use input. This development effort includes providing the capability to create graphical reports and exporting these graphics for storage in the PCB. The PCB retains the function of user viewing of the graphics. As stated in D684-10057-01, Performance Metrics Plan, the MDR will not include cost data.

5.1.12 Micro-Gravity Environment -

The Micro-Gravity Environment focuses on behavior of the ISSA in space. It consists of applications and processes for:

- Integrated Thermal Analysis
- Finite Element Modeling
- Solid Modeling
- EMI Analysis
- Acoustic Analysis
- Meteoroid/Orbital Debris Analysis
- Robotics Analysis
- On-Orbit Structural Loads & Vibrations

Some applications will support more than one of the areas identified above. Finite Element Modeling could be supported by NASTRAN and IDEAS. Thermal analysis could be supported by TRASYS. Many of the Micro-Gravity Environment applications will be users and providers of data in the VMDB. Results of analyses will be documents and reports to be stored in PALS.

The current effort in this environment is to deploy selected components from SSFP, including hardware, systems software, and applications. Analyses are being conducted as to where some of the larger applications such as NASTRAN should be hosted. Other applications are being evaluated to determine the "best fit" to the requirements.

The Micro-Gravity Environment is composed of equipment and software from the SSFP. It contains four RISC6000s, two DECStation 5000s, one DECStation 6000, and one Macintosh Quadra 950. Applications are assigned to specific platforms and are generally long running applications. These platform are expected to be replaced during the life-cycle of the ISSA. Vendor upgrades are planned on an annual basis for the second quarter of each fiscal year.

In addition to the normal workforce assigned to this environment, it is supported by an Engineering Support Team. The team is responsible for backup and disaster recovery, nonstandard loads on workstations, user assistance, system administration of the platforms, and assembly, load and test of the platforms.

5.1.13 Mission Build Environment

The Mission Build Environment consists of applications and processes to provide for:

- Simulation Software Builds
- Flight Software Builds
- Ground Reconfiguration Data

This environment supports the acceptance, integration and testing of flight software products from multiple sources. It provides software and data for simulations, testing, training, and interfaces with other facilities in preparing for final flight loads. As the MDMs are table driven, the configuration and loading of these tables for simulations, testing, training and mission with data to support each configuration will be provided by this environment. This environment interfaces with the VMDB for flight software information and reconfiguration information.

Current efforts in this environment are supporting definition, requirements, design and

implementation planning of the MBF; support sizing and compiler timing studies for development/integration/test of flight software supporting analyses of the software products required by the facility; and supporting analyses of interfaces to the VMDB and CM.

Intermediate efforts will be supporting the selection of the computer hardware and system software from the SSFP equipment inventory; supporting the design of the ground reconfiguration database supporting security administration in terms of risk analysis and risk management; and design of interfaces to the SSVTF.

Longer range plans are development and implementation of interfaces to the CM system; interfaces to the VMDB; interfaces to the SSVTF; development of user guides and system administration procedures facility operations; and sustaining engineering.

5.1.14 Mission Planning/Operations Environment -

The Mission Planning/Operations Environment consists of applications and processes to provide for:

- Resource planning/management
- Assembly sequence
- Payloads
- Launch packages/return cargo
- Crew planning/procedures
- Event Simulations
- Safety

The environment consists of applications focusing on space operations. The candidate applications to support this environment have not been completely identified at this time. It is anticipated that many of the applications developed and proven on the Shuttle Program can be used. Some candidate applications are:

- Shuttle Payloads System (SPS)
- SIMSYLS
- Crew Chief
- Simulation Activation Services (SAS)

This environment will also use some of the applications from other environments. PDS used in the Design Analysis can be expanded to include AAA and further expanded to interface with the MOD Activation and Checkout Procedures. The Mission Planning/Operations Environment will interface with the VMDB and provide documents and reports to PALS.

The Mission Planning/Operations Environment currently consists of two RISC6000s, three HP/Apollo 715s, and a Sun SPARC2. Vendor upgrades to software products are planned on an annual basis during the fourth quarter of each fiscal year. It is expected that the hardware platforms will be replaced during the life-cycle of the ISSA.

Current efforts in this environment are development of the MMPL, the UMPL, and the AAA. This includes bringing up the hardware and system software, development of the-system administration procedures and user guides, and incorporating approved changes to the applications.

Intermediate plans are to develop the necessary interfaces to the Design Analysis Environment to support operational scenarios and models, develop interfaces to the VMDB, and continue analysis of other applications to support the functions of this environment.

Longer range plans are to select and implement applications to support mission planning and operations and the program progresses toward launch and space operations. Continue to evolve applications toward the ISSA-IS data model, and sustaining engineering.

5.1.15 Parts Management-

The EEE Parts Management Group is currently in the process of reviewing two software applications for tracking parts.

5.1.15.1 CAFTA

CAFTA is a PC-based fault tree analysis tool. As the ISSA Program matures, CAFTA will be utilized by the safety engineering organization to analyze potential top-level undesired events and the secondary events contributing to the top-level undesired events. The ISSA-IS organization will coordinate the hardware and software maintenance required to support CAFTA.

5.1.15.2 EPIMS

The functionality of the EPIMS application, implemented on Ingress, can be grouped into three high level categories:

- EEE Parts Reference Information,
- Analysis Tools -- Cross referencing alerts, advisories, and problem reports to parts lists,
- Information Capture -- Various types of parts lists

The ISSA-IS organization will support the utilization of EPIMS by coordinating the system administration and maintenance activities.

5.1.15.3 EPSA

The EPSA application, implemented on the Oracle Database, was developed at Rocketdyne. The system provides engineering data, CM, EEE parts lists, and product assurance. A future release will also contain surveys, NSPARs, and failure analysis capability data. The ISSA-IS organization will support the installation and migration of future EPSA releases.

5.1.16 Program Management Tool -

5.1.16.1 PFI - Physical File Index

A requirement for a database to store, search, and report on the location and content of SSPO hardcopy files has been identified by the SSPO. When resources become available ISSA-IS will coordinate the detail requirements with the SSPO and implement the application.

5.1.16.2 PPI - Program Presentation Index

A requirement for a database to store, search, and report on significant Program Presentations has been identified by the SSPO. When resources become available ISSA-IS will coordinate the detail requirements with the SSPO and implement them in an RDBMS.

5.1.17 Publishing -

Sustaining activity only.

5.1.18 Scheduling -

ISSA-IS and PP&C began a joint development effort to produce the ISPA in November 1993. The schedule integration process and application requirements have been coordinated with the Product Groups and the Prime scheduling team. ISPA is being implemented in the ARTEMIS scripting language (Al) and therefore will only operate in the MVS/TSO/ESA environment in conjunction with the ARTEMIS 9000 Ex version 1.1.2 or greater product. The delivery system independence specified in Information Systems Architecture document (D684-10064) is not achieved in this application. ISSA-IS is working with the vendor and conducting a study to determine if a client-server application would be a cost effective alternative to the mainframe based application. The cost estimate and major schedule milestones for the mainframe system development effort and the study are included in the task sheet. The cost of this transition will be determined by the study and approval of the Business Management AIT is required prior to implementation.

5.1.19 SRM&QA-

5.1.191 PRACA

As a problem reporting and corrective action system PRACA facilitates problem reporting, action assignment, analysis, resolution, and trending. PRACA also provides a repository for non-conformance data. The ISSA-IS organization will maintain PRACA at JSC. The ISSA-IS organization will also test and implement PRACA and develop system interfaces as required with the Product Groups.

5.1.19.2 RBDA

RBDA will be utilized by the Reliability Engineering organization. REDA is a PC-based application. REDA performs reliability modeling using block diagrams with elements of functionality and associated failure rates being the primary outputs. The ISSA-IS organization will coordinate software installation, troubleshooting, and hardware/software maintenance activities to support RBDA.

5.1.20 Supplier Data Tracking -

The study described in section 5.2.18 includes the SDST application. If the study identifies a cost effective alternative to the mainframe ISPA then the SDST application will migrate to the same client-server system as the ISPA. The cost of this transition will be determined by the study and approval of the Business Management Air is required prior to implementation.

5.1.21 Tier III CUI -

The ISSA CUI was developed to allow utilization of the ISC standard PC configuration and to provide SSPO employees access to program applications through a standard user-friendly interface. CUI is Windows-based and icon-driven. CUI also supports scripts. The ISSA-IS organization is responsible for CUI maintenance and administration Enhancements and product upgrade development and testing will be performed in conjunction with the JSC Institutional Information Systems Contractor (JSC-ISC).

5.2 PROGRAM-WIDE APPLICATIONS

5.2.1 Documentation Management (PALS) -

Rehosting the PALS application to RS6000's is being reviewed as a cost savings move. If savings are achievable, the project will be implemented.

5.2.2 Electronic Mail - Task Sheet #51

E-Mail systems are rapidly changing throughout the ISSA Program. NASA and the ISSA contractors are migrating from large host based applications (PROFS & All-in-1) to smaller mail server applications (MS Mail, cc:Mail, Quick Mail, etc.). ISSA-IS will pursue this same approach. The NASA JSC standard E-mail application is Microsoft Mail (MS Mail). This product is provided on every PC and Macintosh workstation supplied and maintained by the NASA JSC ISD. MS Mail servers, software, administration, and operations are currently provided by ISD for the SSPO. ISD maintains the center-wide user ID look-up capability via the X.500 directory and ISD maintains the hardware, software, system administration and operations personnel for the SSPMail system. There is no technical requirement for two E-mail systems and maintaining both systems burdens the program with unnecessary costs. Therefore ISSA SSPO will migrate from SSPMail (All-in-1) to MS Mail. The transition period will be from May 1, 1994 through September 23, 1994. ISD will provide training and user support for MS Mail and ISD will continue to operate the SSPMail system until the transition is complete. Completion of this migration will eliminate the cost of maintaining hardware, software, system administration labor, and operations labor for the SSPMail system. ISSA-IS will coordinate connectivity issues, support the establishment of interfaces for external E-mail systems, and continue the All-in-1 application maintenance tasks until the transition is complete.

5.2.3 Requirements Traceability (ARMS) -

The Prime and the Product Groups have agreed to use RTM instead of ARMS. ARMS will continue to be used by Rocketdyne International. Usage by International Partners/participants is unknown at this time. If it turns out that Rocketdyne International is the only user of ARMS, ISSA-IS will undertake to transfer ARMS responsibility to them.

5.2.4 Review Management (ARTS)

ARTS will be maintained through the transition Program and discontinued after traction.

5.3 DATA RESOURCE MANAGEMENT (DRM) -

As stated in the IS Plan, the ISSA-IS organization strategy is to pursue a plan of phased migration from a baseline set of legacy systems to an integrated shared-data environment. Several tasks need to be completed before this course can be followed.

5.3.1 Documentation of the As-Is Architecture

In order to control the environment and plan effective changes to it, the current data architecture must be thoroughly understood and documented. Each of the databases currently in use must be modeled (reverse-engineer modeling), and all data entities, attributes, and relationships must be accurately documented. This will enable the ISSA-IS organization both to understand the current configuration and its physical implementation and to identify areas of data redundancy among the databases and process overlap among the applications.

5.3.2 Definition of the Enterprise (Enterprise Model)

An enterprise-level ISSA data model is required to document the nature of the business and provide a top-level definition of the data requirements for the ISSA-IS. Conceptually, the enterprise model will also serve as a bridge between the AS-IS architecture and the Target Architecture.

5.3.3 Definition of the Target Architecture (PIDM and PDD)

The key role of the PIDM is described in this document. In general, the PIDM will provide direction for all future database design and implementation activity. The PIDM will also be used to generate the Program Data Dictionary (PDD). Conceptually, the enterprise model will also serve as a bridge between the AS-IS architecture and the Target Architecture.

5.3.4 Strategic Planning

Based on the user's input and the analysis of the existing data architecture, a prioritized list of functional areas which require improvement will be maintained. The goal of this task is to facilitate continuous improvement of the data architecture by focusing on the high return items. This planning effort is critical in the existing environment where the Space Station integration effort cannot wait for the ultimate IS solution to be completed. A periodic review of the top priorities within the data architecture is necessary to provide adequate response to the needs of the ISSA-IS users.

5.3.5 Definition of Data - Related Processes

There are a wide set of processes which surround the data architecture. IS will participate in the definition of any processes which affect the data architecture. Sample processes include the following:

- Electronic data receipt from PGs, IPs, or Work Centers,
- Data delivery to data architecture users,
- Add, modify, or delete processes for data,
- Archiving of data, and
- Review and approval of data model changes.

The goal of this task is to create an orderly, defined, and documented environment without suffering from undue bureaucracy. Continuous improvement depends on the organization's ability to define a process and learn from mistakes.

5.4 NEW DATABASE DEVELOPMENT -

5.4.1 Vehicle Master Database (VMDB)

The VMDB will be the first implementation of the DM2000 concept. SSP 50020, VMDB Plan, contains the implementation plan and schedule for the VMDB.

5.4.2 Mission Build Facility Database (MBFDB)

The goal for the MBFDB is to provide the following data services:

- A central library for flight software and data,
- A central library for the ground reconfiguration data,
- Decision support data for accepting, validating, and promoting to a controlled state the flight software and data CSCI deliveries from the PGs.
- CM for the controlled versions of the central repositories,
- Reporting and distribution of information from the controlled libraries, including read-only and download access to configured items,
- Reporting of status, jeopardies, issues, impact, resolutions, and security incidents, to participating organizations and responsible management.

5.4.2.1 Central Software Library (CSL)

The CSL, previously called the Flight Software Repository, is the portion of the MBFDB that houses all flight software and data. The contents of the CSL are traceable to the information in the Central Data Library (CDL).

5.4.2.2 Central Data Library (CDL)

The CDL, previously called the Ground Reconfiguration Database, is the portion of the MBFDB that houses the data that can be reconfigured in orbit.

5.6 Host Processors -

5.6.1 Current Configuration

The current host architecture is dictated by current applications in use on the Program. It consists of both IBM mainframe and VAX hosts.

IBM Mainframe: An IBM ES9000 is host to the Program Automated Library System (PALS) applications. (For more detail, see the description of PALS in D684-10064-01, ISSA-IS Application Architecture.) The host is accessible to users via both SNA and TCP/IP protocols. The current configuration is delineated in Table 5.6.1.1-1.

Architecture Component	Platform	OS	Product
Host	IBM ES9000	MVS	Oracle IBM Telnet IBM FTP IBM TCP/IP IBM 327x IBM SNA

Table 5.6.1.1-1: Host Processors (IBM)

VAX Hosts: ISSA has two DEC VAX clusters. They host the Electronic Drawing Library System (EDLS) and will host the Vehicle Master Database (VMDB). They also host DEC's All-In-One as the E-Mail product with gateways to platforms using SMTP NBS or X.400. VAX host are accessible to users via both DECnet and TCP/IP. The configuration is delineated in Table 5.6.1.1-2.

Architecture Component	Platform	OS	Product
Host	TM0003 VAX Cluster DEC VAX 6420	VMS	DEC All-In-One X.400 DECnet TGV Multinet TCP/IP
	TMISL2 VAX Cluster DEC VAX 6320	VMS	X.400 DECnet TGV Multinet-TCP/IP
	PRVAX DEC VAX 6510	VMS	DEC All-In-One Oracle DECnet Wollongong TCP/IP
	DEVAX DEC VAX 7610	VMS	Oracle DECnet Wollongong TCP/IP
	DS1 DEC VAX 7610	VMS	DEC All-In-One Oracle DECnet DEC X.25 DEC LAT Wollongong TCP/IP Ungermmmmmann-Bass XNS Appletalk
	DS2 DEC VAX 7610	VMS	DEC All-In-One Engineer Dwg Lab System (EDLS) DECnet DEC X.25 DEC LAT Wollongong TCP/IP Ungermmmmmann-Bass XNS Appletalk
Micro-host	VAXstation VAXstation VAXstation VAXstation MicroVAX MicroVAX		Configuration TBD Configuration TBD Configuration TBD Configuration TBD Configuration TBD Configuration TBD

Table 5.6.1.1-2: Host Processors (VAX)

The All-In-One E-Mail product is currently being phased out and replaced by Microsoft Mail.

5.6.2 Future Strategies

Over the near term, studies will be initiated to determine what roles the current host systems will play as future architecture system components.

5.7 Servers -

5.7.1 Current Configuration

The ISSA-IS currently supports three types of servers: LanMan, Novell, and Unix. The basic server architecture is depicted in Figure 5.7.1-1.

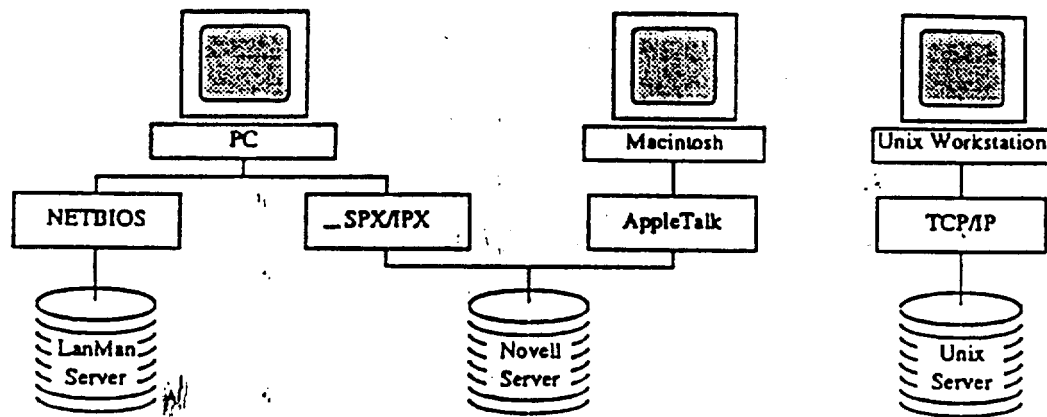


Figure 5.7.1-1: Basic Server Architecture

Servers are used both for applications and for file service.

Applications are made available to users via the network from centralized servers. This server monitors use and allocates the applications according to the number of licenses available. Currently, Novell platforms serve DOS and Macintosh applications, and RS6000 and Sun SPARC platforms serve Interleaf to X-terminals. The current application server configuration is delineated in Table 5.7.2.1-1. The file server configuration is delineated in Table 5.7.2.1-2. In addition, the ISC Data Support System (DSS) supports various Macintosh file servers. (See MDC 91H0544, Rev C, JSC Data Support System Configuration Document.)

5.7.2 Future Strategies

Strategies for the future include consolidating the types of servers to minimize variety and reduce the associated costs. Current plans include a move away from LanMan and NETBIOS. Decisions in this area will be influenced by the standards supported by JSC-ISD

Architecture Component	Platform	OS	Product
Application Server	Intel-based PC	DOS	Novell Netware MS Office IPX NLM Appletalk NLM
	Intel-based PC	OS2	IBM LANMAN MS Office
	RS6000	AIX	Interleaf Oracle IBM TCP/IP
	Sun SPARC	SunOS	Interleaf Oracle RTM TCP/IP
	DECstations	Ultrix	RDD-100 Micro-Gravity Applications TCP/IP
	Intergraph	UNIX	Informix Oracle TCP/IP

Table 5.7.2.1-1: Application Servers

Architecture Component	Platform	OS	Product
File Server	Intel-based PC	DOS	Novell Netware IPX NLM Appletalk NLM
	Intel-based PC	OS2	IBM LANMAN
	Apollo	DomainOS	NFS TCP/IP

Table 5.7.2.1-2: File Servers

5.8 Workstations -

5.8.1 Current Configuration

Several types of workstation configurations are supported, giving the users a choice of the operating system with which they are most comfortable. The current workstation-set is delineated in Table 5.8.1.1-1.

5.8.2 Future Strategies

The number of workstation configurations should be reduced over time, in the interest of minimizing variety and lowering maintenance costs. Decisions in this area will be influenced by the standards supported by JSC-ISD.

Architecture Component	Platform	OS	Product
Workstation	486-based PC	DOS Windows	MS Office Appletalk Spry Air TCP/IP
	Apple Macintosh	System 7	MS Office TCPConnectII MacTCP
	HP Workstation	DomainOS HP-UX	Interleaf HP TCP/IP
	Sun SPARC	Solaris	Interleaf RTM Sun TCP/IP
	Intergraph	Clipper UNIX	Engineering Modeling System EE Schematics Intergraph TCP/IP

Table 5.8.1.1-1: Workstations

5.9 COST ELEMENTS

The principal delivery systems cost drivers for ISSA-IS are as follows:

- MAC/PC/Printer Maintenance
- Hardware Maintenance
- Hardware Upgrades
- Software Maintenance
- Software Upgrades
- System Administration (Novell)
- Installation Support (Novell Clients)

5.10 CHANGE HISTORY

There is no Change History to record at the present time.

APPENDIX A
ABBREVIATIONS AND ACRONYMS

This appendix will be revised as required, and changes will be issued as replacement pages or by complete revision of the appendix as appropriate.

A&C	Activation & Checkout
AAA	Automated Assembly Assessment
ACSAS	Automated Configuration Status Accounting System
ACSS	Automated Cost and Schedule System
AEMIS	Automated Engineering Management Information System
AIT	Analysis and Integration Team
ALSTAR	Automated Logistics System for Tracking And Reporting
ARMS	Automated Requirements Management System
ARTS	Advanced RID Tracking System
ATA	Action Tracking Application
BB	Bulletin Board
CACTIS	Change And Commitment Tracking Information System
CAD	Computer-Aided Design
CADSYS	Computer-Aided Design System
CAFTA	Computer-Aided Fault Tree Analysis
CAM	Computer-Aided Modeling
CCC	Control Center Complex
CIL	Critical Items List
CM	Configuration Management
CMETS	Configuration Event Tracking System
CMSAS	Configuration Management Status Accounting System
CONTR	Contracts
COTS	Commercial off the Shelf.
CTS	Correspondence Tracking System
CUI	Common User Interface
D&SG	Defense & Space Group (Boeing)
DBMS	Database Management System
DEC	Digital Equipment Corporation
DRT	Data Requirements Tracking System
DSCA	Defense & Space Group Common Accounting System
EDLS	Engineering Drawing Library System
EEE	Electrical, Electronic, and Electromechanical
EMDB	Engineering Master Database
ENG	Engineering
EPIMS	EEE Parts Information Management System
EPS	Executive Processing System
EPSA	Electrical Power Supply Application
FEAT	Failure Effects Analysis Tool
FMEA	Failure Modes and Effects Analysis
FIN	Finance
FPS	Financial Planning System
FY	Fiscal Year
GRASP	Grumman Robotic Analysis Simulation Program
GRC	General Research Corporation
GRDS	Ground Reconfiguration Data System
HR	Human Resources
H/W	Hardware

ICBS	Integrated Contract Billing System
ICD	Interface Control Document
ICDSYS	Interface Control Document System
ICRS	IERS Customer Reporting System
IERS	Integrated Employee Records System
IPT	Integrated Product Team
IS	Information Systems
ISD	Information Systems Directorate
ISPA	Integrated Schedule and Planning Application
ISSA	International Space Station Alpha
ITPS	Interleaf Technical Publishing Software
JSC	Johnson Space Center
LSA	Logistics Support Analysis
MBF	Mission Build Facility
MDM	Multiplexed/Demultiplexer
MDR	Metrics Data Repository
MEAC	Management Estimate At Completion
MIC	Management Information Center
MMDB	Mission Manifesting Database
MMPL	Mission Management Plan
MOD	Mission Operations Directorate
MPS	Material Procurement System
N/A	Not Applicable
NASTRAN	NASA Structural Analysis
NSPAR	Non-Standard Part Approval Request
OCCS	Overhead Cost Control System
ODBC	Open Database Connectivity
OMS	Office Management System
OPS	Operations
ORU	Orbital Replacement Unit
OS	Operating System
PALS	Program Automated Library System
PAS	Property Accountability System
PCB	Program Control Book
PDD	Program Data Dictionary
PDS	Paths Data System
PFI	Physical File Index
PFMIS	Program Finance Management Information System
PLATO	Power Loads Analysis for Timeline Operations
POIC	Payload Operations Integration Center
PP&C	Program Planning & Control
PPI	Program Presentation Index
PRACA	Problem Reporting and Corrective Action
PSCN[I]	Program Support Communications Network [Internet]
RBDA	Reliability Block Diagram Analysis
RDD	Requirements Driven Design
RDBMS	Relational Database Management System
RID	Review Item Discrepancy
RMA	Reliability Maintainability Assessment
RPP	Reliability Prediction Program
RTM	Requirements Traceability Manager
SAS	Simulation Activation Services
SDLC	Software Development Life Cycle
SDST	Supplier Data Sheet Tacking

SIMSYLS	Simulation of Manned Space Station Logistics Support
SPS	Shuttle Payloads System
SRM&QA	Safety, Reliability, Maintainability, and Quality Assurance
SS-AIT	Space Station Analysis and Integration Team
SSCB	Space Station Control Board
SSCN	Space Station Change Number
SSE-CM	Software Support Environment Configuration Management
SSFP	Space Station Freedom Program
SSP	Space Station Program
SSPO	Space Station Program Office
SSVTF	Space Station Vehicle Test Facility
TCMS	Test, Checkout, and Monitoring System
TMIS	Technical and Management Information System
TOP	Tactical Operations Plan
TRASYS	Thermal-Radiation Analysis System
UMPL	User Mission Plan
V-IPT	Vehicle Integrated Product Team
VMDB	Vehicle Master Database



International Space Station Program

Individual Small Business Subcontracting Plan

**D684-11716-01
Revision W**

**United States On-Orbit Segment (USOS)
Vehicle Sustaining Engineering Contract**

NAS15-10000

Type 1 Preliminary – Pending NASA Approval

June 12, 2013

Submitted to: NASA
Johnson Space Center
Contract No. NAS15-10000 DR F-PM-04

This document is controlled by the Boeing Houston Small Business Liaison Officer (SBLO)
– Debbie Melvin.

The NASA Contracting Officer, prior to incorporation into the contract, shall approve
all revisions to this document.

Title: Vehicle Sustaining Engineering Contract Small Business Subcontracting Plan

Prepared by:

(b) (4)

Lead SBLO, NASA Programs
Space Exploration
BDS

6/14/2013
Date

(b) (4)

ISS Supplier Management Director
Space Exploration
BDS

6/21/13
Date

(b) (4)

Boeing ISS VP & Program Manager
Space Exploration
BDS

6/25/13
Date

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

INTERNATIONAL SPACE STATION PROGRAM
Provisional Items Order (PIO)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE

PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS

INTERNATIONAL SPACE STATION PROGRAM
Provisional Items Order (PIO)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1179; MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-02	"DELETE" RECEPTICAL CONNECTOR	NRP0E8A806P	1	EA		KSC/PPS	30-Jun-99	"DELETED" NEW P/N
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-04	"DELETE" INDICATOR	1F64991-1	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 1179; MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-09	"DELETE" TRANSISTOR	JANTXV2N2907A	1	EA		KSC/PPS	30-Jun-99	"DELETED" NEW P/N
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-10	"DELETE" TRANSISTOR	JANTXV2N6849	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-11	"DELETE" TRANSISTOR	JANTXV2N7334	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-13	"DELETE" HYBRID MICROCIRCUIT	1F95103-1	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-14	"DELETE" MICROCIRCUIT	5962-8773901CA	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-20	"DELETE" MICROCIRCUIT	5962-8773901BCA	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-25	"DELETE" MICROCIRCUIT	1F95102-1	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-28	"DELETE" MICROCIRCUIT	5962-9059001MCA	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-30	"DELETE" MICROCIRCUIT	1F95101-1	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-33	"DELETE" CONNECTOR	M24308/25-9P	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 877; MOD 591; CCO 504;03-0149	BHB	P026A-37	"DELETE" CONNECTOR	ST225-4B	1	EA		KSC/PPS	30-Jun-99	"DELETED"
MOD 938; CCO 838; R810; P270	BHB	P034A-02	VALVE, GAS PRESSURE REGULATOR, N2	1F40058-1	1	EA		KSC/PPS	28-Feb-02	Deleted per Stop Work Order 1345R1 and definitized proposal letter 2-1150-00-0131 dated 5/23/06 and definitized on MOD 1368. SUPPLIER PN 3215510-101
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-208	DC MOTOR - CABLE ASSEMBLY	R074326-1	1	EA		BOE/CP	14-Oct-00	Deleted per Boeing Ltr 2-1150-06-0181 concurred by NASA on 08/07/06.
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-210	ROLL RING	RE1822-02	1	EA		BOE/CP	20-Feb-01	Deleted per Boeing Ltr 2-1150-06-0181 concurred by NASA on 08/07/06.
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-211	ACTUATOR	RE2757-03	1	EA		BOE/CP	7-Dec-00	Deleted per Boeing Ltr 2-1150-06-0181 concurred by NASA on 08/07/06; NEW P/N RE2757-03
MOD 1084; MOD 938; CCO 848; R812; P342	HSV	P055-04	BACKPLANE PWA	683-61701-1	1	EA		KSC/PPS	30-Sep-02	Deleted per SSCN 8847 definitized on S/A 1310. STOP WORK per NASA letter BG-04-225 dated 07/28/04; REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	HSV	P055-18	POSITION BOARD PWA	683-61715-1	6	EA		KSC/PPS	30-Sep-02	Deleted per Email from NASA dated 8/4/05; STOP WORK per NASA letter BG-04-225 dated 07/28/04; REPAIR PARTS
BG-01-341	HOU	P070-081	FERRULE, SHIELD, INNER	MS21981-101	4	EA	\$2,207	KSC/PPS	28-Nov-03	Deleted per Boeing ltr 2-1150-04-0294, concurred by NASA 07/26/04.

MOD 1024; MOD 962; CCO 566	BCP	P042-044	BMRRM ASSY	R074030-51	1	EA		KSC/PPS	25-Sep-01	"DELETED" per NASA concurrence to Boeing letter 2-1150-04-0254. NEW P/N
MOD 1179; MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-01	"DELETE" MICROCIRCUIT	1F67615-1	1	EA		KSC/PPS	10-Feb-00	"DELETED" NEW P/N
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-02	"DELETE" MICROCIRCUIT (1F67615-501)	318362	1	EA		KSC/PPS	10-Feb-00	"DELETED"
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-12	"DELETE" MICROCIRCUIT	5962-8754802XX	1	EA		KSC/PPS	10-Feb-00	"DELETED"
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-14	"DELETE" MICROCIRCUIT	5962-8868502PX	1	EA		KSC/PPS	10-Feb-00	"DELETED"
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-15	"DELETED" MICROCIRCUIT	5962-8972802EX	1	EA		KSC/PPS	10-Feb-00	"DELETED"
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-20	"DELETE" TRANSISTOR	JANTXV2N2907A	1	EA		KSC/PPS	10-Feb-00	"DELETED"
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-22	"DELETE" OSCILLATOR	M55310/26-B26A-1M344000	1	EA		KSC/PPS	10-Feb-00	"DELETED" NEW P/N
MOD 877; MOD 681; CCO 573;03-0149	BHB	P048-23	"DELETE" MICROCIRCUIT	5962-8961501PA	1	EA		KSC/PPS	10-Feb-00	"DELETED"
MOD 1084; MOD 938; CCO 848; R812; P342	HSV	P055-05	POWER SUPPLY	683-61700-1	0	EA		KSC/PPS	30-Sep-02	REPAIR PARTS
MOD 1084; CC0 1055	HOU	P061A-01	DELETED DIODE	990150-1	3	EA		KSC/PPS	28-Feb-02	Deleted per Boeing Ltr 2-1150-03-0292 concurred by NASA on 7/8/03.
MOD 1084; CC0 1055	HOU	P061A-03	DIODE	990150-3	2	EA		KSC/PPS	28-Feb-02	DELETED per NASA concurrence to Boeing letter 2-1150-04-0345.
MOD 1084; CC0 1055	HOU	P061A-18	TRANSFORMER, +28V/3A	990157-1	3	EA		KSC/PPS	28-Feb-02	DELETED per NASA concurrence to Boeing letter 2-1150-04-0345.

MOD 1179; MOD 1127; BG-01-340	HOU	P069-25	** DELETED ** SEMICONDUCTOR	JANS2N2219AL	1	EA	\$2,450	KSC/PPS	31-Jul-03	** DELETED **
MOD 1179; MOD 1127; BG-01-340	HOU	P069-29	** DELETED ** MICROCIRCUIT	5962R9674201VEC	1	EA	\$337	KSC/PPS	31-Jul-03	** DELETED **
MOD 1179; MOD 1127; BG-01-340	HOU	P069-31	** DELETED ** MICROCIRCUIT	SSQ22667-001	1	EA	\$2,266	KSC/PPS	31-Jul-03	** DELETED **
MOD 1127; BG-01-340	HOU	P069-41	MICROCIRCUIT	F015596-0A02	2	EA		HAMSUND/ GT	31-Jul-03	OPTION FOR 2 EA
BG-01-341;03-0535	HOU	P070-002	HEATER (HR1/ HR2)	D60696202-1	1	EA	\$4,287	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-004	RTD	1F08040-1	6	EA		KSC/PPS	28-Nov-03	Requirement = 23. Residual Available = 17. AMP- 2; RSU - 4; LTU - 1; LDU - 16 Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-009	SPLICE, PARALLEL, UNINSULATED	D60697277-3	25	EA	\$2,753	KSC/PPS	28-Nov-03	AMP - 5; RSU - 10; LDU - 5; LTU - 5 Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-012	SPRING	D60691004-3	4	EA	\$2,207	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-013	SPRING, COMPRESSION - CUSTOM	D60691005-5	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-014	SPRING, COMPRESSION - CUSTOM	D60691005-6	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-015	SPRING, COMPRESSION - CUSTOM	D60691005-8	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-021	HEATER, PRIMARY	D60698136-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-022	HEATER, REDUNDANT	D60698137-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-023	BEARING	MS 14101-5	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-025	BACKSHELL	NZGA-JG-15-N-08	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-027	BACKSHELL	NZGA-JG-15-N-08	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-028	CONTACT	NZGC-C-20PB	20	EA	\$2,202	KSC/PPS	28-Nov-03	RSU - 2; LDU - 12; LTU - 6 Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-029	COMPRESSION SPRINGS	D60691005-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-030	COMPRESSION SPRINGS	D60691005-2	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-031	SWITCH ASSEMBLY, SINGLE	D60691011-1	7	EA	\$62,273	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-034	RADIAL BALL BEARING	D60699005-3	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-038	WHEEL BEARING	D60699032-1	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-040	NEEDLE BEARING	D60699042-1	2	EA	\$126,952	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-049	HEATERS, HR1,HR3	D60699216-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-050	HEATERS, HR41	D60699216-2	1	EA		KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-051	HEATERS, HR2	D60699216-3	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-052	HEATERS, HR44,HR45	D60699216-4	1	EA		KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03

BG-01-341;03-0535	HOU	P070-055	COMPRESSION SPRING - BOOSTER FOOT	D60691005-4	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-056	CLEVIS, BALLNUT	D60695015-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341	HOU	P070-057	CRANK, LIFT-LTU, MOBILE TRANSPORTER	D60695018-1	1	EA	\$10,960	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-058	LINK, LIFT-LTU, MOBILE TRANSPORTER	D60695019-1	1	EA	\$9,032	KSC/PPS	28-Nov-03	
BG-01-341;03-0535	HOU	P070-059	GEAR, PINION	D60695022-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-060	GEAR, DRIVEN	D60695024-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-061	BALL SCREW ASSEMBLY	D60695031-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-062	BEARING, ANGULAR CONTACT	D60695032-1	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-063	BEARING	D60695034-1	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-064	BEARING	D60695034-2	2	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-065	BEARING, SPHERICAL, LINK UPPER	D60695066-1	1	EA	\$478	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-070	BOLT, SHEAR	D60695087-1	1	EA	\$8,983	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-071	BOLT, SHEAR	D60695087-2	1	EA	\$8,983	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-072	BOLT, SOFT DOCK	D60695092-1	1	EA	\$8,631	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-073	BOLT, SOFT DOCK	D60695092-2	1	EA	\$8,631	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-074	BEARING, JOURNAL	D60695108-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-078	STANDOFF, TETHER	D60695165-1	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-079	STANDOFF, TETHER	D60695165-2	1	EA	\$2,204	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
BG-01-341;03-0535	HOU	P070-080	FERRULE, SHIELD, OUTER	MS21980-175	4	EA	\$2,207	KSC/PPS	28-Nov-03	Deleted per Boeing Ltr 2-1150-03-0535 concurred by NASA on 11/19/03
MOD 1179; MOD 1157; RFP 345	HOU	P074-16	** DELETED ** QUICK DISCONNECT	RE2800-04	3	EA	\$593,494	KSC/PPS	15-Jul-03	** DELETED **
MOD 1157; RFP 347;03-0236	HOU	P078-10	"DELETE" 58C1001,128Kx8,150ns,883,DPA,P	5962-3826718QMA	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-12	"DELETE" 54AC138,1-of-8 Decoder	5962-8762201FA	8	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-13	"DELETE" 54AC14,Hx Schmt Trgr Inv,DPA,P	5962-8762401DA	8	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-14	"DELETE" 54ACQ244,Octal Buffer/Driver	5962-9217601MSA	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-19	"DELETE" 54LVTH245,Octal Transceiver	"DELETED" RESIDUAL ASSETS @ NO COST	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-21	"DELETE" CA91C142,VMI/PCI Bridge,UNIVII	CA91C142-33IE	1	EA	\$588	SEAKR	15-Dec-03	DELETED'
MOD 1157; RFP 347;03-0236	HOU	P078-23	"DELETE" 9008RH,A/D Converter,8Bit,D,P	5962F9669601VYC	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-27	"DELETE" LM6142,OP AMP,High Speed	5962-9550301QPA	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-28	"DELETE" LT1111,DC-DC Converter,DPA,PD	5962-9321201MPA	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST

MOD 1157; RFP 347;03-0236	HOU	P078-30	"DELETE" CD4051,8:1,Mux,DP,PIND	CD4051BF3A	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-31	"DELETE" MPC106,PCIBridge/MemCtrl,D,P	MPC106ARX66CG	1	EA		SEAKR	15-Dec-03	"DELETED"
MOD 1157; RFP 347;03-0236	HOU	P078-33	"DELETE" A1460A-1CQ196BX2,6K Gates,PD	A1460A-1CQ196BX14	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-34	"DELETE" RT54SX32-1CQ256B,32K Gates,D,P	RT54SX32-1CQ256B	3	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-38	"DELETE" KM44S32030AT,32Mx4,Synchronous	KM44S32030AT	20	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-41	"DELETE" 12.5MHz,ACT Logic,DPA	10049-12.5MHZ	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-42	"DELETE" 20MHz,ACT Logic,DPA	10049-20MHZ	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-43	"DELETE" 25MHz,QT24T10M,100PPM,DPQX	QT24T10M-25.000MHZ	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-44	"DELETE" 33.333MHz,QT24T10M,100PPM,DPQX	QT24T10M-33.333MHZ	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-45	"DELETE" 40MHz,QT24T10M,100PPM,DPQX	QT24T10M-40.000MHZ	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-46	"DELETE" 64MHz,QT24T10M,100PPM,DPQX	QT24T10M-64.000MHZ	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-47	"DELETE" JANTXV2N7222,500V,8A,.85 Ohm	JANTXV2N7222	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-48	"DELETE" JANTXV2N7224,100V,35A,.07 ohm	JANTXV2N7224	2	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-51	"DELETE" 2SOCKET,SZ11,Flange Mt,NATC	NATC00T11N2PN	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-52	"DELETE" 11SOCKET,SZ19,Flange Mt,NATC	NATC00T19N11SN	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-53	"DELETE" 11SOCKET,SZ19,Flange Mt,NATC	NATC00T19N11SA	1	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-54	"DELETE" Pin,SZ16,NZGC	NZGC-C-16PB	5	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-55	"DELETE" Pin,SZ22,NZGC	NZGC-C-22DPB	19	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
MOD 1157; RFP 347;03-0236	HOU	P078-56	"DELETE" SealingPlug,Sz16,NZGSP-16	NZGSP-16	5	EA		SEAKR	15-Dec-03	"DELETED" RESIDUAL ASSETS @ NO COST
	HOU	P079-003	Winodw Pane	683-13033-1	2	ea		KSC/PPS	31-Dec-03	
MOD 1179; MOD 1127; MOD 1072	HOU	P31A-057	** DELETED ** BUSHING	SV811711-201	2	EA		HAMSD/CT	19-May-02	** DELETED **
MOD 1179; MOD 1127; MOD 1072	HOU	P31A-058	** DELETED ** BUSHING	SV811711-202	2	EA		HAMSD/CT	19-May-02	** DELETED **
MOD 853; MOD 708; CCO 572	BHB	P38A-002	"DELETED" SENSOR, TEMPERATURE, 1000-OHM ICE-POINT, PATCH	0118BLH	4	EA		KSC/PPS	30-Nov-00	
MOD 853; MOD 708; CCO 572	BHB	P38A-003	"DELETED" SPRING, RETRACTION, SHEAR-BOLT	1F27403-1	4	EA		KSC/PPS	30-Nov-00	
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-041	TRANSISTOR	JANS2N7269	2	EA		KSC/PPS	30-Nov-00	DD250 BHB0867; DELETE P38A-092
MOD 853; MOD 742; MOD 708; CCO 572	BHB	P38A-105	"DELETED" SENSOR, TEMPERATURE, 100-OHM ICE-POINT, PATCH	0118BMT-1	2	EA		KSC/PPS	30-Nov-00	
	HOU	P74A-086	LUBRICANT,BRAYCOTE 601-EF-	155584-1	0	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-174	B/CPLG ASSY,1/2"TS,THREAD-LOK-	505001-219	8	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-175	CPLG ASSY,1/2"TS,THREAD-LOK-	505001-219(VS)	4	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-176	B/CPLR ASSY,1/2"TS,THREAD-LOK-	505001-247	6	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-177	CPLR ASSY,1/2"TS,THREAD-LOK-	505001-247(VS)	4	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-178	CPLR ASSY,3/8"TS,THREAD-LOK-	505001-353(VS)	4	EA		KSC/PPS	1-Nov-04	

	HOU	P74A-179	COUPLER ASSY,1.0"TS THREAD-LOK	505001-60(VS)	4	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-180	GPLR ASSY 1"X1/2"THREAD-LOK	505001-64(VS)	4	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-367	B/PRESSURE CAP ASSY,1/4&3/8"TS	505910-061	4	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-368	PRESSURE PLUG ASSY,1/2"	505910-081(VS)	5	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-369	PRESSURE PLUG ASSY,1"	505910-161	4	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-677	HOSE SUBASSY-	H505006-10	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-678	HOSE SUBASSY-	H505006-2	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-679	HOSE SUBASSY-	H505006-3	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-680	HOSE SUBASSY-	H505006-4	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-681	HOSE SUBASSY-	H505006-5	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-682	HOSE SUBASSY-	H505006-7	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-683	HOSE SUBASSY-	H505006-8	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-684	HOSE SUBASSY-	H505006-9	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-698	SCREW (KHI FURNISHED)-	MS27039C0808	8	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-716	WASHER (KHI FURNISHED)-	NAS620C8L	8	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-725	HARDLINE ASSY,3/8"	STR505004-1T	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-726	HARDLINE ASSY,1/2"	STR505004-2T	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-727	HARDLINE ASSY,1/2"	STR505004-3T	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-728	HARDLINE ASSY,1/2"	STR505004-4T	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-729	HARDLINE ASSY,1"	STR505004-5T	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-730	HARDLINE ASSY,1"	STR505004-6T57	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-731	QD AND FITTING ASSY LESS CAP-	STR505007-1T57	2	EA		KSC/PPS	1-Nov-04	
	HOU	P74A-832	MOUNT ASSY KHI FURNISHED-	USS7516-101	2	EA		KSC/PPS	15-Dec-03	
	HOU	P74A-833	CAP (KHI FURNISHED)-	USS7542-101	2	EA		KSC/PPS	15-Dec-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

INTERNATIONAL SPACE STATION PROGRAM Provisional Items Order (PIO)										
CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 114	HSV	P001-01	MOTOROLA DEVICE INTERNAL PROCESSOR	SC32166/SYCE	14	EA		BOE/HSV	15-Dec-96	DD250 BHB0040
LTR 2-1150-99-0203; MOD 114	HSV	P001-02	MOTOROLA DEVICE INTERNAL PROCESSOR	SC32166/SYCE	10	EA		BOE/HSV	15-Dec-95	DD250 BHB0040; DDT&E TO BORROW 10 EA TO SATISFY DELIVERY OF FLT UNITS. THERE IS A PAYBACK.
MOD 384; MOD 100	BHB	P002-01	METAL HALIDE LAMPS (40 WATTS)	C60S0001-1	12	EA		BOE/HUNB	31-Aug-97	DD250 BHB0399: 10 EA SHIPPED TO BOE/HUNB; 2 EA DD250 BHB0237 TO BOE/HOUSTON FEPC FAC
MOD 470; MOD 384, MOD 100	BHB	P002-02	METAL HALIDE LAMPS (150 WATTS)	C60S0002-1	4	EA		BOE/HUNB	31-Aug-97	DD250 BHB0525
MOD 470; MOD 384; MOD 100	HSV	P002-03	TOP WINDOW PRESSURE PANE	683-12137-2	1	EA		BOE/HSV	31-Aug-95	DD250 BHB0187
MOD 470; MOD 384; MOD 102	BHB	P003-01	HYBRIDS	8259405-401	11	EA		HI/GLEND	30-Sep-97	DD250 BHB0201-PROD DIVERSION. REPLACEMENT PARTS; SEE P003-36
MOD 470; MOD 384; MOD 102	BHB	P003-02	HYBRIDS	8260760-401	32	EA		HI/GLEND	30-Sep-97	DD250 BHB0253
MOD 470; MOD 384; MOD 102	BHB	P003-03	HYBRIDS	8260761-401	18	EA		HI/GLEND	30-Sep-97	DD250 BHB0263
MOD 384; MOD 102	BHB	P003-04	HYBRIDS	8260762-401	56	EA		HI/GLEND	30-Sep-97	DD250 BHB0275
MOD 384; MOD 102	BHB	P003-05	HYBRIDS	8260763-401	18	EA		HI/GLEND	30-Sep-97	DD250 BHB0254
MOD 470; MOD 384; MOD 102	BHB	P003-06	HYBRIDS	8260764-402	19	EA		HI/GLEND	30-Sep-97	DD250 BHB0254
MOD 384; MOD 102	BHB	P003-07	HYBRIDS	8260765-401	32	EA		HI/GLEND	30-Sep-97	DD250 BHB0203-PROD DIVERSION. REPLACEMENT PARTS; SEE P003-37
MOD 384; MOD 102	BHB	P003-08	HYBRIDS	8260767-402	112	EA		HI/GLEND	30-Sep-97	DD250 BHB0246
MOD 384; MOD 102	BHB	P003-09	HYBRIDS	8260768-403	128	EA		HI/GLEND	30-Sep-97	DD250 BHB0265
MOD 384; MOD 102	BHB	P003-10	HYBRIDS	8260768-404	32	EA		HI/GLEND	30-Sep-97	DD250 BHB0253
MOD 384; MOD 102	BHB	P003-11	GATE ARRAY	8261001-411	7	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-12	GATE ARRAY	8261002-412	11	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-13	GATE ARRAY	8261004-411	18	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-14	GATE ARRAY	8261005-412	9	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-15	GATE ARRAY	8261007-412	12	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-16	GATE ARRAY	8261009-411	7	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-17	GATE ARRAY	8261010-411	7	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-18	GATE ARRAY	8261013-411	4	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-19	HYBRIDS	8259405-401	3	EA		HI/GLEND	30-Sep-96	DD250 BHB0206-PROD DIVERSION. REPLACEMENT PARTS; SEE P003-41
MOD 384; MOD 102	BHB	P003-20	HYBRIDS	8260760-401	4	EA		HI/GLEND	30-Sep-96	DD250 BHB0203-PROD DIVERSION. REPLACEMENT PARTS; SEE P003-38
MOD 384; MOD 102	BHB	P003-21	HYBRIDS	8260762-401	8	EA		HI/GLEND	30-Sep-97	DD250 BHB0272
MOD 384; MOD 102	BHB	P003-22	HYBRIDS	8260763-401	2	EA		HI/GLEND	30-Sep-97	DD250 BHB0254
MOD 470; MOD 384; MOD 102	BHB	P003-23	HYBRIDS	8260764-402	2	EA		HI/GLEND	30-Sep-97	DD250 BHB0253

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 384; MOD 102	BHB	P003-24	HYBRIDS	8260765-401	1	EA		HI/GLEND	30-Sep-97	DD250 BHB0203-PROD DIVERSION REPLACEMENT PARTS; SEE P003-39
MOD 384; MOD 102	BHB	P003-25	HYBRIDS	8260767-402	9	EA		HI/GLEND	30-Sep-97	DD250 BHB0253
MOD 384; MOD 102	BHB	P003-26	HYBRIDS	8260768-403	18	EA		HI/GLEND	30-Sep-97	DD250 BHB0203-PROD DIVERSION. REPLACEMENT PARTS; SEE P003-40
MOD 384; MOD 102	BHB	P003-27	HYBRIDS	8260768-404	3	EA		HI/GLEND	30-Sep-97	DD250 BHB0253
MOD 384; MOD 102	BHB	P003-28	GATE ARRAY	8261001-411	2	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-29	GATE ARRAY	8261002-412	2	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-30	GATE ARRAY	8261004-411	5	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-31	GATE ARRAY	8261005-412	3	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-32	GATE ARRAY	8261007-412	2	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-33	GATE ARRAY	8261009-411	1	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-34	GATE ARRAY	8261010-411	1	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 384; MOD 102	BHB	P003-35	GATE ARRAY	8261013-411	1	EA		HI/GLEND	28-Jun-96	DD250 BHB0206
MOD 530	BHB	P003-36	HYBRIDS	8259405-401	11	EA		HI/GLEND	17-Mar-98	DD250 BHB0262
MOD 530	BHB	P003-37	HYBRIDS	8260765-401	32	EA		HI/GLEND	13-Feb-98	DD250 BHB0264
MOD 530	BHB	P003-38	HYBRIDS	8260760-401	4	EA		HI/GLEND	6-Feb-98	DD250 BHB0204
MOD 530	BHB	P003-39	HYBRIDS	8260765-401	1	EA		HI/GLEND	3-Mar-98	DD250 BHB0313
MOD 530	BHB	P003-40	HYBRIDS	8260768-403	18	EA		HI/GLEND	12-Mar-98	DD250 BHB0274
MOD 530	BHB	P003-41	HYBRIDS	8259405-401	3	EA		HI/GLEND	19-Dec-97	DD250 BHB0272
MOD 1070; MOD 1048; MOD 877; MOD 742; CCO 631	BCP	P005-04	BMRRM HANDLING SET	RG027340-1	1	EA		KSC/PPS	16-Feb-01	DD250 BHB1368
MOD 877; MOD 742; CCO 687; P285	HSV	P006-01	FILTER	683-19371-1	5	EA		KSC/PPS	30-Oct-99	DD250 BHB0917
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-02	EEE PARTS	2000087-101	30	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-03	EEE PARTS	2000090-101	22	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-04	EEE PARTS	2000089-101	22	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 783; MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-05	EEE PARTS	JANS2N3743	124	EA		BOE/CP	31-Dec-96	DD250 BHB0607 FOR 105 COMPLETED ON 8/11/99; DD250 BHBO737 FOR 19 EA.
MOD 1127; LTR 02-0105; MOD 783; MOD 681; MOD 470	BCP	P007-07	EEE PARTS	5962-8857101CA-RS	75	EA		BOE/CP	31-Dec-96	DD250 BHB1673 CLOSEOUT SHORTAGE. DD250 BHB0607 COMPLETED FOR 75 EA ON 8/11/99. NEW P/N. SHIPPED SHORT 25 EA.NO SOURCE OF SUPPLY
MOD 681; MOD 384; MOD 140	BCP	P007-08	EEE PARTS	JANS2N2219A	112	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 384; MOD 140	BCP	P007-09	EEE PARTS	JANS2N2222A	3748	EA		BOE/CP	31-Dec-96	DD250 BHB0442 QTY 3,761. EXCESS QTY OF 13 EA REC'D DUE TO PACKAGING REQUIREMENTS FROM BOEING, EL PASO, TX
MOD 681; MOD 384; MOD 140	BCP	P007-11	EEE PARTS	JANS2N2905A	88	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 384; MOD 140	BCP	P007-12	EEE PARTS	JANS2N2905AL	10	EA		BOE/CP	31-Dec-96	DD250 BHB0442

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 681; MOD 384; MOD 140	BCP	P007-14	EEE PARTS	JANS2N2907A	1257	EA		BOE/CP	31-Dec-96	DD250 BHB0603
MOD 681; MOD 384; MOD 140	BCP	P007-15	EEE PARTS	JANS2N3019	62	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 384; MOD 140	BCP	P007-16	EEE PARTS	JANS2N3501L	1084	EA		BOE/CP	31-Dec-96	DD250 BHB0442; P/N ON DD250 JANS2N3501
MOD 681; MOD 384; MOD 140	BCP	P007-17	EEE PARTS	JANS2N3637	175	EA		BOE/CP	31-Dec-96	DD250 BHB0442; DD250 QTY 272. EXCESS QTY OF 97 EA REC'D DUE TO PACKAGING REQUIREMENTS FROM BOEING, EL PASO, TX
MOD 681; MOD 384; MOD 140	BCP	P007-18	EEE PARTS	JANS2N3700	635	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-19	EEE PARTS	JANS2N3821	10	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-20	EEE PARTS	JANTXV2N918RS	27	EA		BOE/CP	31-Dec-96	DD250 BHB0531
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-22	EEE PARTS	JANS2N2907A	40	EA		BOE/CP	31-Dec-97	DD250 BHB0531
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-23	EEE PARTS	JANS2N2222A	39	EA		BOE/CP	1-Dec-97	DD250 BHB0463
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-24	EEE PARTS	M38510/10104SGA	50	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-25	EEE PARTS	M38510/11201SCA	25	EA		BOE/CP	31-Dec-97	DD250 BHB0442
MOD 681; MOD 470; MOD 384; MOD 140	BCP	P007-26	EEE PARTS	M38510/11201SCA	50	EA		BOE/CP	31-Dec-96	DD250 BHB0442
MOD 719; MOD 470; MOD 384; MOD 140	BHB	P008-01	RATE GYRO ASSEMBLY	GG9534AC02	1	EA		HI/FLORI	8-Apr-99	DD250 BHB0799
MOD 384; MOD 174R1	HSV	P009-01	AUDIO TERMINAL UNIT	3000001-301	3	EA		HARRIS	30-Apr-99	DD250 BHB0557 2 EA; DD250 BHB1281 1 EA
MOD 384; MOD 174R1	HSV	P009-02	AUDIO INTERFACE UNIT	3000002-301	1	EA		HARRIS	30-Apr-99	DD250 BHB0552
MOD 384; MOD 174R1	HSV	P009-03	AUDIO BUS COUPLER	3000005-301	1	EA		HARRIS	30-Apr-99	DD250 BHB0552
MOD 384; MOD 174R1	HSV	P009-04	VIDEO SWITCHING UNIT	3000008-301	1	EA		HARRIS	30-Apr-99	DD250 BHB0551
MOD 384; MOD 174R1	HSV	P009-05	INTERNAL AUDIO CONTROLLER	3000016-301	2	EA		HARRIS	30-Apr-99	DD250 BHB0557 1 EA; 1 EA ON DD250 BHB0668
MOD 384; MOD 174R1	HSV	P009-06	ACS/USC AUDIO INTERFACE	3000022-301	1	EA		HARRIS	30-Apr-99	DD250 BHB0552
MOD 835; MOD 681; MOD 384; MOD 174R1	HSV	P009-08	VIDEO FIBER OPTICS TRANS.	3000011-302	1	EA		HARRIS	30-Apr-99	DD250 BHB0749
MOD 835; MOD 681; MOD 384; MOD 174R1	HSV	P009-09	VIDEO FIBER OPTICS RECEIVER	3000012-302	1	EA		HARRIS	30-Apr-99	DD250 BHB0748
MOD 445; SSCN 612; MOD 212	BHB	P010-01	TRUNDLE ASSEMBLY	5839155-501	10	EA		LMMS	29-May-98	DD250 BHB0784. TRANSFERRED TO PIO 16.
MOD 445; SSCN 612; MOD 212	BHB	P010-02	POWER RING MODULE	8259153-901	1	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-03	SIGNAL RING MODULE	8259154-901	1	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-04	BOLT UPPER EVA	8262420	2	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-05	BOLT LOWER EVA	8262421	2	EA		HI/GLEND	30-Sep-98	DD250 BHB0354

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 681; MOD 445; SSCN 612; MOD 212	BHB	P010-06	COLLAR	8265667-001	27	EA		HI/GLEND	30-Sep-98	DD250 BHB0355
MOD 445; SSCN 612; MOD 212	BHB	P010-07	BOOT RUBBER, THIMBLE	8259271	27	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-08	BOOT RUBBER	8259272	27	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-09	BOOT RUBBER	8262529	27	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-10	BOOT RUBBER	8259310	3	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-11	HOUSING CONNECTOR	8259046-001	2	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-12	COVER HOUSING	8259047-001	2	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-13	COLLAR	8261676	36	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-14	GROMMET	8265802-014	4	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-15	BELLOWS	8262521-001	2	EA		HI/GLEND	30-Sep-98	DD250 BHB0354
MOD 445; SSCN 612; MOD 212	BHB	P010-16	POWER DATA TRANSFER ASSEMBLY	5841725-501	3	EA		LMMS	17-Dec-99	DD250 BHB0804
MOD 445; SSCN 612; MOD 212	BCP	P010-17	TRRJ BEARING UNIT (BAXS)	5839982-501	1	EA		LMMS	30-Jun-99	DD250 BHB0871
MOD 928; MOD 681; SSCN 613; MOD 384; MOD 181R1	BCP	P011-01	KEMET 82 uF CAPACITOR	F015649-0008	21	EA		BOE/CP	29-Aug-97	DD250 BHB1186 CLOSED OUT SHIP SHORT FROM DD250 BHB0533
MOD 681; SSCN 613; MOD 384; MOD 181R1	BCP	P011-02	KEMET 100 uF CAPACITOR	F015512-0001	7	EA		BOE/CP	29-Aug-97	DD250 BHB0533
MOD 928; MOD 681; SSCN 613; MOD 384; MOD 181R1	BCP	P011-03	KEMET 300 uF CAPACITOR	F015512-0004	18	EA		BOE/CP	29-Aug-97	DD250 BHB1186 CLOSED OUT SHIP SHORT FROM DD250 BHB0533
MOD 928; MOD 681; SSCN 613; MOD 384; MOD 181R1	BCP	P011-04	KEMET 600 uF CAPACITOR	F015512-0003	3	EA		BOE/CP	29-Aug-97	DD250 BHB1186 CLOSED OUT SHIP SHORT FROM DD250 BHB0533
MOD 681; MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-05	MOOG FLUID QUICK DISCONNECT	RE2800-03	4	EA		BOE/CP	31-Jul-97	DD250 BHB0550, 1 EA; DD250 BHB0577, 1 EA. NEW P/N. 2 EA DD250 BHB0675
MOD 681; MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-05A	MOOG FLUID QUICK DISCONNECT	RE2800-05	4	EA		BOE/CP	31-Jul-98	3 EA DD250 BHB0550. 1 EA DD250 BHB0577
MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-08	M-DOT BOOT	8261649	9	EA		BOE/CP	3-Oct-96	DD250 BHB0333
MOD 470	BCP	P011-08A	M-DOT, BOOT	8261649	9	EA		BOE/CP	5-Nov-96	DD250 BHB0333
MOD 470	BCP	P011-08B	M-DOT, BOOT	8261649	16	EA		BOE/CP	6-Dec-96	DD250 BHB0333
MOD 470	BCP	P011-08C	M-DOT, BOOT	8261649	10	EA		BOE/CP	3-Jan-97	DD250 BHB0333
MOD 470	BCP	P011-08D	M-DOT, BOOT	8261649	7	EA		BOE/CP	5-Feb-97	DD250 BHB0333
MOD 470	BCP	P011-08E	M-DOT, BOOT	8261649	11	EA		BOE/CP	5-Mar-97	DD250 BHB0333
MOD 470	BCP	P011-08F	M-DOT, BOOT	8261649	5	EA		BOE/CP	4-Apr-97	DD250 BHB0333
MOD 470	BCP	P011-08G	M-DOT, BOOT	8261649	2	EA		BOE/CP	12-May-97	DD250 BHB0333

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-09	M-DOT BOOT POWER	8262329	7	EA		BOE/CP	5-Nov-96	DD250 BHB0333
MOD 470	BCP	P011-09A	M-DOT, BOOT POWER	8262329	16	EA		BOE/CP	6-Dec-96	DD250 BHB0333
MOD 470	BCP	P011-09B	M-DOT, BOOT POWER	8262329	8	EA		BOE/CP	3-Jan-97	DD250 BHB0333
MOD 470	BCP	P011-09C	M-DOT, BOOT POWER	8262329	9	EA		BOE/CP	5-Feb-97	DD250 BHB0333
MOD 470	BCP	P011-09D	M-DOT, BOOT POWER	8262329	9	EA		BOE/CP	4-Apr-97	DD250 BHB0333
MOD 681; MOD 470	BCP	P011-09E	M-DOT, BOOT POWER	8262329	10	EA		BOE/CP	9-May-97	DD250 BHB0333
MOD 470	BCP	P011-09F	M-DOT, BOOT POWER	8262329	10	EA		BOE/CP	6-Jun-97	DD250 BHB0333
MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-11	M-DOT BOOT POWER	8262330	7	EA		BOE/CP	3-Oct-96	DD250 BHB0333
MOD 470	BCP	P011-11A	M-DOT, BOOT POWER	8262330	12	EA		BOE/CP	5-Nov-96	DD250 BHB0333
MOD 470	BCP	P011-11B	M-DOT, BOOT POWER	8262330	18	EA		BOE/CP	6-Dec-96	DD250 BHB0333
MOD 470	BCP	P011-11C	M-DOT, BOOT POWER	8262330	11	EA		BOE/CP	3-Jan-97	DD250 BHB0333
MOD 470	BCP	P011-11D	M-DOT, BOOT POWER	8262330	8	EA		BOE/CP	5-Feb-97	DD250 BHB0333
MOD 470	BCP	P011-11E	M-DOT, BOOT POWER	8262330	10	EA		BOE/CP	5-Mar-97	DD250 BHB0333
MOD 470	BCP	P011-11F	M-DOT, BOOT POWER	8262330	1	EA		BOE/CP	19-Mar-97	DD250 BHB0333
MOD 470	BCP	P011-11G	M-DOT, BOOT POWER	8262330	3	EA		BOE/CP	4-Apr-97	DD250 BHB0333
MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-12	M-DOT BOOT	8262393	11	EA		BOE/CP	3-Oct-96	DD250 BHB0333
MOD 470	BCP	P011-12A	M-DOT, BOOT	8262393	11	EA		BOE/CP	5-Nov-96	DD250 BHB0333
MOD 470	BCP	P011-12B	M-DOT, BOOT	8262393	20	EA		BOE/CP	6-Dec-96	DD250 BHB0333
MOD 470	BCP	P011-12C	M-DOT, BOOT	8262393	12	EA		BOE/CP	3-Jan-97	DD250 BHB0333
MOD 470	BCP	P011-12D	M-DOT, BOOT	8262393	10	EA		BOE/CP	5-Feb-97	DD250 BHB0333
MOD 470	BCP	P011-12E	M-DOT, BOOT	8262393	6	EA		BOE/CP	5-Feb-97	DD250 BHB0333
MOD 470; SSCN 613; MOD 384; MOD 181R1	BCP	P011-13	UTMC IC ASIC	RM2443-001	181	EA		BOE/CP	31-Dec-96	DD250 BHB0409
MOD 1084; MOD 835; CCO 622; TD; OG3-97-155	BCP	P011B-01	SENIOR FLEXONICS, PFCS ACCUMULATOR	SV809903-7	2	EA		KSC/PPS	15-Feb-01	DD250 BHB1630
MOD 1084; MOD 835; CCO 622; TD; OG3-97-155	BCP	P011B-03	SENIOR FLEXONICS, PV RADIATOR ACCUMULATOR	SV809903-8	2	EA		LMVS	15-Nov-00	DD250 BHB1471
MOD 1084; MOD 835; CCO 622; TD; OG3-97-155	BCP	P011B-04	SENIOR FLEXONICS, PV RADIATOR ACCUMULATOR	SV809903-8	2	EA		LMVS	15-Dec-00	DD250 BHB1588
MOD 1084; MOD 835; CCO 622	BCP	P011B-06	SENIOR FLEXONICS, PFCS ACCUMULATOR	SV809903-7	2	EA		KSC/PPS	15-Mar-01	DD250 BHB1681
MOD 1084; MOD 835; CCO 622	BCP	P011B-07	SENIOR FLEXONICS, PFCS ACCUMULATOR	SV809903-7	2	EA		KSC/PPS	15-Apr-01	DD250 BHB1729
MOD 877; SSCN 614; MOD 182	BCP	P012-06	TENSION MECHANISMS-PULLEY BEARING	1PE0633-001	8	EA		BOE/CP	30-Mar-98	DD250 BHB0699
MOD 877; SSCN 614; MOD 182	BCP	P012-07	TIP FITTING FORGINGS	5838232-001	1	EA		BOE/CP	30-Mar-98	DD250 BHB0699
MOD 877; SSCN 614; MOD 182	BCP	P012-08	PIVOT FITTING FORGINGS	5851367-003	6	EA		BOE/CP	30-Mar-98	DD250 BHB0699
MOD 877; MOD 783; MOD 783; SSCN 614; MOD 182	BCP	P012-20	BLANKET STIFFNERS	5851378-00X*	1280	EA		BOE/CP	30-Apr-98	DD250 BHB0699. * -001 THRU -031.
MOD 445; SSCN 616; MOD 213	BHB	P013-01	IC SRAM 128K X8	8262857-421	220	EA		HI/GLEND	31-Oct-97	DD250 BHB0266

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 445; SSCN 616; MOD 213	BHB	P013-02	32K X 8-BIT SRAM 45n	8259848-421	54	EA		HI/GLEND	31-Oct-97	DD250 BHB0266
MOD 445; SSCN 616; MOD 213	BHB	P013-03	ICD SSQ SCSI BUS INTERFACE	8264484-401	5	EA		HI/GLEND	31-Oct-97	DD250 BHB0266
MOD 445; SSCN 616; MOD 213	BHB	P013-04	EPROM 64KX16 UV	999214-0017	4	EA		HI/GLEND	31-Oct-97	DD250 BHB0280
MOD 445; SSCN 616; MOD 213	BHB	P013-05	HIGH SPEED AMP	990084-021	9	EA		HI/GLEND	31-Oct-97	DD250 BHB0314
MOD 445; SSCN 616; MOD 213	BHB	P013-06	12-BIT D/A CONVERTER	990070-021	5	EA		HI/GLEND	31-Oct-97	DD250 BHB0314
MOD 445; SSCN 616; MOD 213	BHB	P013-07	ECL QUAD TRANSLATOR	992141-021	5	EA		HI/GLEND	31-Oct-97	DD250 BHB0280
MOD 445; SSCN 616; MOD 213	BHB	P013-08	JFET INPUT OP AMP	990081-002	10	EA		HI/GLEND	31-Oct-97	DD250 BHB0280
MOD 445; SSCN 616; MOD 213	BHB	P013-09	GA IOCU PS 256 TERM	8261001-411	14	EA		HI/GLEND	31-Oct-97	DD250 BHB0269
MOD 445; SSCN 616; MOD 213	BHB	P013-10	GA IOCC I/O CONTROL	8261002-412	13	EA		HI/GLEND	31-Oct-97	DD250 BHB0268
MOD 445; SSCN 616; MOD 213	BHB	P013-11	GA CONTROL	8261004-411	55	EA		HI/GLEND	31-Oct-97	DD250 BHB0269
MOD 445; SSCN 616; MOD 213	BHB	P013-12	GA SDIO	8261005-412	28	EA		HI/GLEND	31-Oct-97	DD250 BHB0269
MOD 445; SSCN 616; MOD 213	BHB	P013-13	GA LLA/AIO CONTROL	8261007-412	10	EA		HI/GLEND	31-Oct-97	DD250 BHB0269
MOD 445; SSCN 616; MOD 213	BHB	P013-14	GA DIO CONTROL	8261009-411	7	EA		HI/GLEND	31-Oct-97	DD250 BHB0268
MOD 445; SSCN 616; MOD 213	BHB	P013-15	GA HLA CONTROL	8261010-411	5	EA		HI/GLEND	31-Oct-97	DD250 BHB0268
MOD 445; SSCN 616; MOD 213	BHB	P013-16	GA SDO CONTROL	8261013-411	8	EA		HI/GLEND	31-Oct-97	DD250 BHB0269
MOD 445; SSCN 616; MOD 213	BHB	P013-17	TAXI RECEIVER	8265409-004	11	EA		HI/GLEND	31-Oct-97	DD250 BHB0267
MOD 445; SSCN 616; MOD 213	BHB	P013-18	TAXI TRANSMITTER	8265409-003	11	EA		HI/GLEND	31-Oct-97	DD250 BHB0267
MOD 742; SSCN 961; SSCN 841; MOD 384; MOD 189	HSV	P014-01	AVIONICS AIR ASSEMBLY	SV809992-6	2	EA		BOE/HSV	28-May-99	DD250 BHB0517
SSCN 5265;03-0174	HOU	P014B-04	SHIM, LAMINATED	STSV046B23	8	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1888
MOD 1179; MOD 1171; SSCN 5265;03-0174	HOU	P014B-05	SHIM, LAMINATED	STSV046B67	4	EA		HAMSUND/CT	31-Mar-03	NEW P/N
MOD 1171; SSCN 5265;03-0174	HOU	P014B-06	GASKET, HEAT EXCHANGER	SV812061-1	2	EA		HAMSUND/CT	14-Jul-03	NEW P/N
SSCN 5265;03-0174	HOU	P014B-07	BAND, CLAMP	SV806469-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
MOD 1171; SSCN 5265;03-0174	HOU	P014B-08	GROMMET, PLASTIC, EDGING	MS21266-1T	8	EA		HAMSUND/CT	31-Mar-03	NEW P/N
MOD 1171; SSCN 5265;03-0174	HOU	P014B-09	GROMMET, PLASTIC, EDGING	MS21266-2T	8	EA		HAMSUND/CT	31-Mar-03	NEW P/N

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
SSCN 5265;03-0174	HOU	P014B-10	STRAIGHTENER, AIR FLOW	SV811977-1	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-11	PIN, SHOULDER, HEADLESS	SV812024-1	4	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-12	MOUNT, RESILIENT, FAN	SV812031-1	5	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-13	MOUNT, RESILIENT, FAN	SV812032-1	5	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-14	SHIM, LAMINATED	SV812033-1	4	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1888
SSCN 5265;03-0174	HOU	P014B-15	SPRING, HELICAL, COMPRESSION	SV812035-1	20	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-16	TIE ROD, FAN BRACKET	SV812039-1	22	EA		HAMSUND/CT	9-Jul-03	HEX, FAN R&R
SSCN 5265;03-0174	HOU	P014B-17	SPACER, SOLID	SV812040-1	4	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1888
SSCN 5265;03-0174	HOU	P014B-18	SPACER, SOLID	SV812050-1	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-19	SPACER, SOLID	SV812050-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-20	STRIP, ELECTRICAL GROUNDING	SV812052-1	7	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-21	BUSHING, ISOLATOR	SV812053-1	14	EA		HAMSUND/CT	2-Jul-03	HEX, FAN R&R
SSCN 5265;03-0174	HOU	P014B-22	RING, ISOLATOR	SV812054-1	28	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-23	SCREW, CAP, SOCKET HEAD	SV812055-1	8	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1888
SSCN 5265;03-0174	HOU	P014B-24	WASHER, FLAT	SV812058-1	8	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-25	SOUND CONTROLLING BLOCK	SV812059-1	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-26	BUSHING, SLEEVE	SV812062-1	4	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-27	BUSHING, SLEEVE	SV812063-1	4	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-28	BUSHING, SHOULDER	SV812064-1	24	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
MOD 1179; SSCN 5265;03-0174	HOU	P014B-29	IMPELLER, FAN-AAA	SV819420-2	2	EA		HAMSUND/CT	14-Aug-03	NEW P/N
SSCN 5265;03-0174	HOU	P014B-31	BRACKET, BEARING	SV812830-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-32	CAP, MOTOR	SV812831-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-33	BOLT, REDUCED SHANK	SV813891-3	20	EA		HAMSUND/CT	11-Sep-03	CAPTIVE FASTENER REPAIR
SSCN 5265;03-0174	HOU	P014B-36	WIRING HARNESS-ELECTRICAL	SV817706-3	1	EA		HAMSUND/CT	30-Dec-03	INSURANCE
SSCN 5265;03-0174	HOU	P014B-37	WIRING HARNESS-ELECTRICAL	SV817707-3	1	EA		HAMSUND/CT	18-Jun-03	INSURANCE

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
SSCN 5265;03-0174	HOU	P014B-38	WIRING HARNESS-ELECTRICAL	SV817708-3	1	EA		HAMSUND/CT	21-Aug-03	INSURANCE
SSCN 5265;03-0174	HOU	P014B-39	BACKSHELL, CONNECTOR	SV817710-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-40	CONNECTOR, RECEPTACLE	SV817729-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-41	WIRING HARNESS-ELECTRICAL	SV817730-2	1	EA		HAMSUND/CT	18-Jun-03	INSURANCE
SSCN 5265;03-0174	HOU	P014B-42	SHIM, THRUST BEARING	SV817751-1	4	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
SSCN 5265;03-0174	HOU	P014B-43	IMPELLER ASSY, MOTOR	SV817815-3	2	EA		HAMSUND/CT	28-Apr-03	FAN REPAIR
SSCN 5265;03-0174	HOU	P014B-44	NUT, BARREL	SV817845-2	2	EA		HAMSUND/CT	31-Mar-03	DD250 BHB1837
MOD 1171; MOD 783; MOD 543; CCO 488; SSCN 618	HOU	P016-01	BEARING ASSEMBLY, TRRJ-SPARE	1F81160-1	1	EA		KSC	5-Jan-01	DD250 BHB1948
MOD 1171	HOU	P016-01A	KIT, LOOSE ITEMS, TRRJ SPARE	1F81163-1	1	KT		KSC /PPS	6-Dec-02	DD250 BHB1966
MOD 783MOD 760; MOD 742; MOD 681; MOD 543; CCO 488	BCP	P016-02	FLEXIBLE HOSE ROTARY COUPLER (FHRC)	5849811-501	1	EA		KSC	1-Dec-00	L/I 87 - DD250 BHB1747
MOD 760; MOD 543; CCO 488; SSCN 618	BCP	P016-03	TRRJ DRIVE LOCK ASSEMBLY (LDLA)	5846872-501	1	EA		KSC	7-Aug-00	L/I 96 - DD250 BHB1731
MOD 1127; LTR. 02-0143; MOD 760; MOD 543	BCP	P016-04	ROTARY JOINTS MOTOR CONTROLLER (RJMC)	5842400-505	1	EA		JSC	7-Jul-00	L/I 76 - DD250 BHB1748
MOD 543; CCO 488; SSCN 618	BCP	P016-05	SARJ DRIVE LOCK ASSEMBLY (SDLA)	5847010-501	1	EA		LMMS	8-Sep-00	
MOD 1171; MOD 1127; LTR. 02-0104; MOD 810; MOD 742	BCP	P016-06	UTA DRIVEN MEMBER CONNECTOR ASSEMBLY (UTA)	5847620-301	1	EA		KSC/PPS	7-Jun-00	DD250 BHB1823 IN WK
MOD 760; MOD 543; CCO 488; SSCN 618	BCP	P016-07	TRUNDLE BEARING ASSEMBLIES	5846485-505	8	EA		LMMS	7-Jul-99	L/I 84 - DD250 BHB01086
MOD 760	BCP	P016-07A	TRUNDLE BEARING ASSEMBLIES	5846485-505	2	EA		KSC	15-Oct-99	DD250 BHB1087
MOD 810; MOD 543; CCO 488; SSCN 618	BCP	P016-08	UTILITY TRANSFER ASSEMBLY (UTA)	5846482-503	1	EA		LMMS	7-Jun-00	L/I 81 - DD250 BHB1585
MOD 1084; MOD 681; MOD 543; CCO 488; SSCN 618	BCP	P016-09	TRRJ BEARING ASSEMBLY	5849810-501	1	EA		LMMS	7-Jan-00	L/I 91-DD250 BHB1494; LMMS WILL MFG & DEL. A TRRJ ASSY, P/N 5839193-501(LESS DLAs & FHRC).IT WILL UTIL. THE TRRJ BEARING UNIT P
MOD 543; CCO 488; SSCN 618	BCP	P016-10	FLEXIBLE HOSE ROTARY COUPLER (FHRC)	5849811-501	1	KT		LMMS	7-Nov-01	DD250 BHB1816
MOD 1127; LTR. 02-0143; MOD 760; MOD 543	BCP	P016-11	ROTARY JOINT MOTOR CONTROLLERS (RJMC)	5842400-505	1	EA		LMMS	7-Jul-00	DD250 BHB1774
MOD 1171; MOD 892; MOD 543; CCO 488	BCP	P016-13	TRUNDLE BEARING ASSEMBLIES	5846485-505	10	EA		KSC/PPS	7-May-00	NEW P/N
MOD 681; MOD 530; MOD 413; SSCN 619	BHB	P017-001	ESSMDM - 16E TYPE 4	8259065-905	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0363

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 530; MOD 413; SSCN 619	BHB	P017-002	SSMDM - 10E TYPE 11	8259056-909	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0413
MOD 719; MOD 413; SSCN 619	BHB	P017-003	SSMDM - 4E TYPE 12	8260500-916	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0412. NEW P/N -923
MOD 760; MOD 681; MOD 530; MOD 413; SSCN 619	BHB	P017-004	SSMDM - 4E TYPE 9	8260525-904	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0342. NEW P/N -908
MOD 681; MOD 530; MOD 413; SSCN 619	BHB	P017-005	ESSMDM - INT/TYPE 3	8259015-911	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0365
MOD 719; MOD 681; MOD 530; MOD 413; SSCN 619	BHB	P017-006	SSMDM - 161 TYPE 3	8258906-925	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0413
MOD 530; MOD 413; SSCN 619	BHB	P017-008	HRDL I/O CCA	8265999-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0413
MOD 530; MOD 413; SSCN 619	BHB	P017-009	ESS IOCU CCA	8265894-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0370
MOD 530; MOD 413; SSCN 619	BHB	P017-010	LLA CCA	8260870-901	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0342
MOD 530; MOD 413; SSCN 619	BHB	P017-011	HLA CCA	8260880-901	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0345
MOD 530; MOD 413; SSCN 619	BHB	P017-012	SPD 1553 CCA	8260910-901	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0366
MOD 530; MOD 413; SSCN 619	BHB	P017-013	IOCU CCA	8260920-902	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0362
MOD 530; MOD 413; SSCN 619	BHB	P017-014	CHASSIS ASSY 4C	8266514-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0413; DD250 P/N 8268514-901 DOES NOT MATCH J-9 PT #
MOD 742; MOD 530; MOD 413; SSCN 619	BHB	P017-015	COVER ASSY 4C	8266521-902	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0365; NEW P/N NOW -903, -904
MOD 530; MOD 413; SSCN 619	BHB	P017-016	CHASSIS ASSY 4CE	8266516-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0364, NEW P/N NOW -903 & -905
MOD 530; MOD 413; SSCN 619	BHB	P017-017	CHASSIS ASSY 4CE - MOD	8266515-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0406, NEW P/N NOW -902
MOD 530; MOD 413; SSCN 619	BHB	P017-018	COVER ASSY 4CE	8266522-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0345
MOD 530; MOD 413; SSCN 619	BHB	P017-019	CHASSIS ASSY 10CE	8266517-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0407, NEW P/N NOW -903 & -904
MOD 530; MOD 413; SSCN 619	BHB	P017-020	COVER ASSY 10CE	8266523-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0342
MOD 530; MOD 413; SSCN 619	BHB	P017-021	CHASSIS ASSY 10C IOCU MOD.	8267278-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0404
MOD 530; MOD 413; SSCN 619	BHB	P017-022	CHASSIS ASSY 16C	8266518-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0365
MOD 530; MOD 413; SSCN 619	BHB	P017-023	COVER ASSY 16C	8266524-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB400
MOD 530; MOD 413; SSCN 619	BHB	P017-024	CHASSIS ASSY ESS INT	8266519-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0413
MOD 530; MOD 413; SSCN 619	BHB	P017-025	COVER ASSY ESS INT	8266525-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0365
MOD 530; MOD 413; SSCN 619	BHB	P017-026	CHASSIS ASSY ESS EXT	8266520-901	1	EA		HI/GLEND	30-Apr-99	DD250 BHB401

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 681; MOD 530; MOD 413; SSCN 619	BHB	P017-027	COVER ASSY ESS EXT	8266526-902	1	EA		HI/GLEND	30-Apr-99	DD250 BHB0365
MOD 530; MOD 413; SSCN 619	BHB	P017-028	FASTENER	1F02406-1	33	EA		HI/GLEND	30-Apr-99	DD250 BHB0567
MOD 530; MOD 413; SSCN 619	BHB	P017-029	FASTENER	1F02406-501	66	EA		HI/GLEND	30-Apr-99	DD250 BHB0567
MOD 530; MOD 413; SSCN 619	BHB	P017-030	FASTENER	1F02409-1	53	EA		HI/GLEND	30-Apr-99	DD250 BHB0567
MOD 530; MOD 413; SSCN 619	BHB	P017-031	FASTENER	1F34097-1	27	EA		HI/GLEND	30-Apr-99	DD250 BHB0567
MOD 530; MOD 413; SSCN 619	BHB	P017-032	HARNESS/ORU ASSY	8259031-902	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0405; THIS COMPLETES PARTIAL SHIPMENT (BHB0387)
MOD 530; MOD 413; SSCN 619	BHB	P017-037	IC, PWM, SG1825, 16 PIM DIP	8259843-401	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-039	INDUCTOR, POWER, 235UH	8260632-401	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-040	TRANSFORMER, TF5S03	8260633-401	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-041	MCKT, 5214	8260648-412	5	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-042	OSCILLATOR, XTAL, 48 MHZ	8260833-401	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-044	MCKT, 1553921, 2 CH (LOGIC IN NATURE)	8261076-411	5	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-045	ICH, SINGLE CH OPTOCOUPLER, HCPL5701	8261102-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-047	MCKT, REF43, 2.5V REF, DIP	8261117-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-048	RES, NET, 10K3.75K, VISHAY 1490, F14 PACK	8261721-401	8	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-049	METER, TIME TOTAL	8261820-002	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-050	MCKT, OPT, CLASS H EQUIV	8262490-401	35	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-051	MCKT, 1553 BCRT	8262599-402	9	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-052	IC, PWM, UC1845A, 8 PIN DIP, JC=50C/W	8262725-402	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-053	MCKT, QD COMPARATOR, CMP404A, 14 PIN DIP	8262758-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-054	MCKT, SRAM 128K X 8	8262857-421	60	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-056	SCREW, .138-32 UNRC-3A	8263620-001	1022	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-058	ICH, P.S. MONITOR, CB=0.9C/W	8264455-401	5	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-059	ICH, P.S. MONITOR, 1.57X1.25 IN.	8264456-401	5	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-060	MCKT, 82370, PROCESSOR SUPPORT	8264458-411	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0410

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 530; MOD 413; SSCN 619	BHB	P017-061	GA HRDL CONTROL	8264461-411	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-062	MCKT, SSQ OPTIXMITTER	8264479-401	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-063	MCKT	8264481-401	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-064	MCKT,KSSQ SCSI BUS INTERFACE	8264484-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-066	CABLE ASSY, FIBER OPTIC	8264695-001	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-067	CABLE ASSY, FIBER OPTIC	8264695-002	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-068	IC, POS 3-TERM ADJ REG, TO-257, LM 117A	8264986-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-069	IC, NEG 3-TERM ADJ REG, TO-257, LM 137A	8264987-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-070	IC,8-BIT TRANSCEIVER, 54FCT245AT, F20	8265005-401	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-072	MCKT	8265409-001	30	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-073	MCKT, DRAM 4MX4, 24 PIN, C1 EXTRAP TO 0.04	8265409-002	6	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-074	MCKT, DIGITAL-BUFFER, QUAD	8265608-001	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530; MOD 413; SSCN 619	BHB	P017-075	HARNESS/ORU ASSY-4C/CE	8265746-903	2	EA		HI/GLEND	30-Apr-99	DD250 BHB402
MOD 530; MOD 413; SSCN 619	BHB	P017-076	HARNESS/ORU MDM-10C/CE	8265917-902	2	EA		HI/GLEND	30-Apr-99	DD250 BHB0386
MOD 530; MOD 413; SSCN 619	BHB	P017-077	HARNESS/ORU ASSY-16C/CE	8265931-902	3	EA		HI/GLEND	30-Apr-99	DD250 BHB0388
MOD 530; MOD 413; SSCN 619	BHB	P017-147	IC, OCTAL BUFFER, 3-STATE	M38510/75705SSX	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410 PT # IS M38510/75705SSX
MOD 530; MOD 413; SSCN 619	BHB	P017-148	SCREW, .086-56UNJC-3A	NAS1191E02T3NK	358	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530	BHB	P017-149	CABLE ASSY, FIBER OPTIC	8264696-001	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530	BHB	P017-150	CABLE ASSY, FIBER OPTOC	8264696-002	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530	BHB	P017-151	MCKT	8259816-402	22	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530	BHB	P017-152	RES, NET, 10K/10K, VISHAY	8261722-401	4	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530	BHB	P017-155	CONNECTOR KEYING KIT	320-6620-001	57	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 530	BHB	P017-156	SCREW	NAS1189E04T5NK	114	EA		HI/GLEND	30-Apr-99	DD250 BHB0410
MOD 783	BHB	P017-157	RETAINER	1F02408-1	90	EA		HI/GLEND A	1-Jul-98	DD250 BHB0567
MOD 783	BHB	P017-158	BUSHING	1F02407-1	45	EA		HI/GLEND A	1-Jul-98	DD250 BHB0567
MOD 783	BHB	P017-159	BUSHING	1F02413-1	45	EA		HI/GLEND A	1-Jul-98	DD250 BHB0567
MOD 810	BHB	P017-160	MDM-4C (FLIGHT)	8260555-910	1	EA		KSC/PPS	30-Nov-99	NASA TO ACCEPT FGB MDM SPARE AS IS; SERIAL # 96100105
MOD 470; SSCN 620; MOD 248	HSV	P018-01	PORTABLE FIRE EXTING ASSY	683-10050-1	1	EA		BOE/HSV	4-Sep-98	DD250 BHB0427

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 938; MOD 877; MOD 783; MOD 491; SSCN 621	HSV	P019-01	REMOTE CONTROL SYSTEM ON/OFF	219006-2	1	EA		KSC/PPS	29-Sep-00	DD250 BHB0993
MOD 877; MOD 783; MOD 491; SSCN 621; MOD 254	HSV	P019-02	LAMP HOUSING ASSY GENERAL LIGHT	219010	5	EA		KSC/PPS	30-Dec-98	DD250 BHB0994
MOD 877; MOD 783; MOD 491	HSV	P019-02A	LAMP HOUSING ASSY, GENERAL LIGHT	219010	3	EA		KSC/PPS	30-Jan-99	DD250 BHB0991
MOD 877; MOD 783; MOD 491	HSV	P019-02B	LAMP HOUSING ASSY, GENERAL LIGHT	219010	3	EA		KSC/PPS	28-Feb-99	DD250 BHB0995
MOD 877; MOD 783; MOD 491	HSV	P019-02C	LAMP HOUSING ASSY, GENERAL LIGHT	219010	3	EA		KSC/PPS	31-Mar-99	DD250 BHB0996
MOD 877; MOD 783; MOD 491	HSV	P019-02D	LAMP HOUSING ASSY, GENERAL LIGHT	219010	3	EA		KSC/PPS	30-Apr-99	DD250 BHB1075
MOD 877; MOD 783; MOD 491	HSV	P019-02E	LAMP HOUSING ASSY, GENERAL LIGHT	219010	3	EA		KSC/PPS	30-May-99	DD250 BHB0995
MOD 877; MOD 783; MOD 491	HSV	P019-02F	LAMP HOUSING ASSY, GENERAL LIGHT	219010	3	EA		KSC/PPS	30-Jun-99	DD250 BHB1343
MOD 877; MOD 783; MOD 491	HSV	P019-02G	LAMP HOUSING ASSY, GENERAL LIGHT	219010	2	EA		KSC/PPS	30-Jul-99	DD250 BHB0997
MOD 877; MOD 783; MOD 491; SSCN 621; MOD 254	HSV	P019-03	BASEPLATE/BALLAST ASSEMBLY	219011	5	EA		KSC/PPS	30-Dec-98	DD250 BHB1290
MOD 877; MOD 470; MOD 384; MOD 258	HSV	P020-01	POWER SUPPLY EMERGENCY EGRESS	683-26007-1	4	EA		KSC/PPS	31-May-98	DD250 BHB1314
MOD 470; MOD 384; MOD 258	HSV	P020-02	EMERGENCY EGRESS LIGHT STRIP	683-26007-3	2	EA		BOE/HSV	30-Nov-97	DD250 BHB0351
MOD 470; MOD 384; MOD 258	HSV	P020-03	EMERGENCY EGRESS LIGHT STRIP	683-26007-2	3	EA		BOE/HSV	30-Nov-97	DD250 BHB0351
MOD 491; SSCN 622; MOD 298	HSV	P021-01	CHARCOAL BED ASSEMBLY	5823608-501	1	EA		LMMS	1-Nov-98	DD250 BHB0451
MOD 491; SSCN 622; MOD 298	HSV	P021-02	SORBENT BED ASSEMBLY	5823623-503	1	EA		LMMS	30-Jul-98	DD250 BHB0451
MOD 491; SSCN 622; MOD 298	HSV	P021-03	CATALYTIC OXIDIZER	5823630-503	1	EA		LMMS	29-Nov-98	DD250 BHB0451
MOD 491; SSCN 622; MOD 298	HSV	P021-04	ELECTRICAL INTERFACE ASSEMBLY	5835398-503	1	EA		LMMS	6-Apr-99	DD250 BHB0656
MOD 491; SSCN 622; MOD 298	HSV	P021-05	BLOWER ASSEMBLY	5844815-501	1	EA		LMMS	15-May-99	DD250 BHB0746
MOD 491; SSCN 622; MOD 298	HSV	P021-06	FLOW METER ASSEMBLY	5835405-501	1	EA		LMMS	5-Mar-99	DD250 BHB0466
MOD 681; CCO 556	HSV	P021A-01	Power Supply PWB	2370764-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-02	I/O BUFFER PWB	2370770-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-03	ANALOG PWB	2370776-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-04	INVERTER PWB	2370782-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-05	EMI INRUSH #1 PWB	2370785-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-06	EMI INRUSH #2 PWB	2370788-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-07	CONNECTOR	5844816-001	4	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-08	TERMINAL	2370796-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-09	INDUCTOR	2370505-102	1	EA		LMMS	23-Sep-99	DD250 BHB0666

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 681; CCO 556	HSV	P021A-10	INDUCTOR	2370506-102	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-11	FILTER	2355452-101	4	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-12	CONNECTOR	2354620-115	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-13	CONNECTOR	2354620-111	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-14	RESISTOR	RER65F4R64R	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-15	DIODE	2354907-101	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-16	TRANSISTOR	JANS2N7237	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-17	TERMINAL	2370796-3	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-18	THRUST BEARING	2207344-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-19	THRUST BEARING	2207344-2	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-20	JOURNAL BEARING	2353644-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-21	STATOR ASSEMBLY	2353659-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-22	ROTATING ASSEMBLY	2366134-1	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-23	THRUST BEARING SHIMS	2353643-1	1	SE		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-24	THRUST BEARING SHIMS	2353643-2	1	SE		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-25	THRUST BEARING SHIMS	2353643-3	1	SE		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-26	THRUST BEARING SHIMS	2353643-4	1	SE		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-27	MOTOR HOUSING SHIMS	2366139-1	1	SE		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-28	MOTOR HOUSING SHIMS	2366139-2	1	SE		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-30	O-RING	M83248/1-214	3	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-31	FASTENER, CAPTIVE	5835131-005	2	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-32	FASTENER, CAPTIVE	5835131-033	2	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-33	RETAINER RING	5835131-025	6	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-34	POWER CONTROLLER PWA	5838638-503	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-35	OVERCURRENT PROTECTION CCA	5844854-501	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-36	POWER SUPPLY	683-26300-3	1	EA		HSV	23-Sep-99	DD250 BHB0964
MOD 681; CCO 556	HSV	P021A-37	EMI FILTER PWA	5823609-503	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-38	INDUCTOR	1PE0598-001	2	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-39	FASTENER, CAPTIVE	5835131-001	4	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-41	FDLOW SENSOR ASSEMBLY	92170-E-160	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-42	POWER SUPPLY ASSEMBLY	92170-C-120	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-43	SIGNAL CONDITIONER ASSEMBLY	92170-C-140	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-46	CATALYST	5835120(SPEC)	3	LB		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-47	TEMPERATURE DETECTOR	5823615-001	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-48	HEATER	5844851-501	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-49	O-RING	5844574-001	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-50	INSULATION ASSEMBLY	5835254-501	1	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 835; MOD 681; CCO 556	HSV	P021A-52	BELLVILLE WASHER	5844808-001	200	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-53	CHARCOAL	M83248/1-279	500	LB		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-54	O-RING	M83248/1-5-988	20	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-55	FILTER	5835391-005	20	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-56	RETAINER RING	5835131-027	60	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-57	FASTNER	5835131-009	60	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-58	SPRING	5835388-001	80	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-59	LITHIUM HYDROXIDE	SD-L-0024(SPEC)	30	LB		LMMS	23-Sep-99	DD250 BHB0798

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 681; CCO 556	HSV	P021A-60	O-RING	M83248/1-160	20	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-61	FILTER	5835391-001	20	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681; CCO 556	HSV	P021A-62	SPRING	5835388-003	10	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 681	HSV	P021A-63	FILTER	5835391-003	10	EA		LMMS	23-Sep-99	DD250 BHB0666
MOD 783; MOD 760; MOD 565; SSCN 623; MOD 299	HSV	P022-01	LOW VOLTAGE POWER SUPPLY	360110-001	1	EA		KSC	15-Jul-99	L/I 44 - DD250 BHB0569
MOD 783; MOD 760; MOD 565; SSCN 623; MOD 299	HSV	P022-02	SERIES PUMP ASSEMBLY MCA/TCM	359425-005	1	EA		JSC	5-Apr-99	L/I 40 - DD250 BHB0585
MOD 565; SSCN 623; MOD 299	HSV	P022-02A	SERIES PUMP ASSEMBLY MCA/TCM	359425-005	1	EA		OSC	30-Jul-99	DD250 BHB0796
MOD 565; SSCN 623; MOD 299	HSV	P022-02B	SERIES PUMP ASSEMBLY MCA/TCM	359425-005	1	EA		HAMSD/CA	30-Oct-99	DD250 BHB1482 IN WK
MOD 962; MOD 783; MOD 760; MOD 565; SSCN 623	HSV	P022-03	MCA DATA & CONTROL ASSEMBLY	359650-004	1	EA		KSC	30-Apr-01	L/I 41 - DD250 BHB01028
MOD 1117; MOD 783; MOD 760; MOD 565; SSCN 623	HSV	P022-04	MCA SPECTROMETER ASSEMBLY	359675-005	1	EA		KSC	30-May-02	L/I 42 - DD250 BHB0679 IN WORK. SPARE TO BE USED IN PF1 & BACKFILL WITH SN Q0001 AFTER REWORK; SENDING SN F0003 FOR ASSY CRIT
MOD 565; SSCN 623; MOD 299	HSV	P022-04A	MCA SPECTROMETER ASSEMBLY	359675-004	1	EA		OSC	15-Sep-99	DD250 BHB0680
MOD 565; SSCN 623; MOD 299	HSV	P022-04B	MCA SPECTROMETER ASSEMBLY	359675-004	1	EA		OSC	15-Feb-00	DD250 BHB0708
MOD 783; MOD 760; MOD 565; SSCN 623; MOD 299	HSV	P022-05	SAMPLE DISTRIBUTION ASSEMBLY	359750-002	1	EA		KSC	5-Apr-99	L/I 42 - DD250 BHB0569
MOD 565; SSCN 623; MOD 299	HSV	P022-05A	SAMPLE DISTRIBUTION ASSEMBLY	359750-002	1	EA		OSC	30-Jun-99	DD250 BHB0569
MOD 783; MOD 760; MOD 565; SSCN 623; MOD 299	HSV	P022-08	VERIFICATION GAS ASSEMBLY	359850-004	1	EA		HAMSD/CA	1-Jun-99	DD250 BHB1481 IN WK
MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-01	PUMP BYPASS CHECK VALVE	2351169-1-1	1	EA		BOE/HSV	17-Apr-99	DD250 BHB0554
MOD 877; MOD 760; MOD 681; MOD 530; SSCN 624	HSV	P023-02	PRESSURE CONTROL PANEL	2351290-2-1	2	EA		KSC/PPS	2-Jan-00	DD250 BHB0955
MOD 783; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-04	REGEN HEAT EXCHANGER	2351340-1-1	1	EA		KSC	29-Dec-98	L/I 36 - DD250 BHB0625
MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-05	SPCU HEAT EXCHANGER	2351350-1-1	1	EA		BOE/HSV	15-Apr-99	DD250 BHB0441
MOD 760; MOD 742; MOD 530; SSCN 624; MOD 300	HSV	P023-06	COLDPLATE - 1	683-56045-1	1	EA		BOE/HSV	26-Jan-99	DD250 BHB0584
MOD 760; MOD 742; MOD 530; SSCN 624; MOD 300	HSV	P023-07	COLDPLATE - 4	683-56045-4	1	EA		BOE/HSV	26-Jan-99	DD250 BHB0498

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 760; MOD 742; MOD 530; SSCN 624; MOD 300	HSV	P023-08	COLDPLATE - 5	683-56045-5	1	EA		BOE/HSV	26-Jan-99	DD250 BHB0499
MOD 877; MOD 783; MOD 760; MOD 742; MOD 530	HSV	P023-09	COLDPLATE - 6	683-56045-6	1	EA		KSC/PPS	30-Jul-99	DD250 BHB0584
MOD 877; MOD 742; MOD 530; SSCN 624	HSV	P023-10	COLDPLATE - 7	683-56045-7	1	EA		KSC/PPS	26-Jan-99	DD250 BHB0681
MOD 877; MOD 783; MOD 760; MOD 742; MOD 530	HSV	P023-11	COLDPLATE - 8	683-56045-8	1	EA		KSC/PPS	30-Jul-99	DD250 BHB0944
MOD 760; MOD 742; MOD 530; SSCN 624; MOD 300	HSV	P023-12	COLDPLATE - 9	683-56045-9	1	EA		BOE/HSV	17-Mar-00	DD250 BHB0951
MOD 835; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-13	COLDPLATE - 10	683-56045-10	1	EA		BOE/HSV	23-Feb-00	DD250 BHB0805
MOD 783; MOD 760; MOD 742; MOD 530; SSCN 624	HSV	P023-14	AREA SMOKE DETECTOR ASSEMBLY	2351520-2-1	2	EA		BOE/HSV	19-May-99	DD250 BHB0630
MOD 877; MOD 783; MOD 760; MOD 530; SSCN 624	HSV	P023-15	TEMPERATURE SENSOR	2352514-1-1	1	EA		KSC/PPS	18-May-02	DD250 BHB0704
MOD 783; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-16	PRESSURE TRANSDUCER ABSOLUTE	2352515-1-1	1	EA		BOE/HSV	14-Sep-99	DD250 BHB0716
MOD 783; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-17	DELTA PRESSURE SENSOR	2352516-1-1	1	EA		BOE/HSV	14-Sep-99	DD250 BHB0631
MOD 877; MOD 783; MOD 760; MOD 530; SSCN 624	HSV	P023-18	DESICCANT\SORBENT BED	2352540-1-1	1	EA		KSC/PPS	31-Jan-00	DD250 BHB1293
MOD 877; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-19	BLOWER/PRECOOLER ASSEMBLY	2352550-1-1	1	EA		KSC/PPS	31-Jan-99	DD250 BHB1403
MOD 835; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-20	COLDPLATE	2352658-2	1	EA		BOE/HSV	14-Feb-99	DD250 BHB0690
MOD 1030; MOD 877; MOD 760; MOD 530; SSCN 624	HSV	P023-22	PUMP TWO STAGE	2352730-1-2	1	EA		KSC/PPS	12-Jan-99	DD250 BHB1238
MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-23	PUMP PACKAGE ASSEMBLY	2353170-1-1	3	EA		BOE/HSV	17-Feb-00	DD250 BHB1170
MOD 962; MOD 862; MOD 760	HSV	P023-23A	PUMP PACKAGE ASSEMBLY	2353170-1-1	1	EA		KSC/PGOC	1-Dec-00	L/I 46 - DD250 BHB0921
MOD 877; MOD 810; MOD 760; MOD 530; SSCN 624	HSV	P023-24	INSULATION ASSEMBLY - RACK FLOW CONTROL ASSEMBLY	683-56186-1	1	EA		KSC/PPS	24-Feb-00	DD250 BHB0954
MOD 877; MOD 810; MOD 760; MOD 530; SSCN 624	HSV	P023-25	INSULATION ASSEMBLY - SYSTEM FLOW CONTROL ASSEMBLY	683-56187-1	3	EA		KSC/PPS	20-Feb-00	DD250 BHB1244

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 962; MOD 862; MOD 810; MOD 760	HSV	P023-25A	INSULATION ASSEMBLY - SYSTEM FLOW CONTROL ASSEMBLY	683-56187-1	1	EA		KSC/PGOC	1-Dec-00	L/I 47 - DD250 BHB0952
MOD 892; MOD 877; MOD 810; MOD 783; MOD 760	HSV	P023-26	INSULATION ASSEMBLY - LOOP CROSSOVER ASSEMBLY	683-56188-1	1	EA		BOE/HSV	22-Oct-00	DD250 BHB1048
MOD 877; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-28	MOTOR CONTROLLER	2354164-2-1	1	EA		KSC/PPS	3-May-99	DD250 BHB1238 IN WK
MOD 928; MOD 877; MOD 810; MOD 760; MOD 530	HSV	P023-29	CDRA HEATER CONTROLLER	2354222-2-1	1	EA		KSC/PPS	8-Oct-99	DD250 BHB1528
MOD 783; MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-30	STANDALONE TEMPERATURE SENSOR	2365430-1-1	1	EA		BOE/HSV	24-Jan-00	DD250 BHB0655
MOD 877; MOD 810; MOD 760; MOD 530; SSCN 624	HSV	P023-31	INSULATION ASSEMBLY - THREE-WAY MIX VALVE	683-56185-1	2	EA		KSC/PPS	24-Jul-99	DD250 BHB0977
MOD 962; MOD 862; MOD 810; MOD 760	HSV	P023-31A	INSULATION ASSEMBLY - THREE-WAY MIX VALVE	683-56185-1	1	EA		KSC/PGOC	1-Dec-00	L/I 48 - DD250 BHB0953
MOD 760; MOD 530; SSCN 624; MOD 300	HSV	P023-32	MANUAL FLOW CONTROL VALVE	2366110-1-1	1	EA		BOE/HSV	29-Dec-98	DD250 BHB0503
MOD 1117	HSV	P023-33	PUMP FAN MOTOR CONTROLLER (PFMC)	2354164-2-1	1	EA		KSC/PPS	31-Jul-02	DD250 BHB1606 - NEW ITEM ADDED & DELIVERED AT NO COST
MOD 1268; MOD 1179; MOD 1143; SSCN 5121, 04-0216	HOU	P023B-01	DUCT DETECTOR, SMOKE	2351510-2-1	2	EA		HW/TOR	30-Sep-03	Nomenclature changed per Boeing Ltr 2- 1150-04-0346 concurred by NASA on 08/06/04; Part Number changed per Boeing Ltr 2-1150-04-0216 concurred by NASA on 5/10/04.
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-02	ELEC OPT ASSY	4242867-2	10	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-03	CCA, EMI	4242441-1	1	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-04	CCA, SENSOR	4242889-1	5	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-05	CCA, PS	4242897-1	1	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-06	CANISTER CLAMP	4242773-1	4	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-07	SCREW ASSY	4222145-1004	30	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-08	NUT RETAINER	4222146-1001	30	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-09	CORNER PROTECTOR	4243507-1	8	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121; Ltr 03-0247	HOU	P023B-10	PRESSSURE REGULATOR	683-16302-1	1	EA		KSC	30-Sep-03	
MOD 1143; SSCN 5121; Ltr 03-0247	HOU	P023B-11	RELIEF VALVE	683-16303-2	1	EA		KSC	30-Sep-03	
MOD 1143; SSCN 5121; Ltr 03-0247	HOU	P023B-12	QUICK DISCONNECT	683-16348-376	3	EA		KSC	30-Sep-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; SSCN 5121; Ltr 03-0247	HOU	P023B-13	QUICK DISCONNECT	683-16348-329	3	EA		KSC	30-Sep-03	
MOD 1143; SSCN 5121; Ltr 03-0247	HOU	P023B-14	SEAL RING	KC103-6	12	EA		KSC	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-15	NITROGEN ISOLATION VALVE	2353052-2-1	2	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-16	COIL ASSEMBLY	3797561-1	1	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-17	COIL ASSEMBLY	3797561-2	1	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-18	SEAT WASHER	4173821-1	6	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-19	PACKING	3796912-2	6	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-20	PACKING	3796912-3	6	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-21	SEAL ASSEMBLY	4173819-2	12	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-22	ARMATURE	3797591-1	1	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-23	OPTICAL SWITCH	2351095-101	1	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-24	ACTUATOR	2357590-2-1	1	EA		HW/TOR	30-Sep-03	
MOD 1143; SSCN 5121	HOU	P023B-26	TEMPERATURE SENSOR, STAND ALONE	2365430-1-1	4	EA		HW/TOR	30-Sep-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-27	MEMBRANE	2351311-15	10	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-29	CONNECTOR, CIRCULAR	2354682-101	6	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-30	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-101	70	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-31	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-102	77	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-32	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-105	2	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-33	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-106	1	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-34	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-110	2	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-35	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-111	1	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-36	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-112	1	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-37	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-113	7	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-38	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-114	2	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-39	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-118	1	EA		HW/TOR	30-Jun-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-40	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-119	2	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-41	CONNECTOR, CIRCULAR, SOLDER MOUNT	2354620-120	2	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-42	CONNECTOR, CIRCULAR, WELD MOUNT	2371154-109	3	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-43	CONNECTOR, CIRCULAR, WELD MOUNT	2371154-114	3	EA		HW/TOR	30-Jun-03	
MOD 1179; MOD 1143; SSCN 5121	HOU	P023B-44	CONNECTOR, CIRCULAR, WELD MOUNT	2371154-117	3	EA		HW/TOR	30-Jun-03	
MOD 445; SSCN 625; MOD 271	BHB	P024-01	DATA BUS REPEATER	51612-0411-1	1	EA		BOE/HUNB	17-Oct-97	DD250 BHB0247
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P024-02	APCUI	1F67740-1	1	EA		KSC/PPS	15-Sep-99	DD250 BHB1205
MOD 445; SSCN 625; MOD 271	BHB	P024-03	FET DRIVER	1F67766-1	8	EA		BOE/HUNB	30-Mar-98	DD250 BHB0571
MOD 928; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P024-04	CONTROLLER	1F67759-505	2	EA		KSC/PPS	15-Sep-99	DD250 BHB1058
MOD 565; SSCN 626; MOD 337	BHB	P025-01	CONTROL MOMENT GYRO	5080097-9	1	EA		ALLIEDSIG	10-May-00	DD250 BHB1011
MOD 565; SSCN 626; MOD 337	BHB	P025-02	CONTROL MOMENT GYRO (EA)	5092021-9	1	EA		ALLIEDSIG	10-May-00	DD250 BHB0634
MOD 877; MOD 505; SSCN 627; MOD 338	BHB	P026-01	AUTOMATED PAYLOAD SWITCH	1F95062-1	2	EA		KSC/PPS	17-Oct-98	DD250 BHB1053
MOD 877; MOD 708; MOD 591; MOD 505; SSCN 627	BHB	P026-02	PAYLOAD ETHERNET HUB GATEWAY	AN60231-001-03	2	EA		KSC/PPS	1-Apr-99	DD250 BHB0774
MOD 505; SSCN 627; MOD 338	BHB	P026-03	C & W PANEL	1F51710-1	1	EA		BOE/HUNB	17-Oct-98	DD250 BHB0468
MOD 1048; MOD 877; MOD 591; CCO 504	BHB	P026A-01	CONNECTOR KIT	FODT-PA1720BS	16	KT		KSC/PPS	30-Jun-99	DD250 BHB1445
MOD 877; MOD 591; CCO 504	BHB	P026A-03	INTERCONNECTION, CCA (SRU)	1F95077-1	1	EA		KSC/PPS	30-Jun-99	
MOD 877; MOD 591; CCO 504	BHB	P026A-05	ELEC PWB CONNECTOR	1F97568-1	1	EA		KSC/PPS	30-Jun-99	
MOD 877; MOD 591; CCO 504	BHB	P026A-06	ELEC PWB CONNECTOR	1F97568-501	1	EA		KSC/PPS	30-Jun-99	
MOD 877; MOD 591; CCO 504	BHB	P026A-07	POWER SUPPLY MODULE (SRU)	1F95087-1	1	EA		KSC/PPS	30-Jun-99	
MOD 877; MOD 591; CCO 504	BHB	P026A-08	RECEIVER-APS, CCA (SRU)	1F95089-1	1	EA		KSC/PPS	30-Jun-99	
MOD 591; CCO 504	BHB	P026A-12	DGTL, MICROCIRCUIT	M38510/75701BCA	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 591; CCO 504	BHB	P026A-15	MICROCIRCUIT	5962-9059001MCA	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 877; MOD 591; CCO 504	BHB	P026A-16	CONTROL-APS, CCA (SRU)	1F95095-1	1	EA		KSC/PPS	30-Jun-99	
MOD 591; CCO 504	BHB	P026A-17	OSCILATOR	M55310/16-B41A-32MHZ	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 591; CCO 504	BHB	P026A-18	HYBRID MICROCIRCUIT	1F64577-1	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 877; MOD 591; CCO 504	BHB	P026A-21	MICROCIRCUIT	5962-8777101MCA	1	EA		KSC/PPS	30-Jun-99	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1179; MOD 877; MOD 591; CCO 504	BHB	P026A-22	MICROCIRCUIT	REF43BZ/883	1	EA		KSC/PPS	30-Jun-99	NEW P/N
MOD 591; CCO 504	BHB	P026A-23	MICROCIRCUIT	5962-9215602MXA	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 877; MOD 591; CCO 504	BHB	P026A-24	TRANSMITTER-APS, CCA (SRU)	1F95106-1	1	EA		KSC/PPS	30-Jun-99	
MOD 591; CCO 504	BHB	P026A-26	MICROCIRCUIT	1F95131-1	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 591; CCO 504	BHB	P026A-27	QUARTZ CRYSTAL UNIT	1F95133-1	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 877; MOD 591; CCO 504	BHB	P026A-29	SWITCH ARRAT-APS, CCA (SRU)	1F95115-1	1	EA		KSC/PPS	30-Jun-99	
MOD 877; MOD 591; CCO 504	BHB	P026A-31	ELEC PWB CONNECTOR	1F97569-501	1	EA		KSC/PPS	30-Jun-99	
MOD 591; CCO 504	BHB	P026A-32	BACKSHELL	DB20962-18	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 591; CCO 504	BHB	P026A-34	BACKSHELL ELEC CONNECTOR	M85049/48-2-2F	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 591; CCO 504	BHB	P026A-35	CONNECTOR	ST225-3B	1	EA		BOE/HUNB	30-Jun-99	DD250 BHB0627
MOD 1048; MOD 877; MOD 591; CCO 504	BHB	P026A-36	CONNECTOR	DC20963-17	1	EA		KSC/PPS	30-Jun-99	NEW P/N
MOD 877; MOD 591; CCO 504	BHB	P026A-38	CCA, ESD PROTECTION	1F95135-1	1	EA		KSC/PPS	30-Jun-99	
MOD 877; MOD 591; CCO 504	BHB	P026A-39	PAYLOAD ETHERNET HUB GATEWAY (PEHG) ORU	AN60231-001-03	1	EA		KSC/PPS	30-Jun-99	DD250 BHB0760
MOD 835; MOD 591; CCO 504	BHB	P026A-40	CONNECTOR	NATC00T13N4PB	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-41	POWER SUPPLY ASSY (SRU)	AN60231-002-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0940
MOD 1062; MOD 928; MOD 892; MOD 835; MOD 445	BHB	P026A-42	POWER SUPPLY, CCA (KIT)	PL60231-100-01	1	EA		BFGOODRI	28-Feb-01	DD250 BHB1466
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-43	THERMISTER	311P18-10T76R	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-44	MICROCIRCUIT, 4N55	8157-EP1411-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-45	INTEGRATED CIRCUIT, 4N55	8157-EP1411-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-46	POWER TRANSFORMER	CP60231-010-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-47	GATEDRIVE TRANSFORMER	CP60231-011-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SS	BHB	P026A-48	SEMICONDUCTOR DEVICE	JANTXV1N4148-1	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-49	SEMICONDUCTOR DEVICE, DIODE	JANS1N4573A-1	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-50	SEMICONDUCTOR DEVICE, DIODE	JANS1N5418	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-51	SEMICONDUCTOR DEVICE, DIODE	JANS1N5806	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-52	SEMICONDUCTOR DEVICE, DIODE	JANS1N5811	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-53	TRANSISTOR	JANS2N2222A	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-54	TRANSISTOR	JANS2N2907A	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-55	TRANSISTOR	8157-EP1447-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-56	TRANSISTOR	SSQ22688	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-58	MICROCIRCUIT, LM139A	M38510/11201SCX	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 1011; MOD 835; MOD 445; SSCN 625	BHB	P026A-59	MICROCIRCUIT, UC1846	8157-EP1403-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0835
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-60	CONNECTOR	NATC00T13N4PN	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-61	MICROCIRCUIT	5962-8766301MSX/SSX	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-62	MICROCIRCUIT	8157-EP1007-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-63	MICROCIRCUIT	SSQ22667-001	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-64	MICROCIRCUIT	SSQ22679-001	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-65	OSCILLATOR	6023-EP0200-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-66	OSCILLATOR	8157-EP0200-04	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-67	IC, 1020	AI60231-301-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-68	IC, 1020	AI60231-302-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-69	IC, 1020	AI60231-303-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-70	IC, 1020	AI60231-304-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-71	IC, 28C256	AI60231-306-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-72	IC, 28C256	AI60231-307-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-73	IC, 28C256	AI60231-308-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-74	IC, 28C256	AI60231-309-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-75	IC, 2010	AI60231-310-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-76	IC, 28C256	AI60231-311-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-77	IC, 28C256	AI60231-312-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-78	IC, 28C256	AI60231-313-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-79	DIODE	JANSIN6113A	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-80	MICROCIRCUIT	MT5C1008-25E883C	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-81	MICROCIRCUIT	SSQ22673-002	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-82	HYBRID MICROCIRCUIT	1F95102-1	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-85	IC, 74HCT4046A,16DIP	5962-8875701EX	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 1011; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-86	IC, AM7968-125/B3A	5962-9052701QXA	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0835
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-87	IC, 7025, 84-FP	51-P24370N001	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-89	OSCILLATOR	6023-EP0200-02	1	EA		BFGOODRI	30-Jun-99	DD250 BHB1466
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-90	IC, A1280A, 172-QFN	AI6023-305-01	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 1048; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-91	IC, DP83932, 132-PQFP	DP83932BVF-MPC	1	EA		BFGOODRI	30-Jun-99	DD250 BHB1466
MOD 938; MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-92	IC, DP83950, 160-PQFP	DP83950BVQB-MPC	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-94	CONNECTOR	NATC00T13N35PA	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-95	CONNECTOR	NATC00T23N35PN	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 835; MOD 445; SSCN 625; MOD 271	BHB	P026A-96	CABLE ASSY, FIBER OP	111400-1439	1	EA		BFGOODRI	30-Jun-99	DD250 BHB0821
MOD 797; MOD 591; CCO 504	BHB	P026A-97	PAYLOAD ETHERNET HUB GATEWAY (PEHG)	AN60231-001-03	1	EA		DASA/GER MANY	30-May-00	DD250 BHB0859. PROCURED FOR ESA APM. DEST'N DAIMLER-BENZ AEROSPACE; SPACE INFRACTRUCTURE; HUNEFELDSTR.1-5; 28199 BREMEN,

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 877; MOD 505; MOD 339	HSV	P027-01	SYNCHRONIZER & CONTROL UNIT	1360AE7010-302	1	EA		KSC/PPS	15-Jul-99	DD250 BHB1533
MOD 877; MOD 505	HSV	P027-01A	SYNCHRONIZER & CONTROL UNIT	1360AE7010-302	1	EA		KSC/PPS	20-Nov-99	DD250 BHB1548
MOD 1117; MOD 962; MOD 877; MOD 491; SSCN 629	HSV	P028-01	PANE ASSY, SCRATCH	683-11563-2	1	EA		BOE/HSV	21-Aug-02	NEW P/N
MOD 1117; MOD 1030; MOD 892; MOD 877; MOD 491	HSV	P028-02	PANE ASSY, PRESSURE	683-11445-3	1	EA		BOE/HSV	21-Aug-02	DD250 BHB1790 IN WK
MOD 1117; MOD 1030; MOD 892; MOD 877; MOD 491	HSV	P028-03	PANE ASSY, DEBRIS	683-11446-3	1	EA		BOE/HSV	23-Jul-02	NEW P/N
MOD 1117; MOD 877; MOD 810; MOD 491; SSCN 629	HSV	P028-04	PRESSURE PANE; TOP WINDOW	683-11591-2	1	EA		KSC/PPS	1-Dec-03	NEW P/N
MOD 491; SSCN 629; MOD 340	HSV	P028-06	WINDOW SUBASSEMBLY (OUTER)	683-13030-1	1	EA		BOE/HSV	30-Jan-99	DD250 BHB0622
MOD 491; SSCN 629; MOD 340	HSV	P028-07	SEAL WINDOW INNER	683-13032-1	1	EA		BOE/HSV	15-Mar-98	DD250 BHB0252
MOD 491; SSCN 629; MOD 340	HSV	P028-08	RING INNER	683-13034-3	1	EA		BOE/HSV	30-Nov-97	DD250 BHB0197
MOD 681; MOD 491; SSCN 629; MOD 340	HSV	P028-09	SEALS HATCH	683-13095-3	4	EA		BOE/HSV	15-Mar-98	DD250 BHB0317
MOD 877; MOD 681; MOD 491; SSCN 629	HSV	P028-10	INNER SHAFT ASSEMBLY	683-13353-2	2	EA		KSC/PPS	10-Feb-00	DD250 BHB0722
MOD 491; SSCN 629; MOD 340	HSV	P028-11	CAPTURE LATCH ASSEMBLY	683-13434-6	1	EA		BOE/HSV	15-May-98	DD250 BHB0484
MOD 491; SSCN 629; MOD 340	HSV	P028-12	CONTROLLER ASSEMBLY	2355260-1-1	1	EA		BOE/HSV	15-May-99	DD250 BHB0689
MOD 681; MOD 491; SSCN 629; MOD 340	HSV	P028-13	ACTUATOR POWERED BOLT ASSEMBLY	2357650-2-1	1	EA		BOE/HSV	15-Jan-99	DD250 BHB0553
MOD 877; MOD 783; MOD 491; SSCN 629; MOD 340	HSV	P028-14	CABIN AIR DAMPER ACTUATOR ASSEMBLY	SV809114-5	1	EA		KSC/PPS	30-Jul-01	DD250 BHB0891
MOD 783; MOD 760; MOD 491; SSCN 629; MOD 340	HSV	P028-16	NITROGEN INTERFACE ASSEMBLY	683-16353-1	1	EA		KSC	15-Oct-98	L/I 36 - DD250 BHB1171 FOR ADP ONLY AND DD250 BHB0536 FOR THE HW 22-NOV-00
MOD 783; MOD 760; MOD 491; SSCN 629; MOD 340	HSV	P028-17	PRESSURE TRANSDUCER	200002	1	EA		KSC	16-Oct-98	L/I 46 - DD250 BHB01030
MOD 491; SSCN 629; MOD 340	HSV	P028-18	WIRELESS ANTENNA ASSEMBLY	683-28005-1	1	EA		BOE/HSV	20-Oct-97	DD250 BHB0243
MOD 877; MOD 543; SSCN 630; MOD 341	BHB	P029-01	LINEAR DRIVE UNIT (LDU)	D60699001-1	1	EA		KSC/PPS	7-Sep-99	DD250 BHB1804
MOD 877; MOD 719; MOD 543; SSCN 630; MOD 341	BHB	P029-06	MT/TUS I/F UMBILICAL	1F42993-1	1	EA		KSC/PPS	31-Aug-99	DD250 BHB1446
MOD 877; MOD 719; MOD 543; SSCN 630; MOD 341	BHB	P029-07	MT/TUS REEL	1F45002-1	1	EA		KSC/PPS	31-Aug-99	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 877; MOD 719; MOD 543; SSCN 630; MOD 341	BHB	P029-08	CABLE GUIDE ASSY	1F03347-1	2	EA		KSC/PPS	31-Aug-99	DD250 BHB1056
MOD 928; MOD 543	BHB	P029-09	LOAD TRANSFER UNIT (LTU)	D60695001-2	1	EA		ASTRO	15-Jan-01	DD250 BHB1804
MOD 760; MOD 491; SSCN 631; MOD 342	HSV	P030-01	VALVE .5 IN	B40202-1	1	EA		JSC	15-Oct-98	DD250 BHB0208
MOD 877; MOD 491; SSCN 631; MOD 342	HSV	P030-02	3-WAY VALVE 1.75 IN	B40205-1	1	EA		KSC/PPS	15-Oct-98	DD250 BHB1291
MOD 877; MOD 491; SSCN 631; MOD 342	HSV	P030-04	3-WAY VALVE .125 IN	B40204-12	2	EA		KSC/PPS	15-Oct-98	DD250 BHB0958
MOD 877; MOD 491; SSCN 631; MOD 342	HSV	P030-05	VENT/RELIEF VALVE ASSEMBLY	2353026-1-1	2	EA		KSC/PPS	15-Jan-99	DD250 BHB1618
MOD 877; MOD 862; MOD 491; SSCN 631; MOD 342	HSV	P030-06	PRESSURE EQUAL VALVE ASSEMBLY	B42552-1	1	EA		KSC/PPS	15-Feb-01	DD250 BHB1592
MOD 877; MOD 835; MOD 491; SSCN 631; MOD 342	HSV	P030-07	2.5 INCH VACUUM VALVE	220F01082-003	1	EA		KSC/PPS	3-Mar-00	DD250 BHB1586
MOD 877; MOD 835; MOD 491; SSCN 631; MOD 342	HSV	P030-08	LOAD CONTROL ASSEMBLY	220F03000-007	2	EA		KSC/PPS	3-Mar-00	DD250 BHB1204 (ADP ONLY - SHIP SHORT 1 EA); DD250 BHB0971 (SHIP SHORT 1 EA)
MOD 1084; MOD 491; SSCN 631; MOD 342	HSV	P030-09	COLD CATHODE TRANS	220F01083-001	2	EA		KSC/PPS	31-Dec-98	DD250 BHB0648
MOD 491; SSCN 631; MOD 342	HSV	P030-10	PARANI GAUGE TRANSDUCER	220F01084-001	1	EA		BOE/HSV	31-Dec-98	DD250 BHB0654
MOD 491; SSCN 631; MOD 342	HSV	P030-11	POSTIVE PRESSURE TRANS	220F01101-001	1	EA		BOE/HSV	31-Dec-98	DD250 BHB0509
MOD 877; MOD 491; SSCN 631; MOD 342	HSV	P030-12	1" INT VAC VALVE	220F01087-003	1	EA		KSC/PPS	31-Dec-98	DD250 BHB0817
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-01	VACUUM VALVE ASSY, 2.5 IN (IVA) (ORU)	220F01082-003	1	EA		KSC/PPS	28-Sep-01	
MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-02	2.5 IN FLEX BELLOWS, SHORT	220F01085-001	2	EA		BOE/HSV	30-Nov-00	DD250 BHB1355
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-03	2.5 IN COUPLES	220F01196-001	4	EA		KSC/PPS	29-Sep-00	DD250 BHHB1665 (2 EA); SHIP SHORT 2 EA
MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-04	1.0 IN COUPLES	220F01202-001	4	EA		BOE/HSV	29-Sep-00	DD250 BHB0972
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-05	2.5 IN METAL SEALS	220F01200-001	10	EA		KSC/PPS	30-Nov-00	DD250 BHB1531
MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-06	1 IN METAL SEALS	220F01203-001	20	EA		BOE/HSV	30-Nov-00	DD250 BHB1416
MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-07	2.5 IN O-RINGS	2-232-S383-70	8	EA		BOE/HSV	14-Jul-00	DD250 BHB1379
MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-08	2.5 IN OR RINGS	2-237-S383-70	8	EA		BOE/HSV	14-Jul-00	DD250 BHB1380
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-09	COLD CATHODE TRANSDUCER (ORU)	220F01083-001	2	EA		KSC/PPS	20-Apr-01	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-10	PARANI GAUGE VACUUM XDCR (ORU)	220F01084-001	1	EA		KSC/PPS	20-Jan-01	
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-11	VALVE ASSY, 1 IN VACUUM (ORU)	220F01087-003	3	EA		KSC/PPS	30-Nov-01	DD250 BHB1753
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-12	VALVE ASSY, 1 IN VACUUM (ORU)	220F01087-001	2	EA		KSC/PPS	30-Nov-01	DD250 BHB1587
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-13	POS PRESS TRANSDUCER (ORU)	220F01101-001	1	EA		KSC/PPS	30-Nov-00	
MOD 1084; MOD 892; CCO 820; P126R2; P126R1	HSV	P030A-14	2.5 IN FLEX BELLOWS, SHORT	220F01085-003	2	EA		KSC/PPS	30-Nov-00	DD250 BHB1666 (1 EA); SHIP SHORT 1 EA
MOD 783; MOD 760; MOD 491; SSCN 632; MOD 343	HSV	P031-01	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Jul-98	DD250 BHB0318
MOD 491	HSV	P031-01A	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Aug-98	DD250 BHB0369
MOD 491	HSV	P031-01B	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Sep-98	DD250 BHB0381
MOD 491	HSV	P031-01C	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Oct-98	DD250 BHB0400
MOD 491	HSV	P031-01D	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Nov-98	DD250 BHB0423
MOD 491	HSV	P031-01E	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Dec-98	DD250 BHB0426
MOD 491	HSV	P031-01F	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Jan-99	DD250 BHB0438
MOD 491	HSV	P031-01G	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	4-Feb-99	DD250 BHB0469
MOD 491	HSV	P031-01H	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Mar-99	DD250 BHB0497
MOD 491	HSV	P031-01J	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-Apr-99	DD250 BHB0529
MOD 491	HSV	P031-01K	CABIN AIR BACTERIA FILTER	SV810010-1	8	EA		BOE/HSV	1-May-99	DD250 BHB0538 2 EA. DD250 BHB0693 6 EA.
MOD 491; SSCN 632; MOD 343	HSV	P031-02	WATER SEPARATOR	SV813920-2	1	EA		BOE/HSV	24-Jan-99	DD250 BHB0514
MOD 491	HSV	P031-02A	WATER SEPARATOR	SV813920-2	1	EA		BOE/HSV	24-Apr-99	DD250 BHB0588
MOD 491	HSV	P031-02B	WATER SEPARATOR	SV813920-2	1	EA		BOE/HSV	24-Jul-99	DD250 BHB0651
MOD 783; MOD 760; MOD 491; SSCN 632; MOD 343	HSV	P031-03	IMV FAN ASSEMBLY	SV809111-6	1	EA		BOE/HSV	1-Aug-98	DD250 BHB0401
MOD 491	HSV	P031-03A	IMV FAN ASSEMBLY	SV809111-6	1	EA		BOE/HSV	1-Sep-98	DD250 BHB0454
MOD 783; MOD 760; MOD 491; SSCN 632; MOD 343	HSV	P031-05	INLET FAN GROUP	SV811840-4	1	EA		BOE/HSV	27-Feb-99	DD250 BHB0514
MOD 491	HSV	P031-05A	INLET FAN GROUP	SV811840-4	1	EA		BOE/HSV	27-Apr-99	DD250 BHB0573
MOD 491; SSCN 632; MOD 343	HSV	P031-06	LIQUID SENSOR	SV806609-1	1	EA		BOE/HSV	15-Nov-98	DD250 BHB0432
MOD 681; MOD 491; SSCN 632; MOD 343	HSV	P031-08	ELECTRICAL I/F BOX	SV806488-3	1	EA		BOE/HSV	14-Dec-98	DD250 BHB0432
MOD 491; SSCN 632; MOD 343	HSV	P031-09	TEMPERATURE CONTROL CHECK	SV805626-1	1	EA		BOE/HSV	16-Feb-99	DD250 BHB0514
MOD 491	HSV	P031-09A	TEMPERATURE CONTROL CHECK	SV805626-1	1	EA		BOE/HSV	16-Mar-99	DD250 BHB0534
MOD 877; MOD 783; MOD 742; MOD 505; SSCN 633	BCP	P032-01	MOTOR, VALVE-POSITION INDICATOR	SV809907-3	2	EA		KSC/PPS	30-Dec-98	DD250 BHB0572

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 505; SSCN 633; MOD 332	BCP	P032-02	STEPPER MOTOR ASSY. TARGET MAGNET	SV809916-1	2	EA		BOE/CP	30-Dec-98	DD250 BHB0510
MOD 505; SSCN 633; MOD 332	BCP	P032-03	STEPPER MOTOR ASSY. PRESSURE TRANS	SV809904-2	4	EA		BOE/CP	30-Dec-98	DD250 BHB0510
MOD 505; SSCN 633; MOD 332	BCP	P032-04	STEPPER MOTOR ASSY. DELTA PRESSURE SENSOR	SV809906-2	2	EA		BOE/CP	30-Jun-99	DD250 BHB0604
MOD 505; SSCN 633; MOD 332	BCP	P032-05	STEPPER MOTOR ASSY. TEMPERATURE SENSOR	SV809905-1	8	EA		BOE/CP	30-Jun-99	DD250 BHB0440
MOD 797; MOD 505; SSCN 633; MOD 332	BCP	P032-06	PUMP MOTOR ASSY. ROTOR	SV809914-1	4	EA		BOE/CP	30-Jul-99	DD250 BHB0645
MOD 505; SSCN 633; MOD 332	BCP	P032-07	PUMP MOTOR ASSY. STATOR	SV809901-2	4	EA		BOE/CP	30-Jul-99	DD250 BHB0604
MOD 505; SSCN 634; MOD 331	BCP	P033-01	SSU ACME SPINDLE	RE2769-01	1	EA		BOE/CP	9-Feb-98	DD250 BHB0443
MOD 1147; MOD 877; MOD 505; SSCN 634; MOD 331	BCP	P033-02	PRIMARY INTERFACE MODULE	RE1822-03	1	EA		BOE/CP	29-Jun-98	DD250 BHB0531 ASSIGNED. THE PIM DD250 DATE IS CONTINGENT TO COMPLETION OF BMRRM FCA/PCA
MOD 505; SSCN 634; MOD 331	BCP	P033-03	HOUSING PLATFORM	R074240-3	1	EA		BOE/CP	28-Feb-98	DD250 BHB0424
MOD 505; SSCN 634; MOD 331	BCP	P033-04	CLAMP RING ASSEMBLY	R074266-1	1	EA		BOE/CP	28-Feb-98	DD250 BHB0424
MOD 505; SSCN 634; MOD 331	BCP	P033-05	CONNECTOR	NDBC4C3H	1	EA		BOE/CP	28-Feb-98	DD250 BHB0424
MOD 505; SSCN 634; MOD 331	BCP	P033-06	CONNECTOR	SSQ22680-002	1	EA		BOE/CP	28-Feb-98	DD250 BHB0515
MOD 505; SSCN 634; MOD 331	BCP	P033-07	CONNECTOR	SSQ22680-007	2	EA		BOE/CP	28-Feb-98	DD250 BHB0515
MOD 505; SSCN 634; MOD 331	BCP	P033-08	CONNECTOR	SSQ22680-008	2	EA		BOE/CP	28-Feb-98	DD250 BHB0515
MOD 962; MOD 505; SSCN 634; MOD 331	BCP	P033-09	CONNECTOR	SSQ22680-010-2	3	EA		BOE/CP	28-Feb-98	DD250 BHB0515
MOD 962; MOD 505; SSCN 634; MOD 331	BCP	P033-10	CONNECTOR	SSQ22680-012-2	1	EA		BOE/CP	28-Feb-98	DD250 BHB0515
MOD 505; MOD 505; SSCN 634; MOD 331	BCP	P033-11	CONNECTOR	SSQ22680-014	3	EA		BOE/CP	28-Feb-98	DD250 BHB0515
MOD 853; MOD 760; MOD 530; SSCN 635; MOD 344	BHB	P034-01	HEAT EXCHANGE - HIGH LOAD	1F28940-1	1	EA		KSC/PPS	15-Nov-99	L/I 50-DD250 BHB0865
MOD 783; MOD 760	BHB	P034-01A	HEAT EXCHANGE - HIGH LOAD	1F28940-1	1	EA		HPSC	15-Nov-99	Destination change per Boeing Ltr 2-1150-05-0163 concurred by NASA on 6/22/05.
MOD 853; MOD 530; SSCN 635; MOD 344	BHB	P034-02	HEAT EXCHANGE - LOW LOAD	1F96060-1	1	EA		KSC/PPS	15-Nov-99	
MOD 760; MOD 530; SSCN 635; MOD 344	BHB	P034-03	COLDPLATE ASSY DDCU	1F29200-1	1	EA		KSC	15-Oct-99	L/I 79; DD250 BHB1697
MOD 760; MOD 530; SSCN 635; MOD 344	BHB	P034-04	COLDPLATE ASSY MBSU	1F39990-1	1	EA		KSC	15-Oct-99	L/I 74; DD250 BHB0882

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

**NAS15-10000
MOD 1388 (S/A)**

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1268; MOD 783; MOD 760; MOD 530; SSCN 635; MOD 344	BHB	P034-05	NITROGEN TANK ASSY	1F96000-501	1	EA		BOE/HOU	30-Jan-00	P/N change per Boeing Ltr 2-1150-04-0391 concurred with by NASA on 08/18/04; Destination change per Boeing Ltr 2-1150-04-0357 concurred with by NASA on 07/27/04; L/I 90
MOD 760; MOD 530; SSCN 635; MOD 344	BHB	P034-06	RADIATOR BEAM VALVE MODULE	3750098-101	1	EA		KSC/PPS	7-Feb-00	DD250 BHB1699 IN WK
MOD 760; MOD 530; SSCN 635; MOD 344	BHB	P034-07	RADIATOR BEAM VALVE MODULE	3750098-102	1	EA		KSC/PPS	7-Feb-00	DD250 BHB1699 IN WK
MOD 938; CC0 838; R810; P270	BHB	P034A-05	MANUAL VALVE FILL AND DRAIN	1F96200-1	1	EA		KSC/PPS	31-Dec-01	DD250 BHB1530
MOD 938; CC0 838; R810; P270	BHB	P034A-11	TEMP. SENSOR 1000 OHM ICE POINT PATCH	1F08040-1	3	EA		KSC/PPS	28-Jul-00	DD250 BHB1243
MOD 938; CC0 838; R810; P270	BHB	P034A-12	TEMP. SENSOR 100 OHM ICE POINT PATCH	1F08041-1	4	EA		KSC/PPS	28-Jul-00	DD250 BHB1243
MOD 938; CC0 838; R810; P270	BHB	P034A-39	TRANSDUCER, PRESSURE, DIFERENTIAL	1F08008-1	1	EA		KSC/PPS	31-Dec-01	SUPPLIER PN 10453-1
MOD 938; CC0 838; R810; P270	BHB	P034A-41	TRANSDUCER, PRESSURE, ABSOLUTE	1F08004-1	1	EA		KSC/PPS	31-Dec-01	SUPPLIER PN 41SG473-4
MOD 938; CC0 838; R810; P270	BHB	P034A-42	FLEX JUMPER	FST-210.15A-20	2	EA		KSC/PPS	28-Jul-00	DD250 BHB1442; NEEDED FOR PIO 48 H/W
MOD 938; CC0 838; R810; P270	BHB	P034A-43	FLEX JUMPER	FST-211.05A-20	2	EA		KSC/PPS	28-Jul-00	DD250 BHB0868; NEEDED FOR PIO 48 H/W
MOD 1070; MOD 1048; MOD 938; CC0 838; R810	BHB	P034A-44	FLEX JUMPER	FST211.4A20	50	EA		KSC/PPS	28-Jul-00	DD250 BHB1060; NEEDED FOR PIO 48 H/W
MOD 938; CC0 838; R810; P270	BHB	P034A-45	FLEX JUMPER	FST-22.70A-30	2	EA		KSC/PPS	28-Jul-00	DD250 BHB0868; NEEDED FOR PIO 48 H/W
MOD 938; CC0 838; R810; P270	BHB	P034A-46	FLEX JUMPER	FST-23.15A-12	2	EA		KSC/PPS	28-Jul-00	DD250 BHB0868; NEEDED FOR PIO 48 H/W
MOD 938; CC0 838; R810; P270	BHB	P034A-47	FLEX JUMPER	FST-23.15A-20	2	EA		KSC/PPS	28-Jul-00	DD250 BHB0868; NEEDED FOR PIO 48 H/W
MOD 938; CC0 838; R810; P270	BHB	P034A-48	FLEX JUMPER	FST-23.80A-12	2	EA		KSC/PPS	28-Jul-00	DD250 BHB0868; NEEDED FOR PIO 48 H/W
MOD 938; CC0 838; R810; P270	BHB	P034A-49	FLEX JUMPER	FST-23.80A-20	2	EA		KSC/PPS	28-Jul-00	DD250 BHB0868; NEEDED FOR PIO 48 H/W
MOD 1048; MOD 938; CC0 838; R810; P270	BHB	P034A-50	FLEX JUMPER	FST-29.8A-20	250	EA		KSC/PPS	28-Jul-00	DD250 BHB1669. NEEDED FOR PIO 48 H/W
MOD 962; MOD 938; CC0 838; R810; P270	BHB	P034A-51	FLEX JUMPER	FS100T2.90AE12	2	EA		KSC/PPS	28-Jul-00	DD250 BHB1016; NEEDED FOR 48 H/W
MOD 962; MOD 938; CC0 838; R810; P270	BHB	P034A-52	FLEX JUMPER	FS100T2.90AE20	2	EA		KSC/PPS	28-Jul-00	DD250 BHB1016; NEEDED FOR PIO 48 H/W
MOD 1147; MOD 1048; MOD 938; CC0 838; R810; P270	BHB	P034A-53	FLEX JUMPER	FS100T8.50EA30	100	EA		KSC/PPS	28-Jul-00	DD250 BHB1807
MOD 938; CC0 838; R810; P270	BHB	P034A-54	SWITCH, PUSH BUTTON	1F62954-509	1	EA		KSC/PPS	25-Nov-00	DD250 BHB1541; XFER FM LOE P026B-03
MOD 938; CC0 838; R810; P270	BHB	P034A-55	DIODE	JANS1N5418	1	EA		KSC/PPS	7-Nov-00	DD250 BHB1243; XFER FM LOE P026B-03
MOD 938; CC0 838; R810; P270	BHB	P034A-56	SWITCH, PUSH BUTTON	1F62954-1	1	EA		KSC/PPS	25-Nov-00	DD250 BHB1541; XFER FM LOE P026B-04

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

**NAS15-10000
MOD 1388 (S/A)**

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 938; CC0 838; R810; P270	BHB	P034A-57	SWITCH, PUSH BUTTON	1F62954-501	1	EA		KSC/PPS	25-Nov-00	DD250 BHB1541; XFER FM LOE P026B-05
MOD 938; CC0 838; R810; P270	BHB	P034A-58	SWITCH, PUSH BUTTON	1F62954-505	1	EA		KSC/PPS	25-Nov-00	DD250 BHB1541; XFER FM LOE P026B-06
MOD 938; CC0 838; R810; P270	BHB	P034A-59	SWITCH, PUSH BUTTON	1F62954-507	1	EA		KSC/PPS	25-Nov-00	DD250 BHB1541; XFER FM LOE P026B-07
MOD 938; CC0 838; R810; P270	BHB	P034A-60	DIODE, LIGHT EMITTIN	1F64990-1	1	EA		KSC/PPS	23-Dec-00	DD250 BHB1541; XFER FM LOE P026B-08
MOD 938; CC0 838; R810; P270	BHB	P034A-61	SWITCH, PUSH BUTTON	1F62954-503	1	EA		KSC/PPS	23-Dec-00	DD250 BHB1541; XFER FM LOE P026B-09
MOD 938; CC0 838; R810; P270	BHB	P034A-62	DIODE, LIGHT EMITTIN	1F64990-501	2	EA		KSC/PPS	23-Dec-00	DD250 BHB1541; XFER FM LOE P026B-10
MOD 938; CC0 838; R810; P270	BHB	P034A-63	DIODE, LIGHT EMITTIN	1F64990-503	2	EA		KSC/PPS	23-Dec-00	DD250 BHB1541; XFER FM LOE P026B-11
MOD 1015	BHB	P034B-01	ISOLATION VALVE (2E)	1F39985-515	2	EA		KSC/PPS	28-Feb-02	MORATTA P/N 284185-9001
MOD 1015	BHB	P034B-02	ISO RELIEF VALVE (1D)	1F39986-511	2	EA		KSC/PPS	28-Feb-02	MORATTA P/N 284180-9001
MOD 1015	BHB	P034B-03	BYPASS VALVE (5D)	1F40069-509	2	EA		KSC/PPS	28-Feb-02	MORATTA P/N 284243-9001
MOD 1015	BHB	P034B-04	TANK ISOLATION VALVE (4B)	1F39991-507	2	EA		KSC/PPS	28-Feb-02	DD250 BHB1863
MOD 491; SSCN 636; MOD 347	BHB	P036-02	MCKT HYGRID ANALOG OUTPUT DRIVER	8260760-401	10	EA		HI/GLEND	2-Mar-98	DD250 BHB0239
MOD 491; SSCN 636; MOD 347	BHB	P036-03	MCKT HYBRID P/S RECTIFIER	8260761-401	1	EA		HI/GLEND	2-Mar-98	DD250 BHB0239
MOD 491; SSCN 636; MOD 347	BHB	P036-04	MCKT HYBRID DISCRETE I/O	8260762-401	53	EA		HI/GLEND	2-Mar-98	DD250 BHB0239
MOD 491; SSCN 636; MOD 347	BHB	P036-05	MCKT HYBRID P/S CONTROL	8260763-401	3	EA		HI/GLEND	2-Mar-98	DD250 BHB0239
MOD 491; SSCN 636; MOD 347	BHB	P036-06	MCKT HYBRID COMMON GAIN AMP	8260764-402	4	EA		HI/GLEND	27-Feb-98	DD250 BHB0516
MOD 491; SSCN 636; MOD 347	BHB	P036-07	MCKT HYBRID SOLENOID DRIVER	8260765-401	26	EA		HI/GLEND	27-Feb-98	DD250 BHB0270
MOD 491; SSCN 636; MOD 347	BHB	P036-08	MCKT HYBRID HLA BUFFER/MUX	8260767-402	60	EA		HI/GLEND	10-Mar-98	DD250 BHB0516
MOD 491; SSCN 636; MOD 347	BHB	P036-09	MCKT HYBRID LLA BUFFER/MUX	8260768-403	174	EA		HI/GLEND	17-Mar-98	DD250 BHB0271
MOD 491; SSCN 636; MOD 347	BHB	P036-10	MCKT HYBRIDLLA BUFFER/MUX	8260768-404	27	EA		HI/GLEND	2-Mar-98	DD250 BHB0239
MOD 783; MOD 760; MOD 598; CCO 500	BHB	P038-01	PUMP MODULE	1F96100-1	1	EA		KSC	30-Dec-00	DD250 BHB1913
MOD 1268; MOD 853; MOD 598	BHB	P038-01A	PUMP MODULE	1F96100-503	1	EA		BOE/HOU	30-Sep-01	P/N change per Boeing Ltr 2-1150-04-0359 concurred by NASA on 08/04/04.Destination change per Boeing Ltr 2-1150-04-0359 concurred by NASA on 08/04/04.
MOD 853; MOD 598	BHB	P038-01B	PUMP MODULE	1F96100-1	1	EA		KSC/PPS	30-Nov-01	
MOD 1070; MOD 985; MOD 853; CCO 839; CCO 500	BHB	P038-02	ISO RELIEF VALVE	1F39986-511	3	EA		BOE/HOU	31-Oct-99	DD250 BHB1633 1 EA. 2 EA DD250 BHB1365; PROVIDE AS GFE TO PIO 34, SUPPLIER P/N - 284180-9001. USED ON HEAT EXCHANGER
MOD 1070; MOD 985; MOD 853; CCO 839; CCO 500	BHB	P038-03	BYPASS VALVE	1F40069-509	3	EA		BOE/HOU	31-Oct-99	1 EA DD250 BHB1461; 2 EA DD250 BHB1365; PROVIDE AS GFE TO PIO 34

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1072; MOD 853; CCO 839; CCO 500	BHB	P038-04	ECU	1F98802-501	8	EA		BOE/HOU	31-Oct-99	DD250 BHB1235 IN WORK. NEW P/N; PROVIDE AS GFE TO PIO 34
MOD 1072; MOD 985; MOD 853; CCO 839; CCO 500	BHB	P038-05	ISOLATION VALVE	1F39991-507	2	EA		BOE/HOU	31-Oct-99	DD250 BHB1612; PROVIDE AS GFE TO PIO 34
MOD 877; MOD 598; CCO 501	BHB	P039-01	TRANSMITTER/RECEIVER CONTROLLER	10033317-501	1	EA		KSC/PPS	28-May-00	DD250 BHB1055
MOD 877; MOD 598; CCO 501	BHB	P039-02	SPACE TO GROUND ANTENNA	10033206-2	1	EA		KSC/PPS	28-May-00	DD250 BHB0909
MOD 985; CCO 839; R812	BHB	P039B-01	HYBRID MODULATOR VSW/VBSP/TVCIC	10032546-1	5	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-02	HYBRID MODULATOR VSW/VBSP/TVCIC	10032547-1	5	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-03	F.O. HYBRID XMITTER VSW/TVCIC	10032548-1	10	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-04	F.O. HYBRID XMITTER VSW/TVCIC	10032548-1	10	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-05	F.O. HYBRID XMITTER VSW/TVCIC	10032548-1	10	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-06	F.O. HYBRID XMITTER VSW/TVCIC	10032548-1	4	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-07	F.O. HYBRID RCVR VSW/TVCIC	10032549-1	10	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-08	F.O. HYBRID RCVR VSW/TVCIC	10032549-1	10	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-09	F.O. HYBRID RCVR VSW/TVCIC	10032549-1	10	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 985; CCO 839; R812	BHB	P039B-10	F.O. HYBRID RCVR VSW/TVCIC	10032549-1	3	EA		L3COM	30-Mar-02	DD250 BHB0883
MOD 892; MOD 877; CCO 792; R812	BCP	P040-01	MANIFOLD	SV809924-2	2	EA		HAMSD/CT	30-Aug-02	DD250 BHB1732
MOD 892; MOD 877; CCO 792; R812	BCP	P040-02	PUMP	SV809908-2	2	EA		HAMSD/CT	30-Jun-02	DD250 BHB1726
MOD 892; MOD 877; CCO 792; R812	BCP	P040-03	DUAL CHECK VALVE	SV809226-1	2	EA		HAMSD/CT	30-Jun-00	DD250 BHB0987
MOD 1117; MOD 892; MOD 877; CCO 792; R812	BCP	P040-04	VALVE MOTOR	SV809907-3	4	EA		HAMSD/CT	30-Jan-02	DD250 BHB1653
MOD 892; MOD 877; CCO 792; R812	BCP	P040-05	FILTER	SV809939-1	6	EA		HAMSD/CT	30-Jun-00	DD250 BHB0987
MOD 1143; MOD 892; MOD 877; CCO 792; R812	BCP	P040-06	TEMPERATURE SENSOR	SV809905-2	2	EA		HAMSD/CT	30-Jul-00	DD250 BHB1797
MOD 892; MOD 877; CCO 792; R812	BCP	P040-07	PRESSURE TRANSDUCER	SV809904-2	2	EA		HAMSD/CT	30-Sep-01	DD250 BHB1199
MOD 892; MOD 877; CCO 792; R812	BCP	P040-08	DELTA P TRANSDUCER	SV809906-2	4	EA		HAMSD/CT	30-Oct-01	DD250 BHB1489
MOD 892; MOD 877; CCO 792; R812	BCP	P040-09	PUMP MOTOR CONTROLLER	SV809375-3	4	EA		HAMSD/CT	30-Jun-01	DD250 BHB1532
MOD 892; MOD 877; CCO 792; R812	BCP	P040-10	SCI	SV809973-3	2	EA		HAMSD/CT	30-Jun-00	DD250 BHB1553

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 892; MOD 877; CC0 792; R812	BCP	P040-11	BOARD	SV809969-3	2	EA		HAMSD/CT	30-Sep-00	DD250 BHB1406
MOD 892; MOD 877; CC0 792; R812	BCP	P040-12	BOARD	SV809966-3	2	EA		HAMSD/CT	30-Sep-00	DD250 BHB1406
MOD 892; MOD 877; CC0 792; R812	BCP	P040-13	BOARD	SV809963-5	2	EA		HAMSD/CT	30-Sep-00	DD250 BHB1406
MOD 892; MOD 877; CC0 792; R812	BCP	P040-14	BOARD	SV809963-6	2	EA		HAMSD/CT	30-Sep-00	DD250 BHB1406
MOD 892; MOD 877; CC0 792; R812	BCP	P040-15	BOARD	SV809972-3	2	EA		HAMSD/CT	30-Sep-00	DD250 BHB1245
MOD 892; MOD 877; CC0 792; R812	BCP	P040-16	SEAL	SV812722-1	12	EA		HAMSD/CT	30-Apr-00	DD250 BHB1134
MOD 892; MOD 877; CC0 792; R812	BCP	P040-17	SEAL	SV809144-1	6	EA		HAMSD/CT	30-Apr-00	DD250 BHB0987
MOD 892; MOD 877; CC0 792; R812	BCP	P040-18	BOLT	SV809922-1	2	EA		HAMSD/CT	30-Apr-00	DD250 BHB0987
MOD 892; MOD 877; CC0 792; R812	BCP	P040-19	NUT	SV808375-1	4	EA		HAMSD/CT	30-Apr-00	DD250 BHB0987
MOD 892; MOD 877; CC0 792; R812	BCP	P040-20	NUT	SV809212-1	2	EA		HAMSD/CT	30-Apr-00	DD250 BHB0987
MOD 892; MOD 877; CC0 792; R812	BCP	P040-21	NUT	SV809933-1	2	EA		HAMSD/CT	30-Apr-00	DD250 BHB0987
MOD 1070; MOD 892; MOD 877; CC0 792; R812	BCP	P040-22	CAP	SV809934-2	2	EA		HAMSD/CT	30-Apr-00	DD250 BHB1406
MOD 1117; MOD 892; MOD 877; CC0 792; R812	BCP	P040-23	PUMP	SV809908-3	2	EA		HAMSD/CT	30-Jun-02	DD250 BHB1726
MOD 892; MOD 877; CC0 792; R812	BCP	P040-24	HEATER CONTROL UNIT	SV823101-1	1	EA		HAMSD/CT	30-Jun-01	DD250 BHB1406
MOD 892; MOD 877; CC0 792; R812	BCP	P040-25	HEATER ELEMENT	SV823077-1	1	EA		HAMSD/CT	30-Sep-00	DD250 BHB0987
MOD 892; MOD 877; CC0 792; R812	BCP	P040-26	HEATER RTD'S	SV823076-1	3	EA		HAMSD/CT	30-Sep-00	DD250 BHB0987
MOD 962; MOD 892; MOD 877; CC0 792; R812	BCP	P040-27	SCI	SV809973-4	1	EA		HAMSD/CT	30-Jun-01	DD250 BHB1532
MOD 1179; MOD 1143; MOD 938; MOD 835	HOU	P041-01	PV RADIATOR	RE1894-03	1	EA		KSC/PPS	15-Oct-01	DD250 BHB1950
MOD 835	HOU	P041-03	ATCS RADIATOR	1F40032-1	1	EA		KSC/PPS	15-Jul-01	SUPPLIER P/N - 83-39400-101
MOD 1143;MOD 835	HOU	P041-11	QD CAPS	1F45580-501	3	EA		BOE/HUNB	15-Nov-99	DD250 BHB0635. USED FOR PIO 38
MOD 1143; MOD 835	HOU	P041-12	QD CAPS	1F45580-507	9	EA		KSC/PPS	15-Dec-99	DD250 BHB0895. USED FOR PIO 38
MOD 1143; MOD 835	HOU	P041-13	QD CAPS	1F45580-515	12	EA		KSC/PPS	15-Feb-00	DD250 BHB0759. USED FOR PIO 16
MOD 1143; MOD 1072; MOD 1062; MOD 835	HOU	P041-15	TORQUE ARM ASSEMBLYKIT	83-42100-103	1	EA		KSC/PPS	15-Dec-01	DD250 BHB1706
MOD 1143; MOD 1062; MOD 835	HOU	P041-16	TORQUE PANEL ASSEMBLY KIT	83-52134-701	1	EA		KSC/PPS	15-Dec-01	DD250 BHB1706
MOD 1143; MOD 1062; MOD 835	HOU	P041-17	BASE STRUCTURAL KIT	83-52135-701	1	EA		KSC/PPS	15-Dec-01	DD250 BHB1918

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1062; MOD 835	HOU	P041-20	RADIATOR STRUCTURAL COMPONENT KIT	83-42013-701	1	EA		KSC/PPS	15-Dec-01	DD250 BHB1959
MOD 1143; MOD 1062; MOD 835	HOU	P041-23	PANEL/SCISSORS LINKAGE ASSEMBLY KIT	83-39410-701	1	EA		KSC/PPS	15-Jun-02	DD250 BHB1730
MOD 1143; MOD 1072; MOD 1062; MOD 835	HOU	P041-25	TORQUE PANEL ASSY KIT	83-52137-701	1	EA		KSC/PPS	15-Jun-02	DD250 BHB1706
MOD 1143; MOD 1072; MOD 1062; MOD 835	HOU	P041-26	TORQUE ARM ASSYKIT	83-39353-101	1	EA		KSC/PPS	15-Jun-02	DD250 BHB1706
MOD 1143; MOD 1072; MOD 1062; MOD 835	HOU	P041-27	ORU RADIATOR ASSY KIT	83-52138-701	1	EA		KSC/PPS	15-Jun-02	NEW P/N
MOD 1143; MOD 1072; MOD 1062; MOD 835	HOU	P041-28	BASE ASSEMBLY KIT	83-52136-701	1	EA		KSC/PPS	15-Jun-02	DD250 BHB1780
MOD 1143; MOD 1062	HOU	P041-30	RADIATOR PANEL STACK KIT	83-521362-701	1	EA		KSC/PPS	15-Dec-01	DD250 BHB1838
MOD 1024; MOD 962; CCO 566	BCP	P042-002	DDCU-E ASSY	R076522-121	1	EA		KSC/PPS	19-Aug-01	DD250 BHB1915
MOD 1024; MOD 1011; MOD 962; CCO 566	BCP	P042-003	DDCU-I ASSY	R076500-221	1	EA		KSC/PPS	12-Aug-01	DD250 BHB1283 - DD250'd UNIT TO BE DIVERTED TO SPEL LAB PER SSCN 4307
MOD 1024; MOD 962; CCO 566	BCP	P042-005	MBSU ASSEMBLY	R072591-41	1	EA		KSC/PPS	23-Sep-01	L/I 86 - DD250 BHB1755
MOD 1024; MOD 962; CCO 566	BCP	P042-007	RPCM ASSY-TYPE I (INTERNAL)	R077416-91	1	EA		KSC/PPS	31-Aug-01	DD250 BHB1459
MOD 1024; MOD 962; CCO 566	BCP	P042-008	RPCM ASSY-TYPE II (INTERNAL)	R077417-71	1	EA		KSC/PPS	28-Jul-01	L/I 63 - DD250 BHB0984
MOD 1024; MOD 962; CCO 566	BCP	P042-009	RPCM ASSY-TYPE II (EXTERNAL)	R077417-61	1	EA		KSC/PPS	4-Sep-01	DD250 BHB1236
MOD 1024; MOD 962; CCO 566	BCP	P042-011	RPCM ASSY-TYPE III (INTERNAL)	R077418-51	1	EA		KSC/PPS	24-Sep-01	DD250 BHB1274
MOD 1024; MOD 962; CCO 566	BCP	P042-012	RPCM ASSY-TYPE III (EXTERNAL)	R077418-41	1	EA		KSC/PPS	21-Sep-01	DD250 BHB1420
MOD 1024; MOD 962; CCO 566	BCP	P042-013	RPCM ASSY-TYPE IV (EXTERNAL)	R072702-81	1	EA		KSC/PPS	27-Sep-01	DD250 BHB1260
MOD 1024; MOD 962; CCO 566	BCP	P042-021	RPCM ASSY-TYPE VI (INTERNAL)	R077420-51	1	EA		KSC/PPS	19-Aug-01	
MOD 1024; MOD 962; CCO 566	BCP	P042-023	RPCM ASSY-TYPE VI (EXTERNAL)	R077420-41	1	EA		KSC/PPS	17-Aug-01	
MOD 1024; MOD 962; CCO 566	BCP	P042-032	DDCU-HEATPIPE, ASSY	R079903-11	1	EA		KSC/PPS	26-Aug-01	DD250 BHB1767
MOD 1084; MOD 1024; MOD 962; CCO 566	BCP	P042-033	PCU ASSY	R078480-11	1	EA		BOE/CP	1-Jan-02	DD250 BHB1140
MOD 1070; MOD 1024; MOD 962; CCO 566	BCP	P042-038	CABLE BOX, TYPE I ASSY	R071763-21	1	EA		KSC/PPS	24-Apr-01	DD250 BHB1810
MOD 1024; MOD 962; CCO 566	BCP	P042-041	CABLE BOX, TYPE IV ASSY	R071764-1	1	EA		KSC/PPS	15-May-01	DD250 BHB1810

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1024; MOD 962; CCO 566	BCP	P042-046	ECU ASSY	R072341-61	1	EA		KSC/PPS	22-Jun-01	DD250 BHB1282
MOD 1024; MOD 962; CCO 566	BCP	P042-048	CABLE SET (3A AND 4A)	R081860-1	1	KT		KSC/PPS	24-Aug-01	DD250 BHB1779 (SHIP SHORT)
MOD 1024; MOD 962; CCO 566	BCP	P042-049	RESOLVER	8261728	1	EA		KSC/PPS	6-Oct-00	DD250 BHB1136
MOD 1024; MOD 962; CCO 566	BCP	P042-050	CONNECTORS	4023589-001	1	EA		KSC/PPS	28-Aug-00	DD250 BHB1637
MOD 1024; MOD 962; CCO 566	BCP	P042-051	POWER RING ASSEMBLY	8261608-901	1	EA		KSC/PPS	11-Nov-00	DD250 BHB1136
MOD 1024; MOD 962; CCO 566	BCP	P042-052	SIGNAL RING ASSEMBLY	8261609-901	1	EA		KSC/PPS	11-Nov-00	DD250 BHB1136
MOD 1024; MOD 962; CCO 566	BCP	P042-053	SECONDARY POWER RING ASSEMBLY	8261610-901	1	EA		KSC/PPS	11-Nov-00	DD250 BHB1136
MOD 1024; MOD 962; CCO 566	BCP	P042-054	CCA, FET DRIVER - DDCU	R076570-41	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1083
MOD 1024; MOD 962; CCO 566	BCP	P042-056	CCA, PRIMARY CURRENT SCA	R076580-1	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1083
MOD 1024; MOD 962; CCO 566	BCP	P042-058	CCA, INRUSH CURRENT DAMP	R076590-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1083
MOD 1024; MOD 962; CCO 566	BCP	P042-060	CCA, OUTPUT VOLTAGE DIVIDER	R076600-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1320
MOD 1024; MOD 962; CCO 566	BCP	P042-062	CCA, PCC BACKLANE	R076610-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-064	CCA, FEEDBACK	R076620-71	2	EA		KSC/PPS	28-Apr-01	DD250 BHB1701
MOD 1024; MOD 962; CCO 566	BCP	P042-066	CCA, POWER SUPPLY "D"	R076650-131	2	EA		KSC/PPS	21-Apr-01	DD250 BHB1345
MOD 1024; MOD 962; CCO 566	BCP	P042-068	CCA, RC SNUBBER	R076660-41	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1279
MOD 1024; MOD 962; CCO 566	BCP	P042-070	CCA, RC SNUBBER	R076660-51	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1296
MOD 1024; MOD 962; CCO 566	BCP	P042-072	CCA, COMMON CONTROLLER	R077448-11	2	EA		KSC/PPS	14-Apr-01	DD250 BHB1309
MOD 1024; MOD 962; CCO 566	BCP	P042-074	CCA, PCC INSTRUMENTATION	R078169-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1309
MOD 1024; MOD 962; CCO 566	BCP	P042-076	CCA, FET DRIVER - DDCU	R076570-41	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1340
MOD 1024; MOD 962; CCO 566	BCP	P042-078	F-CCA, INRUSH CURRENT DAMP	R076590-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1279
MOD 1024; MOD 962; CCO 566	BCP	P042-080	CCA, OUTPUT VOLTAGE DIVIDER	R076600-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1279
MOD 1024; MOD 962; CCO 566	BCP	P042-082	CCA, PCC BACKPLANE	R076610-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-084	CCA, FEEDBACK	R076620-31	2	EA		KSC/PPS	28-Apr-01	DD250 BHB1562
MOD 1024; MOD 962; CCO 566	BCP	P042-086	CCA, POWER SUPPLY "D"	R076650-131	2	EA		KSC/PPS	28-Apr-01	DD250 BHB1369
MOD 1024; MOD 962; CCO 566	BCP	P042-088	CCA, RC SNUBBER	R076660-41	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1320

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1024; MOD 962; CCO 566	BCP	P042-090	CCA, RC SNUBBER	R076660-51	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1320
MOD 1024; MOD 962; CCO 566	BCP	P042-092	CCA, PCC INSTRUMENTATION	R078169-11	2	EA		KSC/PPS	30-Mar-01	DD250 BHB1320
MOD 1024; MOD 962; CCO 566	BCP	P042-094	CCA, COMMON CONTROLLER	R077448-11	2	EA		KSC/PPS	21-Apr-01	DD250 BHB1320
MOD 1024; MOD 962; CCO 566	BCP	P042-096	CCA, MAG CURRENT SENSOR	R077403-11	2	EA		KSC/PPS	27-Jan-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-098	CCA, COMMON CONTROLLER	R077448-11	2	EA		KSC/PPS	28-Apr-01	DD250 BHB1359
MOD 1024; MOD 962; CCO 566	BCP	P042-100	CCA,INST/RELAY INT-SCA	R073999-11	4	EA		KSC/PPS	28-Jan-01	DD250 BHB1320
MOD 1024; MOD 962; CCO 566	BCP	P042-104	CCA, BACKPLANE ASSEMBLY	R072538-11	2	EA		KSC/PPS	28-Jan-01	DD250 BHB1296
MOD 1024; MOD 962; CCO 566	BCP	P042-106	CURRENT SENSOR, ASSY OF	R072554-1	2	EA		KSC/PPS	28-Apr-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-108	RESISTOR NETWORK	R076836-11	1	EA		KSC/PPS	28-Apr-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-109	RESISTOR NETWORK	R076912-11	1	EA		KSC/PPS	28-Apr-01	DD250 BHB1542
MOD 1024; MOD 962; CCO 566	BCP	P042-110	POWER SUPPLY A/E	R075730-71	2	EA		KSC/PPS	14-Feb-01	DD250 BHB1679
MOD 1024; MOD 962; CCO 566	BCP	P042-112	CCA,INPUT & CTRL PS A/E	R078561-41	5	EA		KSC/PPS	28-Jan-01	DD250 BHB1407
MOD 1024; MOD 962; CCO 566	BCP	P042-117	CHASSIS, ASSY OF	R078574-11	2	EA		KSC/PPS	6-Sep-01	DD250 BHB1289
MOD 1024; MOD 962; CCO 566	BCP	P042-119	CCA, A/E	R078566-81	3	EA		KSC/PPS	26-Feb-01	DD250 BHB1375
MOD 1024; MOD 962; CCO 566	BCP	P042-122	VOLTAGE DIVIDER ASSY	R078224-21	2	EA		KSC/PPS	26-Feb-01	DD250 BHB1427
MOD 1024; MOD 962; CCO 566	BCP	P042-124	VOLTAGE DIVIDER ASSY	R078224-31	2	EA		KSC/PPS	26-Feb-01	DD250 BHB1428
MOD 1024; MOD 962; CCO 566	BCP	P042-126	CURRENT SENSOR,ASSY OF	R078235-1	2	EA		KSC/PPS	26-Feb-01	DD250 BHB1345
MOD 1024; MOD 962; CCO 566	BCP	P042-128	CCA,FET/FET DRVR TYPE I	R076764-41	1	EA		KSC/PPS	23-Sep-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-129	SCREW LOCK ASSY - RPCM	R078149-31	1	EA		KSC/PPS	27-Jan-01	DD250 BHB1289
MOD 1024; MOD 962; CCO 566	BCP	P042-130	CCA CONTROLLER RPC	R076756-21	2	EA		KSC/PPS	6-May-01	DD250 BHB1345
MOD 1024; MOD 962; CCO 566	BCP	P042-131	CCA CONTROLLER RPC	R076756-21	2	EA		KSC/PPS	13-May-01	DD250 BHB1359
MOD 1024; MOD 962; CCO 566	BCP	P042-132	CCA CONTROLLER RPC	R076756-21	2	EA		KSC/PPS	20-May-01	DD250 BHB1347
MOD 1024; MOD 962; CCO 566	BCP	P042-133	CCA CONTROLLER RPC	R076756-21	2	EA		KSC/PPS	27-May-01	DD250 BHB1408
MOD 1024; MOD 962; CCO 566	BCP	P042-134	CCA CONTROLLER RPC	R076756-21	2	EA		KSC/PPS	31-May-01	DD250 BHB1409
MOD 1024; MOD 962; CCO 566	BCP	P042-140	CCA, POWER SUPPLY	R076754-31	2	EA		KSC/PPS	13-May-01	DD250 BHB1325

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1024; MOD 962; CCO 566	BCP	P042-141	CCA, POWER SUPPLY	R076754-31	2	EA		KSC/PPS	20-May-01	DD250 BHB1325
MOD 1024; MOD 962; CCO 566	BCP	P042-142	CCA, POWER SUPPLY	R076754-31	2	EA		KSC/PPS	27-May-01	DD250 BHB1325
MOD 1024; MOD 962; CCO 566	BCP	P042-146	STATUS INDICATOR-RPCM	R078254-21	1	EA		KSC/PPS	30-Dec-00	DD250 BHB1289
MOD 1024; MOD 962; CCO 566	BCP	P042-147	CCA, FLEX CABLE - RPCM	R073619-11	1	EA		KSC/PPS	28-Apr-01	DD250 BHB1289
MOD 1024; MOD 962; CCO 566	BCP	P042-148	CCA,B/P T1-3,5,6	R076761-11	1	EA		KSC/PPS	13-May-01	DD250 BHB1296
MOD 1024; MOD 962; CCO 566	BCP	P042-149	CCA,B/P T1-3,5,6	R076761-11	2	EA		KSC/PPS	20-May-01	DD250 BHB1296
MOD 1127; MOD 1024; MOD 962; CCO 566	BCP	P042-151	CONNECTOR ASSY, TYPE I	R072694-51	2	EA		KSC/PPS	28-Apr-01	DD250 BHB1683
MOD 1024; MOD 962; CCO 566	BCP	P042-153	CCA,FET/FET DRVR-T2 RPC	R076769-21	3	EA		KSC/PPS	23-Sep-01	DD250 BHB1327
MOD 1024; MOD 962; CCO 566	BCP	P042-156	CONNECTOR ASSY-TYPE 2	R072695-31	2	EA		KSC/PPS	21-Apr-01	DD250 BHB1410
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-158	CCA,FET/FET DRVR-TYPE 3	R076774-21	2	EA		BOE/CP	23-Sep-01	
MOD 1024; MOD 962; CCO 566	BCP	P042-160	CONNECTOR ASSY-TYPE III	R072715-31	2	EA		KSC/PPS	14-Apr-01	DD250 BHB1352
MOD 1024; MOD 962; CCO 566	BCP	P042-162	CCA,SNUBBER-TYPE IV RPC	R076789-31	2	EA		KSC/PPS	20-May-01	DD250 BHB1373
MOD 1024; MOD 962; CCO 566	BCP	P042-164	CCA,POWER SUPPLY,T4 RPC	R076749-31	2	EA		KSC/PPS	20-May-01	DD250 BHB1330
MOD 1024; MOD 962; CCO 566	BCP	P042-166	CCA,BACKPLANE-T 4 RPCM	R076792-11	2	EA		KSC/PPS	16-May-01	DD250 BHB1325
MOD 1127; LTR. 02-103; MOD 1024; MOD 962; CCO 566	BCP	P042-168	CONNECTOR ASSY TYPE IV	R072723-61	2	EA		KSC/PPS	7-Feb-01	DD250 BHB1672
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-170	CCA,FET/FET DRVR-T6 RPC	R076784-21	4	EA		BOE/CP	23-Sep-01	
MOD 1024; MOD 962; CCO 566	BCP	P042-174	CONNECTOR ASSY, TYPE VI	R077869-31	1	EA		KSC/PPS	31-Mar-01	DD250 BHB1411
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-175	CCA,FET DRVR TYPE V	R076779-21	6	EA		BOE/CP	16-Sep-01	
MOD 1024; MOD 962; CCO 566	BCP	P042-176	CCA,FET DRVR TYPE V	R076779-21	2	EA		KSC/PPS	23-Sep-01	DD250 BHB1309
MOD 1024; MOD 962; CCO 566	BCP	P042-183	CONNECTOR ASSY, TYPE V	R072728-31	1	EA		KSC/PPS	31-Mar-01	DD250 BHB1374
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-184	COLDPLATE ASSY, DDCU-HP	RE3270-03	1	EA		BOE/CP	28-Oct-00	NEW P/N
MOD 1024; MOD 962; CCO 566	BCP	P042-195	SWITCHGEAR CONTROLLER ASSY	R072526-51	4	EA		KSC/PPS	20-May-01	DD250 BHB1506

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1024; MOD 962; CCO 566	BCP	P042-196	SWITCHGEAR CONTROLLER ASSY	R072526-51	4	EA		KSC/PPS	1-Jun-01	DED250 BHB1617
MOD 1024; MOD 962; CCO 566	BCP	P042-203	RESISTOR NETWORK ASSY	R076830-11	1	EA		KSC/PPS	29-Nov-00	DD250 BHB1279
MOD 1024; MOD 962; CCO 566	BCP	P042-204	VOLTAGE DIVIDER ASSY	R078226-11	2	EA		KSC/PPS	11-Mar-01	DD250 BHB1507
MOD 1024; MOD 962; CCO 566	BCP	P042-206	CURRENT SENSOR, DCSU	R073406-1	2	EA		KSC/PPS	11-Mar-01	DD250 BHB1279
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-209	RETAINER, BETA GIMBAL	R074355-3	1	EA		BOE/CP	21-Nov-00	NEW P/N
MOD 1147; MOD 1024; MOD 962; CCO 566	BCP	P042-212	BEARING SET	RE3165-02	1	EA		BOE/CP	16-Feb-01	
MOD 1024; MOD 962; CCO 566	BCP	P042-213	CCA, CONTROLLER, ECU	R073965-31	6	EA		KSC/PPS	11-Mar-01	DD250 BHB1374
MOD 1024; MOD 962; CCO 566	BCP	P042-219	CCA,OUTPUT POWER SELECTOR, ECU	R071519-31	1	EA		KSC/PPS	28-Sep-00	DD250 BHB1279
MOD 1024; MOD 962; CCO 566	BCP	P042-220	CCA, POWER SUPPLY B-ECU	R070105-31	3	EA		KSC/PPS	11-Mar-01	DD250 BHB1376
MOD 1024; MOD 962; CCO 566	BCP	P042-223	CCA, GIMBAL DRIVER A-ECU	R073975-71	2	EA		KSC/PPS	8-Mar-01	DD250 BHB1393
MOD 1024; MOD 962; CCO 566	BCP	P042-225	CCA, GIMBAL DRIVER B-ECU	R073955-51	2	EA		KSC/PPS	29-Dec-00	DD250 BHB1309
MOD 1024; MOD 962; CCO 566	BCP	P042-227	CCA, INPUT POWER SELECTOR-ECU	R073960-51	2	EA		KSC/PPS	8-Mar-01	DD250 BHB1309
MOD 1024; MOD 962; CCO 566	BCP	P042-229	CCA, SAW BACKPLANE, ECU	R071575-11	1	EA		KSC/PPS	6-Jun-01	DD250 BHB1328
MOD 1024; MOD 962; CCO 566	BCP	P042-230	CCA, BGA BACKPLANE, ECU	R071525-11	1	EA		KSC/PPS	6-Jun-01	DD250 BHB1328
MOD 1147; MOD 1127; MOD 1070; MOD 1024; MOD 962	BCP	P042-231	XENON GAS FEED SYSTEM ASSY	R076870-51	1	EA		BOE/CP	25-May-01	DD250 BHB1749
MOD 1147; MOD 1127; MOD 1070; MOD 1024; MOD 962	BCP	P042-232	XENON GAS FEED SYSTEM ASSY	R076870-41	1	EA		BOE/CP	23-Jun-01	DD250 BHB1756
MOD 1147; MOD 1127; MOD 1070; MOD 1024; MOD 962	BCP	P042-233	XENON GAS FEED SYSTEM ASSY	R076870-41	1	EA		BOE/CP	28-Jul-01	DD250 BHB1791
MOD 1147; MOD 1127; MOD 1070; MOD 1024; MOD 962	BCP	P042-234	XENON GAS FEED SYSTEM ASSY	R076870-41	1	EA		BOE/CP	28-Aug-01	DD250 BHB1852
MOD 1024; MOD 962; CCO 566	BCP	P042-235	POWER ELECTRONICS UNIT	R076855-51	1	EA		KSC/PPS	28-Oct-00	DD250 BHB1326
MOD 1024; MOD 962; CCO 566	BCP	P042-236	POWER ELECTRONICS UNIT	R076855-51	1	EA		KSC/PPS	25-Jan-01	DD250 BHB1363
MOD 1024; MOD 962; CCO 566	BCP	P042-237	POWER ELECTRONICS UNIT	R076855-51	1	EA		KSC/PPS	25-Jan-01	DD250 BHB1364
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-260	DDCU-E-UNASSEMBLED ORU	R081845-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-261	DDCU-I-UNASSEMBLED ORU	R081846-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-262	MBSU-UNASSEMBLED ORU	R081848-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-263	RPCM TYPE II (EXTERNAL)-UNASSEMBLED ORU	R081850-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-264	RPCM TYPE IV (EXTERNAL)-UNASSEMBLED ORU	R081851-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-265	RPCM TYPE VI (INTERNAL)-UNASSEMBLED ORU	R081852-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-266	RPCM TYPE VI (EXTERNAL)-UNASSEMBLED ORU	R081853-1	2	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-267	DCSU-UNASSEMBLED ORU	R081847-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-268	DCSU-UNASSEMBLED ORU	R081847-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-269	BMRRM-UNASSEMBLED ORU	R083741-1	1	EA		BOE/CP	30-Sep-03	NEW P/N
MOD 1127; MOD 1108; MOD 1084; MOD 1070	BCP	P042-270	ECU-UNASSEMBLED ORU	R081849-1	1	EA		BOE/ELPAS O	30-Sep-03	NEW P/N
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-01	DC/DC CONVERTER UNIT EXTERNAL	R076522-121	1	EA	\$295,494	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-02	DC/DC CONVERTER UNIT INTERNAL	R076500-221	1	EA	\$295,494	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-03	MAIN BUS SWITCHING UNIT	R072591-41	1	EA	\$280,648	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-04	RPCM - TYPE II (EXTERNAL)	R077417-61	1	EA	\$275,700	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-05	RPCM - TYPE IV (EXTERNAL)	R072702-81	1	EA	\$275,700	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-06	RPCM - TYPE VI (INTERNAL)	R077420-51	1	EA	\$275,700	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-07	RPCM - TYPE VI (EXTERNAL)	R077420-41	2	EA	\$275,700	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-08	DC SWITCHING UNIT	R072610-71	2	EA	\$521,709	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-10	ELECTRONIC CONTROL UNIT	R072341-61	1	EA	\$270,751	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-11	LOCAL DATA INTERFACE	R072491-101	1	EA	\$597,348	KSC/PPS	15-Dec-03	CORRECT TYPO

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1179; MOD 1148; BG-01-337; 03-0234, 04-0124	HOU	P042A-12	LOCAL DATA INTERFACE	R072491-101	1	EA	\$597,348	SS/LORAL	15-Dec-03	NEW P/N; CORRECT TYPO DEST'N changed per Boeing Ltr 2-1150-04-0124 concurred by NASA on 3/26/04
MOD 1179; MOD 1148; BG-01-337	HOU	P042A-13	LOCAL DATA INTERFACE	R072491-151	1	EA	\$597,348	KSC/PPS	15-Dec-03	CORRECT TYPO
MOD 681; CCO 569	BHB	P043-02	MICROCIRCUIT	10036985-1	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-03	MICROCIRCUIT	21-1023-0001	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-04	TRANSISTOR	21-353-0001	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-05	TRANSISTOR	JANSG2N7270	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-06	THYRISTOR, SCR	21-356-0001	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 877; MOD 681; CCO 569	BHB	P043-07	DIODE	B77D0059-1	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508; NEW P/N B77D0059-1 ON DD250; TYPO IN DATABASE
MOD 681; CCO 569	BHB	P043-08	THERMISTOR	311P18-07S7R6	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-09	MICROCIRCUIT	4072-101	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-10	MICROCIRCUIT	8080-EP1403-01	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-11	DIODE	C77D0010-1	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-12	MICROCIRCUIT	D77H0001-2	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-13	DIODE	JANS1N4148-1	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-14	DIODE	JANS1N5806	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-15	DIODE	JANS1N759A-1	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-18	TRANSISTOR	JANS2N5665	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-19	DIODE	JANTXV1N4106-1-0AI	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-20	DIODE	JANTXV1N4249-0AI	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-21	DIODE	JANTXV1N978B-1-0AI	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-22	TRANSISTOR	JANTXV2N6193-0AI	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-23	TRANSISTOR	JANTXV2N6770-0AI	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-24	TRANSISTOR	PS239465-03	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-25	MICROCIRCUIT	M38510/11005BCX-0AI	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-27	MICROCIRCUIT	M38510/11704SYA	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-28	MICROCIRCUIT	M38510H05051SCA	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-29	MICROCIRCUIT	M38510H05252SCA	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-30	MICROCIRCUIT	M38510H05554SEA	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-31	FILTER, RF.EMI	SSQ21216-04-G	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-32	REFLECTOR ASSY, (VIDEO/150W LAMP)	J06A0132-1	2	EA		BOE/STL	31-Aug-99	DD250 BHB1052 (P/N J06A0132-2)
MOD 681; CCO 569	BHB	P043-33	MICROCIRCUIT	D77H0001-1	1	EA		BOE/STL	28-Feb-99	DD250 BHB0508
MOD 681; CCO 569	BHB	P043-35	DIODE	10M10-1853	1	EA		BOE/STL	28-Feb-99	DD250 BHB0568
MOD 681; CCO 569	BHB	P043-36	DIODE	10M10-1854	1	EA		BOE/STL	28-Feb-99	DD250 BHB0568
MOD 783; MOD 708; CC0 567	HSV	P045-01	MEDIUM PRESSURE O2 REGULATOR/RELIEF ASSY	B41389-1	1	EA		KSC	30-Jun-99	L/I 53-DD250 BHB1162 SHIPPED ADP ONLY; DD250 BHB1080 SHIPPED SHORT ADP
MOD 783; MOD 708; CC0 567	HSV	P045-02	LOW PRESSURE N2 REGULATOR/RELIEF ASSY	B41301-1	1	EA		KSC	12-May-99	L/I 61-DD250 BHB0719
MOD 783; MOD 708; CC0 567	HSV	P045-03	LOW PRESSURE O2 REGULATOR/RELIEF ASSY	B41301-3	1	EA		KSC	12-May-99	L/I 62-DD250 BHB0717 SHIPPED SHORT IPL AND ADP
MOD 783; MOD 708; CC0 567	HSV	P045-04	N2 LATCHING MOTOR VALVE	B41395-1	1	EA		KSC	30-Jun-99	L/I 58-DD250 BHB0782
MOD 783; MOD 708; CC0 567	HSV	P045-05	O2 LATCHING MOTOR VALVE	B41395-3	1	EA		KSC	30-Jun-99	L/I 59-DD250 BHB0783

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 783; MOD 708; CCO 567	HSV	P045-06	N2 MANUAL ISOLATION VALVE	B41396-1	1	EA		KSC	12-May-99	L/I 60-DD250 BHB0718
MOD 877; MOD 783; MOD 708; CCO 567	HSV	P045-07	1/2" SOLENOID VALVE (AIR)	B40202-1	1	EA		KSC/PPS	30-Jun-99	DD250 BHB1090
MOD 783	HSV	P045-07A	1/2" SOLENOID VALVE (AIR)	B40202-1	1	EA		KSC	30-Jun-99	L/I 69 - DD250 BHB1090
MOD 877; MOD 708; CCO 567	HSV	P045-08	1/2" SOLENLID VALVE (WATER)	B40202-2	4	EA		KSC/PPS	30-Jun-99	DD250 BHB1091
MOD 708; CCO 567	HSV	P045-09	1/8" SOLENLID VALVE	B40204-12	5	EA		BOE/HSV	30-Jun-99	DD250 BHB0959
MOD 708; CCO 567	HSV	P045-10	RELIEF VALVE	B41408-1	1	EA		BOE/HSV	30-Jun-99	DD250 BHB0646
MOD 877; MOD 681; CCO 573;03-0096	BHB	P048-03	MICROCIRCUIT	M38510/19006BEA	1	EA		KSC/PPS	10-Feb-00	CORRECT TYPO
MOD 877; MOD 681; CCO 573	BHB	P048-04	SENSOR, TEMPERATURE (1F08041-1)	0118BMT1	1	EA		KSC/PPS	10-Feb-00	DD250 BHB1243
MOD 1268; MOD 877; MOD 681; CCO 573	BHB	P048-05	CCA,POWER SUPPLY	1F64095-503	1	EA		KSC/PPS	10-Feb-00	P/N change per Boeing Ltr 02-1150-04-0356 concurred with by NASA on 07/27/04.
MOD 877; MOD 681; CCO 573	BHB	P048-07	CCA,SIGNAL CONDITIONER	1F64102-1	1	EA		KSC/PPS	10-Feb-00	
MOD 681; CCO 573	BHB	P048-08	MICROCIRCUIT	1F67616-1	1	EA		BOE/HUNB	10-Feb-00	DD250 BHB0628
MOD 877; MOD 681; CCO 573	BHB	P048-10	MICROCIRCUIT	1F67621-1	1	EA		KSC/PPS	10-Feb-00	
MOD 877; MOD 681; CCO 573	BHB	P048-11	MICROCIRCUIT	1F67621-501	1	EA		KSC/PPS	10-Feb-00	
MOD 877; MOD 681; CCO 573	BHB	P048-13	MICROCIRCUIT	5962-8762701RX	1	EA		KSC/PPS	10-Feb-00	
MOD 877; MOD 681; CCO 573	BHB	P048-16	MICROCIRCUIT	5962-9151901MPA	1	EA		KSC/PPS	10-Feb-00	
MOD 877; MOD 681; CCO 573	BHB	P048-17	MICROCIRCUIT	5962-9159501MPX	1	EA		KSC/PPS	10-Feb-00	
MOD 681; CCO 573	BHB	P048-18	MICROCIRCUIT	5962-9215601MXX	1	EA		BOE/HUNB	10-Feb-00	DD250 BHB0628
MOD 681; CCO 573	BHB	P048-19	DIODE	JANTXV1N5550	1	EA		BOE/HUNB	10-Feb-00	DD250 BHB0628
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-01	BATTERY CHARGE/DISCHARGE UNIT	RE1807-03	1	EA		KSC/PPS	13-Dec-02	
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-02	BATTERY CHARGE/DISCHARGE UNIT	RE1807-03	1	EA		KSC/PPS	7-Jan-03	
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-03	BATTERY CHARGE/DISCHARGE UNIT KIT	2R081935-1	1	EA		LORAL	30-Sep-03	CONVERTED TO KIT
MOD 1171; MOD 1127; MOD 1108; MOD 1048; MOD 1011	BCP	P050-05	SEQUENTIAL SHUNT UNIT	RE1806-04	1	EA		KSC/PPS	21-Dec-02	DD250 BHB1955 IN WK
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-06	SEQUENTIAL SHUNT UNIT KIT	2R081936-1	1	EA		LORAL	30-Sep-03	CONVERTED TO KIT
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-07	BILATERAL CONVERTER	E041385-02	3	EA		KSC/PPS	23-Jul-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-08	PHASE CONTROL CCA	E041796-02	2	EA		KSC/PPS	18-Sep-02	
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-09	PWM CCA	E041429-02	6	EA		KSC/PPS	8-Apr-03	
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-10	POWER STAGE ASSEMBLY	E041355-02	12	EA		KSC/PPS	7-Jun-03	
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-11	FAULT ISOLATOR ASSEMBLY	E040425-04	1	EA		KSC/PPS	28-May-02	
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-12	LOWER CHASSIS ASSEMBLY	E040429-03	1	EA		KSC/PPS	28-May-02	
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-13	GATE DRIVE CCA	E040465-01	1	EA		KSC/PPS	19-Feb-02	DD250 BHB1721
MOD 1127; MOD 1108; MOD 1011; MOD 985; CCO 840	BCP	P050-14	UPPER CHASSIS ASSEMBLY	E040486-02	1	EA		KSC/PPS	28-May-02	DD250 BHB1805
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-15	LDI INTERFACE CCA	E042007-01	1	EA		KSC/PPS	5-Jan-02	DD250 BHB1721
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-16	CONTROLLER CCA	E041947-01	1	EA		KSC/PPS	11-Dec-01	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-17	POWER SUPPLY, DC/DC	E041685-03	1	EA		KSC/PPS	5-Jan-02	DD250 BHB1904
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-18	MAIN CONTROL CCA	E041709-02	1	EA		KSC/PPS	13-Oct-01	DD250 BHB1750
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-19	ISO CONVERTER/FEEDBACK CCA	E041715-02	1	EA		KSC/PPS	13-Oct-01	DD250 BHB1805
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-20	OUTPUT FILTER +/-15 V CCA	E041697-01	1	EA		KSC/PPS	11-Sep-01	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-21	OUTPUT FILTER + 5 V CCA	E041704-01	1	EA		KSC/PPS	11-Sep-01	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-22	15 V REGULATOR CCA	E041951-01	1	EA		KSC/PPS	11-Sep-01	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-23	HEATER SWITCH ASSEMBLY	E041510-03	1	EA		KSC/PPS	21-Dec-01	DD250 BHB1853
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-24	HEATER SWITCH SUBASSEMBLY	E040390-05	1	EA		KSC/PPS	25-Oct-01	DD250 BHB1805

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-24A	HEATER SWITCH SUBASSEMBLY	E040390-06	1	EA		KSC/PPS	23-Nov-01	DD250 BHB1805
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-25	LVBC CCA	E119635-01	2	EA		KSC/PPS	16-Apr-02	DD250 BHB1721
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-26	DIODE ASSEMBLY	E041823-03	2	EA		KSC/PPS	11-Dec-01	DD250 BHB1721 IN WK
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-27	RBI	E042000-02	1	EA		KSC/PPS	21-Jun-02	DD250 BHB1853
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-28	GATE DRIVE CCA	E041989-01	1	EA		KSC/PPS	5-Mar-02	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-29	CLOCK GENERATOR CCA	E041816-01	1	EA		KSC/PPS	24-Nov-01	DD250 BHB1777
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-30	INTERFACE CCA	E041505-01	1	EA		KSC/PPS	10-Jan-02	DD250 BHB1777
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-31	CONTROLLER CCA	E041985-01	1	EA		KSC/PPS	24-Nov-01	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-32	POWER SUPPLY CCA	E040406-02	2	EA		KSC/PPS	24-Feb-02	DD250 BHB1750
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-33	RAMP GENERATOR CCA	E040103-01	2	EA		KSC/PPS	29-Apr-02	DD250 BHB1777
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-34	RAMP GENERATOR CCA	E040103-02	2	EA		KSC/PPS	19-May-02	DD250 BHB1750 (1 EA); DD250 BHB1721 (1 EA)
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-35	CURRENT MONITOR CCA	E040034-01	1	EA		KSC/PPS	4-Jan-02	DD250 BHB1721
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-36	PVCE #1 CCA	E040050-01	1	EA		KSC/PPS	26-Jan-02	DD250 BHB1777
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-37	PVCE #2 CCA	E040054-03	2	EA		KSC/PPS	22-Jan-02	DD250 BHB1777
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-38	ECA, DC/DC CONVERTER	E040525-03	1	EA		KSC/PPS	9-Jul-02	DD250 BHB1925
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-39	INPUT CCA	E040535-02	1	EA		KSC/PPS	18-Mar-02	DD250 BHB1777
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-40	OUTPUT FILTER CCA	E040505-03	1	EA		KSC/PPS	18-Mar-02	DD250 BHB1750

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-41	LOGIC CCA	E040073-01	2	EA		KSC/PPS	22-May-02	DD250 BHB1925
MOD 1127; MOD 1048; MOD 1011; MOD 985; CCO 840	BCP	P050-42	POWER SUPPLY CCA	E040024-01	1	EA		KSC/PPS	21-Feb-02	DD250 BHB1777
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-43	ECA, 8 STRING	E040094-01	1	EA		KSC/PPS	30-Jan-01	DD250 BHB1853
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-44	ECA, 8 STRING	E040094-02	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1821
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-45	ECA, 8 STRING	E040094-03	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1853
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-46	ECA, 8 STRING	E040094-04	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1853
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-47	ECA, 8 STRING	E040094-05	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1821
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-48	ECA, 8 STRING	E040094-06	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1853
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-49	ECA, 8 STRING	E040094-07	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1821
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-50	ECA, 8 STRING	E040094-08	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1821
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-51	ECA, 8 STRING	E040094-09	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1821
MOD 1127; MOD 1011; MOD 985; CCO 840	BCP	P050-52	ECA, 8 STRING	E040094-10	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1821
BG-01-339	HOU	P050A-01	BATTERY CHARGE/DISCHARGE UNIT	RE1807-03	1	EA		KSC/PPS	30-Sep-03	
MOD 1171; BG-01-339	HOU	P050A-02	SEQUENTIAL SHUNT UNIT	RE1806-04	1	EA		LORAL	30-Sep-03	NEW P/N
MOD 742	HSV	P051-01A	BOLT ASSY, POWERED	683-13450-5	4	EA		BOE/HSV	24-Sep-99	DD250 BHB0624
MOD 742	HSV	P051-02A	NUT ASSY, POWERED	683-13503-4	4	EA		BOE/HSV	24-Sep-99	DD250 BHB0633
MOD 1070; MOD 810; CCO 749; P293	BHB	P052-01	1" NH3/N2 VENT TOOL	1F98589-1	1	EA		JSC	9-Jun-00	DD250 BHB0932
MOD 1070; MOD 1011; MOD 810; CCO 749; P293	BHB	P052-02	1" H2O/N2 VENT TOOL	1F98593-1	1	EA		KSC	9-Jun-00	DD250 BHB0937
MOD 1070; MOD 810; CCO 749; P293	BHB	P052-03	1/4" NH3/N2 VENT TOOL	1F98592-1	1	EA		JSC	9-Jun-00	DD250 BHB1338
MOD 1070; MOD 810; CCO 749; P293	BHB	P052-04	1 1/2" NH3/N2 VENT TOOL	1F98591-1	1	EA		JSC	9-Jun-00	DD250 BHB1338
MOD 810; CCO 749; P293	BHB	P052-05	3/4" NH3/N2 VENT TOOL	1F98597-1	1	EA		JSC	9-Jun-00	DD250 BHB1338

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1015; MOD 810; CCO 749; P293	BHB	P052-06	1" N2-M VENT TOOL	1F98596-1	1	EA		JSC	9-Jun-00	DD250 BHB1013
MOD 1070; MOD 810; CCO 749; P293	BHB	P052-09	GRAPPLE BAR ASSY, FIXED	1F82000-1	1	EA		JSC	9-Jun-00	NEW P/N
MOD 1070; MOD 810; CCO 749; P293	BHB	P052-10	GRAPPLE BAR ASSY, ADJUSTABLE	1F82020-1	1	EA		JSC	9-Jun-00	NEW P/N
MOD 1062; MOD 719; CCO 694	BHB	P053-01	MT CAPTIVE NUT	D60694113-1	1	EA		JSC	24-Feb-00	L/I 79 - DD250 BHB1057
MOD 719; CCO 655	BHB	P054-01	MPLM MDM - 10 SPARE	8266726-901	1	EA		KSC	30-Nov-98	DD250 BHB0450; ALL GFE COMPONENTS
MOD 1117	HSV	P055-10A	ACTUATOR ASSEMBLY	683-61592-5	1	EA		BOE/MSFC	30-Sep-02	DD250 BHB1622
MOD 938; CCO 848; R812; P342	HSV	P055-12	PUSHROD ASSEMBLY	683-61599-5	2	EA		BOE/HSV	30-Sep-02	STOP WORK per NASA letter BG-04-225 dated 07/28/04; DD250 BHB1174 FOR ADP AND IPL ONLY; DD250 BHB1098 SHIPPED SHORT IPL & ADP. ORU
MOD 1084; MOD 938; CCO 848; R812; P342	HSV	P055-13	PUSHROD ASSEMBLY	683-61599-6	2	EA		KSC/PPS	30-Sep-02	STOP WORK per NASA letter BG-04-225 dated 07/28/04; DD250 BHB1099 IN WORK; DD250 BHB1175 ADP AND IPL ONLY 2-FEB-01
MOD 938; CCO 848; R812; P342	HSV	P055-14	PUSHROD ASSEMBLY	683-61599-7	2	EA		BOE/HSV	30-Sep-02	STOP WORK per NASA letter BG-04-225 dated 07/28/04; DD250 BHB1176 ADP AND IPL ONLY; DD250 BHB1100 SHIPPED SHORT IPL & ADP
MOD 938; CCO 848; R812; P342	HSV	P055-15	PUSHROD ASSEMBLY	683-61599-8	2	EA		BOE/HSV	30-Sep-02	STOP WORK per NASA letter BG-04-225 dated 07/28/04; DD250 BHB1173 ADP AND IPL ONLY; DD250 BHB1101 SHIPPED SHORT IPL & ADP
MOD 1011; R812	BHB	P056-01	SENSOR, TEMPERATURE	1F08041-1	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-02	SWITCH, LIMIT	1F08061-1	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-03	HEATER	1F97611-1	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-04	EVA DRIVE ASSEMBLY	1F69447-1	1	EA		KSC/PPS	31-Jul-01	DD250 BHB1650
MOD 1011; R812	BHB	P056-05	GEARTRAIN ASSEMBLY	1F03107-1	1	EA		KSC/PPS	31-Jul-01	
MOD 1011; R812	BHB	P056-06	SWITCH, LIMIT	1F08065-1	1	EA		KSC/PPS	31-Jul-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-07	HEATER	1F97611-1	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-08	SENSOR, TEMPERATURE	1F08041-1	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-09	SWITCH, LIMIT	1F08065-1	2	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-10	SENSOR, TEMPERATURE	1F08040-1	1	EA		KSC/PPS	31-Mar-01	DD250 BHB0849
MOD 1011; R812	BHB	P056-11	CCA	1F97308-1	1	EA		KSC/PPS	15-Jan-02	DD250 BHB1977
MOD 1011; R812	BHB	P056-12	RELAY	1F97558-1	1	EA		KSC/PPS	30-Jun-01	SUPPLIER PN AP10A-04
MOD 1011; R812	BHB	P056-13	THERMOSTAT, DUAL	1F97597-525	1	EA		KSC/PPS	30-Jun-01	DD250 BHB1394
MOD 1011; R812	BHB	P056-14	HEATER, PATCH	1F97604-1	1	EA		KSC/PPS	30-Jun-01	SUPPLIER PN 62-6805-1
MOD 1011; R812	BHB	P056-15	SENSOR, TEMPERATURE, LTU, LDU & AOA	1F08040-1	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1127; MOD 1024; MOD 1011; R812	BHB	P056-16	SWITCH ASSY, LTU	D60691010-3	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1811
MOD 1127; MOD 1011; R812	BHB	P056-17	SWITCH ASSY, LDU	D60691011-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1705
MOD 1127; MOD 1011; R812	BHB	P056-18	PWA, SWITCH ASSY, LDU & LTU	D60691016-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1705

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1011; R812	BHB	P056-19	HEATER, MOTOR, LTU 1	D60695161-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1127; MOD 1011; R812	BHB	P056-21	HEATER, MOTOR, LTU 3	D60695161-3	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1127; MOD 1011; R812	BHB	P056-23	HEATER, LINKAGES, LTU 1	D60695162-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1127; MOD 1011; R812	BHB	P056-25	HEATER, LINKAGES, LTU 3	D60695162-3	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1127; MOD 1011; R812	BHB	P056-27	SWITCH, MAGNETIC, LDU& LTU	D60697751-1	2	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1127; MOD 1011; R812	BHB	P056-28	HEATER, LDU	D60699217-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1011; R812	BHB	P056-29	HEATER, BRAKE, LDU	D60699234-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1581
MOD 1011; R812	BHB	P056-30	HEATER, BOGIE, LDU	D60699235-1	1	EA		KSC/PPS	30-Sep-01	DD250 BHB1581
MOD 1011; R812	BHB	P056-31	BRAKE, ASSY, LDU	D60699750-1	1	EA		KSC/PPS	15-Jul-01	DD250 BHB1705
MOD 1011; R812	BHB	P056-32	THERMOSTAT, LDU& LTU	1F97597-525	1	EA		KSC/PPS	30-Jun-01	DD250 BHB1394
MOD 1011; R812	BHB	P056-33	THERMOSTAT, AOA	1F97597-509	1	EA		KSC/PPS	30-Jun-01	DD250 BHB0849
MOD 1127; MOD 1011; R812	BHB	P056-34	MT ROLLER SUSPENSION UNIT	D60698000-1	1	EA		KSC/PPS	30-Oct-01	
MOD 1127; MOD 1011; R812	BHB	P056-35	GUIDE VANE ASSEMBLY	1F70524-1	3	EA		KSC/PPS	31-Jul-01	DD250 BHB1884
MOD 1127; MOD 1011; R812	BHB	P056-36	UMA PASSIVE HALF	1F05104-1	1	EA		KSC/PPS	30-Sep-01	
MOD 1127; MOD 1072; MOD 1011	BHB	P056-39	UMA MT	1F05101-1	1	EA		KSC/PPS	30-Sep-01	DD250 BHB1849 IN WK
MOD 1127; MOD 1011	BHB	P056-40	LOAD TRANSFER UNIT (LTU)	D60695001-3	1	EA		KSC/PPS	31-Aug-01	
MOD 1011	BHB	P056-41	LEAD TRANSFER UNIT SPARES KIT (LTU KIT -1 OR -4)	D60695800-1	1	KT		KSC/PPS	31-Aug-01	Change nomenclature and unit of measure for P056-41 per Boeing letter 2-1150-03-0526 concurred by NASA 01/20/04.; DD250 BHB1804
MOD 1011; DIR 128	BHB	P057-01	UTILITY RAIL	1F97000-1	1	EA		KSC	1-Jul-01	DD250 BHB1688
MOD 1011; DIR 128	BHB	P057-02	UTILITY RAIL	1F97057-1	1	EA		KSC	1-Jul-01	DD250 BHB1688
MOD 1011; DIR 128	BHB	P057-03	UTILITY RAIL	1F97063-1	1	EA		KSC	1-Jul-01	DD250 BHB1949
MOD 1011; DIR 128	BHB	P057-04	UTILITY RAIL	1F97015-1	1	EA		KSC	1-Jul-01	DD250 BHB1951
MOD 1011; DIR 128	BHB	P057-05	UTILITY RAIL	1F97018-1	1	EA		KSC	1-Sep-01	DD250 BHB1952
MOD 1011; DIR 128	BHB	P057-06	UTILITY RAIL	1F97006-1	1	EA		KSC	1-Oct-01	DD250 BHB1527
MOD 1011; DIR 128	BHB	P057-07	THERMOSTAT ASSY	1F80434-1	1	EA		KSC	21-Aug-01	
MOD 1011; DIR 128	BHB	P057-08	THERMOSTAT ASSY	1F80435-1	1	EA		KSC	12-Sep-01	
MOD 1070; MOD 1018; P515	BCP	P058-01	BATTERY ASSEMBLY	RE1804-12	7	EA		LORAL	1-Jun-03	
MOD 962; CCO 884; SSCN 2920	BHB	P059-01	CHASSIS ASSY-SSMDM-4CE (FLIGHT SPARE)	8266516-905	1	EA		HI/GLEND	15-Jul-01	DD250 BHB1488
MOD 962; CCO 884; SSCN 2920	BHB	P059-02	CHASSIS ASSY-SSMDM-4CE (FLIGHT SPARE)	8266516-903	1	EA		HI/GLEND	15-Jul-01	DD250 BHB1488
MOD 962; CCO 884; SSCN 2920	BHB	P059-03	LLA CCA	8260870-901	4	EA		HI/GLEND	15-Jul-01	DD250 BHB1488
MOD 962; CCO 884; SSCN 2920	BHB	P059-04	5V PS CCA	8260885-901	1	EA		HI/GLEND	15-Jul-01	DD250 BHB1488
MOD 962; CCO 884; SSCN 2920	BHB	P059-05	SV PS CCA	8260895-901	1	EA		HI/GLEND	15-Jul-01	DD250 BHB1488

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 962; CCO 884; SSCN 2920	BHB	P059-06	HRDL LOAD BOARD	8260534-901	2	EA		HI/GLEND	30-Nov-00	DD250 BHB1014
MOD 962; CCO 884; SSCN 2920	BHB	P059-07	MSD LOAD BOARD	8260537-901	4	EA		HI/GLEND	30-Nov-00	DD250 BHB1014
MOD 962; CCO 884; SSCN 2920	BHB	P059-08	HRDL PROCESSOR CCA	8264898-901	1	EA		HI/GLEND	15-Jul-01	DD250 BHB1488
MOD 962; CCO 884; SSCN 2920	BHB	P059-09	SDO CCA	8260890-901	4	EA		HW/GLEND	31-Dec-01	DD250 BHB1536 SIGNED 5/6/02; NEED COPY
MOD 962; CCO 884; SSCN 2920	BHB	P059-10	MDM DDC DISK	108995-103	125	EA		HI/GLEND	31-Jan-01	DD250 BHB1628; MOVED FROM P056-37
MOD 1084; MOD 985; CCO 868	HSV	P060-01	CONTROL/MONITOR INSTRUMENTATION ASSY	9524	1	EA		KSC/PPS	30-Nov-01	DD250 BHB1715
MOD 1084; MOD 985; CCO 868	HSV	P060-02	FLUID PUMP ASSY	9530	2	EA		KSC/PPS	30-Nov-01	DD250 BHB1715
MOD 1084; MOD 985; CCO 868	HSV	P060-03	GAS REMOVAL ASSY	9461	1	EA		KSC/PPS	30-Nov-01	DD250 BHB1742
MOD 1084; MOD 985; CCO 868	HSV	P060-04	POLYPROPYLENE GAS TRAP	9464-4	2	EA		KSC/PPS	30-Nov-01	DD250 BHB1727
MOD 1084; MOD 985; CCO 868	HSV	P060-05	LIQUID BARRIER	9480	2	EA		KSC/PPS	30-Nov-01	DD250 BHB1715
MOD 1084; MOD 985; CCO 868	HSV	P060-06	AIR/WATER FILTER	9463	12	EA		KSC/PPS	30-Nov-01	DD250 BHB1743
MOD 1084; MOD 985; CCO 868	HSV	P060-07	LIQUID AIR/FILTER ASSY	9459	1	EA		KSC/PPS	30-Nov-01	DD250 BHB1744
MOD 1084; MOD 985; CCO 868	HSV	P060-08	FILTER HOUSING INSTALLATION TOOL	SKA-4108	1	EA		KSC/PPS	30-Nov-01	DD250 BHB1745
MOD 1268; MOD 1143; MOD 1070; CCO 839R2	BHB	P061-01	TRC TYPE II POWER SUPPLY	K10048293-1	3	EA		L-3 COM	1-Jul-02	P/N & dest. change per Boeing Ltr 02-1150-04-0309 concurred with by NASA on 06/30/04; REF P039B-11
MOD 1268; MOD 1143; MOD 1070; CCO 839R2	BHB	P061-02	VSW/VBSP TYPE III POWER SUPPLY	K10048294-1	6	EA		KSC/PPS	1-Jul-02	P/N change per Boeing Ltr 02-1150-04-0309 concurred with by NASA on 06/30/04; REF P039B-12
MOD 1268; MOD 1143; MOD 1070; CCO 839R2	BHB	P061-03	ETVCG TYPE IV POWER SUPPLY	K10048295-1	5	EA		L-3 COM	1-Jul-02	P/N & dest. change per Boeing Ltr 02-1150-04-0309 concurred with by NASA on 06/30/04; REF P039B-13
MOD 1143; MOD 1070; CCO 839R2	BHB	P061-04	S-BAND SSPA	817652-551	1	EA		KSC/PPS	1-Oct-02	DD250 BHB1889. REF P039B-14
MOD 1084; CCO 1055	HOU	P061A-02	DIODE	990150-2	5	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-04	DIODE	990150-4	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-07	CAPACITOR 100pf 100V	990152-1	10	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-08	CAPACITOR 0.1pf 100V	990152-2	10	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-11	TRANSFORMER, +7.5V/1A	990154-1	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-12	TRANSFORMER, +15V/0.5A, -15V/0.25A	990154-2	2	EA		KSC/PPS	28-Feb-02	Qty changed per Boeing Ltr 2-1150-03-0345 concurred by NASA on 10/21/03.
MOD 1084; CCO 1055	HOU	P061A-13	TRANSFORMER, -2.0V/1.5A	990154-3	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-14	TRANSFORMER, +5.05V/0.75A	990154-4	2	EA		KSC/PPS	28-Feb-02	TRANSFORMER, +5.1V/1.25A, -5.25V/1.75A
MOD 1084; CCO 1055	HOU	P061A-15	TRANSFORMER, +5.1V/3.25A	990155-1	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-16	TRANSFORMER, +15V/1.5A(A15V/A1A)(+15V/1.25A, 15V/1A)	990155-2	4	EA		KSC/PPS	28-Feb-02	
MOD 1084; CCO 1055	HOU	P061A-17	TRANSFORMER, -5.25V/12A	990156-1	2	EA		KSC/PPS	28-Feb-02	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1084; CC0 1055	HOU	P061A-19	TRANSFORMER, SYNC	990158-1	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-20	TRANSFORMER, CURRENT	990158-2	14	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-21	TRANSFORMER, HKPS	990159-1	4	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-22	INDUCTOR, +7.5V/1A, +5.05V/0.75A	990160-1	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-23	INDUCTOR, +15V/0.5A, -15V/0.25A	990160-2	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-24	INDUCTOR, -2.0V/1.5A	990160-3	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-25	INDUCTOR, +5.1V/1.25A, -5.25V/1.75A	990160-4	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-26	INDUCTOR, A15V/A1A	990160-5	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-27	INDUCTOR, +15V/1.5A	990161-1	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-28	INDUCTOR, +5.1V/3.25A	990161-2	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-29	TRANSFORMER, DRIVE	990162-1	14	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-30	INDUCTOR, -5.25V/12A	990163-1	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-31	INDUCTOR, +28V/3A	990163-2	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-32	INDUCTOR, OUTPUT FILTER	990164-1	2	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-33	INDUCTOR, OUTPUT FILTER	990165-1	10	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-34	INDUCTOR, OUTPUT CM-2	990166-1	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-35	INDUCTOR, OUTPUT CM-1	990167-1	7	EA		KSC/PPS	28-Feb-02	Qty changed per Boeing Ltr 2-1150-03-0345 concurred by NASA on 10/21/03.
MOD 1084; CC0 1055	HOU	P061A-36	INDUCTOR, EMI "A" DM	990168-1	4	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-37	INDUCTOR, EMI DM	990169-1	10	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-38	INDUCTYOR, EMI CM	990170-1	4	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-39	TEMP SENSE	GSFC-S-311-P-18-07S	3	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-40	FET	990171-1	10	EA		KSC/PPS	28-Feb-02	
MOD 1084; CC0 1055	HOU	P061A-41	FET	990171-2	7	EA		KSC/PPS	28-Feb-02	
MOD 1084; BG-00-290	BHB	P063-01	AMPLIFIER ORU ASSEMBLY*	D60696200-1	1	EA		KSC/PPS	22-Dec-03	* WITH RECLOCKED CONNECTORS, ASSY CAN BE CONVERTED TO A-3
BG-01-286; SSCN 4922	HOU	P064-01	LAMP HOUSING ASSEMBLY	219010	8	EA		KSC/PPS	29-Apr-02	DD240 BHB1759 (4 EA), DD250 BHB1676 (4 EA)
BG-01-286; SSCN 4922	HOU	P064-02	LAMP HOUSING ASSEMBLY	219010	16	EA		KSC/PPS	24-Jun-02	DD250 BHB1760 (8 EA); BHB1812 (6 EA) AND BHB1857 (2 EA)
BG-01-286; SSCN 4922	HOU	P064-03	LAMP HOUSING ASSEMBLY	219010	16	EA		KSC/PPS	26-Aug-02	DD250 BHB1857 (10 EA); BHB1943 (5 EA); BHB1978 (1 EA)
BG-01-286; SSCN 4922	HOU	P064-04	LAMP HOUSING ASSEMBLY	219010	16	EA		KSC/PPS	28-Oct-02	DD250 BHB1957 (8 EA); BHB1978 (2 EA)
BG-01-286; SSCN 4922	HOU	P064-05	LAMP HOUSING ASSEMBLY	219010	4	EA		KSC/PPS	27-Jan-03	
BG-01-286	HOU	P064-06	LAMP HOUSING ASSEMBLY	219010	20	EA		KSC/PPS	14-Feb-03	
BG-01-286	HOU	P064-07	LAMP HOUSING ASSEMBLY	219010	16	EA		KSC/PPS	15-Apr-03	
BG-01-286	HOU	P064-08	LAMP HOUSING ASSEMBLY	219010	16	EA		KSC/PPS	13-Jun-03	
BG-01-286	HOU	P064-09	LAMP HOUSING ASSEMBLY	219010	13	EA		KSC/PPS	11-Aug-03	
	HOU	P064A-01	LAMP HOUSING ASSEMBLY	219010	10	EA	\$307,723	KSC	31-Oct-03	
	HOU	P064A-02	LAMP HOUSING ASSEMBLY	219010	10	EA	\$307,723	KSC	30-Nov-03	
	HOU	P064A-03	LAMP HOUSING ASSEMBLY	219010	10	EA	\$307,723	KSC	30-Dec-03	
	HOU	P064A-09	BASEPLATE/BALLAST ASSEMBLY	219011	3	EA	\$915,437	KSC	31-Oct-03	
MOD 1108; CCO 1056	BHB	P067-01	INTEGRATED MOTOR CONTROLLER ACTUATOR (IMCA)	1F03158-515	4	EA		KSC/PPS	30-Jun-03	
MOD 1117; MOD 1084; BG-01-190	HSV	P068-01	VIDEO TAPE RECORDER (VTR)	683-51020-1	1	EA		BOE/MSFC	30-Sep-01	ATP - RESIDUAL UNIT
MOD 1127; BG-01-340	HOU	P069-01	MODULE, THERMOSTAT	1F97597-523	2	EA	\$24,544	KSC/PPS	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-03	HEATER, QD 3/4"	4173273-101	6	EA	\$21,953	HW	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-04	HEATER, QD 1"	4173272-101	6	EA	\$21,764	HW	31-Jul-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; BG-01-340	HOU	P069-05	HEATER, BALL VALVE	4173264-101	4	EA	\$11,855	HW	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-06	HEATER, IMCA	4173263-101	2	EA	\$4,077	HW	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-08	BALL VALVE, RETURN, 2-PORT	4173124-103	1	EA	\$262,370	HW	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-09	BALL VALVE, SUPPLY, 3-PORT	4173218-101	1	EA	\$183,393	HW	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-10	SWITCH, LIMIT	4173240-101	15	EA	\$140,576	HW	31-Jul-03	Requirement is 2ea; Minimum Buy of 15
MOD 1127; BG-01-340	HOU	P069-12	HEATER,PATCH, HEAT	1F97621-1	1	EA	\$372	KSC/PPS	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-13	HEATER,LINE,SINGLE	1F97620-1	2	EA	\$683	KSC/PPS	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-14	HEATER,LINE,SINGLE	1F97620-501	2	EA	\$588	KSC/PPS	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-15	HEATER,STRIP, SINGLE	1F97600-501	2	EA	\$620	KSC/PPS	31-Jul-03	Used on MBSU & DDCU Coldplates
MOD 1171; MOD 1127; BG-01-340	HOU	P069-16	SENSOR,TEMPERATURE	SV819499-2	1	EA	\$16,561	HAMSUND/CT	31-Jul-03	NEW P/N
MOD 1127; BG-01-340	HOU	P069-17	ACTUATOR,ELECTRO MECHANICAL	SV819413-1	1	EA	\$314,657	HAMSUND/CT	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-18	FILTER,PUMP	SV819415-1	1	EA		HAMSUND/CT	31-Jul-03	SOURCE,REV-C
MOD 1127; BG-01-340	HOU	P069-19	MOTOR,PUMP	SV819548-2	1	EA	\$276,015	HAMSUND/CT	31-Jul-03	ALTERNATE,REV-F
MOD 1127; BG-01-340	HOU	P069-20	CHOKE,COMMON MODE	SV819376-2	1	EA	\$46,370	HAMSUND/CT	31-Jul-03	SOURCE,REV-B
MOD 1127; BG-01-340	HOU	P069-21	CHOKE,SERIES	SV819377-2	1	EA	\$55,203	HAMSUND/CT	31-Jul-03	SOURCE,REV-C
MOD 1127; BG-01-340	HOU	P069-23	MICROCIRCUIT,MONOLITHIC	SV819469-9	1	EA	\$5,520	HAMSUND/CT	31-Jul-03	(INFO. DWG.)
MOD 1171; MOD 1127; BG-01-340	HOU	P069-24	MICROCIRCUIT, TRANSDUCER-TEMPERATURE	SV817631-1	1	EA		HAMSUND/CT	31-Jul-03	NEW P/N
MOD 1127; BG-01-340	HOU	P069-26	SEMICONDUCTOR	JANSR2N7261	1	EA	\$522	HAMSUND/CT	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-27	MICROCIRCUIT, MONOLITHIC-CLASS S EQUIVALENT	SV812710-2	1	EA		HAMSUND/CT	31-Jul-03	SELECTED / ALTERED
MOD 1127; BG-01-340	HOU	P069-28	MICROCIRCUIT, ELECTRONIC-CLASS S EQUIVALENT	SV812726-12	1	EA		HAMSUND/CT	31-Jul-03	SELECTED / ALTERED
MOD 1127; BG-01-340	HOU	P069-30	MICROCIRCUIT	M38510/65403BRA	1	EA		HAMSUND/CT	31-Jul-03	P/N MAY CHANGE, UPSCREENING REQUIRED
MOD 1127; BG-01-340	HOU	P069-32	MICROCIRCUIT, DIGITAL, DRIVER-RECEIVER, MONOLITHIC SILICON	5962R8864405VZA	1	EA		HAMSUND/CT	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-33	MICROCIRCUIT, ELECTRONIC-CLASS S EQUIVALENT	SV812726-7	1	EA		HAMSUND/CT	31-Jul-03	
MOD 1127; BG-01-340	HOU	P069-34	MICROCIRCUIT,PAL-PCVP FIRMWARE CONTROLLER	SV819443-002	1	EA	\$5,520	HAMSUND/CT	31-Jul-03	ALTERED,REV-C
MOD 1127; BG-01-340	HOU	P069-35	MICROCIRCUIT,PAL-PCVP FIRMWARE CONTROLLER	SV819443-004	1	EA	\$5,520	HAMSUND/CT	31-Jul-03	ALTERED,REV-C
MOD 1127; BG-01-340	HOU	P069-36	MICROCIRCUIT,PAL-PCVP FIRMWARE CONTROLLER	SV819443-005	1	EA	\$5,520	HAMSUND/CT	31-Jul-03	ALTERED,REV-C
MOD 1127; BG-01-340	HOU	P069-37	MICROCIRCUIT, EEPROM, PCVP BOOT	SV819445-001	1	EA	\$38,642	HAMSUND/CT	31-Jul-03	ALTERED,REV-A
MOD 1127; BG-01-340	HOU	P069-38	MICROCIRCUIT, EEPROM, PCVP BOOT	SV819445-002	1	EA	\$11,041	HAMSUND/CT	31-Jul-03	ALTERED,REV-A
MOD 1127; BG-01-340	HOU	P069-39	CRYSTAL OSCILLATOR-HCMOS	SV819472-1	1	EA	\$77,284	HAMSUND/CT	31-Jul-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; BG-01-340	HOU	P069-40	CRYSTAL OSCILLATOR-HCMOS	SV819472-2	1	EA		HAMSUND/CT	31-Jul-03	
BG-01-341	HOU	P070-001	THERMOSTAT	1F97597-509	2	EA	\$5,089	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-003	BACKSHELL, CABLE SUPPORT, RFI/EMI SHIELDING, 90 DEGREE, NZGL PLUG	NZGA-JG-15-N-16Z	2	EA	\$3,903	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-006	CONNECTOR, ELECTRICAL, PLUG, ENVIRONMENTAL	NZGL06G1515N19PB-1	6	EA	\$38,595	KSC/PPS	28-Nov-03	AMP- 1; RSU - 2; LDU - 3
BG-01-341	HOU	P070-007	CONTACT, ELECTRICAL, CONNECTOR, CRIMP TYPE	NZGC-C-2022PB	124	EA	\$5,101	KSC/PPS	28-Nov-03	AMP- 36; RSU - 40; LDU - 20; LTU - 28
BG-01-341	HOU	P070-010	THERMOSTAT	1F97597-501	2	EA	\$6,165	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-011	TIRE-RSU, MOBILE TRANSPORTER	D60698044-1	3	EA	\$16,631	KSC/PPS	28-Nov-03	
BG-01-341;04-0543	HOU	P070-016	SCREW, EXTENDED-ORU ATTACHMENT, MOBILE TRANSPORTER	D60693045-2	1	EA	\$5,083	KSC/PPS	28-Nov-03	Qty change per Boeing Ltr 02-11580-03-0543 concurred with by NASA on 11/19/03.
BG-01-341;04-0543	HOU	P070-017	SCREW, EXTENDED-ORU ATTACHMENT, MOBILE TRANSPORTER	D60693045-3	1	EA	\$3,779.50	KSC/PPS	28-Nov-03	Qty change per Boeing Ltr 02-11580-03-0543 concurred with by NASA on 11/19/03.
BG-01-341;04-0543	HOU	P070-018	BEARING, WHEEL-RSU, MOBILE TRANSPORTER	D60698036-1	9	EA	\$1,807.36	KSC/PPS	28-Nov-03	Qty change per Boeing Ltr 02-11580-03-0543 concurred with by NASA on 11/19/03.; RSU - 10; LDU - 1
BG-01-341	HOU	P070-019	HUB-RSU, MOBILE TRANSPORTER	D60698043-1	5	EA	\$9,576	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-020	TIRE-RSU, MOBILE TRANSPORTER	D60698044-1	2	EA	\$13,343	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-024	BEARING, PLAIN SELF-LUBRICATING, SELF-ALIGNING, LOW SPEED, NARROW, CHAMFERED OUTER RING,-65 DEGREE F TO 325 DEGREE F	MS 14104-5	1	EA	\$2,681	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-032	GEAR, INPUT-LDU, MOBILE TRANSPORTER	D60699004-1	1	EA	\$7,402	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-033	BEARING, BALL, RADIAL-LDU, MOBILE TRANSPORTER	D60699005-2	1	EA	\$14,130	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-035	GEAR, PLANET-LDU, MOBILE TRANSPORTER	D60699006-1	1	EA	\$7,653	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-036	GEAR, RING-LDU, MOBILE TRANSPORTER	D60699008-1	1	EA	\$14,520	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-037	WHEEL ASSEMBLY-LDU, MOBILE TRANSPORTER	D60699030-1	2	EA	\$71,822	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-039	GEAR, WHEEL-LDU, MOBILE TRANSPORTER	D60699035-1	1	EA	\$23,635	KSC/PPS	28-Nov-03	
BG-01-341;03-0566;04-0226	HOU	P070-040	BEARING, NEEDLE IR-LDU, MOBILE TRANSPORTER	D60699042-1	1	EA	\$63,476	KSC/PPS	28-Nov-03	DEST'N change per Boeing Ltr 02-11580-04-0226 concurred with by NASA on 5/10/04. Added line item per Boeing ltr 03-0566 concurred by NASA 12/12/03.
BG-01-341	HOU	P070-041	GEAR, POWER TRAIN-LDU, MOBILE TRANSPORTER	D60699045-1	1	EA	\$7,136	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-042	GEAR, POWER TRAIN-LDU, MOBILE TRANSPORTER	D60699045-2	1	EA	\$7,136	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-043	GEAR, POWER TRAIN, SMALL-LDU, MOBILE TRANSPORTER	D60699048-1	2	EA	\$7,983	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-044	BEARING, CAM-LDU, MOBILE TRANSPORTER	D60699102-1	1	EA	\$17,499	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-045	BEARING, ANGULAR CONTACT-LDU, MOBILE TRANSPORTER	D60699103-1	1	EA	\$109,135	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-046	GEAR, CAM DRIVE-LDU, MOBILE TRANSPORTER	D60699105-1	1	EA	\$8,035	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-047	GEAR, CAM -LDU, MOBILE TRANSPORTER	D60699113-1	1	EA	\$21,689	KSC/PPS	28-Nov-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

**NAS15-10000
MOD 1388 (S/A)**

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
BG-01-341	HOU	P070-048	BEARING, BALL, RADIAL-LDU, MOBILE TRANSPORTER	D60699199-1	2	EA	\$131,339	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-053	BACKSHELL, CABLE SUPPORT, RFI/EMI SHIELDING, 45 DEGREE, NZGL PLUG	NZGA-HG-15-N-24Z	2	EA	\$52,844	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-054	THERMOSTAT	1F97597-525	5	EA	\$15,413	KSC/PPS	28-Nov-03	LDU - 3; LTU - 2
BG-01-341;04-0543;04-0226	HOU	P070-066	BEARING, ROLLER, LINK-LTU, MOBILE TRANSPORTER	D60695067-2	2	EA	\$104,400	KSC/PPS	28-Nov-03	Qty change per Boeing Ltr 2-1150-04-0226 concurred by NASA on 05/10/04. Qty change per Boeing Ltr 02-11580-03-0543 concurred with by NASA on 11/19/03.
BG-01-341;04-0543	HOU	P070-067	BEARING, TRACK ROLLER-LTU, MOBILE TRANSPORTER	D60695068-1	3	EA	\$81,087	KSC/PPS	28-Nov-03	Qty change per Boeing Ltr 02-11580-03-0543 concurred with by NASA on 11/19/03.
BG-01-341	HOU	P070-068	BEARING, DOUBLE ROW-LTU, MOBILE TRANSPORTER	D60695082-1	1	EA	\$122,151	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-069	BEARING, DUPLEX PAIR-LTU, MOBILE TRANSPORTER	D60695084-1	1	EA	\$117,490	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-075	BOOSTER FOOT ASSEMBLY-MOBILE TRANSPORTER	D60695115-5	1	EA	\$35,127	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-076	STANDOFF HANDLE-LTU, MOBILE TRANSPORTER	D60695148-1	1	EA	\$8,631	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-077	STANDOFF, HANDLE-LTU, MOBILE TRANSPORTER	D60695148-2	1	EA	\$8,631	KSC/PPS	28-Nov-03	
BG-01-341	HOU	P070-082	BACKSHELL, CABLE SUPPORT, RFI/EMI SHIELDING, 45 DEGREE, NZGL PLUG	NZGA-HG-17-N-24Z	2	EA	\$2,204	KSC/PPS	28-Nov-03	
MOD 1127; BG-01-342	HOU	P071-01	CAUTION & WARNING MALFUNCTION PANEL	1F51710-1	1	EA	\$406,000	KSC/PPS	2-Aug-03	
MOD 1157; RFP 345	HOU	P074-01	QUICK DISCONNECT	1F45540-1	1	EA	\$21,408	KSC/PPS	15-Jul-03	ALT REFN 505540-UP04A
MOD 1157; RFP 345	HOU	P074-02	QUICK DISCONNECT	1F45540-511	1	EA	\$19,884	KSC/PPS	15-Jul-03	ALT REFN NN505540-UP04A
MOD 1157; RFP 345	HOU	P074-03	QUICK DISCONNECT	1F45541-1	3	EA	\$61,805	KSC/PPS	15-Jul-03	ALT REFN 545541-U041A
MOD 1157; RFP 345	HOU	P074-04	QUICK DISCONNECT	1F45571-1	1	EA	\$30,411	KSC/PPS	15-Jul-03	ALT REFN 505571-U161W
MOD 1268; MOD 1157; RFP 345	HOU	P074-05	QUICK DISCONNECT	1F45540-505	1	EA	\$20,254	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN; 505540-UP16A
MOD 1268; MOD 1157; RFP 345	HOU	P074-06	QUICK DISCONNECT	1F45540-507	1	EA	\$21,674	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN; 505540-UP24A
MOD 1268; MOD 1157; RFP 345	HOU	P074-07	QUICK DISCONNECT	1F45540-517	4	EA	\$44,555	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN; NN505540-UP16A
MOD 1268; MOD 1157; RFP 345	HOU	P074-08	QUICK DISCONNECT	1F45541-501	1	EA	\$33,995	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN 545541-
MOD 1268; MOD 1157; RFP 345	HOU	P074-09	QUICK DISCONNECT	1F45541-503	4	EA	\$72,469	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN 545541-
MOD 1268; MOD 1157; RFP 345	HOU	P074-10	QUICK DISCONNECT	1F45541-505	7	EA	\$113,884	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN 545541-
MOD 1268; MOD 1157; RFP 345	HOU	P074-11	QUICK DISCONNECT	1F45541-507	1	EA	\$37,885	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN 545541-

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1268; MOD 1157; RFP 345	HOU	P074-12	QUICK DISCONNECT	1F45541-517	2	EA	\$43,767	KSC/PPS	15-Jul-03	P/N change per Boeing Ltr 02-1150-03-0548 concurred with by NASA on 12/12/03; ALT REFN; NN545541-U161A
MOD 1157; RFP 345	HOU	P074-13	QUICK DISCONNECT	1F70136-1	1	EA	\$37,579	KSC/PPS	15-Jul-03	ALT REFN 545136-U241A
MOD 1157; RFP 345	HOU	P074-14	QUICK DISCONNECT	1F98690-1	1	EA	\$5,225	KSC/PPS	15-Jul-03	ALT REFN 502040-GP06G
MOD 1157; RFP 345	HOU	P074-15	QUICK DISCONNECT	1F98691-1	1	EA	\$5,024	KSC/PPS	15-Jul-03	ALT REFN 502050-GP06N
MOD 1157; RFP 345	HOU	P074-17	COLLAR	1F00799-505	1	EA	\$5,221	KSC/PPS	16-Jul-03	ALT REFN K545105-505
MOD 1157; RFP 345	HOU	P074-18	COLLAR	1F00799-507	4	EA	\$9,781	KSC/PPS	17-Jul-03	ALT REFN K545105-507
MOD 1157; RFP 345	HOU	P074-19	COLLAR	1F00799-509	7	EA	\$14,304	KSC/PPS	18-Jul-03	ALT REFN K545105-509
MOD 1157; RFP 345	HOU	P074-20	CAP	1F45580-1	1	EA	\$7,645	KSC/PPS	19-Jul-03	ALT REFN 505580-04
MOD 1157; RFP 345	HOU	P074-21	CAP	1F45580-505	1	EA	\$8,235	KSC/PPS	20-Jul-03	ALT REFN 505580-16
MOD 1157; RFP 345	HOU	P074-22	CAP	1F45580-507	1	EA	\$7,214	KSC/PPS	21-Jul-03	ALT REFN 505580-24
MOD 1132	HOU	P075-01	UTILITY OUTLET PANEL	683-27710-5	6	EA	\$413,430	KSC/PPS	15-Dec-03	
MOD 1132	HOU	P075-02	UTILITY OUTLET PANEL	683-27710-6	4	EA	\$300,011	KSC/PPS	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-01	.33UF,500V,10%,X7R,3HI,DPA	87106-429	8	EA	\$229	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-02	1000pF,1000V,10%,X7R,DPA	87043-25	8	EA	\$1,005	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-07	MAMA IV,Class B,DPA,PIND	11097-B-001	1	EA	\$9,636	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-08	CAPSTAN,I/O,Protoflt,HCOR,D,P	350241-B-001	3	EA	\$15,923	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-15	7968,TAXI Transmitter	AM7968-125/JC	3	EA	\$85	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-16	7969,TAXI Receiver	AM7969-125/JC	4	EA	\$125	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-17	54LVTH16244,Buffer/Driver	5962-9668501QXA	9	EA	\$274	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-18	54LVTH16245,Bus Transceiver	5962-9668601QXA	8	EA	\$237	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-20	54LVTH240,Octal Bufr/Drvr,Inv	5962-9950801QSA	6	EA	\$102	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-22	54LVTH244,Octal Buffer/Dri,D,P	5962-9584401QSA	6	EA	\$101	SEAKR	15-Dec-03	
MOD 1157; RFP 347;03-0236;04-0019	HOU	P078-24	AD580, Voltage Reference, 2.5V	5962-8686101XA	6	EA	\$133	SEAKR	15-Dec-03	Part Number changed per Boeing Ltr 2-1150-04-0019 concurred by NASA on 1/28/04
MOD 1157; RFP 347	HOU	P078-25	LM185-1.2,Voltage Reference	5962-8759405XA	6	EA	\$151	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-26	LM193,Voltage Comparator,DPA,P	JM38510/11202BPA	7	EA	\$147	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-29	OM186,VoltageReg,1.5A,DPA,PIND	5962-8998101UA	6	EA	\$901	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-37	44V16004,16Mx4,60ns,Rev A,DP,S	KM44V16004AK-6	7	EA	\$197	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-39	53C885,PCI-SCSI/Ethernet Contr	53C885160QFP	6	EA	\$533	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-40	DP83840,Ethernet Physical Layr	DP83840AVCE	6	EA	\$103	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-49	SI4435DY,Rev-.30V,8.0A,DPA,SCR	SI4435DY	2	EA	\$4	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-50	22Pin,SZ13,Flange MT,NATC	NATC00T13N35PN	1	EA	\$425	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-57	SealingPlug,Sz22,NZGSP-22DP	NZGSP-22DP	6	EA	\$89	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-58	Control Board	350550	1	EA	\$149,457	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-59	Power Supply	350530	1	EA	\$119,024	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-60	I/O Board	350540	1	EA	\$460,135	SEAKR	15-Dec-03	
MOD 1157; RFP 347	HOU	P078-61	Memory Board	350560	1	EA	\$86,217	SEAKR	15-Dec-03	
MOD 1143; MOD 591; CCO 498	BCP	P16A-001	MICROCIRCUIT	1621792-005	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-002	IC, ANALOG SW	1621877-003	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-003	IC, OPNL AMPL	1621902-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-004	IC, ANALOG MUX	1622039-004	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-005	TRANSISTOR	1PE0301-024	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-006	IC, SER INTFC	1PE0437-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-007	CRYSTAL, QUARTZ	1PE0441-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-008	IC, R/D CONVERTER	1PE0442-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-009	IC, D/A CONVERTER	1PE0463-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-010	IC, AMP OP	1PE0464-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 591; CCO 498	BCP	P16A-011	IC, A/D CONVERTER	1PE0465-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 1024; MOD 591; CCO 498	BCP	P16A-012	DIODE	1PE0467-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1259
MOD 591; CCO 498	BCP	P16A-013	CONNECTOR	1PE0509-008C	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-014	IC, D/A CONVERTER	1PE0534-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-015	DIODE	JANS1N5819-1	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-016	CAPACITOR, 50V, 10PCT	1PE0536-003	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-017	IC, QUAD OP AMP	1PE0543-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-018	PROM, 2K X8	1PE0584-101	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-019	PROM, 2K X8	1PE0584-201	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-020	PROM, 2K X8	1PE0584-301	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-021	PROM, 2K X8	1PE0584-401	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-022	IC, VOLT REF	1PE0599-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-023	IC, R/D CONVERTER	1PE0625-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 1070; MOD 591; CCO 498	BCP	P16A-024	IC, OP AMP	JM38510/10104SPA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1384
MOD 591; CCO 498	BCP	P16A-025	IC, QUAD OP AMP	95151-004	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-026	IC, OP AMP	95171-004	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 1070; MOD 591; CCO 498	BCP	P16A-027	IC, TRANSCEIVER	5962-8961501VPA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1384
MOD 591; CCO 498	BCP	P16A-028	TRANSISTOR, NPN	95513-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-029	TRANSISTOR, PNP DUAL	95518-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-030	IC, NAND GATE	95601-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-031	IC AND GATE	95603-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-032	IC, NOR GATE	95604-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-033	IC, HEX INVERTER	95605-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-034	IC, INV, SCHMITT	95606-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-035	IC, NOR GATE	95607-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-036	IC, FLIP/FLOP	95608-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-037	IC, FLIP/FLOP	95608-004	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-038	IC, TRANSCEIVER	95609-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-039	IC, OCT BUFF	95610-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-040	IC, DCDR/MUX	95612-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-041	IC, COUNTER	95633-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-042	IC, 3-IN NOR	95636-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-043	IC, COUNTER	95A22-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-044	IC, DGTLFF	95A51-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-045	PROM, 2K X8	HS1-6617RHQ	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 742; MOD 591; CCO 498	BCP	P16A-046	TRANSISTOR, N CHAN	JANSR2N7261	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-047	DIODE, VR6.4V	LS41444-008	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-048	MICROCIRCUIT, LINEAR	M38510/10701SXA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 1024; MOD 591; CCO 498	BCP	P16A-049	MICROCIRCUIT, LINEAR	M38510/11501SXA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1259
MOD 591; CCO 498	BCP	P16A-050	MICROCIRCUIT, LINEAR	M38510/13503SPA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-051	MICROCIRCUIT, DGTL	M38510/30004SCA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-052	MICROCIRCUIT, DGTL	M38510/31402SEA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-053	IC, CUR MODE CON	1622158-002	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-054	DIODE ARRAY	1PE0302-016	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-055	DIODE	1PE0302-019	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-056	DIODE	1PE0303-051	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 742; MOD 591; CCO 498	BCP	P16A-057	DIODE, 20A, 150V	1PE0401-101	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 742; MOD 591; CCO 498	BCP	P16A-058	DIODE	1PE0401-102	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 1127; MOD 591; CCO 498	BCP	P16A-059	DIODE	1PE0302-020	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-060	TRANSISTOR	1PE0443-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-061	DIODE	1PE0469-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-062	MICROCIRCUIT	1PE0471-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-063	MICROCIRCUIT	1PE0480-003	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-064	MICROCIRCUIT	1PE0533-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498 IN WK
MOD 591; CCO 498	BCP	P16A-065	TRANSISTOR	1PE0575-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-066	IC, OP AMP	95116-017	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-067	IC, QUAD COMPTR	95127-005	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-068	MICROCIRCUIT	95180-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-069	DIODE	JANS1N4467	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-070	DIODE	JANS1N4475	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-071	SEMICONDUCTOR DEVIC	JANS1N5806	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-072	SEMICONDUCTOR DEVIC	JANS1N5811	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-073	DIODE	JANS1N6321	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-076	MICROCIRCUIT	M38510H05051SCA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-077	MICROCIRCUIT	M38510H05053SCA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 1127; MOD 591; CCO 498	BCP	P16A-078	IC, HEX INV	5962R9665301VCC	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-079	MICROCIRCUIT	M38510R05555SCA	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-080	SENSOR	1621896-003	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-081	IC, PRCN COMPTR	1622061-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 1070; MOD 591; CCO 498	BCP	P16A-082	DIODE, 150V	JANS1N3595-1	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1384
MOD 591; CCO 498	BCP	P16A-083	IC, SW DC MOT	1PE0569-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-084	IC, DRVR MOS G	1PE0570-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 591; CCO 498	BCP	P16A-085	CURRENT SENSOR	5846789-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-086	IC, TIMER	95134-006	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-087	IC, V COMPTR	95140-005	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 591; CCO 498	BCP	P16A-088	DIODE, VOLT REF	95190-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB0986 IN WK
MOD 591; CCO 498	BCP	P16A-089	TRANSISTOR, N-CHAN F	95315-006	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-090	TRANSISTOR, PNP	95503-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1200
MOD 1070; MOD 591; CCO 498	BCP	P16A-091	TRANSISTOR, NPN	JANS2N2219AL	1	EA		KSC/PPS	30-Oct-99	NEW P/N
MOD 591; CCO 498	BCP	P16A-092	DIODE, VR 20V	JANS1N4472	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-093	DIODE	JANS1N5418	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1329
MOD 1070; MOD 591; CCO 498	BCP	P16A-094	DIODE	SP6318	1	EA		KSC/PPS	30-Oct-99	NEW P/N
MOD 742; MOD 591; CCO 498	BCP	P16A-096	TRANSISTOR	JANSR2N7261	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-097	DIODE, B1DIRECTIONAL	JANS1N6116A	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-098	DIODE, RECT	JANS1N645-1	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-099	ENCLOSURE ASSY, RJMC	5849385-501	1	EA		KSC/PPS	28-Feb-00	DD250 BHB1793
MOD 1127; MOD 591; CCO 498	BCP	P16A-101	PWA, A2, POWER SUPPLY	5842420-507	1	EA		KSC/PPS	28-Feb-00	DD250 BHB1793
MOD 591; CCO 498	BCP	P16A-102	TRANSFORMER, ASSY, RJ	5846579-501	1	EA		KSC/PPS	30-Nov-99	DD250 BHB1686

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 591; CCO 498	BCP	P16A-104	SEMICONDUCTOR DEVIC	JANS1N5804	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 742; MOD 591; CCO 498	BCP	P16A-107	MOTOR, DIRECT CURREN	5846958-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-108	OUTPUT, SHAFT ASSY	5846916-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-109	BEARING, BALL, DUPLEX	5846975-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-110	BEARING, FOLLOWER	5846976-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-111	SWITCH, MINIATURE	5847013-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 742; MOD 591; CCO 498	BCP	P16A-112	BEARING, BALL, DUPLEX	5846954-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-113	RESOLVER, COMMUTATIO	5847054-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-114	BEARING, BALL, DUPLEX	5847200-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 742; MOD 591; CCO 498	BCP	P16A-115	MOTOR	5846955-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-116	INPUT SHAFT ASSY	5847080-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 742; MOD 591; CCO 498	BCP	P16A-117	OUTPUT SHAFT ASSY	5847086-503	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-119	BEARING, BALL, DUPLEX	5847093-003	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-120	STEPPER MOTOR	5847182-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-121	FOLLOWER ASSEMBLY	5847123-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1793
MOD 591; CCO 498	BCP	P16A-122	FOLLOWER ASSEMBLY	5847123-503	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1793
MOD 591; CCO 498	BCP	P16A-123	FOLLOWER ASSEMBLY	5847123-505	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1793
MOD 591; CCO 498	BCP	P16A-124	FOLLOWER ASSEMBLY	5847123-507	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1793
MOD 591; CCO 498	BCP	P16A-126	BEARING, BALL, DUPLEX	5847142-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-128	MOTOR, STEPPER	5847182-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-129	CONNECTOR, 16-26 SN	LS41164-034	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-130	CONNECTOR, 12-35 SN	LS41164-583	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-131	CONNECTOR, 12-35 SB	LS41164-587	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-132	CONNECTOR, 12-35 PN	LS41164-594	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-133	CONNECTOR, 12-35 PB	LS41164-598	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-134	BACKSHELL	NZGASG15N24Z	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-135	BACKSHELL	NZGASG17N20Z	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-136	CONNECTOR, PLUG	NZGL00T1717N26PN	1	EA		KSC/PPS	30-Oct-99	DD250 BHB986
MOD 591; CCO 498	BCP	P16A-137	CONNECTOR, PLUG	NZGL00T2525N61PN	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 591; CCO 498	BCP	P16A-138	CONNECTOR, PLUG, ELEC	NZGL06G1717N26PN	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1498
MOD 1127; MOD 742; MOD 591; CCO 498	BCP	P16A-139	TEMP SENSOR	1621896-003	2	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-140	SWITCH	5846982-501	2	EA		KSC/PPS	30-Oct-99	DD250 BHB1793
MOD 591; CCO 498	BCP	P16A-141	POWER RING ASSY	8259153-901	1	EA		KSC/PPS	30-May-00	DD250 BHB0830
MOD 591; CCO 498	BCP	P16A-148	TEMP SENSOR/RTD	8263621-001	1	EA		KSC/PPS	30-May-00	DD250 BHB0830
MOD 591; CCO 498	BCP	P16A-150	BEARING ASSY, FHRC	5851037-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1655
MOD 591; CCO 498	BCP	P16A-151	TORQUE OVERLOAD SENSOR	5851088-501	1	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-152	REDUCER, FLUID	5849449-001	4	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-153	BELLOWS ASSEMBLY	5849450-503	4	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-154	COUPLING, QUICK DISCONNECT	5843390-501	4	EA		KSC/PPS	30-Oct-99	DD250 BHB1686
MOD 591; CCO 498	BCP	P16A-155	TEMP SENSOR/RTD	8263621-001	1	EA		KSC/PPS	30-Oct-99	DD250 BHB0830
MOD 591; CCO 498	BCP	P16A-156	SIGNAL RING ASSY	8259154-901	1	EA		KSC/PPS	30-May-00	DD250 BHB0830
MOD 1157	BCP	P16A-157	DIODE, 150V	1PE0106-004	1	EA		KSC/PPS	27-Sep-02	DD250 BHB1891
MOD 1157; MOD 862; CCO 702R1; DIR 96	HSV	P22A-001	CCA, EDP	360330-003	1	EA		HAMSD/CA	30-Oct-02	DD250 BHB1930 IN WK
MOD 962; MOD 862; CCO 702R1; DIR 96	HSV	P22A-003	CCA, 1553 MEMORY	360020-006	1	EA		HAMSD/CA	31-Jan-01	DD250 BHB1907

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 862; CCO 702R1; DIR 96	HSV	P22A-004	CCA, ANALOG, MONITOR RAD ASSY	360280-002	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-008	JACKSCREW	359562-001	78	EA		HAMSD/CA	30-Oct-00	DD250 BHB1570 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-009	CCA, INTERCONNECT D/C	359245-002	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 1117; MOD 862; CCO 702R1; DIR 96	HSV	P22A-010	MS ANALYZER	359665-007	1	EA		HAMSD/CA	30-May-02	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-011	ION PUMP ASSY	343840-3	6	EA		HAMSD/CA	30-Oct-00	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-012	HEATED ION SOURCE ASSY	343740-9	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-013	GOLD GASKET	359668-002	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-014	GOLD GASKET	317716-71	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-015	STANDOFF CERAMIC	63-0035-132	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-016	WASHER	NAS620C8L	20	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-017	WASHER	63-0029-14	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-018	WASHER	MS15795-801	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-019	WASHER	NAS620C4L	106	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-020	SCREW	345408-13	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-021	SCREW	345408-17	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-022	SCREW	63-0045-101	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-023	WASHER	NAS671C4	15	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-024	STANDOFF CERAMIC	63-0035-133	8	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-025	CONN. LEAD ASSY	343288-2	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1570 IN WK; NEW P/N
MOD 862; CCO 702R1; DIR 96	HSV	P22A-026	SCREW	63-0102-101	16	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-027	SCREW	63-0014-102	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-028	WASHER	NAS620C10L	8	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-029	SCREW	63-0014-103	8	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-030	SCREW	63-0012-105	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-031	WASHER	NAS620C6L	24	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 862; CCO 702R1; DIR 96	HSV	P22A-032	NUT	NAS671C6	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-033	SCREW	63-0102-102	8	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-034	SCREW	63-0014-106	14	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-035	SCREW	63-0012-102	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-036	SCREW	NAS1352C04-6	12	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-037	GOLD GASKET	317716-19	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-038	SCREW	NAS1352C06-6	6	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK; NEW P/N
MOD 862; CCO 702R1; DIR 96	HSV	P22A-039	SCREW	63-0012-106	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-040	SCREW	NAS1352C02-6	24	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-041	WASHER	NAS620C2	40	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-042	SCREW	NAS1352C02-4	14	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-043	SCREW	NAS1352C04-4	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-044	SCREW	NAS1352C04-8	2	EA		HAMSD/CA	30-Oct-00	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-045	SHIM	335520-91	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-046	SHIM	335520-92	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-047	SHIM	335520-93	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-048	SHIM	335520-94	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-049	SCREW	63-0012-103	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-050	SCREW	63-0102-105	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-051	SHIM	335520-95	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-052	SHIM	335520-96	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-053	SHIM	335520-97	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-054	SHIM	335520-98	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-055	SHIM	335520-99	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-056	SHIM	335520-100	10	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 862; CCO 702R1; DIR 96	HSV	P22A-057	WASHER	NAS620C4L	14	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-058	O-RING, VITON	M83248/1-018	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-059	FILTER 2 MICRON	61-0072-101	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-060	FITTING O-SEAL	359859-002	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-061	VALVE, LATCH, SOL, FLIGHT	38-0642-101	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-062	SEAL O-RING	61-0090-105	2	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-063	MANIFOLD ASSY	359655-003	4	EA		HAMSD/CA	30-Oct-00	NEW P/N; PN 61-0088-101, GASKET, O SEAL IS NOT PROCURABLE; PART IS VULCANIZED INTO NEXT HIGHER ASSY; BUY NHA
MOD 862; CCO 702R1; DIR 96	HSV	P22A-064	SEAL, O-RING	61-0090-103	4	EA		HAMSD/CA	30-Oct-00	DD250 DD250 BHB1677
MOD 862; CCO 702R1; DIR 96	HSV	P22A-066	CCA, INTERFACE MCA	359740-009	6	EA		HAMSD/CA	30-Oct-00	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-079	PUMP, SAMPLE ASSY	360116-003	7	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-080	DIAPHRAM, SAMPLE	63-0082-101	28	EA		HAMSD/CA	30-Oct-00	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-082	O-RING	63-0098-101	56	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-083	VALVE PLUG ASSY	360136-001	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-087	VALVE, LATCH, SOL	38-0642-101	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-089	SEAL .125 FITTING	359544-002	90	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-090	SLIP WASHER	359546-001	100	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-091	CCA, MOTOR FILTER	360040-002	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK
MOD 1070; MOD 862; CCO 702R1; DIR 96	HSV	P22A-092	VALVE, LATCH, SOL, FLIGHT	38-0642-101	6	EA		HAMSD/CA	30-Oct-00	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-094	COUPLING MANIFOLD	61-0087-101	4	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-098	SEAL, O-RING	61-0090-106	3	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-099	SCREEN,FILTER	61-0067-103	3	EA		HAMSD/CA	30-Oct-00	
MOD 862; CCO 702R1; DIR 96	HSV	P22A-100	RETAINER, FILTER	359210-001	3	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-101	VALVE, LATCH, SOL, FLIGHT	38-0642-101	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1675 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-102	FACE PLATE, O-SEAL	360076-002	13	EA		HAMSD/CA	30-Oct-00	DD250 BHB1677 IN WK

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 862; CCO 702R1; DIR 96	HSV	P22A-103	SEAL	359544-002	65	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-104	MANUAL VALVE ASSY	359863-005	1	EA		HAMSD/CA	30-Oct-00	DD250 BHB1674 IN WK
MOD 862; CCO 702R1; DIR 96	HSV	P22A-105	EMI FILTER ORU 7	359775-004	1	EA		OSC	30-Oct-00	DD250 BHB01029
MOD 1143; MOD 1072; R997	HOU	P23A-001	Electro - Optic Assy	4242867-2	1	EA		HW/TOR	20-Apr-03	
MOD 1143; MOD 1072; R997	HOU	P23A-002	CCA, Sensor Cond	4242889-1	1	EA		HW/TOR	21-Apr-03	
MOD 1143; MOD 1072; R997	HOU	P23A-003	CCA, Power Supply	4242897-1	1	EA		HW/TOR	21-Apr-03	
MOD 1143; MOD 1072; R997	HOU	P23A-004	Sintered Assy	2351311-3	1	EA		HW/ALLIED	17-Feb-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-005	Membrane	2351311-15	2	EA		HW/ALLIED	23-Dec-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-006	Module Assy, Gas Trap	2352727-1	2	EA		HW/ALLIED	19-Mar-02	DD250 BHB1465
MOD 1143; MOD 1072; R997	HOU	P23A-007	Packing, Preformed	2366144-145	4	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-008	Packing, Preformed	2366144-154	2	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-009	Packing, Preformed	2366144-155	6	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-010	Pump, Mot/Cont Driven	2353172-1-1	1	EA		HW/TOR	1-Dec-02	
MOD 1143; MOD 1072; R997	HOU	P23A-011	Nut, Self-Locking	2366176-01	4	EA		HW/ALLIED	1-Dec-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-012	Collar, Thrust	2366039-1	6	EA		HW/ALLIED	19-Jan-02	DD250 BHB1762
MOD 1143; MOD 1072; R997	HOU	P23A-013	Bearing Assy	2366042-1	6	EA		HW/ALLIED	19-Jan-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-014	Retainer, Stator	2366046-1	1	EA		HW/ALLIED	19-Jan-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-015	Washer	2357417-17	1	EA		HW/ALLIED	1-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-016	Washer	2357417-18	1	EA		HW/ALLIED	1-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-017	Washer	2357417-19	1	EA		HW/ALLIED	1-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-018	Packing, Preformed	2366144-122	1	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-019	Packing, Preformed	2366144-141	1	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-020	Screw, Captive	2352754-214	4	EA		HW/ALLIED	12-Apr-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-021	Bellows/Cover	2353560-2	3	EA		HW/TOR	25-May-03	
MOD 1143; MOD 1072; R997	HOU	P23A-022	Sensor, Quantity	2353592-1-1	11	EA		HW/TOR	11-Apr-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-023	Omniseal	2366077-3	4	EA		HW/ALLIED	7-Feb-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-024	Packing, Preformed	2366144-010	4	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-025	Packing, Preformed	2366144-018	10	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-026	Packing, Preformed	2366144-022	4	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-027	Packing, Preformed	2366144-039	4	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-028	Packing, Preformed	2366144-276	2	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-029	Packing, Preformed	2366144-904	8	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-030	Packing, Preformed	2366144-247	4	EA		HW/ALLIED	25-Nov-01	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-031	Blanket, Insulation	2366374-1	1	EA		HW/ALLIED	5-Jan-02	DD250 BHB1762
MOD 1143; MOD 1072; R997	HOU	P23A-032	Stator Assy	2354710-1	3	EA		HW/ALLIED	2-Oct-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-033	SENSOR, FLOW	2366095-1-2	2	EA		HW/TOR	14-Oct-02	
03-0289	HOU	P23A-033A	Sensor, Flow	2366095-1-1	1	EA		HW/TOR	14-Oct-02	
MOD 1143; MOD 1072; R997	HOU	P23A-034	Seal, Ball	3797583-1	2	EA		HW/ALLIED	2-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-035	Pin Assy	2351743-1	1	EA		HW/ALLIED	20-Jan-02	DD250 BHB1762
MOD 1143; MOD 1072; R997	HOU	P23A-036	Ring, Retaining	2351165-2	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-037	Screw, Captive	2351157-5	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-038	Screw, Captive	2351157-3	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-039	Screw, Captive	2351157-2	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-040	Screw, Captive	2351157-6	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-041	Screw, Captive	2351157-4	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-042	Screw, Captive	2351157-1	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-043	Screw, Captive	2351157-403	4	EA		HW/ALLIED	9-Jun-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-044	Coupling, Retainer Assy	2352578-1	1	EA		HW/ALLIED	19-Jan-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-045	Coupling, Body Assy	2352576-1	1	EA		HW/ALLIED	19-Jan-02	DD250 BHB1704
MOD 1143; MOD 1072; R997	HOU	P23A-046	Cloth, Wire	2352565-3	1	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-047	Molecular Sieve	MPS500001	17	LB		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-048	Desiccant	MPS500004	50	LB		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-049	Washer, Flat	2366145-106	21	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-050	Packing, Preformed	2351303-274	6	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-051	Screw, Captive	2352754-212	9	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-052	Beads, Glass	MPS500005, Type III	6	LB		HW/ALLIED	6-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-053	Screw, Captive	2352754-208	2	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-054	Packing, Preformed	2351305-3	2	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-055	Nut, Self-Locking	2351643-08	3	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-056	Valve, Check	2352504-1-1	3	EA		HW/TOR	23-Dec-01	
MOD 1143; MOD 1072; R997	HOU	P23A-057	Washer, Flat	2351637-115	10	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-058	Packing, Preformed	2351303-234	2	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-059	Nut	2371990-103	4	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-060	Screw, Captive	2352754-220	4	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-061	Blanket, Insulation	2351724-1	1	EA		HW/ALLIED	1-Apr-02	DD250 BHB1787
MOD 1143; MOD 1072; R997	HOU	P23A-062	Seal Assembly, Shaft	3797433-1	2	EA		HW/ALLIED	17-Feb-02	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-063	Ball, Selector	3797415-1	2	EA		HW/TOR	18-Mar-02	
MOD 1143; MOD 1072; R997	HOU	P23A-064	Seal, Ball	3797571-1	3	EA		HW/ALLIED	11-Feb-02	DD250 BHB1819 IN WK
MOD 1143; MOD 1072; R997	HOU	P23A-065	Spring	3797558-1	1	EA		HW/ALLIED	6-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-066	Ring, Retaining	3797488-2	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-067	Packing, Preformed	3796890-30	2	EA		HW/ALLIED	23-Dec-01	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-068	Retainer, Seal	3797421-1	1	EA		HW/ALLIED	19-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-069	Spring	3797564-1	2	EA		HW/ALLIED	6-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-070	Spring	3797568-1	1	EA		HW/ALLIED	6-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-071	Packing, Preformed	3796890-23	1	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-072	Packing, Preformed	3796890-26	2	EA		HW/ALLIED	23-Dec-01	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-073	Ring, Retaining	3797488-5	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-074	Washer	3797486-30	1	EA		HW/ALLIED	14-Oct-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-075	Ring, Retaining	3797488-3	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-076	Packing, Preformed	3796890-28	1	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-077	Packing, Preformed	3796890-31	2	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-078	Bearing	2353680-1	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-079	Bearing	2353681-1	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-080	Pump Stator	2354380-1	1	EA		HW/TOR	14-Oct-02	
MOD 1143; MOD 1072; R997	HOU	P23A-081	Vanes, Stage 1	2353984-1-1	6	EA		HW/ALLIED	23-Dec-01	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-082	Vanes, Stage 2	2353985-1-1	6	EA		HW/ALLIED	23-Dec-01	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-083	Seal Assy	4173819-2	2	EA		HW/ALLIED	6-Dec-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-088	CCA, Pwr Supply A2	2355177-1	1	EA		HW/TOR	7-Nov-03	
MOD 1143; MOD 1072; R997	HOU	P23A-090	Terminal	2366267-1	1	EA		HW/ALLIED	25-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-091	Thrust Bearing	2207344-1	1	EA		HW/ALLIED	25-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-092	Thrust Bearing	2207344-2	1	EA		HW/ALLIED	25-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-093	Journal Bearing	2353644-1	2	EA		HW/ALLIED	25-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-094	Stator Assy	2353659-1	1	EA		HW/TOR	1-Apr-02	
MOD 1143; MOD 1072; R997	HOU	P23A-095	Rotating Assy	2353997-1	1	EA		HW/ALLIED	1-Apr-02	DD250 BHB1787
MOD 1143; MOD 1072; R997	HOU	P23A-096	Thrust Bearing Shim	2353643-1	1	EA		HW/ALLIED	26-Oct-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-097	Thrust Bearing Shim	2353643-2	1	EA		HW/ALLIED	26-Oct-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-098	Thrust Bearing Shim	2353643-3	1	EA		HW/ALLIED	26-Oct-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-099	Thrust Bearing Shim	2353643-4	1	EA		HW/ALLIED	26-Oct-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-100	Actuator	2357120-2-1	2	EA		HW/TOR	11-Apr-03	COMMON W/RFCA, SFCA-ACTRA
MOD 1143; MOD 1072; R997	HOU	P23A-101	Actuator	2357140-2-1	1	EA		HW/TOR	11-Apr-03	SFCA-ACTRB

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-102	Actuator, Electro-Mech	2357590-2-1	1	EA		HW/TOR	11-Apr-03	3WM; CHANGED AT OCT 99 HONEYWELL/ALLIED MTG FROM 2
MOD 1143; MOD 1072; R997	HOU	P23A-103	COVER ASSY, CONT (A1)	2357872-1	2	EA		HW/TOR	2-Jan-03	CDRA-CO2SEL-ACTR
MOD 1143; MOD 1072; R997	HOU	P23A-104	COVER ASSY, CONT (A1)	2357872-2	2	EA		HW/TOR	2-Jan-03	COMMON W/RFCA-ACTR, SFCA-ACTRB
MOD 1143; MOD 1072; R997	HOU	P23A-105	COVER ASSY, CONT (A1)	2357872-3	2	EA		HW/TOR	2-Jan-03	SFCA-ACTRA
MOD 1143; MOD 1072; R997	HOU	P23A-106	COVER ASSY, CONT (A1)	2357872-4	2	EA		HW/TOR	2-Jan-03	IMV-ACTR
MOD 1143; MOD 1072; R997	HOU	P23A-107	COVER ASSY, CONT (A1)	2357872-5	2	EA		HW/TOR	2-Jan-03	LCA-ACTR
MOD 1143; MOD 1072; R997	HOU	P23A-108	COVER ASSY, CONT (A1)	2357872-6	2	EA		HW/TOR	2-Jan-03	3WM-ACTR
MOD 1143; MOD 1072; R997	HOU	P23A-109	COVER ASSY, CONT (A1)	2357872-7	1	EA		HW/TOR	2-Jan-03	VRV-ACTR2
MOD 1143; MOD 1072; R997	HOU	P23A-110	COVER ASSY, CONT (A1)	2357872-8	1	EA		HW/TOR	2-Jan-03	VRV-ACTR3
MOD 1143; MOD 1072; R997	HOU	P23A-111	PS CCA(A2)	2354365-1	2	EA		HW/TOR	7-Dec-02	COMMON W/CDRA-CO2SRV-AVYT, LCA-AVYT, SFCA-AVYTS
MOD 1143; MOD 1072; R997	HOU	P23A-112	PS CCA(A2)	2354365-2	1	EA		HW/TOR	7-Dec-02	VRV-AVYT2
MOD 1143; MOD 1072; R997	HOU	P23A-113	PS CCA(A2)	2354365-3	2	EA		HW/TOR	7-Dec-02	VRV-AVYT3
MOD 1143; MOD 1072; R997	HOU	P23A-114	PS CCA(A2)	2354365-4	2	EA		HW/ALLIED	7-Dec-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-115	Contrlr CCA(A3)	2354371-1	2	EA		HW/TOR	7-Dec-02	CDRA-CO2SEL-ACTR
MOD 1143; MOD 1072; R997	HOU	P23A-116	Contrlr CCA(A3)	2354371-2	2	EA		HW/TOR	7-Dec-02	COMMON W/3WM-ACTR, RFCA-ACTR, SFCA-ACTRB
MOD 1143; MOD 1072; R997	HOU	P23A-117	Contrlr CCA(A3)	2354371-3	2	EA		HW/ALLIED	7-Dec-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-118	Contrlr CCA(A3)	2354371-4	2	EA		HW/ALLIED	7-Dec-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-119	Contrlr CCA(A3)	2354371-5	1	EA		HW/TOR	7-Dec-02	VRV-ACTR3
MOD 1143; MOD 1072; R997	HOU	P23A-120	Contrlr CCA(A3)	2354371-6	1	EA		HW/TOR	7-Dec-02	VRV-ACTR2
MOD 1143; MOD 1072; R997	HOU	P23A-121	Contrlr CCA(A3)	2354371-7	2	EA		HW/TOR	7-Dec-02	LCA-ACTR
MOD 1143; MOD 1072; R997	HOU	P23A-122	A4 CCA	2354840-1	2	EA		HW/TOR	7-Dec-02	Common w/3WM-Actr, CDRA-CO2Sel-Actr, IMV-Actr, LCA-Actr, RFCA-Actr, SFCA-ActrA, VRV-Actr2, VRV-Actr3
MOD 1143; MOD 1072; R997	HOU	P23A-123	A5 CCA	2354844-2	2	EA		HW/TOR	7-Dec-02	Common w/3WM-Actr, CDRA-CO2Sel-Actr, IMV-Actr, LCA-Actr, RFCA-Actr, SFCA-ActrA, VRV-Actr2, VRV-Actr3
MOD 1143; MOD 1072; R997	HOU	P23A-124	End Bell	2357401-1	25	EA		HW/ALLIED +1716	15-Feb-02	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-125	Output Shaft	2357355-1	10	EA		HW/ALLIED	15-Feb-02	DD250 BHB1716

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-126	Brg Retainer Cover	2357351-1	4	EA		HW/ALLIED	15-Feb-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-127	Brg Retainer Cover	2357384-1	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-128	Optical Trigger	2357363-1	10	EA		HW/ALLIED	25-Nov-01	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-129	Cover	2357364-1	10	EA		HW/ALLIED	6-Jan-02	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-130	Mech. Stop	2357332-1	2	EA		HW/ALLIED	19-Jan-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-131	Mech. Stop	2357370-1	1	EA		HW/ALLIED	19-Jan-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-132	Mech. Stop	2357354-1	1	EA		HW/ALLIED	19-Jan-02	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-133	Mech. Stop	2357336-1	2	EA		HW/ALLIED	19-Jan-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-134	Switch, Optical	2351095-101	50	EA		HW/TOR	13-Oct-02	Possible residual or most economic buy; common w/3WM-Actr,CDRA-CO2Sel-Actr, IMV-Actr, LCA-Actr, PCP-NIV, NIV,PCP-OIV,RFCA-Actr, SFCA-ActrA, SFCA-ActrB
MOD 1143; MOD 1072; R997	HOU	P23A-135	Packing, Preformed	2351303-024	1	EA		HW/ALLIED	1-Nov-01	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-136	Rotor Assy	2354690-2	11	EA		HW/TOR	18-Mar-02	Common w/3WM-Actr, RFCA-Actr, SFCA-ActrB;
MOD 1143; MOD 1072; R997	HOU	P23A-137	Rotor Assy	2354690-1	3	EA		HW/TOR	18-Mar-02	Common w/3WM-Actr, CDRA-CO2Sel-Actr, IMV-Actr, LCA-Actr, SFCA-ActrA, VRV-Actr2, VRV-Actr3
MOD 1143; MOD 1072; R997	HOU	P23A-138	Stator Assy W/Sensor	2354700-2	15	EA		HW/TOR	17-Jan-03	NEW P/N. Common w/3WM-Actr, CDRA-CO2Sel-Actr, IMV-Actr, LCA-Actr, RFCA-Actr, SFCA-ActrA, SFCA-ActrB, VRV-Actr2, VRV-Actr3
MOD 1143; MOD 1072; R997	HOU	P23A-139	HOUSING ASSY	2357350-1	1	EA		HW/ALLIED	15-Feb-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-140	HOUSING ASSY	2357350-4	1	EA		HW/ALLIED	15-Feb-02	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-141	GEAR, PLANET, OUTPUT	2357365-1	75	EA		HW/ALLIED	15-Feb-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-142	GEAR, PLANET, INTERMED	2357365-2	12	EA		HW/ALLIED	15-Feb-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-143	GEAR, PLANET, INPUT	2357366-1	138	EA		HW/ALLIED	15-Feb-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-144	CARRIER ASSY, INPUT	2357382-1	21	EA		HW/ALLIED	15-Feb-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-145	CARRIER ASSY, INPUT	2357381-1	4	EA		HW/ALLIED	4-Mar-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-146	CARRIER ASSY, INTERMED	2357371-1	21	EA		HW/ALLIED	15-Feb-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-147	CARRIER ASSY, INTERMED	2357377-1	4	EA		HW/ALLIED	15-Feb-02	DD250 BHB1716

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-148	GEAR, BULL	2357367-1	18	EA		HW/ALLIED	2-Apr-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-149	GEAR, BULL	2357380-1	4	EA		HW/ALLIED	2-Apr-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-150	GEAR, BULL	2357375-1	3	EA		HW/ALLIED	2-Apr-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-151	CARRIER ASSY, OUTPUT	2357352-1	18	EA		HW/ALLIED	16-Mar-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-152	CARRIER ASSY, OUTPUT	2357376-1	7	EA		HW/ALLIED	16-Mar-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-153	Bearing, Ball	2354705-1	50	EA		HW/ALLIED	19-Jan-02	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-154	BEARING, BALL	2357386-1	25	EA		HW/ALLIED	19-Jan-02	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-155	BEARING, BALL	2357387-1	25	EA		HW/ALLIED	19-Jan-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-156	BEARING, BALL	2357388-1	25	EA		HW/ALLIED	19-Jan-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-157	BEARING, BALL, SHIELDED	2357389-1	25	EA		HW/ALLIED	19-Jan-02	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-158	BEARING, JOURNAL	2372001-1	25	EA		HW/ALLIED	19-Jan-02	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-159	SEAL, SHAFT HOUSING	2357390-1	25	EA		HW/ALLIED	25-Nov-01	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-160	SEAL, SHAFT HOUSING	2357391-1	25	EA		HW/ALLIED	25-Nov-01	DD250 BHB1716
MOD 1143; MOD 1072; R997	HOU	P23A-161	Cartridge Assy, Seal	3796723-1	4	EA		HW/ALLIED	4-Mar-02	DD250 BHB1878
MOD 1143; MOD 1072; R997	HOU	P23A-162	Shaft, Drive	3796726-1	2	EA		HW/ALLIED	3-Feb-02	Common w/3WM, RFCA, SFCA
MOD 1143; MOD 1072; R997	HOU	P23A-163	Ring, Retainer, Bearing	3796728-1	6	EA		HW/ALLIED	19-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-164	Retainer, Spring	3796733-1	4	EA		HW/ALLIED	1-Apr-02	Common w/3WM, MFCV, RFCA, SFCA
MOD 1143; MOD 1072; R997	HOU	P23A-165	Ball, Flow Control	3796735-1	1	EA		HW/ALLIED	17-Mar-02	Common w/MFCV, RFCA, SFCA
MOD 1143; MOD 1072; R997	HOU	P23A-166	Bearing, Ball	3796753-1	6	EA		HW/ALLIED	17-Mar-02	Changed Honeywell/Allied Mtg 10/99 from 2; Common w/3WM, MFCV, MPEV-AL, NAMPEV, RFCA, SFCA
MOD 1143; MOD 1072; R997	HOU	P23A-167	Packing, Preformed	3796890-7	2	EA		HW/ALLIED	23-Dec-01	Common w/CO2 Sel, MPEV-AL, NAMPEV
MOD 1143; MOD 1072; R997	HOU	P23A-168	Packing, Preformed	3796912-2	4	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-169	Packing, Preformed	3796912-3	2	EA		HW/ALLIED	23-Dec-01	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-170	Seal Assy, Shaft	3796989-1	2	EA		HW/ALLIED	19-Jan-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-171	Nut, Self-Locking	3797086-1	18	EA		HW/ALLIED	10-Dec-01	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-172	Washer	3797486-4	2	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-173	Washer	3797486-5	2	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-174	Washer	3797486-6	2	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-175	Packing, Preformed	3797575-1	4	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-176	Ring, Retaining, Bowed	3797579-1	4	EA		HW/ALLIED	19-Jan-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-177	Seal, Ball, Flow Control	3797581-1	1	EA		HW/ALLIED	11-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-178	Spring, Helical	3797584-1	6	EA		HW/ALLIED	11-Feb-02	DD250 BHB1819
MOD 1143; MOD 1072; R997	HOU	P23A-179	Washer, Seat	4173821-1	2	EA		HW/ALLIED	14-Oct-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-180	Coil Assembly	3797561-1	1	EA		HW/ALLIED	14-Oct-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-181	Coil Assembly	3797561-2	1	EA		HW/ALLIED	14-Oct-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-182	Washer, Flat	2351637-118	5	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-183	Nut, Self-Locking	2351643-3	2	EA		HW/ALLIED	1-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-184	Packing, Preformed	2366144-011	4	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-185	Packing, Preformed	2366144-012	9	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-186	Packing, Preformed	2366144-024	11	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-192	Packing, Preformed	2351303-222	65	EA		HW/ALLIED	23-Dec-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-193	Washer, Flat	2366145-108	7	EA		HW/ALLIED	7-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-194	Bolt, Machined	2366159-04	1	EA		HW/ALLIED	7-Nov-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-195	Blanket Insulation	MPS1700016	1	EA		HW/ALLIED	23-Dec-01	DD250 BHB1862
MOD 1143; MOD 1072; R997	HOU	P23A-196	Diff Press Sensor	2352637-1-1	2	EA		HW/ALLIED	14-Oct-02	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-197	N2 Isolation Valve	2353052-2-1	2	EA		HW/TOR	26-Oct-02	
MOD 1171; MOD 1072; R997	HOU	P23A-198	CO2 Selector Valve	2352720-1-1	3	EA		BOE/MSFC	14-Oct-02	DD250 BHB1921
MOD 1179; MOD 1143; MOD 1072; R997	HOU	P23A-199	Manual Pressure Equalization Valve	2353028-2-1	1	EA		HW/TOR	8-Aug-02	NEW P/N
MOD 1143; MOD 1072; R997	HOU	P23A-200	Filter Assy	2353561-1-1	2	EA		HW/ALLIED	9-Dec-02	DD250 BHB1491
MOD 1143; MOD 1072; R997	HOU	P23A-201	Valve, InterModulating Vent	2353024-1-1	1	EA		HW/TOR	8-Jul-02	
MOD 1143; MOD 1072; R997	HOU	P23A-202	HEADER, MULTI-PIN SEAL COUPLING	2354686-101	32	EA		HW/ALLIED	8-Oct-01	DD250 BHB1787

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1072; R997	HOU	P23A-203	HEADER, MULTI-PIN SEAL COUPLING	2354686-102	16	EA		HW/ALLIED	8-Oct-01	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-211	SENSOR, MATCHED SET, HALL EFFECT	2371157-102	35	EA		HW/ALLIED	14-Oct-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-213	SENSOR, FLOW 3000 LB/HR	2366122-1-2	1	EA		HW/ALLIED	14-Oct-02	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-216	SENSOR, PRESSURE 100 PSID	2352638-1-1	1	EA		HW/ALLIED	14-Oct-02	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-217	SENSOR, PRESSURE 110 PSIA	2352635-1-1	1	EA		HW/ALLIED	14-Oct-02	DD250 BHB1905
MOD 1143; MOD 1072; R997	HOU	P23A-238	SEAL, INNER	3796921-1	1	EA		HW/ALLIED	7-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-239	PACKING	3796890-3	50	EA		HW/ALLIED	7-Feb-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-240	RETAINER, SEAL	3796668-1	2	EA		HW/ALLIED	4-Mar-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-241	SEAL, OUTER	3796921-2	1	EA		HW/ALLIED	4-Mar-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-242	PACKING	3796890-2	1	EA		HW/ALLIED	4-Mar-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-243	BEARING, THRUST	3796669-1	1	EA		HW/ALLIED	4-Mar-02	DD250 BHB1728
MOD 1143; MOD 1072; R997	HOU	P23A-244	SEAL, OUTER	3796676-1	2	EA		HW/ALLIED	4-Mar-02	DD250 BHB1728
MOD 783; MOD 598; CCO 499	BHB	P25A-001	CCA, OG/IG PWM	5100812-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0678
MOD 783; MOD 598; CCO 499	BHB	P25A-002	MCKT, LINEAR, QUAD, LO	5962-8777101VCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-003	IC	5150765-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-004	IC	5150830-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-005	IC	5150866-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-006	TRANSISTOR	5151215-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0703
MOD 938; MOD 783; MOD 598; CCO 499	BHB	P25A-007	HR/BRG HSG RPR KIT	7100005-9	1	EA		ALLIEDSIG	15-Dec-00	DD250 BHB1350
MOD 938; MOD 783; MOD 598; CCO 499	BHB	P25A-008	SM/BRG RPR KIT/BRG	7100004-9	1	EA		ALLIEDSIG	15-Dec-00	DD250 BHB1350
MOD 598; CCO 499	BHB	P25A-009	CONNECTOR, ELECTRICA	5155202-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-010	CONNECTOR, ELECTRICA	5155202-2	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-011	CONNECTOR, ELECTRICA	5155202-3	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-012	CONNECTOR, ELECTRICA	5155202-4	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-013	CONNECTOR, ELECTRICA	5155209-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-014	ACCELEROMETER	5160161-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-015	DIODE	JANS1N4491	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-016	SEMICONDUCTOR DEVIC	JANS1N5811	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-019	DIODE	5152160-3	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-020	DIODE	JANS1N6324	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-022	TRANSISTOR	JANS2N3439	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-023	MICROCIRCUIT, DGTL	M38510/65702SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-024	MICROCIRCUIT, DGTL	M38510/66302SEA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 598; CCO 499	BHB	P25A-025	IC	5150767-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-026	IC	5150840-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-027	MICROCIRCUIT, LINEAR	M38510/10304SPA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-028	MICROCIRCUIT, LINEAR	M38510/13502SPA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-029	MICROCIRCUIT, DGTL	M38510/65003SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-030	DIODE	JANS1N6103A	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-031	DIODE	JANS1N6109A	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-032	DIODE	JANS1N6110A	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-033	DIODE	JANS1N6112A	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-034	MICROCIRCUIT, LINEAR	M38510/11703SXA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-035	MICROCIRCUIT, LINEAR	M38510/13503SPA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-036	TRANSISTOR	5151149-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-037	TRANSISTOR	5151190-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0703
MOD 598; CCO 499	BHB	P25A-038	DIODE	JANS1N4467	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-039	DIODE	JANS1N4480	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-040	DIODE	JANS1N4482	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-041	TRANSISTOR	JANS2N5665	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-042	CCA, CPU	5100486-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 598; CCO 499	BHB	P25A-043	IC	153A748-2	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-044	MICROCIRCUIT, DGTL	M38510/65802SEA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-045	MICROCIRCUIT, DGTL	M38510/66309SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-047	MCKT, MUX TERM HYB	34091578-001	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-048	IC	5150739-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-049	MICROCIRCUIT, DGTL	M38510/65602SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-050	OSCILLATOR, CRYSTAL	M55310/16-S31B16	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-051	PWR SPLY MDL, OG/IG	5109800-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0678
MOD 598; CCO 499	BHB	P25A-052	OPTICAL COUPLER	34091577-001	1	EA		ALLIEDSIG	31-Jul-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-053	SEMICONDUCTOR, MOS F	34091603-002	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-054	TRANSISTOR	5151152-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-055	DIODE	JANS1N4466	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-057	MODULE, SPIN MTR PS	5109913-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 598; CCO 499	BHB	P25A-058	OG & INSR ASSY	5109630-9	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-059	TORQUER MODULE ASSY	5109631-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0934
MOD 1117; MOD 783; MOD 598; CCO 499	BHB	P25A-060	IG WIRE ASSY	7204018-9	1	EA		ALLIEDSIG	30-Nov-01	DD250 BHB1350
MOD 835; MOD 598; CCO 499	BHB	P25A-061	RTR HUB & GRSHFT ASSY	5109667-9	1	EA		ALLIEDSIG	7-Jan-00	DD250 BHB0638
MOD 598; CCO 499	BHB	P25A-062	16 SPEED RESOLVER	5157470-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-063	CONN, ELEC	NLS7E14-35P	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-064	DIODE, BI-POLAR	5152155-40	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-065	TRANSISTOR	5151191-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-066	DIODE, BI-PLAR	5152155-37	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-067	DIODE	5152156-4	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-068	DIODE	5152160-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-069	DIODE	5152165-2	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0703
MOD 598; CCO 499	BHB	P25A-070	IC	5150856-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 598; CCO 499	BHB	P25A-071	DIODE	5152145-22	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-072	DIODE	5152145-28	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-073	DIODE	5152145-31	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-074	DIODE, BI-POLAR	5152155-38	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-075	DIODE	5152160-4	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-076	DIODE	5152165-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-077	DIODE	JANS1N4468	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-078	SEMICONDUCTOR DEVIC	JANS1N5806	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-079	TRANSISTOR	5151214-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0703
MOD 598; CCO 499	BHB	P25A-080	TRANSISTOR	JANS2N5666	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-081	1 SPEED RESOLVER	5157471-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-087	IC	5150828-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-088	TRANSISTOR	5151147-2	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-089	DIODE	JANS1N4465	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-090	DIODE	JANS1N4473	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-091	DIODE	JANS1N4476	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-092	DIODE	JANS1N4477	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-093	CONNECTOR, ELECTRICA	5155203-3	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-094	CONNECTOR, ELECTRICA	5155203-4	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-095	MOTHERBOARD ASSY	5100888-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 783; MOD 598; CCO 499	BHB	P25A-096	CONNECTOR & FILTER	5109790-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0678
MOD 598; CCO 499	BHB	P25A-097	CONNECTOR, ELECTRICA	5155205-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-098	BACKSHELL, EMI/RFI	NZGA-LG-21-N-28Z	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-100	DIODE	5152154-3	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-102	BACKSHELL, EMI/RFI	NZGA-LG-15-N-16Z	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-103	DIODE, BI-POLAR	5152155-4	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-106	MODULE, INNER GIMBAL	5109745-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 598; CCO 499	BHB	P25A-107	MCKT, A/D, CONV	34091604-001	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-108	IC	5150850-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0931
MOD 598; CCO 499	BHB	P25A-109	IC	5150886-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-110	TRANSISTOR	5151147-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-111	TRANSISTOR	5151153-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-112	MICROCIRCUIT, LINEAR	M38510/11803SXA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-113	MICROCIRCUIT,DGTL	M38510/32501SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 797; MOD 598; CCO 499	BHB	P25A-114	MICROCIRCUIT,DGTL	M38510/32803SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-115	MODULE, OUTER GIMBAL	5109746-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 598; CCO 499	BHB	P25A-116	DIODE	JAN1N6642	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-117	MICROCIRCUIT, DGTL	M38510/32301SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-118	MICROCIRCUIT, DGTL	M38510/32401SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-119	MICROCIRCUIT, DGTL	M38510/32403SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-120	MICROCIRCUIT, DGTL	M38510/65001SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-121	MICROCIRCUIT, DGTL	M38510/65201SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-122	MICROCIRCUIT, DGTL	M38510/65203SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-123	MICROCIRCUIT, DGTL	M38510/65302SCA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-124	MICROCIRCUIT, DGTL	M38510/65453SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 598; CCO 499	BHB	P25A-125	MICROCIRCUIT, DGTL	M38510/65553SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-126	MICROCIRCUIT, DGTL	M38510/65601SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-127	MICROCIRCUIT, DGTL	M38510/65753SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-128	MICROCIRCUIT, DGTL	M38510/65755SRA	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-129	THERMISTOR SENSOR	5157474-1	1	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 598; CCO 499	BHB	P25A-130	FUSE	5157511-4	5	EA		ALLIEDSIG	30-Jun-99	DD250 BHB0602
MOD 783; MOD 598; CCO 499	BHB	P25A-131	CCA, SPIN MOT & TIMING	5100814-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 783; MOD 598; CCO 499	BHB	P25A-132	ACTIVE BRAKE ASSY	5109916-9	1	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 783; MOD 598; CCO 499	BHB	P25A-133	SPIN BEARING	5109598-9	2	EA		ALLIEDSIG	1-Dec-99	DD250 BHB0638
MOD 877; MOD 835; MOD 598; CCO 499	BHB	P25A-134	RGA ASSY	1F76619-1	1	EA		KSC/PPS	31-Dec-99	DD250 BHB1788
MOD 598; CCO 499	BHB	P25A-136	POWER SUPPLY ASSY, LV	34090372-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-137	PWA, LVPS	34090378-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-139	PWA, CPU/MEM ELEX	34090386-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-140	PWA, PAM/1553	34090382-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-141	PWA, GYRO ELEX	34090390-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-142	PWA, DITHER DRIVE	34090394-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-143	PWA, PLC/RDI DRIVE	34090398-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-145	POWER SUPPLY ASSY, HV	34100967-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-146	PWA, HVPS-REGULATOR	34100962-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-147	PWA, HVPS-OUTPUT	34100965-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-148	PWA, PRESSURE TRANSD	34092336-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-149	ISOLATOR SET, 75 HZ	34089091-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-150	DIGITAL TEST CONNECTOR	34092321-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-151	ANALOG TEST CONNECTOR	34092322-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-152	MKCT, DIG, 16 BIT UP	153A748-1	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-153	MCKT, DIG, 1.5U, CMOS	34091532-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-154	GATE ARRAY	22018440	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-155	DAMPING MODULES	34108363-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 598; CCO 499	BHB	P25A-156	MCKT, LINEAR	34108367-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-157	MCKT, LINEAR, DUAL, HI	34091589-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-158	MCKT, A/D, CONV	34091604-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-159	MCKT, MUX, 8CH	SSQ2256901SEA	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-160	MCKT, LINEAR, HIGH SP	34091586-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-161	MCKT, DIG, HEX INVERTER	34093097-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 962; MOD 719; MOD 598; CCO 499	BHB	P25A-162	GYROSCOPE, 525 HZ	34109702-013	3	EA		HI/FLORIDA	31-Dec-99	DD250 BHB0928
MOD 962; MOD 719; MOD 598; CCO 499	BHB	P25A-163	GYROSCOPE, 575 HZ	34109702-014	3	EA		HI/FLORIDA	31-Dec-99	DD250 BHB0928
MOD 962; MOD 719; MOD 598; CCO 499	BHB	P25A-164	GYROSCOPE, 625 HZ	34109702-015	3	EA		HI/FLORIDA	31-Dec-99	DD250 BHB0928
MOD 598; CCO 499	BHB	P25A-165	TRANSISTOR, MOS FET,	34093099-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-166	DIODE POWER RECTIFI	34095114-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-167	SEMICOND, MOSFET PWR 7130	34091603-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-168	MCKT, SRAM 8K X 8	5962R3829437SXA	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-169	DIODE, SILICON LOW-N	34091602-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-170	SEMICONDUCTOR, MOS FET	34091603-002	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-171	MCKT, LINEAR, QUAD, SP	34091599-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-172	FILTER, EMI	SSQ21216-03G	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-173	DIODE, SCHOTTKY	34091615-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 598; CCO 499	BHB	P25A-174	PRESSURE TRANSDUCER	34109633-001	1	EA		HI/FLORIDA	31-Dec-99	TO DD250 BHB0664
MOD 1072	HOU	P31A-001	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	19-Nov-02	
MOD 1072	HOU	P31A-002	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	19-Dec-02	
MOD 1072	HOU	P31A-003	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	18-Jan-03	
MOD 1072	HOU	P31A-004	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	18-Feb-03	
MOD 1072	HOU	P31A-005	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	18-Mar-03	
MOD 1072	HOU	P31A-006	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	17-Apr-03	
MOD 1072	HOU	P31A-007	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	18-May-03	
MOD 1072	HOU	P31A-008	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	10	EA		KSC/PPS	18-Jun-03	
MOD 1072	HOU	P31A-009	ELEMENT ASSY, BACTERIA FILTER	SV810010-1	8	EA		KSC/PPS	18-Jul-03	
MOD 1179; MOD 1072	HOU	P31A-010	BACTERIA FILTER ASSY-CABIN AIR	SV806630-3	1	EA		KSC/PPS	28-Nov-02	NEW P/N
MOD 1127; MOD 1072	HOU	P31A-011	IMPELLER ASSY	SV811625-1	1	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-012	CIRCUIT CARD ASSY, FILTER	SV817720-1	6	EA		HAMSD/CT	9-Jan-03	
MOD 1127; MOD 1072	HOU	P31A-013	CIRCUIT CARD ASSY, CONTROLLER	SV817719-1	2	EA		HAMSD/CT	17-Mar-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1072	HOU	P31A-014	ROTOR, ASSY	2968540-3	4	EA		HAMSD/CT	11-Apr-03	
MOD 1127; MOD 1072	HOU	P31A-015	BEARING, BALL	2908925	12	EA		HAMSD/CT	11-Apr-03	
MOD 1127; MOD 1072	HOU	P31A-016	BEARING, BALL	2908926	12	EA		HAMSD/CT	11-Apr-03	
MOD 1127; MOD 1072	HOU	P31A-017	VALVE, CHECK, LIQUID	SV824143-1	3	EA		HAMSD/CT	15-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-018	BEARING, BALL	2908795	6	EA		HAMSD/CT	16-Nov-02	
MOD 1127; MOD 1072	HOU	P31A-019	BEARING, BALL	2908796	6	EA		HAMSD/CT	16-Nov-02	
MOD 1127; MOD 1072	HOU	P31A-020	HOUSING, VOLUTE-SEPARATOR	SV808312-1	14	EA		HAMSD/CT	28-Apr-03	
MOD 1127; MOD 1072	HOU	P31A-021	IMPELLER, FAN, CENTRIFUGAL-OUTLET	SV808321-2	14	EA		HAMSD/CT	14-Jan-03	
MOD 1127; MOD 1072	HOU	P31A-022	IMPELLER, FAN, CENTRIFUGAL - INLET	SV808322-2	14	EA		HAMSD/CT	1-Nov-02	
MOD 1127; MOD 1072	HOU	P31A-023	ADAPTER, INLET	SV811790-1	14	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-024	SPACER	SV817776-1	168	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-025	TRANSDUCER, PRESSURE	SV806553-1	1	EA		HAMSD/CT	3-Jan-03	
MOD 1127; MOD 1072	HOU	P31A-026	VALVE, CHECK	SV806589-1	1	EA		HAMSD/CT	8-Nov-02	DD250 BHB1859
MOD 1127; MOD 1072	HOU	P31A-027	VALVE, SOLENOID CONDENSATE	SV809057-1	3	EA		HAMSD/CT	1-Nov-02	DD250 BHB1897
MOD 1127; MOD 1072	HOU	P31A-028	SENSOR, LIQUID	SV811726-1	1	EA		HAMSD/CT	6-Sep-03	DD250 BHB1897
MOD 1127; MOD 1072	HOU	P31A-029	FILTER, WATER SEPARATOR	SV817668-1	14	EA		HAMSD/CT	16-Aug-02	
MOD 1127; MOD 1072	HOU	P31A-030	COLLECTION PLATE, FLUID	SV808316-1	14	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-031	PITOT TUBE	SV808323-1	3	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-032	PWB ASSY, COMMUTATOR	2968544	10	EA		HAMSD/CT	6-Mar-03	
MOD 1127; MOD 1072	HOU	P31A-033	ROTOR, ASSY	2968542	2	EA		HAMSD/CT	4-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-035	CIRCUIT CARD ASSY, CONTROLLER	SV812759-1	1	EA		HAMSD/CT	17-Mar-03	
MOD 1127; MOD 1072	HOU	P31A-037	MOTOR, STEPPER	1051200001A	5	EA		HAMSD/CT	1-Jun-02	
MOD 1127; MOD 1072	HOU	P31A-038	SIZE 8: BRUSHLESS RESOLVER	3031200100A	2	EA		HAMSD/CT	15-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-039	STEPPER MOTOR CONTROLLER	6061200001C	3	EA		HAMSD/CT	1-Jun-02	
MOD 1127; MOD 1072	HOU	P31A-040	SPUR GEAR	JO93515003-1	2	SE		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-041	SPUR GEAR	JO93515001A	2	SE		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-042	SHAFT, OUTPUT	JO93525001-1	2	SE		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-043	SHAFT, INPUT	JO94525002A	2	SE		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-044	GEAR, ABL	JO93511001A	2	SE		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-045	GEAR, ABL	JO93515002A	2	SE		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-046	BEARING, BALL, FLANGED (BALL CAGE RETAINER)	J094575005A	2	SE		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-047	BEARING, NEEDLE ROLLER, FULL COMPLEMENT	J094575004A	2	SE		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-048	BEARING, NEEDLE ROLLER, FULL COMPLEMENT	J094575001A	2	SE		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-049	BEARING, NEEDLE ROLLER, FULL COMPLEMENT	J094575002A	2	SE		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-050	BEARING, THRUST, NEEDLE ROLLER	J094575008A	2	SE		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-051	BEARING, THRUST, NEEDLE ROLLER	J094575003A	6	SE		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-052	AXLE, DRIVE, DOOR	SV811667-1	1	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-053	BEARING, THRUST, NEEDLE ROLLER	SV811668-1	1	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-055	BUSHING, SUPPORT	SV811674	8	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-059	ARM, DRIVER	SV811714-1	1	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-060	LINK, CENTER	SV811715-1	1	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-061	ARM, DRIVEN	SV811717-1	1	EA		HAMSD/CT	19-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-062	BEARING, ROD END	SV811718-1	3	EA		HAMSD/CT	9-Aug-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-063	BEARING, ROD END	SV811718-2	3	EA		HAMSD/CT	9-Aug-02	DD250 BHB1802
MOD 1072	HOU	P31A-064	SENSOR, TEMPERATURE - ORU	SV813923-1	1	EA		HAMSTD	14-Apr-03	
MOD 1127; MOD 1072	HOU	P31A-066	FILTER, ELECTRICAL	SV812771-3	1	EA		HAMSD/CT	16-Mar-03	
MOD 1127; MOD 1072	HOU	P31A-067	ROTOR ASSEMBLY, MOTOR	2968552	2	EA		HAMSD/CT	16-Nov-02	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1072	HOU	P31A-068	IMPELLER, FAN ASSY	SV819455-1	2	EA		HAMSD/CT	27-May-02	DD250 BHB1897
MOD 1127; MOD 1072	HOU	P31A-069	BEARING, BALL	2908788	1	SE		HAMSD/CT	16-Nov-02	
MOD 1127; MOD 1072	HOU	P31A-070	BEARING, BALL	2908789	1	SE		HAMSD/CT	16-Nov-02	
MOD 1127; MOD 1072	HOU	P31A-071	PWB ASSEMBLY, COMMUTATOR	2968554	1	EA		HAMSD/CT	6-Mar-03	
MOD 1127; MOD 1072	HOU	P31A-072	TRANSDUCER, PRESSURE-DIFFERENTIAL	SV806578-1	1	EA		HAMSD/CT	3-Jan-03	
MOD 1127; MOD 1072	HOU	P31A-073	RUBBER GROMMET	SV809111-203	8	EA		HAMSD/CT	12-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-074	SOLID SHIM	SV811623-1	6	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-075	FLAT WASHER	SV811624-1	6	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-076	ELECTRICAL GROUNDING STRIP	SV813908-1	1	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-077	HIGH STRENGTH SCREW	SV814081-2	24	EA		HAMSD/CT	28-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-078	HIGH STRENGTH SCREW	SV814081-7	24	EA		HAMSD/CT	28-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-079	PANEL ACOUSTIC FABRIC	SV823961-1	2	EA		HAMSD/CT	15-Jul-02	DD250 BHB1897
MOD 1127; MOD 1072	HOU	P31A-080	ACOUSTIC WRAP	SV823962-1	1	EA		HAMSD/CT	15-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-081	ACOUSTIC FABRIC	SV823963-1	2	EA		HAMSD/CT	15-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-082	ACOUSTIC WRAP	SV823964-1	1	EA		HAMSD/CT	15-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-083	ACOUSTIC FABRIC	SV823966-1	1	EA		HAMSD/CT	15-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-084	ACOUSTIC FABRIC	SV823969-1	2	EA		HAMSD/CT	15-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-085	IMV WIRING HARNESS	SV812791-1	1	EA		HAMSD/CT	17-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-086	IMV WIRING HARNESS	SV812792-1	1	EA		HAMSD/CT	17-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-087	IMV WIRING HARNESS	SV812793-1	1	EA		HAMSD/CT	14-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-088	IMV WIRING HARNESS	SV812794-1	1	EA		HAMSD/CT	17-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-089	CONNECTOR GASKET	STSV153A27	6	EA		HAMSD/CT	18-Apr-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-090	CABLE ASSY	2968565	2	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-091	STRAIN RELIEF	2908803	8	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-092	CLAMP	2948304	8	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-093	CABLE ASSY	2968572	2	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-094	RESERVOIR, LUBRICANT	2948147	6	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-095	NUT	2948140	2	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-096	STRAIN RELIEF	2908806	2	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-097	SPACER	2922220	6	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-098	INSULATED WRAP	SV814062-1	14	EA		HAMSD/CT	11-Nov-02	DD250 BHB1859
MOD 1127; MOD 1072	HOU	P31A-099	PREFORMED WATER OUTLET HOSE	SV813913-1	14	EA		HAMSD/CT	11-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-100	SCREW, HIGH STRENGTH	SV814081-14	22	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-101	BOLT, REDUCED SHANK	SV813891-2	21	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-102	SPRING, HELICOIL COMPRESSION	SV812035-1	21	EA		HAMSD/CT	8-Jul-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-103	RING, NUT	SV812730-200	1	EA		HAMSD/CT	21-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-104	SPACER, SLEEVE	SV812790-1	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-105	WIRE, HARNESS	SV812796-1	1	EA		HAMSD/CT	31-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-106	WIRE, HARNESS	SV812795-1	1	EA		HAMSD/CT	24-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-107	WIRE, HARNESS	SV819582-1	1	EA		HAMSD/CT	17-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-108	SHIM, LAMINATED	STSV046B59	4	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-109	WASHER, CONVEX-PITOT BRACKET	SV808324-1	1	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-110	WASHER, CONCAVE-PITOT BRACKET	SV808325-1	1	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-111	SHIM, LAMINATED	STSV046A45	3	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-112	WASHER, CONVEX	SV808327-1	14	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-113	WASHER, CONCAVE	SV808326-1	14	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-114	SLINGER, WATER	SV808318-2	14	EA		HAMSD/CT	27-Sep-02	DD250 BHB1859
MOD 1127; MOD 1072	HOU	P31A-115	WASHER, FLAT-SLINGER	STSV061U179	28	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-116	SPACER, SLEEVE-FAN	SV808313-1	14	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-117	PIN, STRAIGHT, HEADLESS	STSV055-4N14	14	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-118	WASHER, FLAT-IMPELLER OUTLET	STSV061U180	14	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1072	HOU	P31A-119	WASHER, MOUNT	SV810074-2	2	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-120	SPACER, RING	SV819496-2	2	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-121	SPACER, RING	SV819496-1	6	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-122	CLAMP, HOSE, WORM-GEAR	STSV274-20	4	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-123	WASHER, MOUNT	SV810074-1	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-124	SCREW, HIGH STRENGTH	SV814081-13	2	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-125	NUT, HIGH STRENGTH	SV814082-6	1	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-126	SCREW, HIGH STRENGTH	SV814081-8	4	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-127	SCREW, HIGH STRENGTH	SV814081-1	3	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-128	SCREW, HEX HEAD	SV813920-212	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-129	TUBE, PRESSURE TRANSDUCER	SV810024-1	3	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-130	TUBE, SOLENOID	SV813915-1	3	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-131	TUBE, TEE	SV813914-1	3	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-132	HOSE, PREFORMED, CONDENSATE-INLET	SV813906-1	1	EA		HAMSD/CT	11-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-133	HOSE, AIR-OUTLET	SV810039-1	1	EA		HAMSD/CT	11-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-134	TUBE, QUICK DISCONNECT	SV810038-1	3	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-135	PRELOAD WASHER	SV810106-2	330	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-142	REDUCED SHANK BOLT	SV813891-2	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1171; MOD 1127; MOD 1072	HOU	P31A-143	WASHER, FLAT, PRECISION-CAPTIVE FASTENER	SV822073-1	4	EA		HAMSD/CT	18-May-02	NEW P/N
MOD 1127; MOD 1072	HOU	P31A-144	WORM CLAMP HOSE	STSV274-80	1	EA		HAMSD/CT	16-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-145	PIN, ROLLER	J094569001A	16	EA		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-146	COLLAR, SHIM	J094416001B	2	EA		HAMSD/CT	11-Jul-02	DD250 BHB1939
MOD 1127; MOD 1072	HOU	P31A-147	COVER, SHIM	J094486003A	2	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-148	WASHER, SPRING STEEL	J094562002A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-149	WASHER, SPRING	J094562001A	2	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-150	WASHER, SHIM	J094559001A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-151	WASHER, SHIM	J094559002A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-152	WASHER, SHIM	J094559003A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-153	WASHER, SHIM	J094559004A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-154	WASHER, SHIM	J094559005A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1940
MOD 1127; MOD 1072	HOU	P31A-155	WASHER, SHIM	J094559006A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-156	WASHER, SHIM	J094559007A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-157	WASHER, SHIM	J094559008A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-158	WASHER, SHIM	J094559009A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-159	WASHER, SHIM	J094559010A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-160	WASHER, SHIM	J094559011A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-161	WASHER, SHIM	J094559012A	4	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-162	SEAL, ROTARY	J094557002A	5	EA		HAMSD/CT	11-Jul-02	DD250 BHB1941
MOD 1127; MOD 1072	HOU	P31A-163	SEAL, COVER	J094486001A	5	EA		HAMSD/CT	11-Jul-02	DD250 BHB1942
MOD 1127; MOD 1072	HOU	P31A-164	SPRING	J094455008A	20	EA		HAMSD/CT	11-Jul-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-165	SHRINK TUBING	J099955001A	25	IN		HAMSD/CT	11-Jul-02	DD250 BHB1942
MOD 1127; MOD 1072	HOU	P31A-166	SHRINK TUBING	J099955002A	30	IN		HAMSD/CT	11-Jul-02	DD250 BHB1942
MOD 1127; MOD 1072	HOU	P31A-167	SHRINK TUBING	J099955003A	15	IN		HAMSD/CT	11-Jul-02	DD250 BHB1942
MOD 1127; MOD 1072	HOU	P31A-168	SHRINK TUBING	STSV089E13H01	30	IN		HAMSD/CT	11-Jul-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-169	SCREW, SET	J094568007A	5	EA		HAMSD/CT	11-Jul-02	DD250 BHB1942
MOD 1127; MOD 1072	HOU	P31A-170	LABEL	9994961006A	5	EA		HAMSD/CT	11-Jul-02	DD250 BHB1942
MOD 1127; MOD 1072	HOU	P31A-171	HIGH STRENGTH BOLT	Sv814080-3	2	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-172	WOODRUFF KEY	SV811670-1	3	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-173	WOODRUFF KEY	SV811670-2	1	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-174	FLOATING CAPTIVE SCREW	STSV550A0912F11	6	EA		HAMSD/CT	18-May-02	DD250 BHB1802

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1127; MOD 1072	HOU	P31A-175	FLOATING CAPTIVE SCREW	STSV550A0410E09	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-176	GASKET	SV811837-1	1	EA		KSC/PPS	26-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-178	SCREW, HIGH STRENGTH	SV814081-4	4	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-179	NUT, RING	STSV512Y12	2	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-180	RESILIENT MOUNTS	SV811683-1	2	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-181	WASHER, FLAT	SV822073-1	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-182	NUT, RING	STSV512Y18	1	EA		HAMSD/CT	12-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-183	SCREW, HIGH STRENGTH	SV814081-15	1	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-184	SPACER, SLEEVED	SV810054-2	1	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-185	SPACER, SLEEVED	SV810054-1	7	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-186	BOLT, REDUCED SHANK	SV813891-1	4	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-187	GROMMET, RUBBER	SV811840-200	8	EA		HAMSD/CT	17-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-188	BAND, RETAINING-ORU	SV805628-1	2	EA		HAMSD/CT	17-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-189	COUPLING, FLEXIBLE INLET	SV811703-1	1	EA		HAMSD/CT	21-Apr-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-190	BACKSHELL, CONNECTOR	NZGA-SG-11-N-08	1	EA		HAMSD/CT	1-May-02	
MOD 1127; MOD 1072	HOU	P31A-191	BRACKET, CABLE TIE	SV809354-1	9	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-192	WIRE, HARNESS	SV812784-1	1	EA		HAMSD/CT	9-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-193	WIRE, HARNESS	SV812785-2	1	EA		HAMSD/CT	9-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-194	WIRE, HARNESS	SV812787-1	1	EA		HAMSD/CT	9-Oct-02	DD250 BHB1890
MOD 1127; MOD 1072	HOU	P31A-195	SHIM, LAMINATED	STSV046B63	16	EA		HAMSD/CT	13-Mar-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-196	WASHER, FLAT	SV819489-2	7	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-197	WASHER, FLAT	SV819489-1	14	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-198	BUSHING, ANTIVIBRATION	SV819488-1	14	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-199	PAD, ANTIVIBRATION	SV813890-204	28	EA		HAMSD/CT	23-Jul-02	DD250 BHB1898
MOD 1127; MOD 1072	HOU	P31A-200	SCREW, HIGH STRENGTH	SV814081-3	6	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-201	WASHER, FLAT	SV811724-1	2	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-202	SHIM	SV813890-200	2	EA		HAMSD/CT	18-May-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-203	SPACER	2922228	6	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-204	WASHER, FLAT	2504638-10	16	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-205	CABLE ASSY	2968573-1	1	EA		HAMSD/CT	11-Jul-02	NEW P/N 2968573-1
MOD 1127; MOD 1072	HOU	P31A-206	STOP, PRELOAD	2948167	2	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-207	SPRING WASHER	2905624-38	2	EA		HAMSD/CT	11-Jul-02	
MOD 1179; MOD 1127; MOD 1072	HOU	P31A-208	COLLAR	2948136-1	10	EA		HAMSD/CT	11-Jul-02	NEW P/N
MOD 1179; MOD 1127; MOD 1072	HOU	P31A-209	WASHER, FLAT-METALIC	0770-3	36	EA		HAMSD/CT	11-Jul-02	NEW P/N
MOD 1127; MOD 1072	HOU	P31A-210	SPACER	2948151	10	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-211	ADAPTER	2948148	10	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-212	SPRING WASHER	2905624-35	10	EA		HAMSD/CT	11-Jul-02	
MOD 1179; MOD 1127; MOD 1072	HOU	P31A-213	WASHER, FLAT	2504638-1	144	EA		HAMSD/CT	11-Jul-02	NEW P/N
MOD 1127; MOD 1072	HOU	P31A-215	STOP, PRELOAD	2948292	10	EA		HAMSD/CT	11-Jul-02	
MOD 1127; MOD 1072	HOU	P31A-216	PRELOAD WASHER	STSV153A09	15	EA		HAMSD/CT	16-Apr-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-217	FLEXIBLE COUPLING	SV811704-1	6	EA		HAMSD/CT	3-May-02	DD250 BHB1899
MOD 1127; MOD 1072	HOU	P31A-218	HELICAL COMPRESSION SPRING	SV813894-1	8	EA		HAMSD/CT	8-Jul-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-219	HIGH STRENGTH SCREW	SV814081-5	35	EA		HAMSD/CT	1-Jun-02	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-220	RESILIENT MOUNT	SV811636-2	12	EA		HAMSD/CT	15-Dec-01	DD250 BHB1802
MOD 1127; MOD 1072	HOU	P31A-221	STATOR, ASSEMBLY	2968543	6	EA		HAMSD/CT	11-Feb-03	
MOD 1127; MOD 1072	HOU	P31A-222	STATOR, ASSEMBLY	2968551	2	EA		HAMSD/CT	11-Feb-03	
MOD 1127; MOD 1072	HOU	P31A-223	LUBRICANT RESERVOIR	2948163	6	EA		HAMSD/CT	11-Feb-03	

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 853; MOD 810; MOD 708; CCO 572	BHB	P38A-001	TRANSDUCER, PRESSURE, ABSOLUTE, 0 TO 500	41SG473-4	1	EA		KSC/PPS	30-Nov-00	NEW P/N
MOD 853; MOD 708; CCO 572	BHB	P38A-004	VALVE BODY, ISOLATION	284185-9001	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1462; SCD 1F39985-515
MOD 853; MOD 708; CCO 572	BHB	P38A-005	VALVE BODY, ISOLATION RELIEF	284180-9001	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1702. SCD 1F39986-511
MOD 853; MOD 708; CCO 572	BHB	P38A-006	FLOW METER, AMMONIA	1F40070-505	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1059
MOD 853; MOD 708; CCO 572	BHB	P38A-007	FLOW METER, AMMONIA	1F40070-507	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1059
MOD 853; MOD 708; CCO 572	BHB	P38A-008	COUPLING, QUICK DISCONNECT, MALE, EXTERNAL	NN505540-UP08A	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0636 IN WORK. NEW P/N; SCD 1F45540-513
MOD 853; MOD 708; CCO 572	BHB	P38A-009	COUPLING, QUICK DISCONNECT, MALE, EXTERNAL	NN505540-UP24A	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0636 IN WORK. NEW P/N; SCD 1F45540-519
MOD 853; MOD 708; CCO 572	BHB	P38A-010	MANUAL VALVE-FILL AND DRAIN, NITROGEN, 1/4 INCH	1F96200-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1530
MOD 853; MOD 708; CCO 572	BHB	P38A-011	VENT, NON PROPULSIVE	1F96351-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1912
MOD 1048; MOD 853; MOD 708; CCO 572	BHB	P38A-012	AMMONIA ACCUMULATOR	1F96456-501	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1334
MOD 853; MOD 708; CCO572R2; CCO 572	BHB	P38A-013	HEATER, FLUID LINE, PUMP MODULE	1F96458-1	2	EA		KSC/PPS	30-Nov-00	DD250 BHB1912
MOD 853; MOD 708; CCO 572R2; CCO 572	BHB	P38A-014	ELECTRONIC CONTROL UNIT(ECU), ISSA AMMONIA VALVES	1F98802-501	4	EA		KSC/PPS	30-Nov-00	DD250 BHB1515
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-017	MICROCIRCUIT	SV826132-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-019	MICROCIRCUIT	8259842-421	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0924
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-021	DIODE	F015212-0022	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-022	TEMP SENSOR	SV81763-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863 & MOD
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-024	DIODE	JANS1N4148-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-025	DIODE	JANS1N5418	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-026	DIODE	JANS1N5615	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-027	DIODE	JANS1N5806	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-028	DIODE	JANS1N5811	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-029	DIODE	JANS1N6115A	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-030	DIODE	JANS1N6328	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-031	DIODE	JANS1N6331	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-036	DIODE	JANS2N3741	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-037	DIODE	JANS2N6849	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0863
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-038	TRANSISTOR	JANS2N7237	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-039	DIODE	SV826124-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-040	SEMICONDUCTOR,OPTOCOUPLER	JANS4N49	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-043	MICROCIRCUIT	M38510/11001SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-044	MICROCIRCUIT	M38510/11005SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-048	MICROCIRCUIT	M38510/13501SPA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-049	MICROCIRCUIT	M38510/65203SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-050	MICROCIRCUIT	M38510/65204SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-051	MICROCIRCUIT	M38510/65302SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-052	MICROCIRCUIT	M38510/65403SRA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-053	MICROCIRCUIT	5962R9679701VRC	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-054	MICROCIRCUIT	M38510/65701SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0867
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-056	MICROCIRCUIT	SSQ22563/01SEA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-057	MICROCIRCUIT	D015821-AA01	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-058	MICROCIRCUIT	SV826133-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-059	MICROCIRCUIT	SSQ22673-002	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-060	MICROCIRCUIT	5962R8864405VZA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-061	CRYSTAL,OSCILLATOR	SV812732-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 928; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-063	MICROCIRCUIT	5962-9452602VGA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 1024; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-065	DIODE	F015291-0006	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1211
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-067	MICROCIRCUIT	SV817629-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-068	MICROCIRCUIT	SV817629-3	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-069	MICROCIRCUIT	SV817630-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 1127; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-070	PUMP CONTROLLER CCA	SV824105-1	1	EA		HAMSD/CT	30-Nov-00	DD250 BHB1689
MOD 1127; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-071	FIRMWARE CCA	SV819380-2	1	EA		HAMSD/CT	30-Nov-00	DD250 BHB1689
MOD 1127; MOD 797; MOD 742; MOD 708; CCO 572	BCP	P38A-072	CCA,POWER SUPPLY	SV819385-3	1	EA		HAMSD/CT	30-Nov-00	DD250 BHB1689
MOD 1127; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-073	FILTER, CCA	SV819390-1	1	EA		HAMSD/CT	30-Nov-00	DD250 BHB1689
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-075	MICROCIRCUIT	SV819465-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-078	MICROCIRCUIT	SV819467-3	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0874
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-079	MICROCIRCUIT	SV819467-4	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 962; MOD 928; MOD 853; MOD 742; MOD 708	BCP	P38A-082	MICROCIRCUIT	5962R9567901VCC	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1092
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-083	MICROCIRCUIT	SV819469-9	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-084	CRYSTAL	SV819472-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0924
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-085	CRYSTAL	SV819472-2	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0924
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-087	DIODE	SV819478-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-088	COLD PLATE ASSEMBLY	SV819539-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1092
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-089	CENTRIGUGAL PUMP ASSEMBLY	SV819406-2	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1092
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-090	MANIFOLD AND FRAME ASSEMBLY	SV819421-101	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1313
MOD 1048; MOD 1024; MOD 928; MOD 853; MOD 742	BCP	P38A-091	DIODE	JANS1N6111A	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1211
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-093	CRYSTAL OSCILLATOR	SV819472-3	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-094	MICROCIRCUIT	SV819481-003	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-095	DIODE	SV824130-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-096	MICROCIRCUIT	59629474301MXA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-097	MICROCIRCUIT	683-29429-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-098	MICROCIRCUIT	683-29430-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-099	TRANSISTOR	JANTXV2N3767	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 877; MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-100	MICROCIRCUIT	M38510/65201SCA	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0860
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-101	MICROCIRCUIT	SV824090-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0924
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-102	DIODE	F015818-0001	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0924
MOD 853; MOD 742; MOD 708; CCO 572	BCP	P38A-103	MICROCIRCUIT	SV817629-2	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0924
MOD 742; MOD 708; CCO 572	BCP	P38A-104	FILTER	SSQ21216-03S	2	EA		HAMSD/CT	30-Nov-00	DD250 BHB1092
MOD 853; MOD 853; MOD 742; MOD 708; CCO 572	BHB	P38A-106	SENSOR, ATCS TEMPERATURE	1F96433-1	1	EA		KSC/PPS	30-Nov-00	DD250 BHB0919
MOD 853; MOD 853; MOD 742; MOD 708; CCO 572	BHB	P38A-107	INRUSH CURRENT LIMITER	1F97575-1	8	EA		KSC/PPS	30-Nov-00	DD250 BHB1912
MOD 1157; MOD 853; MOD 708; CCO 572R2 CO 572	BHB	P38A-108	AMMONIA TANK	1F40057-503	1	EA		KSC/PPS	30-Nov-00	DD250 BHB1786
MOD 853; MOD 708; CCO 572R2 CO 572	BHB	P38A-109	ELECTRONIC CONTROL UNIT, ISSA NH3 VALVE	236805-9001	4	EA		KSC/PPS	15-Jun-00	DD250 BHB1515 - SCD 1F98802-1; HEAT EXCHANGER
MOD 853; MOD 708; CCO 572R4	BHB	P38A-110	ABSOLUTE PRESSURE TRANSDUCER	41SG581-1	1	EA		KSC/PPS	31-Dec-00	SCD 1F08021-1
MOD 853; MOD 708; CCO 572R4	BHB	P38A-111	TRANSDUCER, PRESSURE	41SG473-4	1	EA		KSC/PPS	31-Dec-00	SCD 1F08004-1
MOD 1108; MOD 962; CCO 855;04-0125	BHB	P39A-002	TRANSDUCER, PRESSURE	826061-602	2	EA		KSC/PPS	20-Dec-02	NEW P/N 826061-602 DEST'N changed per Boeing Ltr 2-1150- 04-0125 concurred by NASA on 3/16/04.
MOD 1143; MOD 962; CCO 855	BHB	P39A-005	INDUCTOR	24-P35980T001	1	EA		KSC/PPS	1-Oct-01	DD250 BHB1914
MOD 1157; MOD 1143; MOD 962; CCO 855	BHB	P39A-006	MICROCIRCUIT	10037052-1	3	EA		KSC/PPS	1-Oct-01	DD250 BHB1914
MOD 1157	BHB	P39A-006A	MICROCIRCUIT	10037052-1	2	EA		L3COM	1-Oct-01	DD250 BHB1919
MOD 1143; MOD 1108; MOD 962; CCO 855	BHB	P39A-008	INTEGRATED CIRCUIT	5962H9584502VYC	19	EA		KSC/PPS	20-Dec-00	NEW P/N 5962H9584502VYC
MOD 1143; MOD 1108; MOD 962; CCO 855	BHB	P39A-009	TRANSISTOR, FET	SPSS-EVMG07-117	24	EA		KSC/PPS	20-Dec-00	NEW P/N SPSS-EVMG07-117; MIN BUY

**INTERNATIONAL SPACE STATION PROGRAM
J-9 PROVISIONING ITEM ORDER**

NAS15-10000
MOD 1388 (S/A)

CHANGE NUMBER	RESP SITE	DIL ID Number	NOMENCLATURE	PART NUMBER	QTY	UNIT	TOTAL COST	DEST'N	DD250 DATE	REMARKS
MOD 1143; MOD 1108; MOD 962; CCO 855	BHB	P39A-010	MICROCIRCUIT	5962-7802005VFA	47	EA		KSC/PPS	20-Dec-00	- Fundamental
MOD 962; CCO 855	BHB	P39A-011	INTEGRATED CIRCUIT	5962-9096503MTC	29	EA		KSC/PPS	1-Oct-01	SUB FOR 5962-9096501MTC
MOD 1084; MOD 962; CCO 855	BHB	P39A-012	EXTERNAL AUDIO CONTROL PANEL	683-51983-1	1	EA		KSC/PPS	1-Oct-01	- Contracts & Proc
MOD 1084; MOD 1048; MOD 962; CCO 855	BHB	P39A-013	VTR BUS CONTROLLER CARD	683-51036-3	1	EA		KSC/PPS	1-Oct-01	- Installed OPP Cob
MOD 1084; MOD 1048; MOD 962; CCO 855	BHB	P39A-014	VTR POWER SUPPLY CARD	683-51056-3	1	EA		KSC/PPS	1-Oct-01	- Have the Huntsvi
MOD 1143; MOD 962; CCO 855	BHB	P39A-015	ATTENUATOR, S-BAND	818063-144	1	EA		KSC/PPS	1-Oct-01	- Working with two
MOD 1143; MOD 962; CCO 855	BHB	P39A-016	SWITCH, RF, COAXIAL L	814444-104	4	EA		KSC/PPS	1-Oct-01	to some experienc
MOD 1143; MOD 962; CCO 855	BHB	P39A-017	TRANSISTOR, FET	SPSS-EVLF01-101	124	EA		KSC/PPS	1-Oct-01	- One of the Busine
MOD 1143; MOD 962; CCO 855	BHB	P39A-019	TRANSISTOR	48-P24290N001	2	EA		KSC/PPS	1-Oct-01	DD250 BHB1914
MOD 1143; MOD 962; CCO 855	BHB	P39A-020	MICROCIRCUIT	51-P24339N002	6	EA		KSC/PPS	1-Oct-01	DD250 BHB1914
MOD 1143; MOD 962; CCO 855	BHB	P39A-023	RADOME-LGA	824568-601	1	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-024	COUPLER ASSY	824577-551	1	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-026	CAPACITOR	SPSS-ECC103-804	2	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-027	CONNECTOR, ADPTR	M55339/02-30001	21	EA		KSC/PPS	1-Oct-01	SUB FOR EJC001-121-Y101; MIN BUY
MOD 1143; MOD 962; CCO 855	BHB	P39A-028	INDUCTOR	SPSS-EHP134-509	3	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-029	INDUCTOR	SPSS-EHP144-002	3	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-030	MICROCIRCUIT	10043166-1	3	EA		KSC/PPS	1-Oct-01	DD250 BHB1914
MOD 1143; MOD 962; CCO 855	BHB	P39A-031	INDUCTOR	SPSS-EHP064-389	5	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-032	INDUCTOR	SPSS-EHP074-001	5	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-033	CONNECTOR, FEMALE	SPSS-EJM002-225	7	EA		KSC/PPS	1-Oct-01	
MOD 1143; MOD 962; CCO 855	BHB	P39A-034	CONNECTOR, FEMALE	SPSS-EJM002-250	7	EA		KSC/PPS	1-Oct-01	
MOD 1157; MOD 1143; MOD 962; CCO 855	BHB	P39A-035	CONNECTOR	DDMY50PNMB-K52	1	EA		L3COM	1-Oct-01	DD250 BHB1919
MOD 1143; MOD 962; CCO 855	BHB	P39A-036	RESISTOR	D55342K07B26D7S	22	EA		KSC/PPS	1-Oct-01	DD250 BHB1914
MOD 1171; MOD 962; CCO 855	BHB	P39A-037	RESISTOR NETWORK	SSQ21008-4701B	22	EA		KSC/PPS	1-Oct-01	DD250 BHB1914

INTERNATIONAL SPACE STATION PROGRAM

J-9 PROVISIONING ITEM ORDER

NAS15-10000
MOD 1388 (S/A)

[illegible]

INTERNATIONAL SPACE STATION PROGRAM

J-9 PROVISIONING ITEM ORDER

NAS15-10000
MOD 1388 (S/A)

[illegible]

INTERNATIONAL SPACE STATION PROGRAM

J-9 PROVISIONING ITEM ORDER

NAS15-10000
MOD 1388 (S/A)

[illegible]

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 435	BHB	G016-01	MICROCONICAL FITTING (3/4 INCH HOLE)	0006055-002	3	EA	BOE/HUNB	1-May-99	JSC FORM 290 # C9-099-002; SHIPPED TO LMMS 8-SEP-99
MOD 435	BHB	G016-02	MICROCONICAL FITTING (FLANGED)	0006056-002	4	EA	BOE/HUNB	15-Jan-99	JSC FORM 290 # C9-099-002; SHIPPED TO LMMS 8-SEP-99
MOD 591; CCO 498	BHB	G016A-01	TRANSISTOR	JANS2N2222A	1	EA	LMMS	30-Oct-99	GFE FROM P007. SHIPPED TO LMMS 8-SEP-99
MOD 742; MOD 591; CCO 498	BHB	G016A-02	TRANSISTOR, PNP	JANS2N2905A	1	EA	LMMS	30-Oct-99	GFE FROM P007. SHIPPED TO LMMS 8-SEP-99
MOD 783; MOD 742; MOD 591; CCO 498	BHB	G016A-03	TRANSISTOR, PNP	JANS2N2219A	1	EA	BOE/HUNB	30-Oct-99	GFE FROM PIO 7. SHIPPED TO LMMS 8-SEP-99
MOD 530	BHB	G017-001	MSD DDC	8260515-306	1	EA	HI/GLENDALE	30-Apr-99	LON - 5A, DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-002	MCKT, U-PROCESSOR, 386SX-16	8259403-402	6	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-003	MCKT, PERIPHERAL, 82370	8259816-402	4	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-004	MCKT, DGTL ADDR	8259842-421	65	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-005	MCKT, TRANSCEIVER, 16F95	8259846-401	33	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-006	MCKT, 1021 10V VOLTAGE REF	8261049-702	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-007	IC, M80C186 U-PROCESSOR	8263482-401	5	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-008	MOSFET N-CH, 2N6796	8264168-601	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-009	MCKT, CO-PROCR, 387SX, 68 PIN FP	8264485-401	3	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-010	MCKT, DUAL OP AMP, 8 PIN DIP	8265082-401	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-011	MCKT, MSD	994023-0013	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-012	MCKT, MSD	990063-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-013	MCKT, MSD	990067-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-014	MCKT, MSD	990068-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-015	MCKT, MSD	990069-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-016	MCKT, MSD	990075-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-017	MCKT, MSD	990077-002	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-018	MCKT, MSD	990098-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-019	MCKT, MSD	990099-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-020	MCKT, MSD	990100-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-021	MCKT, MSD	990101-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-022	MCKT, MSD	990102-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-023	MCKT, MSD	990103-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-024	MCKT, MSD	990105-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-025	MCKT, MSD	990106-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-026	MCKT, MSD	990107-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-027	MCKT, MSD	990108-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-028	MCKT, MSD	990109-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-029	MCKT, MSD	990110-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-030	MCKT, MSD	990111-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-031	MCKT, MSD	990112-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-032	MCKT, MSD	990113-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-033	MCKT, MSD	992095-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-034	MCKT, MSD	992100-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-035	MCKT, MSD	992113-051	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-036	MCKT, MSD	992114-051	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-037	MCKT, MSD	992129-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-038	MCKT, MSD	992130-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-039	MCKT, MSD	992131-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-040	MCKT, MSD	992132-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-041	MCKT, MSD	992133-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-042	MCKT, MSD	992134-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-043	MCKT, MSD	992135-031	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-044	MCKT, MSD	992136-031	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-045	MCKT, MSD	992137-021	3	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-046	MCKT, MSD	992138-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-047	MCKT, MSD	992140-021	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-048	MCKT, MSD	992165-021	3	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-049	MCKT, MSD	994023-0010	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-050	MCKT, MSD	994023-0011	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-051	MCKT, MSD	994023-0012	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-052	MCKT, MSD	994024-0010	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-053	MCKT, MSD	994024-0011	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-054	MCKT, MSD	994024-0014	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-055	MCKT, MSD	994025-0010	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-056	MCKT, MSD	994025-0011	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-057	MCKT, MSD	994026-0011	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-058	MCKT, MSD	994026-0012	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-059	MCKT, MSD	994026-0013	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-060	MCKT, MSD	994026-0014	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-061	MCKT, MSD	994026-0015	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-062	MCKT, MSD	994026-0016	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-063	MCKT, MSD	994026-0018	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-064	MCKT, MSD	994027-0010	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-065	MCKT, MSD	994027-0011	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-066	MCKT, MSD	994028-0010	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-067	MCKT, MSD	994028-0011	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-068	MCKT, MSD	994028-0012	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-069	MCKT, MSD	996203-0022	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-070	MCKT, MSD	996203-0023	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-071	MCKT, MSD	996203-0024	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-072	MCKT, MSD	996203-0025	2	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-073	DIODE 1N649-1	JANS1N6663	3	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-074	MOSFET, 200V,26A,150W, 1RHHM7250,T0-254	JANSR2N7269	3	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-075	MOSFET, 500V,11A,150W, 1RHHM7450,T0-254	JANSR2N7270	3	EA	HI/GLENDALE	30-Apr-99	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-076	MICROCONICAL FITTING (FLANGED)	0006056-002	10	EA	HI/GLENDALE	30-Apr-98	DD1149 C9-103-002
MOD 530	BHB	G017-077	HYBRIDS	8259405-401	11	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-078	HYBRIDS	8260760-401	26	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-079	HYBRIDS	8260761-401	18	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-080	HYBRIDS	8260762-401	53	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-081	HYBRIDS	8260763-401	18	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-082	HYBRIDS	8260764-402	19	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-083	HYBRIDS	8260765-401	32	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-084	HYBRIDS	8260767-402	88	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-085	HYBRIDS	8260768-403	128	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-086	HYBRIDS	8260768-404	26	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-087	GATE ARRAY	8261001-411	7	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-088	GATE ARRAY	8261002-412	11	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-089	GATE ARRAY	8261004-411	18	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-090	GATE ARRAY	8261005-412	9	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-091	GATE ARRAY	8261007-412	12	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-092	GATE ARRAY	8261009-411	7	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-093	GATE ARRAY	8261010-411	6	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-094	GATE ARRAY	8261013-411	4	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 3
MOD 530	BHB	G017-095	IC, SRAM 128K X8	8262857-421	174	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-096	32K X 8-BIT SRAM 45n	8259848-421	36	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-097	ICD SSQ SCSI BUS INTERFACE	8264484-401	2	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-098	GA IOCU PS 256 TERM	8261001-411	2	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-099	GA IOCC I/O CONTROL	8261002-412	1	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-100	GA CONTROL	8261004-411	17	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-101	GA SDIO	8261005-412	9	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-102	GA LLA/AIO CONTROL	8261007-412	1	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-103	GA SDO CONTROL	8261013-411	1	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-104	TAXI RECEIVER	8265409-004	3	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-105	TAXI TRANSMITTER	8265409-003	3	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 13
MOD 530	BHB	G017-106	MCKT, HYBRID, A/D INPUT	8259405-401	1	EA	HI/GLENDALE	1-Apr-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-107	MCKT, HYBRID, SOLENOID DRIVER	8260765-401	3	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 36
MOD 530	BHB	G017-108	MCKT, HYBRID, LLA BUFFER/MUX	8260768-403	30	EA	HI/GLENDALE	1-Apr-98	DD1149 980543418; GFE FROM PIO 36
MOD 530	BHB	G017-109	MCKT, LM120H-15	8261112-403	2	EA	HI/GLENDALE	1-Apr-98	DD1149 973383332; GFE DMSR CONTRACT; REC'D QTY = 17
MOD 530	BHB	G017-110	MCKT, MSD	990104-031	2	EA	HI/GLENDALE	1-Apr-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-111	MCKT, MSD	994026-0010	2	EA	HI/GLENDALE	1-Apr-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-112	PWB MSD A1	8260531	5	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-113	PWB	8266318	6	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-114	MCKT	5962-9052701MXX	64	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-115	MCKT	5962-9052801MXX	64	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-116	SPACER	8253810-024	67	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-117	STIFFENER,CCA	8258934-007	33	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-118	MCKT 32 BIT 80386SK-	8259403-402	17	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT; REC'D QTY = 14; SHORT QTY 3 EA
MOD 530	BHB	G017-119	A/D INPUT HYBRID	8259405-401	24	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT; REC'D QTY = 13 // SHORT QTY 11 EA
MOD 530	BHB	G017-120	HEATSINK	8259727-001	304	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-121	HEATSINK	8259727-002	181	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-122	CAPACITOR	8259736-022	139	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-123	MCKT PSM16 GA	8259816-402	17	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 742; MOD 530	BHB	G017-124	EEPROM	8259842-421	107	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT. QTY 15 EA TRANSFERRED FOR FLT H/W PER LTR 2-1150-99-0158.
MOD 530	BHB	G017-125	MCKT DIFF BUS 16F95	8259846-401	857	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-126	CAP 15PF 100V 10%	8260184-002	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-127	CAP CER 1000PF 10% 1	8260184-042	79	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-128	CAP CER .047UF 10% 1	8260184-057	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-129	CAP .015UF 10% 100V	8260184-314	544	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-130	CAP 0.027UF 10% 100V	8260184-317	1698	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-131	CAP .047UF 10% 100V	8260184-421	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-132	CAP 0.10UF 10% 50V	8260184-423	1959	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-133	CAP 3300PF 100V 10%	8260184-455	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-134	CAP 4700PF 1000V 1%	8260184-459	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-135	CAP 8200PF 10% 50V	8260184-465	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-136	CAP .012UF 1% 50V	8260184-561	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-137	CAP 120PF 1% 100V	8260184-851	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-138	CAP 180PF 10% 100V	8260184-855	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-139	CAP 330PF	8260184-861	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-140	CAP 390PF	8260184-863	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-141	CAP 470PF 1% 100V	8260184-865	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-142	CAP 560PF 100V 1%	8260184-867	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-143	CAP 1000PF 100V 1%	8260184-873	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-144	CAP 1200PF	8260184-878	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-145	CAP 2200PF 1% 50V	8260184-881	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-146	CAP 1000PF 10% 100V	8260184-886	74	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-147	CCA MOTOR CNTRL (A1)	8260515-301	1	EA	HI/GLENDALE	31-Mar-98	PRE-POSITIONED SPARE - FLT 6A, DD1149 980833463; GFE DMSR CONTRACT
MOD 530	BHB	G017-148	CCA SERVO RCVR (A3)	8260515-303	1	EA	HI/GLENDALE	31-Mar-98	LON - 5A, DD1149 980833463; GFE DMSR CONTRACT
MOD 530	BHB	G017-149	CRTRDG MOUNTING ASSY	8260515-304	3	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-150	CRTRDG INTRCNCT CBLE	8260515-305	2	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-151	DISK DRIVE CARTRIDGE	8260515-306	3	EA	HI/GLENDALE	31-Mar-98	PRE-POSITIONED SPARE - FLT 6A, DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-152	CCA INTERFACE (A2)	8260515-312	1	EA	HI/GLENDALE	31-Mar-98	PRE-POSITIONED SPARE - FLT 6A, DD1149 980833463; GFE DMSR CONTRACT
MOD 530	BHB	G017-153	DIODE 1N4620-1 3.3V	8260647-607	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-154	DIODE 1N4105-1 11V 1	8260647-621	47	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-155	DIODE 1N4109-1	8260647-625	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-156	DIODE 1N4112-1	8260647-628	47	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-157	DIODE	8260647-636	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-158	Screw, NAS1190E02T6G	8260732-106	147	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-159	MCKT	8261002-412	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-160	MCKT	8261004-411	67	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-161	MCKT	8261005-412	37	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-162	MCKT RH102AC-10 VREF	8261049-702	4	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-163	XFMR PULSE LOW PWR	8261075-401	140	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-164	MCKT LM120H-15 V REG	8261112-403	17	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-165	RES NET 30K/20K .15W	8261727-401	14	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-166	COIL ELEC-POWER	8262550-402	9	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-167	TRANSFORMER GATE DRI	8262552-402	12	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-168	Screw, .086-56X.312	8262972-105	196	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-169	LABEL	8262977-103	5	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-170	MICROPROC	8263482-401	97	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-171	XSTR 2N6796	8264168-601	158	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-172	Transistor	8264168-606	159	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-173	Transistor	8264168-607	140	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT; REC'D QTY = 137; SHORT QTY 3 EA
MOD 530	BHB	G017-174	DIODE 1N5819	8264250-601	84	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-175	IC	8264485-401	12	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-176	TRANSFORMER +5V POWE	8264843-401	6	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-177	TRANSFORMER +15V POW	8264844-401	5	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-178	TRANSFORMER 9V 20V P	8264845-401	6	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-179	INDUCTOR +5	8264848-401	6	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-180	INDUCTOR +15	8264849-401	6	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-181	INDUCTOR +9V +20V	8264850-401	1	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-182	INDUCTOR	8264869-401	19	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-183	INDUCTOR	8264870-401	7	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-184	TRANSFORMER	8264871-401	7	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-185	XFMR CURRENT SENSOR	8264872-401	36	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-186	XFMR GATE DRIVER	8264873-401	11	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-187	INDUCTOR 137UH	8264876-401	7	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-188	TRANSISTOR	8264879-401	22	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-189	XFMR FLYBACK	8264881-401	10	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-190	INDUCTOR SUPPORT INP	8264883-401	7	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-191	INDUCTOR CPLD OUTPUT	8264885-401	7	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-192	CAPACITOR	8264977-101	11	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-193	CAP 390PF+/-1% 200V	8264977-102	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-194	CAP 820PF+/-1% 200V	8264977-103	10	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-195	CAP 1500PF+/-1% 200V	8264977-104	10	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-196	CAP 330PF+/-1% 200V	8264977-105	10	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-197	CAPACITOR	8264977-106	11	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-198	DIODE 200V DUAL RECT	8264981-601	21	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-199	DIODE 200V DUAL RECT	8264981-602	10	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-200	CAP 39UF 10% 200V	8265031-443	8	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-201	Dual Op AMP	8265082-401	11	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-203	DIODE,SEMICONDUCTOR	8265985-701	26	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-204	CAPACITOR	CWR06KC156JB	60	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-205	CAPACITOR	CWR06MC105JB	75	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-206	CAP, 6.8UF	CWR06MH685JB	120	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-207	CAP, 3.3UF	CWR06NH335JB	60	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-208	CAP, 4.7UF	CWR06NH475JB	60	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-209	RESISTOR	D55342E07B100AR	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-210	RESISTOR	D55342E07B100BR	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-211	RES	D55342E07B10B0R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-212	RES 11K OHM .1% .125	D55342E07B11B0R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-213	RES 121K .1% .125W	D55342E07B121BR	98	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-214	RES 13.3K .1% .125W	D55342E07B13B3R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-215	RESISTOR	D55342E07B15B0R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-216	RESISTOR	D55342E07B15B4R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-217	RES 15K .1% .125W	D55342E07B15B8R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-218	RESISTOR	D55342E07B16B9R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-219	RES 18.4K OHM .1% .1	D55342E07B18B4R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-220	RESISTOR	D55342E07B1B27R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-221	RES	D55342E07B1B78R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-222	RES	D55342E07B20B0R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-223	RES	D55342E07B20B5R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-224	RES	D55342E07B237AR	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-225	RES	D55342E07B2B00R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-226	RES 2.87K 1% 125W	D55342E07B2B87R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-227	RES	D55342E07B39B2R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-228	RES	D55342E07B3B74R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-229	RESISTOR	D55342E07B40B2R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-230	RES .1% .125W 25PPM	D55342E07B41B2R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-231	RES 464	D55342E07B464AR	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-232	RESISTOR	D55342E07B46B4R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-233	RES	D55342E07B4B32R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-234	RES 681K .125W .1% 2	D55342E07B681AR	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-235	RES 6.26K .125W .1%	D55342E07B6B26R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-236	RES	D55342E07B6B49R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-237	RES	D55342E07B7B32R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-238	RES	D55342E07B7B87R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-239	RESISTOR	D55342E07B8B16R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-240	RES	D55342E07B8B25R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-241	RES 97.6K OHM .1% .1	D55342E07B97B6R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-242	CHIP FIXED SLIM 100K	D55342K07B100ES	49	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-243	RESISTOR	D55342K07B10D0S	43	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-244	RES	D55342K07B147DS	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-245	RES 15 .25W 1% 100PP	D55342K07B15D0S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-246	RESISTOR	D55342K07B15E0S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-247	RES 169K OHM 1% .25W	D55342K07B169ES	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-248	RES, 191	D55342K07B191DS	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-249	RES 1206 1/4W 1% 20K	D55342K07B20E0S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-250	RES 42.3 .25W .1% TH	D55342K07B24D3S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-251	RES	D55342K07B2E00S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-252	RESISTOR	D55342K07B301DS	20	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-253	RESISTOR	D55342K07B332DS	90	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-254	RES	D55342K07B38D3S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-255	RES	D55342K07B3E48S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-256	RES 3.92K OHM 1% .25	D55342K07B3E92S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-257	RESISTOR	D55342K07B49E9S	30	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-258	RES	D55342K07B64D9S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-259	RES	D55342K07B71D5S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-260	RES	D55342K07B78D7S	18	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-261	RESISTOR	D55342E07B1B00R	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-262	DIODE ZENER 1N4965	JANS1N4965	72	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-263	DIODE	JANS1N5418	14	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-264	DIODE	JANS1N5811	85	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-265	DIODE IN6642	JANS1N6642	96	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-266	DIODE	JANS1N6663	533	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-267	XSTR FET N-CH 200V	JANSR2N7269	54	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-268	TRANSISTOR	JANSR2N7270	11	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-269	CAPACITOR	M123A02BXB474KC	62	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-270	CAPACITOR	M39003/10-2044S	39	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-271	CAPACITOR	M39003/10-2086S	11	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-272	CAP 2092	M39003/10-2092S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-273	CAP	M39003/10-2528S	15	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-274	CAP, 47UF 35V 10%	M39003/10-2547S	52	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-275	CAP	M39003/10-2551S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-276	CAP 27UF 50V	M39003/10-2555S	19	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-277	CAPACITOR	M39003/10-2557S	15	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-278	CAPACITOR	M39003/10-3032S	22	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-279	CAP, 560UF 10V 10%	M39003/10-3519S	59	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-280	CAPACITOR 56UF 125V	M39006/22-0660H	21	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-281	RESISTOR	M55342K03B100NS	800	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-282	RES, 10	M55342K03B10D0S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-283	RESISTOR	M55342K03B10E0S	2393	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-284	RESISTOR	M55342K03B1E00S	50	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-285	RES, 1.5K	M55342K03B1E50S	174	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-286	RESISTOR	M55342K03B20E0S	477	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-287	RESISTOR	M55342K03B22E6S	320	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-288	RES, 27.4	M55342K03B27D4S	93	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-289	RESISTOR	M55342K03B34E0S	320	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-290	RES, 42.2	M55342K03B42D2S	40	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-291	RESISTOR	M55342K03B4E99S	240	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-292	RESISTOR	M55342K03B51D1S	198	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-293	RES, 68.1	M55342K03B68D1S	13	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-294	RES, 6.04	M55342K03B6D04S	18	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-295	RESISTOR	M55342K08B221DS	90	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-296	CONTACT ORU	NRP-S-16P	242	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-297	CONTACT ORU	NRP-S-20P	196	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-298	CONTACT ORU	NRP-S-22P	4376	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-299	SEALING PLUG	NRP-SP-16	157	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-300	SEALING PLUG	NRP-SP-22P	2298	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-301	CONN ORU	NRP0E8A805P	5	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-302	RESISTOR	RLR20C1003FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-303	RES, 169K	RLR20C1693FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-304	RESISTOR	RNC55H1004BS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-305	RES, 422K	RNC55H4223BS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-306	RES, 499K	RNC55H4993BS	99	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-307	RESISTOR	RNC55J4223BS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-308	RESISTOR	RNC55J4993BS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-309	RESISTOR	RWR80NR205FS	98	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-310	RESISTOR	RWR80S44R2FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-311	RESISTOR	RWR81N1000FS	20	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-312	RES	RWR81N10R0FS	20	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-313	RESISTOR	RWR81N13R0FS	20	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-314	RES	RWR81N15R0FS	19	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-315	RESISTOR	RWR81N16R2FS	10	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-316	RESISTOR	RWR81N1R00FS	34	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-317	RES, 33.2	RWR81N33R2FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-318	RESISTOR	RWR89N10R0FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-319	RESISTOR	RWR89N20R5FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 530	BHB	G017-320	RESISTOR	RWR89N24R9FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-321	RESISTOR	RWR89N60R4FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-322	RESISTOR	RWR89N82R5FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-323	RES WW 32 976	RWR89N9760FS	79	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-324	RESISTOR,3W	RWR89S27R4FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-325	RESISTOR	RWR89S42R2FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-326	RES	RWR89S54R9FS	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-327	RES 976 OHM 1% 3W	RWR89S9760FR	100	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-328	CAPACITOR	SSQ21113-111	21	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 530	BHB	G017-329	RES.	RWR81N51R1FS	20	EA	HI/GLENDALE	31-Mar-98	DD1149 973383332; GFE DMSR CONTRACT
MOD 810; MOD 598	BHB	G025A-01	TRANSISTOR	JANS2N2907A	1	EA	ALLIED/NJ	30-Jun-99	DD1149 1SSA992992001; GFE FROM P007-14
MOD 810; MOD 598	BHB	G025A-02	MICROCIRCUIT, LINEAR	M38510/11201SCA	1	EA	ALLIED/NJ	30-Jun-99	GFE FROM P007-25. SHIPPED TO ALLIED SIGNAL / NJ 8-SEP-99
MOD 810; MOD 598	BHB	G025A-03	TRANSISTOR	JANS2NS2222A	1	EA	ALLIED/NJ	30-Jun-99	GFE FROM P007-23. SHIPPED TO ALLIED SIGNAL / NJ 8-SEP-99
MOD 760; MOD 591; CC0 504	BHB	G026A-01	MICROCIRCUIT, LM108A	M38510/10104SGA	1	EA	BOE/HUNB	30-Jun-99	NEW PT #; GFE FROM P007-24. SHIPPED TO KSC/PPS 3-FEB-00
	BHB	G029-01	MOTOR CONTROLLER, INTEGRATED	1F03158-515	4	EA	BOE/HUNB	11-Mar-99	SHIPPED TO ASTRO 28-OCT-99
	BHB	G029-02	MOTOR CONTROLLER, INTEGRATED	1F03158-505	2	EA	BOE/HUNB	11-Mar-99	1 EA SHIPPED DD250 AAA0006 TO ASTRO 20-OCT-99; 1 EA SHIPPED 30-NOV-99
	BHB	G029-03	MICROCONICAL FITTING (3/4 INCH HOLE)	0006055-002	5	EA	BOE/HUNB	11-Mar-99	JSC FORM 290 # C9-099-002; SHIPPED TO ASTRO 8-SEP-99
MOD 783	BHB	G029-04	VIDEO SIGNAL CONVERTER (VSC) (TUS)	51617-3001-1	1	EA	BOE/HUNB	15-Sep-99	LON - 8A, DD1149

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
max 810	BHB	G029-06	MOTOR CONTROLLER, INTEGRATED	1F03158-515	2	EA	BOE/HUNB	29-Oct-99	1 EA DEL 12-NOV-99; 1 EA SHIPPED 30-NOV-99
MOD 810	BHB	G029-07	ATTRACTION PLATE	51617-3105-1	2	EA	BOE/HUNB	15-Jan-00	TAG # 364837; (VSC BRACKET - 2 EA) REPLACES G029-05. REC'D PALMDALE 9-DEC-99
MOD 810	BHB	G029-08	FLOATING INSERT	51612-2671-1	1	EA	BOE/HUNB	15-Jan-00	TAG # 364837 (2 EA); REPLACES G029-05. REC'D PALMDALE 9-DEC-99
MOD 892; MOD 810	BHB	G029-09	THERMAL BLANKET ASSY	51817-3002-11	1	EA	BOE/HUNB	15-Jan-00	P/N CHANGED TO MATCH DD1149
MOD 530	BHB	G034-01	MICROCONICAL FITTING (3/4 INCH HOLE)	0006055-002	8	EA	BOE/HUNB	30-Jun-98	JSC FORM 290 # C9-099-002; SHIPPED TO BOE/HOUSTON 8-SEP-99
MOD 530	BHB	G034-02	HANDRAIL ASSSEMBLY, TOP MOUNTED- ISS(8.53")	SEG33106347-807	10	EA	BOE/HUNB	30-Jun-98	DD250 LMS0211. SHIPPED TO BOE/HOU ON 14-JAN-00
MOD 530	BHB	G034-03	HANDRAIL ASSEMBLY, TOP MOUNTED- ISS(25.53")	SEG33106347-801	1	EA	BOE/HUNB	30-Jun-98	DD250 LMS0211. SHIPPED TO BOE/HOU 14- JAN-00
MOD 530	BHB	G034-04	MICROCONICAL FITTING (3/4 INCH HOLE)	0006055-002	2	EA	BOE/HUNB	30-Jun-98	JSC FORM 290 # C9-099-002; SHIPPED TO BOE/HOUSTON 8-SEP-99
MOD 530	BHB	G034-05	HANDRAIL ASSEMBLY, TOP MOUNTED	SEG33106347-805	1	EA	BOE/HUNB	30-Jun-98	DD250 LMS0211. SHIPPED TO BOE/HOU ON 14-JAN-00
MOD 530	BHB	G034-06	INTEGRATED MOTOR CONTROLLER	1F03158-1	2	EA	BOE/HUNB	30-Jun-98	SHIPPED TO AS/TEMPE 15-NOV-99.
MOD 1011; MOD 530	BHB	G034-07	ISO RELIEF VALVE	1F39986-511	3	EA	BOE/HUNB	31-Oct-99	GFE FROM PIO 38-02. NEW P/N
MOD 1011; MOD 530	BHB	G034-08	BYPASS VALVE	1F40069-509	3	EA	BOE/HUNB	31-Oct-99	NEW P/N. GFE FROM PIO 38-03.
MOD 1011; MOD 530	BHB	G034-09	ECU	1F98802-501	8	EA	BOE/HUNB	31-Oct-99	NEW P/N. GFE FROM PIO 38-04.
MOD 1011; MOD 530	BHB	G034-10	ISOLATION VALVE	1F39991-507	2	EA	BOE/HUNB	31-Oct-99	GFE FROM PIO 38-05. NEW P/N; SHIP TO MORATTA
MOD 491	BHB	G036-01	MCKT HYBRID A/D INPUT	8259405-401	3	EA	HI/GLENDALE	6-Nov-97	DD1149 973383332; GFE DMSR CONTRACT; REC'D QTY = 2; SHORT QTY 1 EA
MOD 598; CCO 500	BHB	G038-01	MICROCONICAL FITTING (3/4 INCH)	0006055-002	12	EA	BOE/HUNB	1-Sep-99	JSC FORM 290 # C9-099-002; SHIPPED TO BOE/HOUSTON 8-SEP-99
MOD 598; CCO 500	BHB	G038-02	HANDRAILS ASSY, TOP-MOUNTED-ISS(22.625")	SEG33106347-805	12	EA	BOE/HUNB	1-Sep-99	DD250 LMS0211. SHIPPED TO BOE/HOU ON 14-JAN-00
MOD 708	BHB	G038A-01	DIODE	JANS2N2219A	1	EA	HAMSTD	30-Nov-00	DD1149 ISSA990342002; GFE FROM P007- 08; SHIPPED TO HAMSTD 7-FEB-00

INTERNATIONAL SPACE STATION PROGRAM J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 708	BHB	G038A-02	DIODE	JANS2N2222A	1	EA	HAMSTD	30-Nov-00	GFE FROM P007-09. SHIPPED TO HAMSTD 2-SEP-99
MOD 742; MOD 708	BHB	G038A-03	TRANSISTOR	JANS2N2905A	1	EA	HAMSTD	30-Nov-00	GFE FROM P007-12. SHIPPED TO HAMSTD 2-SEP-99
MOD 783; MOD 708	BHB	G038A-04	DIODE	JANS2N2907A	1	EA	BOE/HUNB	30-Nov-00	DD1149 ISSA992992002; GFE FROM P007-14. REC'D HS 29-OCT-99
MOD 708	BHB	G038A-05	MICROCIRCUIT	M38510/11201SCA	1	EA	HAMSTD	30-Nov-00	GFE FROM P007-25. SHIPPED TO HAMSTD 2-SEP-99
MOD 598; CCO 501	BHB	G039-01	MICROCONICAL FITTING (FLANGED)	0006056-002	4	EA	BOE/HUNB	31-Oct-98	JSC FORM 290 # C8-302-003; SHIPPED TO L3COM 2-NOV-98
MOD 835	BHB	G041-03	MICROCONICAL FITTING (3/4 INCH)	0006055-002	36	EA	LMVS	15-Sep-99	JSC FORM 290 # C9-103-001. SHIPPED TO LMVS 19-APR-99
MOD 835	BHB	G041-04	INTEGRATED MOTOR CONTROLLER ASSEMBLY	1F03158-515	1	EA	LMVS	16-Sep-99	DD250 AAA0004 20-SE-99; SHIPPED TO LMVS 12-OCT-99
MOD 862; MOD 835	BHB	G041-06	HANDHOLD ASSY, TOP MOUNTED, ISS (8.53")	SEG33106347-807	7	EA	LMVS	31-Oct-99	DD250 LMS0210 (-323); SHIPPED TO KSC/PPS 6-MAR-00 FROM LMVS
MOD 862; MOD 835	BHB	G041-07	HANDHOLD ASSY, TOP MOUNTED, ISS (8.53")	SEG33106347-807	7	EA	KSC/PPS	15-Aug-00	DD250 LMS0209(-323)
MOD 862; MOD 835	BHB	G041-08	HANDRAIL ASSY, TOP MOUNTED, ISS (25.53")	SEG33106347-801	1	EA	LMVS	31-Oct-99	DD250 LMS0210(-317);SHIPPED TO KSC/PPS 6-MAR-00 FROM LMVS
MOD 862; MOD 835	BHB	G041-09	HANDRAIL ASSY, TOP MOUNTED, ISS (25.53")	SEG33106347-801	1	EA	KSC/PPS	15-Aug-00	DD250 LMS0209(-317)
MOD 835	BHB	G041-10	INTEGRATED MOTOR CONTROLLER ASSEMBLY	1F03158-515	1	EA	LMVS	31-Dec-01	
MOD 835	BHB	G041-11	FLUID QUICK DISCONNECT (FQDC)	RE2800-05	4	EA	LMVS	1-Oct-99	DD1149 ISSA990342001; FROM PO11-05A; SHIPPED TO LMVS 7-FEB-00
MOD 928; MOD 835	BHB	G041-12	ACCUMULATOR	RSV809903-5	4	EA	LMVS	15-Dec-00	FROM PO11B-03/04. NOTE: DEL DATE ON 11B IS 15-FEB-01 AND 15-MAR-01
MOD 783; MOD 681	BHB	G043-01	TRANSISTOR	JANS2N2222A	1	EA	BOE/HUNB	31-Dec-98	DD1149 ISSA992992003; GFE FROM P007-09. SHIPPED TO BSTL 17-JAN-00
MOD 783; MOD 681	BHB	G043-02	TRANSISTOR	JANS2N2907A	1	EA	BOE/HUNB	31-Dec-98	DD1149 ISSA992992003; GFE FROM P007-14. SHIPPED TO BSTL 17-JAN-00
MOD 783; MOD 681	BHB	G043-03	MICROCIRCUIT	M38510/11201SCA	1	EA	BOE/HUNB	31-Dec-98	DD1149 ISSA99222992003; GFE FROM P007-26. SHIPPED TO BSTL 17-JAN-00
MOD 810; P293	BHB	G052-01	TETHER HOOK	SEG33108365-301	6	EA	BOE/HOUS	30-Sep-99	NEW P/N SEG33108365-302

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 810; P293	BHB	G052-02	HANDRAIL	SEG33106347-811	2	EA	BOE/HSV	1-Jul-99	
MOD 835; MOD 810; P293	BHB	G052-03	GRAPPLE FIXTURE	51450F1-3	2	EA	BOE/HSV	1-Jul-99	NEW P/N
MOD 1011; R812	BHB	G056-39	INTEGRATED MOTOR CONTROLLER ASSEMBLY	1F03158-515	2	EA	BHB	10-Jun-00	FOR UMA, ACTIVE. SHIPPED TO BHBSV 9-JUN-00
MOD 1011; R812	BHB	G056-40	INTEGRATED MOTOR CONTROLLER ASSEMBLY	1F03158-515	2	EA	ASTRO	29-Sep-00	FOR LTU. SHIPPED TO ASTRO 9-JUN-00
MOD 1011	BHB	G056-42	MICROCONICAL FITTING (3/4 INCH HOLE)	0006055-002	5	EA	ASTRO	10-Jun-00	JSC FORM 290 / C0-285-002. FOR LTU
MOD 1024	BHB	G059-01	FITTING, MICROCONICALS, FLANGED	SDG33113005-002	4	EA	HI/GLEND	30-Sep-00	
MOD 1171	HOU	G065-01	INNER FRAME ASSY	1510CU117-401	1	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-02	TOP SCRATCH OUTER FRAME	1510CU119-001	1	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-03	CAPTIVE BOLT	FTD7098-12-11E	9	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-04	PLATE ASSY	1510CU127-401	1	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-05	SPACER	1510CU221-001	19	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-06	WASHER	1510CU321-001	9	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-07	RETAINING RING	CA2210A-4R	9	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-08	WASHER CSK	DIN65209-03M	4	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-09	HI-LITE PIN 100 DEG HEAD	HST41PY-8-6	10	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-10	HI-LITE COLLAR	HST97MA-8	10	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-13	SEAL PLUG	NZGSP-22DP	10	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-14	BUMPER 1	1510CU111-001	1	EA	BOE/HSV	26-Mar-03	NHA 683-11576

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 1171	HOU	G065-15	BUMPER 2	1510CU113-001	1	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-16	BUMPER 3	1510CU115-001	2	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-17	RECEPTACLE, FLANGE MOUNT	NATC00T13N35PN	1	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-18	CONTACT	NZGC-C-22DPB	12	EA	BOE/HSV	26-Mar-03	NHA 683-11576
MOD 1171	HOU	G065-19	SPACER	1510CU221-001	26	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-20	CAPTIVE BOLT	FTD7098-12-06E	8	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-21	WASHER	1510CU321-001	8	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-22	T-HANDLE BRACKET	1510CU323-001	2	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-23	BUMPER 1	1520CU311-001	2	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-24	SIDE DEBRIS INNER FRAME	1520CU313-001	1	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-25	SIDE DEBRIS OUTER FRAME	1520CU315-001	1	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-26	BUMPER 2	1520CU317-001	1	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-27	RETAINING RING	CA2210A-4R	8	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-28	HI-LITE PIN 100 DEG HEAD	HST41PY-8-6	14	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-29	HI-LITE PIN 100 DEG HEAD	HST41P-8-8	4	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-30	HI-LITE COLLAR	HST97MA-8	18	EA	BOE/HSV	2-Jul-03	NHA 683-11584
MOD 1171	HOU	G065-31	WASHER	1510CU321-001	18	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-32	BUMPER 1	1520CU111-001	19	EA	BOE/HSV	15-Apr-03	NHA 683-11577

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 1171	HOU	G065-33	BUMPER 2	1520CU113-001	20	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-34	BUMPER 3	1520CU115-001	21	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-35	INNER FRAME ASSY	1520CU117-401	1	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-36	SIDE SCRATCH OUTER FRAME	1520CU119-001	1	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-37	RETAINING RING	CA2210A-4R	8	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-38	WASHER CSK	DIN65209-03M	4	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-39	HI-LITE PIN 100 DEG HEAD	HST41PY-8-6	12	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-40	HI-LITE COLLAR	HST97MA-8	12	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-43	CAPTIVE BOLT	FTD7098-12-11E	8	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-44	PLATE ASSY	1510CU127-401	1	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-45	SPACER	1510CU221-001	20	EA	BOE/HSV	15-Apr-03	NHA 683-11577
MOD 1171	HOU	G065-46	SEAL PLUG	NZGSP-22DP	10	EA	BOE/HSV	20-Jan-03	NHA 683-11577
MOD 1171	HOU	G065-47	RECEPTACLE, FLANGE MOUNT	NATC00T13N35PN	1	EA	BOE/HSV	20-Jan-03	NHA 683-11577
MOD 1171	HOU	G065-48	CONTACT	NZGC-C-22DPB	12	EA	BOE/HSV	20-Jan-03	NHA 683-11577
MOD 1171	HOU	G065-49	BUMPER 1	1510CU315-001	2	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-50	BUMPER 2	1510CU317-001	1	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-51	CAPTIVE BOLT	FT7098-12-06E	8	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-52	WASHER	1510CU321-001	8	EA	BOE/HSV	20-Jan-03	NHA 683-11583

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 1171	HOU	G065-53	T-HANDLE BRACKET	1510CU323-001	2	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-57	RETAINING RING	CA2210A-4R	8	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-55	HI-LITE PIN 100 DEG HEAD	HST41PY-8-6	14	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-56	HI-LITE PIN 100 DEG HEAD	HST41PY-8-8	4	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-57	HI-LITE COLLAR	HST97MA-8	18	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-58	SPACER	1510CU221-001	26	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-59	FRAME, INNER	1510CU311-001	1	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-60	FRAME, OUTER	1510CU313-001	1	EA	BOE/HSV	20-Jan-03	NHA 683-11583
MOD 1171	HOU	G065-61	3 MM ID HELICAL INSERT	LN9499-01045	8	EA	BOE/HSV	26-Mar-03	NHA 683-11576-1
MOD 1171	HOU	G065-62	3 MM ID HELICAL INSERT	LN9499-01045	8	EA	BOE/HSV	15-Apr-03	NHA 683--11577-1
MOD 1171	HOU	G065-63	DECAL	683-11432-1	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-64	DECAL	683-11432-2	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-65	DECAL	683-11432-3	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-66	DECAL	683-11432-4	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-67	DECAL	683-11432-5	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-68	DECAL	683-11432-6	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-69	DECAL	683-11432-7	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-70	DECAL	683-11432-8	5	EA	BOE/HSV	1/20/2003	

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
MOD 1171	HOU	G065-71	DECAL	683-11432-9	1	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-72	DECAL	683-11432-41	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-73	DECAL	683-11432-42	5	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-74	DECAL	683-11432-61	1	EA	BOE/HSV	1/20/2003	
MOD 1171	HOU	G065-75	TOP SCRATCH PANE	683-11561-1	1	EA	BOE/HSV	1/6/2003	STA WINDOW ASSY (SN 000001)
MOD 1171	HOU	G065-76	SIDE SCRATCH PANE	683-11562-1	1	EA	BOE/HSV	1/6/2003	STA WINDOW ASSY (SN 000001)
MOD 1171	HOU	G065-77	TOP DEBRIS PANE	683-11587-2	1	EA	BOE/HSV	1/6/2003	STA WINDOW ASSY (SN 0001)
MOD 1171	HOU	G065-78	TOP PRESSURE PANE	683-12137-1	1	EA	BOE/HSV	1/6/2003	STA PANE (SN 0004)
MOD 1171	HOU	G065-79	SIDE PRESSURE PANE	683-12156-1	1	EA	BOE/HSV	1/6/2003	STA PANE (SN 0003)
MOD 1171	HOU	G065-80	SIDE PRESSURE PANE	683-12156-2	1	EA	BOE/HSV	1/6/2003	STA PANE (SN 0009)
MOD 1171	HOU	G065-81	SCRATCH PANE ASSEMBLY (LAB)	683-11563-2	1	EA	BOE/HSV	1/6/2003	P028-01 OR SSCN 2199
MOD 1171	HOU	G065-82	PRESSURE PANE ASSEMBLY (LAB)	683-11445-3	1	EA	BOE/HSV	1/6/2003	
MOD 1171	HOU	G065-83	DEBRIS PANE ASSEMBLY (LAB)	683-11446-3	1	EA	BOE/HSV	1/6/2003	
	HOU	G079-01	SPACER	1510CU221-001	26	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-02	CAPTIVE BOLT	FTD7098-12-05E	8	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-03	WASHER	1510CU321-001	8	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-04	T-HANDLE BRACKET	1510CU323-001	2	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-05	BUMPER 1	1520CU311-001	2	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1

INTERNATIONAL SPACE STATION PROGRAM J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
	HOU	G079-06	SIDE DEBRIS INNER FRAME	1520CU313-001	1	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-07	SIDE DEBRIS OUTER FRAME	1520CU315-001	1	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-07A	STRIP, HOOK ATTACHMENT	683-11586-3	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07B	STRIP, HOOK ATTACHMENT	683-11586-4	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07C	STRIP, HOOK ATTACHMENT	683-11586-5	2	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07D	DECAL	683-11432-1	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07E	DECAL	683-11432-2	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07F	DECAL	683-11432-3	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07G	DECAL	683-11432-4	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07H	DECAL	683-11432-5	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07I	DECAL	683-11432-6	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07J	DECAL	683-11432-7	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07K	DECAL	683-11432-8	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07L	DECAL	683-11432-41	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-07M	DECAL	683-11432-42	1	EA	BOE/HSV	1-Nov-03	INSTALLED HDWR
	HOU	G079-08	BUMPER 2	1520CU317-001	1	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-09	RETAINING RING	FT1761-12P	8	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-10	HI-LITE PIN 100 DEG HEAD	HST41PY-8-6	14	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1

INTERNATIONAL SPACE STATION PROGRAM

J-9 GOVERNMENT FURNISHED EQUIPMENT FOR PIOs

NAS15-10000
MOD 1220 (S/A)

CHANGE NUMBER	RESP SITE	UNIQUE ID NO.	NOMENCLATURE	PART NUMBER	QTY	UNIT	DEST'N	DELIVERY DATE	REMARKS
	HOU	G079-11	HI-LITE PIN 100 DEG HEAD	HST41PY-8-8	4	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-12	HI-LITE COLLAR	HST97MA-8	18	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-13	PANE, DEBRIS, SIDE WINDOW - CUPOLA	683-11588-2	1	EA	BOE/HSV	1-Nov-03	NHA 683-11584-1
	HOU	G079-14	WINDOW PANE, HATCH	683-13033-1	1	EA	BOE/HSV	1-Nov-03	KIT 683-61498-1

SECTION DELETED WITH MODIFICATION 992

Attachment J-11
Common Hardware

ATTACHMENT J-11

COMMON HARDWARE

INTERNATIONAL		ESTIMATED
PARTNER	NOMENCLATURE	COST
NASDA	Audio Terminal Units	\$1,144,437
NASDA	Avionics Air Assembly (AAA)	\$405,694
NASDA	Caution & Warning (C&W) Panel Assembly	\$77,000
NASDA	Common Berthing Mechanism (CBM) Test Article Kit (Active and Passive)	\$766,742
NASDA	DC-to-DC (DDCU) Converter Unit	\$499,616
NASDA	Experiment Logistics Module/Pressurized Section (ELM/PS) CBM	\$577,803
NASDA	G1138 Simulator Part 1	\$275,789
NASDA	G1138 Simulator Part 2	\$490,953
NASDA	Hatch	\$372,906
NASDA	Hatch Covers	incl. in hatch cost
NASDA	Hatch Mounted Berthing Visual Cue	obsolete
NASDA	Hatch Tracks	incl. in hatch cost
NASDA	1G Installation Kit for Hatch	\$106,784
NASDA	Pressurized Module (PM) CBM (Active and Passive)	\$4,004,030
NASDA	Smoke Sensors	\$121,799
NASDA	Waste Gas Quick Disconnect (QD) - (Vacuum Exhaust Disconnects)	\$2,515
ESA	10-Watt Fans	obsolete
ESA	1200-Watt Fans	obsolete
ESA	Audio Terminal Units	\$1,144,437
ESA	C&W Panel Assembly	\$116,500
ESA	CBM (Passive)	\$416,000
ESA	CBM Test Article Kit (Passive)	\$171,238
ESA	DDCU and Converter	\$499,616

ESA	G1138 Simulator Part 1	\$275,789
ESA	G1138 Simulator Part 2	\$490,953
ESA	Hatch	\$325,881
ESA	Hatch Covers	\$253,000
ESA	Hatch Mounted Berthing Visual Cue	obsolete
ESA	Hatch Tracks	included in Hatch costs
ESA	1G Installation Kit for Hatch	\$59,434
ESA	Smoke Sensors	\$121,799
ASI	CBM Pads & Protective Covers	\$51,816
ASI	CBM (Passive Half)	\$416,000
ASI	CBM (Active Half Simulation) (G1138 Part 2)	\$441,000
ASI	CBM Seals	\$84,000
ASI	CBM Drilling Template	\$17,000
ASI (Alenia)	OH1-01248 Hatch Operations Kit	\$34,000
ASI (Alenia)	Hatch Installation Fixture	\$106,784
ASI (Alenia)	Hatch Pads & Covers	\$46,754
ASI (Alenia)	GH1-01256 Hatch Restraint Fixture	\$2,000
ASI (Alenia)	Hatch Pads & Covers	\$46,754
ASI (Alenia)	GH1-31256 Hatch Restraint Fixture	\$8,179
ASI (Alenia)	Hatch Seals	incl. in hatch cost
ASI (Alenia)	Hatch	\$253,000

Attachment J-12

International Partners - Provided Property & Data

Section I	IP Government Furnished Equipment
Section II	NASDA/JAXA Furnished Data
Section III	ASI Furnished Data
Section IV	CSA Furnished Data
Section V	RSA Furnished Data
Section VI	ESA Furnished Data

25-Jun-2007

Revision No. 11

Section I
INTERNATIONAL SPACE STATION PROGRAM
J-12 GOVERNMENT FURNISHED EQUIPMENT (GFE) -
INTERNATIONAL PARTNER SOURCED - REVISION 10

NAS 15-10000
MOD 1440

CHANGE NUMBER	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	REMARKS
	000093	MPLM CSCI (FQT)	1	EA	FLT	PRIM/MBFH	
CCM263	000094	MPLM CSCI (END-ITEM)	1	EA	FLT	PRIM/MBFH	CHANGED DATE
CCM 232	000102	4-PIN PLUG/JACK (INLINE)	5	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 232	000104	50-PIN BULKHEAD (PLUG-BULKHEAD-PLUG)	1	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 232	000112	DOCKING ADAPTER CONNECTORS (SM TO FGB)	2	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 232	000113	4-PIN PLUG/JACK (INLINE)	5	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 232	000114	4-PIN PLUG	2	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 232	000116	50-PIN BULKHEAD (PLUG-BULKHEAD-PLUG)	3	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 232	000118	TEMPORARY TERMINATOR UNITS (KCP)(KCP1)	1	EA	FLT	PRIME	ADD (REV A)/ CHANGE DATE (REV B)
CCM 232	000120	DOCKING ADAPTER CONNECTORS (FGB TO PMA 1)	4	EA	FLT	PRIME	ADD (REV A)/ CHANGE QUANTITY AND DATE (REV B)
CCM 210	000140	OPERATIONS CONTROL S/W (OCS)	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000141	ARM HOST S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000142	CANADIAN RPCM S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000143	JOINT CONTROL S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000144	LEE CONTROL S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000145	SSRMS ARM CONTROL S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210B	000148	AVU CONTROL S/W CSCI	1	EA	FLT	CSAP	
CCM 210	000149	MBS CONTROL UNIT S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000150	POA CONTROL S/W CSCI	1	EA	FLT	CSAP	ADD PER CCM 210
CCM 210	000151	OPERTIONS CONTROL S/W (OCS)	1	EA	FLT	CSAP	FINAL W/BUILD 3 ADD PER CCM 210
CCM 172	000160	FGB CSCI (FINAL)	1	EA	FLT	PRIME/MBF	Add
CCM 172	000161	MPLM MDM FLIGHT SOFTWARE (FQT)	1	EA	FLT	PRIME/MBF	Add
CCM 172	000162	MPLM SIMULATION PACKAGE (FINAL)	1	EA	SIM	PRIME/MBF	Add
CCM 172	000163	MPLM SIMULATION PACKAGE (FQT)	1	EA	SIM	PRIME/MBF	Add
CCM 172	000164	MPLM SIMULATION PACKAGE (TRR)	1	EA	SIM	PRIME/MBF	Add
CCM 172	000165	MPLM SIMULATION PACKAGE (INTERIM)	1	EA	SIM	PRIME/MBF	Add
CCM 287	105156	APAS DOCKING MECHANISM (ACTIVE)	1	EA	FLT	MDAC/HUNB	DELIVERED CHANGED DATE
CCM 287	105159	APAS DOCKING MECHANISM (PASSIVE)	1	EA	FLT	MDAC/HUNB	DELIVERED CHANGED DATE
CCM 287	105163	APAS DOCKING MECHANISM (PASSIVE)	1	EA	FLT	MDAC/HUNB	CHANGED DATE
	105215	STRUCTURAL MODELS	1	EA	S/W	MDAC/HUNB	
CCM 263	105217	APAS DRILL PLATE TOOL	1	EA	GSE	MDAC/HUNB	REC'D 9/16/96
CCM 064	105258	APAS MATING CONNECTOR PIGTAILS (PMA-2 PASSIVE SET)	1	SET	FLT	MDAC/HunB	
CCM 263	105433	AVIONICS SIMULATOR (JEM PWR LOAD SIM)	1	EA	FEU	MDAC/HunB	

Section I
INTERNATIONAL SPACE STATION PROGRAM
J-12 GOVERNMENT FURNISHED EQUIPMENT (GFE) -
INTERNATIONAL PARTNER SOURCED - REVISION 10

NAS 15-10000
MOD 1440

CHANGE NUMBER	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	REMARKS
	105434	AVIONICS SIMULATOR (COLUMBUS PWR LOAD SIM)	1	EA	FEU	MDAC/HunB	
CCM 263	105435	AVIONICS SIMULATOR (MPLM PWR LOAD SIM)	1	EA	GSE	MDAC/HunB	
CCM 287	105444	APAS HANDLING/INSTALLATION EQUIPMENT	1	EA	GSE	MDAC/HunB	
CCM 172	105536	ESA DATA BASE TOOL SET D0	1	EA	GSE	MDAC/SVF	Changed destination from PRIM/MBFH
CCM 172	105537	ESA DATA BASE TOOL SET D1	1	EA	GSE	MDAC/SVF	Changed destination from PRIM/MBFH
CCM 287	105538	ESA DATA BASE TOOL SET D2	1	EA	GSE	MDAC/SVF	Changed destination from PRIM/MBFH
CCM 172	105539	ESA DATA BASE TOOL SET D3	1	EA	GSE	MDAC/SVF	Changed destination from PRIM/MBFH
	105543	PDGF LB RT SIM (OLD #000071)	1	EA	SIM	MDAC/SVFFH	
CCM 172	105550	JEM CONTROL PROCESSOR	1	EA	FLT	MDAC/SVFFH	Change Replaced ID no. and destination. See 000058. Also changed nomenclature and date per CCM 172
CCM 172	105552	JEM CONTROL PROCESSOR	1	EA	FEU	MDAC/SVFFH	Change Replaced ID no. and destination. See 000059
CCM 172	105556	ATV PROCESSOR WITH FLIGHT S/W	1	EA	FEU	MDAC/SVFFH	Change Replaced ID no. and destination. See 000060. Also changed nomenclature per CCM 172
	105557	MBS SIM (OLD #000061)	1	EA	SIM	MDAC/SVFFH	
CCM 172	105562	ATV SIM (TO DRIVE ATV COMP)	1	EA	SIM	MDAC/SVFFH	Change Replaced ID no. and destination. See 000063. Also changed nomenclature and fdly. per CCM 172
CCM 172	105564	SIM OF H/W CONTROLLED BY JEM CONTROL PROCESSOR)	1	EA	SIM	MDAC/SVFFH	Change Replaced ID no. and destination. See 000064. Also changed nomenclature and date
CCM 172	105566	SM CENTRAL COMPUTER SIM S/W (TRR) (5A-9A)	1	EA	SIM	MDAC/SVFFH	Change Replaced ID no. and destination. See 000075. Also changed nomenclature and date.
CCM 172	105568	SM CC FLIGHT SOFTWARE (TRR) (5A-9A)	1	EA	FLT	MDAC/SVFFH	Change Replaced ID no. and destination. See 000077. Also changed nomenclature and date per CCM 172
	105576	SSRMS SIM (OLD #000079)	1	EA	SIM	MDAC/SVFFH	
CCM 100	105669	VIDEO SIGNAL CONVERTER (VSC)	1	EA	FEU	MDAC/HunB	
CCM 100	105670	VIDEO SIGNAL CONVERTER (VSC)	2	EA	FLT	MDAC/HunB	
CCM 172	105687	FGB SIMULATION PACKAGE (FQT)	1	EA	SIM	PRIM/SVF	Change Changed nomenclature and date per CCM 172
CCM 064	105694	APAS MATING CONNECTOR PIGTAIL (1 ACTIVE SET)	1	SET	FLT	MDAC/HunB	
CCM 058	105697	CGS V2.0 (BUILD 0)	1	EA	GSE	MDAC/HunB	
CCM 058	105698	CGS V2.1 (BUILD 1)	1	EA	GSE	MDAC/HunB	
CCM 263	105699	CGS V2.2 (BUILD 2)	1	EA	GSE	MDAC/HunB	
CCM 263	105700	CGS V3 (BUILD 3)	1	EA	GSE	MDAC/HunB	
CCM 100	105716	VIDEO SIGNAL CONVERTER MTG HARDWARE KIT	3	EA	FLT	MDAC/HunB	
CCM 172	105722	APM LAPTOP FOR APM ACTIVATION	1	EA	FLT	MDAC/SVF	Change Replaced ID no. and destination. See 000066
CCM 172	105723	APM VTC WITH SW	1	EA	FEU	MDAC/SVF	Change Replaced ID no. and destination. See 000067. Also changed nomenclature per CCM 172
CCM 172	105724	APM MMC WITH SW	1	EA	FEU	MDAC/SVF	Change Replaced ID no. and destination. See 000068. Changed nomenclature per CCM 172
CCM 172	105725	APM SIM TO DRIVE VTC	1	EA	SIM	MDAC/SVF	Change Replaced ID no. and destination. See 000069. Also changed nomenclature and fdly per CCM 172
CCM 172	105726	APM SIM TO DRIVE MMC	1	EA	SIM	MDAC/SVF	Change Replaced ID no. and destination. See 000070. Also changed nomenclature and fdly per CCM 172
CCM 172	105727	SM GN&C/TC SIM S/W (TRR) (5A-9A)	1	EA	SIM	MDAC/SVF	Change Replaced ID no. and destination. See 000080. Also changed nomenclature and date per CCM 172
CCM 172	105729	SM GN&C/TC S/W (TRR) (5A-9A)	1	EA	FLT	MDAC/SVF	Change Replaced ID no. and destination. See 000082. Also changed nomenclature and date per CCM 172.

Section I
INTERNATIONAL SPACE STATION PROGRAM
J-12 GOVERNMENT FURNISHED EQUIPMENT (GFE) -
INTERNATIONAL PARTNER SOURCED - REVISION 10

NAS 15-10000
MOD 1440

CHANGE NUMBER	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	REMARKS
CCM 172	105730	SM CONTROL POST FLIGHT SOFTWARE (TRR) (5A-9A)	1	EA	FLT	MDAC/SVF	Change Replaced ID no. and destination. See 000083. Also changed nomenclature and date per CCM 172
CCM 172	105732	DMS-R CABLES (SM)	1	SET	GSE	PRIM/SVF	CHANGE ID # (CCM 172) AND NOMENCLATURE. Also changed nomenclature, unit, fdlt and date per CCM 172
CCM 119	105740	DDCU	1	EA	ENG	MDAC/HunB	
CCM 119	105741	MOBILE TRANSPORTER (MT)	1	EA	FLT	MDAC/HunB	
CCM 119	105742	MT SUPPORT FIXTURE	1	EA	TSE	MDAC/HunB	
CCM 119	105743	MT/MBS TOOLING PLATE	1	EA	FEQ	MDAC/HunB	
CCM 172	105754	PAYLOAD GENERAL SUPPORT COMP.	2	EA	GSE	MDAC/SVF	ADD/CHANGE Changed nomenclature and quantity per CCM 172
CCM 172	105755	MPLM SIM (TO DRIVE MPLM MDM) (FINAL)	1	EA	SIM	MDAC/SVF	Change Replace ID No. and destination. See 000092
CCM 287	105763	RUSSIAN DOCKING TEST PLATE	1	EA	GSE	MDAC/HunB	
CCM 172	105765	APM SITE WITH TEST EXEC, NODE, AIM, NODE, HCI PC AND SERVER	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105768	JEM SIMULATOR KIT	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105769	JCP SIMULATOR DISPLAY/KEYBOARD	2	EA	GSE	MDAC/SFVH	ADD
CCM 172	105770	DIU III FEU	1	EA	FEU	MDAC/SFVH	ADD
CCM 172	105771	DIU SIMULATION SOFTWARE	1	EA	SIM	MDAC/SFVH	ADD
CCM 172	105772	DIU FLIGHT SOFTWARE	1	EA	FLT	MDAC/SFVH	ADD
CCM 172	105773	DIU SIMULATOR KIT	1	EA	GSE	MDAC/SFVH	ADD
CCM 172	105774	DIU SIMULATOR DISPLAY/KEYBOARD	1	EA	GSE	MDAC/SFVH	ADD
CCM-210B	105921	AVU SIMULATION	4	EA	SIM	CSAP	ADD PER CCM 210
CCM 210	105922	SMDS SSRMS SIMULATION	1	EA	SIM	CSAP	ADD PER CCM 210
CCM 210	105923	SMDS MBS SIMULATION	1	EA	SIM	CSAP	ADD PER CCM 210
CCM 064	105928	APAS MATING CONNECTOR PIGTAIL (PMA-3 PASSIVE SET)	1	SET	FLT	MDAC/HunB	
CCM 172	105938	FGB SIMULATION PACKAGE (TRR)	1	EA	SIM	MDAC/SVFH	ADD
CCM 172	105939	FGB SIMULATION PACKAGE (EE)	1	EA	SIM	MDAC/SVFH	ADD
CCM 172	105940	SM CENTRAL COMPUTER SIM S/W (TRR) (1R-4A)	1	EA	SIM	MDAC/SVFH	ADD
CCM 172	105941	SM CENTRAL COMPUTER SIM S/W (EE) (1R-4A)	1	EA	SIM	MDAC/SVFH	ADD
CCM 172	105942	SM CC FLIGHT SOFTWARE (TRR) (1R-4A)	1	EA	FQT	MDAC/SVFH	ADD
CCM 172	105943	SM CC FLIGHT SOFTWARE (EE) (1R-4A)	1	EA	DEV	MDAC/SVFH	ADD
CCM 172	105944	SM GN&C/TC SIM S/W (TRR) (1R-4A)	1	EA	SIM	MDAC/SVFH	ADD
CCM 172	105945	SM GN&C/TC SIM S/W (EE) (1R-4A)	1	EA	SIM	MDAC/SVFH	ADD
CCM 172	105946	SM GN&C TC S/W (TRR) (1R-4A)	1	EA	FQT	MDAC/SVFH	ADD
CCM 172	105947	SM GN&C TC S/W (EE) (1R-4A)	1	EA	DEV	MDAC/SVFH	ADD
CCM 172	105948	SM CONTROL POST FLIGHT S/W (TRR) (1R-4A)	1	EA	GQT	MDAC/SVFH	ADD
CCM 172	105949	SM CONTROL POST FLIGHT SW (EE) (1R-4A)	1	EA	DEV	MDAC/SVFH	ADD

Section I
INTERNATIONAL SPACE STATION PROGRAM
J-12 GOVERNMENT FURNISHED EQUIPMENT (GFE) -
INTERNATIONAL PARTNER SOURCED - REVISION 10

NAS 15-10000
MOD 1440

CHANGE NUMBER	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	REMARKS
CCM 172	105950	DMS-R FCR	2	EA	DEV	MDAC/SVFH	ADD
CCM 172	105951	DMS-R SYSTEM S/W (FINAL)	1	EA	FLT	MDAC/SVFH	ADD
CCM 172	105952	DMS-R SYSTEM S/W (FQT)	1	EA	FQT	MDAC/SVFH	ADD
CCM 172	105953	DMS-R SYSTEM S/W (EE)	1	EA	DEV	MDAC/SVFH	ADD
CCM 172	105954	DMS-R FTC TE (H/W & S/W)	2	EA	DEV	MDAC/SVFH	ADD
CCM 172	105956	DMS-R FCR (EM API CARDS UPGRADED)	2	EA	ENG	MDAC/SVFH	ADD
CCM 172	105957	DMS-R FCR (DM) LOAN FOR TEST)	2	EA	ENG	MDAC/SVFH	LOAN TO 9/1/97
CCM 172	105959	DMS-R FCR (DM) (LOAN FOR TEST)	2	EA	ENG	MDAC/SVFH	LOAN TO 7/1/98
CCM 172	105961	DMS-R SITE S/W (FINAL)	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105962	DMS-R SITE S/W (FQT)	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105964	DMS-R SITE (SM TEST S/W) (FINAL)	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105965	DMS-R SITE (SM TEST S/W) (FQT)	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105966	DMS-R SITE (SM TEST S/W) (INTERIM)	1	EA	GSE	MDAC/SVFH	ADD
CCM 172	105967	SM MISSION DATABASE (FINAL)	1	EA	FLT	MDAC/SVFH	ADD
CCM 172	105968	SM MISSION DATABASE (FQT)	1	EA	FQT	MDAC/SVFH	ADD
CCM 172	105969	SM MISSION DATABASE (INTERIM)	1	EA	DEV	MDAC/SVFH	ADD
CCM 056	205220	SECONDARY/TERTIARY POWER DISTRIBUTION CABLES	1	SE	ENG	RDYN/CAPK	
	205223	SPDA/TPDA	1	SE	ENG	RDYN/CAPK	
CCM 056	205224	SPDA/TPDA REPRESENTATIVE LOADS	1	SE	TSE	RDYN/CAPK	
	205254	AMERICAN-TO-RUSSIAN CONVERTER UNIT (ARCU) KhSC	2	EA	ENG	RDYN/MDAC	
CCM 056	205681	SECONDARY/TERTIARY POWER DISTRIBUTION CABLES	1	SE	ENG	RDYN/CAPK	
	205682	SPDA/TPDA	1	SE	ENG	RDYN/CAPK	
CCM 056	205683	SPDA/TPDA REPRESENTATIVE LOADS	1	SE	TSE	RDYN/CAPK	
	205757	AMERICAN-TO-RUSSIAN CONVERTER UNIT (ARCU) NPO-E	4	EA	ENG	RDYN/MDAC	
	205758	MOUNT FIXTURE (ARCU)	4	EA	ENG	RDYN/MDAC	
	205759	CABLES/CONNECTORS (ARCU)	4	EA	FEU	RDYN/MDAC	
	205760	RUSSIAN-TO-AMERICAN CONVERTER UNIT (RACU)	2	EA	ENG	RDYN/MDAC	
	205761	MOUNT FIXTURE (RACU)	2	EA	ENG	RDYN/MDAC	
	205762	CABLES/CONNECTORS (RACU)	2	EA	FEU	RDYN/MDAC	
	205763	MOUNT FIXTURES (ARCU)	2	EA	ENG	RDYN/MDAC	
	205764	CABLES/CONNECTORS (ARCU)	2	EA	FEU	RDYN/MDAC	
CCM 119	205792	DDCU COOLING SYSTEM	1	EA	TSE	RDYN/CAPK	
CCM 287	205902	POWER DISTRIBUTION UNIT (INCLUDING CABLE AND CONNECTORS)	1	EA	FEU	RDYN/CAP	LOAN TO 4/25/97

Section I
INTERNATIONAL SPACE STATION PROGRAM
J-12 GOVERNMENT FURNISHED EQUIPMENT (GFE) -
INTERNATIONAL PARTNER SOURCED - REVISION 10

NAS 15-10000
MOD 1440

CHANGE NUMBER	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	DEST'N	REMARKS
CCM 287	205903	POWER DISTRIBUTION BOX (INCLUDING CABLE AND CONNECTORS)	1	EA	FEU	RDYN/CAP	LOAN TO 4/25/96
CCM 287	306083	MSS TEST SET (LAB); SYSTEM TEST CENTER (STC)	1	EA	FEU	BMSD/HSVE	
CCM 210	306134	ARTIFICIAL VISION UNIT (AVU)	1	EA	FEU	BMSD/HSVE	CHANGED NOMENCLATURE/QTY/DATE
	306137	VIDEO SIGNAL CONVERTER (VSC) (LAB)	1	EA	FLT	BMSD/HSVE	
	306155	VIDEO SIGNAL CONVERTER (VSC) (HAB)	1	EA	FLT	BMSD/HSVE	
CCM 217	306188	DEPRESS PUMP ASSEMBLY	1	EA	FLT	BMSD/HSVE	NOMENCLATURE CHANGE
CCM 217	306206	DON/DOFF ASSEMBLY (ORLAN)	2	EA	FLT	BMSD/HSVE	NOMENCLATURE CHANGE
	306266	MPLM SIM (TO DRIVE MPLM MDM) (INTERIM)	1	EA	FEU	BMSD/HSVE	
	306267	MPLM CSCI (INTERIM)	1	EA	FLT	BMSD/HSVE	
CCM 263	306301	MPLM CSCI (FQT)	1	EA	FLT	BMSD/HSVE	
CCM 263	306302	MPLM CSCI (END-ITEM)	1	EA	FLT	BMSD/HSVE	
CCM 263	306303	MPLM SIM (TO DRIVE MPLM MDM) (FQT)	1	EA	SIM	BMSD/HSVE	
CCM 263	306304	MPLM SIM (TO DRIVE MPLM MDM (FINAL)	1	EA	FLT	BMSD/HSVE	
CCM 119	306336	SSRMS	1	EA	FLT	BMSD/HSVE	
CCM 119	306337	SSRMS STRONGBACKS	3	EA	FEU	BMSD/HSVE	
CCM 119	306338	SSRMS STRONGBACKS INTERCONNECT CABLE SET	1	EA	FEU	BMSD/HSVE	
CCM 119	306339	SSRMS LATCHING END EFFECTOR CONN. SAVER SET (LCSA)	2	SE	FEU	BMSD/HSVE	
CCM 119	306340	RWS/SSRMS INTERCONNECT TEST CABLE	1	EA	FEU	BMSD/HSVE	
CCM 119	306341	OCS TEST SOFTWARE	1	EA	FEU	BMSD/HSVE	
CCM 119	306342	PDGF/LEE I/F CABLE ASSEMBLY	1	EA	FEU	BMSD/HSVE	
CCM 119	306343	STC/SSRMS POWER CABLE ASSEMBLY	1	EA	FEU	BMSD/HSVE	
CCM 119	306345	ARTIFICIAL VISION TEST TARGET SET	1	EA	FEU	BMSD/HSVE	
CCM 119	306346	LDP VIDEO SIGNAL CONVERTER(VSC)	1	EA	FLT	BMSD/HSVE	
CCM 119	306347	LDP CABLE	1	EA	FLT	BMSD/HSVE	
CCM 119	306404	LAB PDGF RIGID UMBILICAL 1F75432	1	EA	FLT	BMSD/HSVE	
CCM 210B	306429	ARTIFICIAL VISION UNIT (AVU) WITH SOFTWARE	2	EA	FLT	CSAP	
CCM 210B	306432	AVU CONTROL S/W	4	EA	TSE	CSAP	TEST S/W ADD PER CCM 210
CCM 210	306545	OPERATIONS CONTROL S/W (OCS)	1	EA	TSE	CSAP	TEST S/W ADD PER CCM 210
CCM 287	306581	SPECIAL TEST EQUIPMENT WITH CABLES (RWS)	1	EA	TSE	CSAP	ADD PER CCM 210

CHANGE NUMBER	DEVELOPE INDIVID/OR	LP/S TEAM	BOEING ID NO.	NOMENCLATURE	QTY	UNIT	HDWE TYPE	FLT. NO.	DEST'N	ON DOCK DATE	RECVD. DATE(AF)	REMARKS
CCM 232	REILEY	LP/S-1	000103	4-PIN PLUG(CONNECTS TO UNIT)	24	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000105	19-PIN PLUG/JACK (JACK IS UNIT MOUNTED TYPE)	2	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000106	22-PIN PLUG/JACK (JACK IS UNIT MOUNTED TYPE)	12	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000107	32-PIN PLUG/JACK (JACK IS UNIT MOUNTED TYPE)	2	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000108	TBD-PIN PLUG/JACK (JACK IS UNIT MOUNTED TYPE)	6	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000109	TEMPORARY TERMINATOR UNITS (KCP)(A51)	1	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000110	TEMPORARY TERMINATOR UNITS (KCP)(A52)	1	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000111	TEMPORARY TERMINATOR UNITS (KCP)(A53)	1	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000115	4-PIN PLUG/JACK (JACK IS UNIT MOUNTED TYPE)	6	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000117	TBD-PIN PLU/JACK (JACK IS UNIT MOUNTED TYPE)	2	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)
CCM 232	REILEY	LP/S-1	000119	TEMPORARY TERMINATOR UNITS (KCP)(KCP2)	1	EA	FLT	0	PRIME	03/30/96	01/00/00	ADD (REV A)/ DELETE (REV B)

Data Provided pursuant to:

Agreement in Principle JEM Launch Offset, September 1997

Memorandum of Understanding Between the National Aeronautics and Space Administration of the United States of America and the Government of Japan Concerning Cooperation on the Civil International Space Station, February 1998

Multilateral International Agreement, January 1998

Agreement Between the National Aeronautics and Space Administration (NASA) and the National Space Development Agency of Japan (NASDA) on the Obligation and Processes of Reimbursement for Unique ISSP Launch Site Services Provided by NASA to NASDA for the Japanese Experiment Module, April 2003

Agreement Between the National Aeronautics and Space Administration (NASA) And the National Space Development Agency of Japan (NASDA) On Use of NASA's Common Spares Pool (CSP) To Support the Japanese Experiment Module (JEM) through Amendment 3, July 2004

Vehicles Covered:

HTV

Systems/Elements/Interfaces Covered:

JEM

CAM

NASDA/JAXA Contractors:

NEC

Toshiba

MHI

IP FURNISHED DATA LIST
SECTION III
ASI

NAS 15-10000
MOD 1440

Data Provided pursuant to:

Multilateral International Agreement, January 1998
Memorandum of Understanding Between The United States National
Aeronautics and Space Administration and the Italian Space Agency for the
Design, Development, Operation and Utilization of Three Mini Pressurized
Logistics Modules for the International Space Station, October 1997

Vehicles Covered:

ATV

Systems/Elements/Interfaces Covered:

MPLM
Node 2
Node 3
Cupola

ASI Contractors:

Alcatel Alenia

IP FURNISHED DATA LIST
SECTION IV
CSA

NAS 15-10000
MOD 1440

Data Provided pursuant to:

Multilateral International Agreement, January 1998
Memorandum of Understanding Between the National Aeronautics and Space Administration of the United States of America and the Canadian Space Agency Concerning Cooperation on the Civil International Space Station, January 1998
Arrangement Between the National Aeronautics and Space Administration of the United States of America and the Canadian Space Agency Regarding the Provision, by Canada, of a Special Purpose Dexterous Manipulator and Other Goods and Services Towards Fulfillment of its Common System Operations Responsibilities Within the Context of the International Space Station Program, January 1998
Arrangement Between the National Aeronautics and Space Administration of the United States of America and the Canadian Space Agency Regarding a Barter of International Space Station Supporting Services and Utilization, August 2001

Vehicles Covered:

ATV

Systems/Elements/Interfaces Covered:

APM
SPDM/Dextre
SSRMS

CSA Contractors:

MDA

Data Provided pursuant to:

Multilateral International Agreement, January 1998

Memorandum of Understanding Between the National Aeronautics and Space Administration of the United States of America and the Russian Space Agency Concerning Cooperation on the Civil International Space Station, January 1998

Protocol Including Terms, Conditions and Assumptions Summary Balance of Contributions and Obligations to International Space Station (ISS) and Resulting Rights of NASA and RSA to ISS Utilization Accommodations and Resources, and Flight Opportunities, June 1996

Addendum to the 1996 Balance of Contributions Protocol for Services to be Provided Through December 2005 and Crew Rescue Through April 2006, October 2004

Second Addendum to the Implementing Arrangement Entitled "Protocol Including Terms, Conditions and Assumptions, Summary Balance of Contribution and Obligations to International Space Station (ISS) and Resulting Rights of NASA and RSA to ISS Utilization Accommodations and Resources, and Flight Opportunities" Between the National Aeronautics and Space Administration of the United States of America and the Federal Space Agency of the Russian Federation, July 2006

Vehicles Covered:

Progress
Soyuz

Systems/Elements/Interfaces Covered:

FGB
Zarya
APDS
Zvezda
Vosdukh
Elektron
Pirs

RSA Contractors:

RSC Energia
S.P. Korolev

Data Provided pursuant to:

Memorandum of Understanding between the National Aeronautics and Space Administration of the United States of America and the European Space Agency Enabling Early Utilization Opportunities of the International Space Station, March 1997
Arrangement Between the National Aeronautics and Space Administration of the United States of America and the European Space Agency Regarding Shuttle Launch of Columbus Orbital Facility and its Offset by ESA Provisions of Goods and Services, October 1997
Multilateral International Agreement, January 1998
Memorandum of Understanding Between the National Aeronautics and Space Administration of the United States of America and the European Space Agency Concerning Cooperation on the Civil International Space Station, January 1998
Protocol Amending the Arrangement between the National Aeronautics and Space Administration of the United States of America and the European Space Agency Regarding Shuttle Launch of Columbus Orbital Facility add its Offset by ESA Provision of Goods and Services, August 2000
Amendment to the Arrangement Between the National Aeronautics and Space Administration of the United States of America and the European Space Agency Regarding Shuttle Launch of Columbus Orbital Facility and its Offset by ESA Provisions of Goods and Services (Amendment 2), July 2002
Arrangement between the National Aeronautics and Space Administration of the United States of America and the European Space Agency Concerning ESA's Provision of a Cupola in Exchange for NASA's Provision of Shuttle Launch and Return Services for Five External European Payloads, (date unknown)

Vehicles Covered:

ATV

Systems/Elements/Interfaces Covered:

MBS
SSRMS
SPDM
ZSR
Columbus

ESA Contractors:

EADS
Energia

Attachment J-13
Hazardous Material

DMS2224/TYI/CLW/GR5	FABRIC, CARBON, EPOXY PREIMPREGNATED IMPACT RESISTANT	3719
DMS2235/TYI/G40/C40.04	FOAM, SYNTACTIC CORE MATL EPOXY FOR SANDWICH PANELS	6236
DPM11002/.5	TAPE, P/S, TRANSPARENT, TEFLON	38
DPM11002/.75	TAPE, P/S, TRANSPARENT, TEFLON	38
DPM11002/1	TAPE, P/S, TRANSPARENT, TEFLON	38
DPM11002/1.5	TAPE, P/S, TRANSPARENT, TEFLON	38
DPM11002/2	TAPE, P/S, TRANSPARENT, TEFLON	38
DPM11002/3	TAPE, P/S, TRANSPARENT, TEFLON	38
DPM11005	ADHESIVE, FILM, HIGH TEMPERATURE EPOXY	5784
DPM11006	PRIMER, ADHESIVE HIGH TEMPERATURE EPOXY	4759
DPM11007	ADHESIVE, EPOXY PASE, ONE PART	2098
DPM11023	FOAM, POLYIMIDE, FLEXIBLE	337
DPM11036	PRIMER, SILANE	614
DPM11039/.125	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/.25	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/.375	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/.5	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/.625	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/.75	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/.875	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.125	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.25	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.375	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.5	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.625	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.75	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/1.875	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11039/2	SHEET, PLASTIC, ACETAL, 20% GLASS FILLED	1054
DPM11040/.25	FOAM, MELAMINE	6019
DPM11040/.5	FOAM, MELAMINE	6019
DPM11040/1	FOAM, MELAMINE	6019
DPM11040/1.5	FOAM, MELAMINE	6019

DPM11040/2	FOAM, MELAMINE	6019
DPM11040/2.5	FOAM, MELAMINE	6019
DPM11040/3	FOAM, MELAMINE	6019
DPM11041	FILM, POLYIMIDE, DOUBLE ALUMINIZED, PERFORATED, 3 MIL THICK	6642
DPM11042	FILM, POLYIMIDE, DOUBLE ALUMINIZED, PERFORATED, 3 MIL THICK	6804/3800
DPM11045/.031	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.047	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.0625	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.0945	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.125	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.156	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.1875	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.219	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.25	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.3125	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.375	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.438	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11045/.5	SHEET, LAMINATE, EPOXY/GLASS	2101
DPM11046/1	TAPE, P/S, CU/ACRYLIC, EMBOSSED	2099
DPM11047/1	TAPE, P/S ACRYLIC, TEFLON	2100
DPM11052/.25	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/.3125	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/.375	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/.5	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/.625	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/.75	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/1	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/1.25	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/1.5	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM11052/2.0	ROD, PLASTIC, POLY (AMIDE-IMIDE)	6037
DPM1053/.5	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM1053/.75	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM1053/1	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM1053/1.25	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM1053/1.5	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM1053/1.75	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM1053/2	PLASTIC, POLYSULFONE SHEET, WHITE PIGMENTED	INACTIVE
DPM11062	SEALANT, THREAD	7438
DPM11063	FABRIC, WOVEN CERAMIC	807

DPM11064	FABRIC, CARBON, RESIN PREIMPREGNATED	3719
DPM11065	FABRIC, ARAMID, EPOXY PREIMPREGNATED	6735/3719
DPM11067/.25	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/.375	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/.5	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/.625	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/.75	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/1.0	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/1.25	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067/1.50	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11067-1	ROD, POLYAMIDE-IMIDE, 30% GLASS FILLED	7000
DPM11068	BATTING, MODIFIED POLYAMIDE, FLAME RESISTANT	6755
DPM11069/1	WEBBING, TEXTILE, ARAMIDE	7527
DPM11072	NETTING, MODIFIED POLYAMIDE	6822
DPM11073/.062	CORD, LACING, PTFE	6753
DPM11076/130-150	FOAM, CHLOROPRENE	6722
DPM11076/15-25	FOAM, CHLOROPRENE, SAFLITE II	6722
DPM11076/30-40	FOAM, CHLOROPRENE, SAFLITE II	6722
DPM11076/45-55	FOAM, CHLOROPRENE, SAFLITE II	6722
DPM11076/55-65	FOAM, CHLOROPRENE, SAFLITE II	6722
DPM11077	POTTING COMPOUND, SILICONE RUBBER	6720/6719
DPM11079	FOIL, ALUMINUM PHOTSENSITIVE	7421
DPM11080	ADHESIVE, FILM, EPOXY, .08 POUNDS PER SQUARE FEET	654/6746
DPM11080-1	ADHESIVE FILM, EPOXY, .085 POUNDS PER SQUARE FEET	6220
DPM11080-2	ADHESIVE, FILM, EPOXY, .08 POUNDS PER SQUARE FOOT	654
DPM11081	COMPOUND, POTTING, HONEYCOMB REINFORCING	6781
DPM11081-1	COMPOUND, POTTING, HONEYCOMB REINFORCING	6783/6784
DPM11081-2	COMPOUND, EPOXY POTTING	4817
DPM11082/.125	FOAM, POLYETHYLENE, SHEET	7378
DPM11082/.25	FOAM, POLYETHYLENE, SHEET	7378
DPM11083/1 IN	FOAM, POLYETHYLENE, PLANK	7378
DPM11083/2	FOAM, POLYETHYLENE, PLANK	7378
	ADHESIVE, CORE SPLICING, .025	5786

DPM11085/.05	THICK	
DPM11094/.030	SHEET PRESSURE SENSITIVE, MAGNETIC	7055
DPM11094/.060	SHEET PRESSURE SENSITIVE, MAGNETIC	7055
DPM11097/.062	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11097/.092	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11097/.125	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11097/.188	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11097.25	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11097/.375	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11097/.5	RUBBER, SILICONE, EXPLANDED, MEDIUM, LOW COMPRESSION SET	7158
DPM11099	ADHESIVE, POLYURETHANE, HIGH	7218
DPM111104	SEALANT, FABRIC EDGE CARD.	7202
DPM1252	LUBRICANT, ANTI-SEIZE, HIGH	7987
DPM13028/2.5 OZ.	ADHESIVE, EPOXY, CRYOGENIC & ELEVATED TEMPERATURE	208/209
DPM13028/6 CC	ADHESIVE, EPOXY, CRYOGENIC & ELEVATED TEMPERATURE	208/209
DPM13030	ADHESIVE, SILICONE ELASTOMER	5918/6451
DPM13045/10ML	ADHESIVE, URETHANE ACRYLIC	6752
DPM13045/20ML	ADHESIVE, URETHANE ACRYLIC	6752
DPM1346	ADHESIVE, ACRYLIC	6743/60/6885/61/6886
DPM154-2	GAS, NITROGEN	1494/17
DPM1826-8	FABRIC, GLASS 1584, PHENOLIC	7385
DPM2058-4	COMPOUND, OPOXY, ALUMINUM	5510/6279
DPM2065-1	SOLVENT, CHLOROTHENE SM	1310/6723/1337/6085/6587
DPM2091	ADHESIVE, POLYSULFIDE	628/629
DPM2092	FILLER, COLLOIDAL SILICA	5526
DPM2101-1/3-8 MESH	DESICCANT, INDICATING TYPE	3434
DPM2292	SEALANT, POLYSULFIDE, CLASS B-2	2097
DPM2292-1	SEALANT, POLYSULFIDE, CLASS B-	7800-7801
DPM2292-2	SEALANT, POLYSULFIDE, CLASS A-2	7802/7803
DPM2292-5	SEALANT, POLYSULFIDE, CLASS B-2	5326
DPM2292-7	SEALANT, POLYSULFIDE-CLASS A-	7804/7805
DPM2419/.02	SHEET, LAMINATE	3778
DPM2419/.031	SHEET, LAMINATE	3778
DPM2419/.0625	SHEET, LAMINATE	3778
DPM2419/.092	SHEET, LAMINATE	3778
DPM2419/.102	SHEET, LAMINATE	3778

DPM2419/.125	SHEET, LAMINATE	3778
DPM2419/.19	SHEET, LAMINATE	3778
DPM2419/.25	SHEET, LAMINATE	3778
DPM2419/.5	SHEET, LAMINATE	3778
DPM2419/1.0	SHEET, LAMINATE	3778
DPM2479	ADHESIVE, FILM	INACTIVE/1572
DPM2531	SEALANT, SILICONE, RTV	952/953
DPM256-1	SEALANT, POLYSULFIDE	INACTIVE
DPM2584-1	PRIMER, THREAD SEALANT	7785
DPM2584-2	PRIMER, THREAD SEALANT	1107
DPM264NATURAL/26AWG	TUBE, TEFLON	6461
DPM2756-1	FABRIC, GLASS, PTFE COATED	332
DPM276-1/.25	TAPE, PTFE, THREAD SEALING	A0001
DPM2870	ADHESIVE, CERAMIC	1967/1968
DPM2939	COMPOUND, SILICONE RUBBER, CASTING, RTV	2140/912
DPM3020	ADHESIVE, OPOXY	243/244/295
DPM3087-3	MAT, GLASS FILAMENT	7283
DPM3098/1	FOAM, POLYETHYLENE, SHEET	336/7378
DPM3098/1.5	FOAM, POLYETHYLENE, SHEET	336/7378
DPM3098/1.75	FOAM, POLYETHYLENE, SHEET	336/7378
DPM3098/2	FOAM, POLYETHYLENE, SHEET	336/7378
DPM3098/2.25	FOAM, POLYETHYLENE, SHEET	336/7378
DPM3167	ADHESIVE, RUBBER, NEOPRENE	261
DPM3197	ADHESIVE, RUBBER	264
DPM3201	ADHESIVE, SILICONE, 1	5546/159
DPM3201-2	SEALANT, SILICONE, RED	161/357
DPM3202-1	PRIMER, ADHESIVE, SILICONE	162
DPM3392-1	PRIMER, ADHESIVE, SILICONE, BLUE	191
DPM3392-3	COATING, THERMAL BARRIER	1071/192
DPM3392-4	CURING AGENT, SILICONE PASTE	192
DPM3422	COMPOUND, EPOXY, EDGE FILLER	198/199
DPM348-1	LUBRICANT, GREASE, SILICONE	6204
DPM3484	ADHESIVE, QUICK SET	4803-7794
DPM3485	ADHESIVE, EPOXY<BULK>	208/209
DPM3485/10 GRAM	ADHESIVE, EPOXY	208/209
DPM3485/20 GRAM	ADHESIVE, EPOXY	208/109
DPM3494	RELEASE AGENT, FLUOROCARBON	7216/4310
DPM3574-1	ADHESIVE, OPOXY, STRAIN GAGE	219/220/221
DPM3574-3	ADHESIVE, EPOXY, STRAIN GAGE	222/2144/8027
DPM3683-1/2 WIDE	FILM, BAGGING & STOWING	7696
DPM3683-2	FILM, NYLON, ANTI-STATIC, TINTED	7696
DPM3688	PRIMER, ADHESIVE, SILOXANE	236/INACTIVE
DPM3688-1	PRIMER, STRUCTURAL BONDING	236
DPM3716-1-25M/.094	RUBBER, SILICONE SHEET	267
DPM3716-1-25M/.125	RUBBER, SILICONE SHEET	267
DPM3716-1-30/.062	RUBBER, SILICONE SHEET	267
DPM3716-1-30M/.062	RUBBER, SILICONE SHEET	267
DPM3716-1-50/.062	RUBBER, SILICONE SHEET	267

DPM3717/.010	RUBBER, FLUOROSILICONE	INACTIVE
DPM3734-2	ADHESIVE, FILM, MODIFIED EPOXY	268
DPM3771-2	INSULATION, EPOXY ABLATIVE	272/273/334
DPM379-1	TALC, POWDERED, ASBESTOS FREE	56
DPM3844	ADHESIVE, FILM	INACTIVE
DPM4002	PLASTIC SHEET, LAMINATED PHENOLIC, POST-FORMING	7832/7833
DPM4002/.032	PLASTIC SHEET, LAMINATED PHENOLIC, POST-FORMING	7832/7833
DPM4002/.093	PLASTIC SHEET, LAMINATED PHENOLIC, POST-FORMING	7832/7833
DPM4002/.187	PLASTIC SHEET, LAMINATED PHENOLIC, POST-FORMING	7832/7833
DPM4004/.5	INSULATION, BATTING, GLASS FIBER	7839
DPM4004-1/0.6LB/CUFTX1.0	BATTING, GLASS, 0.6LB/CU.FT.	7839
DPM4004-1/THICKX48W	BATTING, GLASS, 1.0 LB/CU.FT	7839
DPM4074/.5	ROD, PTFE	5678
DPM4074/.563	ROD, PTFE	5678
DPM4074/.563DIAX1	ROD, PTFE	5678
DPM4074/1.75	ROD, PTFE	5678
DPM4074/7	ROD, PTFE	5678
DPM417-11105	PAINT, ENAMEL, GLOSS, RED	7248
DPM4192	PIGMENT DISPERSION, BLACK	INACTIVE
DPM4246/.75	INSULATION, REFRACTORY	297
DPM4248	FABRIC, QUARTZ	7304
DPM4248-1/2WIDE	TAPE, QUARTZ	7304
DPM4249/.44	SLEEVING, QUARTZ, BRAIDED	298
DPM4268	ADHESIVE, EPOXY	300/301
DPM4273	FABRIC, BETA GLASS, PTFE COATED	6660
DPM4301	FABRIC, GLASS, PHENOLIC	1311
DPM347/.063	INSULATION, CORK, COMPOSITE	317
DPM347/.08	INSULATION, CORK, COMPOSITE	317
DPM347/.11	INSULATION, CORK, COMPOSITE	317
DPM347/.125	INSULATION, CORK, COMPOSITE	317
DPM347/.16	INSULATION, CORK, COMPOSITE	317
DPM347/.188	INSULATION, CORK, COMPOSITE	317
DPM347/.25	INSULATION, CORK, COMPOSITE	317
DPM347/.25S	INSULATION, CORK, COMPOSITE	317
DPM347/.375	INSULATION, CORK, COMPOSITE	317
DPM347/.4	INSULATION, CORK, COMPOSITE	317
DPM347/.5	INSULATION, CORK, COMPOSITE	317
DPM347/.63	INSULATION, CORK, COMPOSITE	317
DPM347.75	INSULATION, CORK, COMPOSITE	317
DPM347/.8	INSULATION, CORK, COMPOSITE	317
DPM347/.875	INSULATION, CORK, COMPOSITE	317
DPM347/1	INSULATION, CORK, COMPOSITE	317
DPM347/1.13	INSULATION, CORK, COMPOSITE	317
DPM347/1.75	INSULATION, CORK, COMPOSITE	317
DPM347-1/.137	INSULATION, CORK, COMPOSITE	317

DPM347-1/.161	INSULATION, CORK, COMPOSITE	317
DPM347-1/.4	INSULATION, CORK, COMPOSITE	317
DPM347-3/.125	INSULATION, CORK, COMPOSITE	317
DPM4490	ADHESIVE SILICONE, 1	330
DPM4569	INSULATION, THERMAL, SILICONE	348/349
DPM4597	SEALANT, POLYSULFIDE	8143
DPM4597-1	SEALANT, POLYSULFIDE	8144/8145
DPM4598	SEALANT, SILICONE, RTV, LOW OUTGASSING, TRANSLUCENT	354/4782
DPM4598-1	SEALANT, SILICONE, LOW-	7402/355
DPM4626	TAPE, P/S, SILICONE SPONGE	7017
DPM4626/.38	TAPE, P/S, SILICONE SPONGE	7017
DPM4630	ADHESIVE, SILICONE, 2	369/1305
DPM4701-1	COMPOUND, POLYURETHANE, POTTING & CABLE MOLDING	382/381
DPM4751	ADHESIVE, POLYURETHANE	2024/2025
DPM4765-2	SEALANT, SILICONE	5380
DPM4766-1	PRIMER, ADHESIVE, SILICONE	399
DPM4777	ADHESIVE, EPOXY	412/413
DPM4777-1	ADHESIVE, EPOXY COATED	345/411
DPM4820-1	SEALANT, POLYSULFIDE, CORROSION INHIBITING	7251/7256
DPM4280-1/2.5OZCG	SEALANT, CORROSION-INHIBING, POLYSULFIDE	7251/7256
DPM4280-1/2.5ZFZCG	SEALANT, CORROSION-INHIBING, POLYSULFIDE	7251/7256
DPM4280-1/6OZCG	SEALANT, CORROSION-INHIBING, POLYSULFIDE	7251/7256
DPM4280-1/6OZFZCG	SEALANT, CORROSION-INHIBING, POLYSULFIDE	7251/7256
DPM4280-3	SEALANT, POLYSULFIDE, CORROSION INHIBITING	431/432
DPM4820-4	SEALANT, POLYSULFIDE, CORROSION INHIBITING	INACTIVE
DPM4829	ADHESIVE, SPRAY	INACTIVE
DPM4830-2/.25	FOAM, POLYETHYLENE, ANTISTATIC	435
DPM4839	ADHESIVE, EPOXY	437
DPM4841	SEALANT, SILICONE	439/440
DPM4863/.5	TAPE, P/S, POLYIMIDE, ALUMINIZED	4201
DPM4863/1	TAPE, PRESSURE SENSITIVE, POLYIMIDE, ALUMINIZED	4201
DPM4863/2	TAPE, PRESSURE SENSITIVE, POLYIMIDE, ALUMINIZED	4201
DPM4863-1	TAPE, PRESSURE SENSITIVE, POLYIMIDE, ALUMINIZED	4201
DPM4863-2/1	TAPE, PRESSURE SENSITIVE, POLYIMIDE, ALUMINIZED	4201
DPM4868	ETCHANT, FLUOROBORATE	INACTIVE
DPM4885	PRIMER, ADHESIVE	149

DPM4892	PRIMER, ADHESIVE, CORROSION	154
DPM4924	ADHESIVE, SILICONE, 2	INACTIVE
DPM4958	PRIMER, ADHESIVE, SILICONE	463
DPM4971	ADHESIVE, EPOXY	1370/361
DPM590	WAX, CARNUBA	5248
DPM782-16	FABRIC, GLASS, NO. 116	6649
DPM8004	ADHESIVE, RUBBER	536
DPM8010	FABRIC, GLASS, EPOXY	3246
DPM8028	SEALANT, THREAD WICKING &	542/8088
DPM8029	SEALANT, THREAD LOCKING	543/4735
DPM8030	SEALANT, THREAD LOCKING	3030/4110
DPM8031	SEALANT, THREAD LOCKING	545/8089
DPM8032	SEALANT, THREAD LOCKING	4734/4411/547
DPM8033	RETAINING COMPOUND, ANAEROBIC, LOW VISCOSITY	4412/548
DPM8043	FABRIC, ARAMID, LIGHTWEIGHT	552
DPM8047	COATING STRAIN GAGE, MOISTURE	555
DPM8051	FABRIC, GRAPHITE, EPOXY	556/7751
DPM8051-1	FABRIC, GRAPHITE/EPOXY	7751
DPM806	PRIMER, ADHESIVE	2015/4802
DPM8060	FABRIC, GLASS, EPOXY PREPREG	4237
DPM8060-1	FABRIC, GLASS, EPOXY PREPREG	5608
DPM8060-1/50WIDE	FABRIC, GLASS, EPOXY PREPREG	5608
DPM8061	FABRIC, GRAPHITE/EPOXY	5608/566
DPM-8061-1	FABRIC, GRAPHITE/EPOXY	5589/4237
DPM8074/2	FOAM, POLYURETHANE SHEET, RIGID, 20 LB/CU.FT.	4544
DPM8074/4	FOAM, POLYURETHANE SHEET, RIGID, 20 LB/CU.FT.	4544
DPM8074/4.5	FOAM, POLYURETHANE SHEET, RIGID, 20 LB/CU.FT.	4544
DPM8074/6	FOAM, POLYURETHANE SHEET, RIGID, 20 LB/CU.FT.	4544
DPM8076-1	COMPOUND, CASTING, RTV SILICONE RUBBER	575/576
DPM8265	TAPE, P/S, GLASS FABRIC, PTFE	7274
DPM8278/.125	RUBBER, SILICONE, EXPANDED, VACUUM GRADE	1256
DPM8278/.1875MD	RUBBER, SILICONE, EXPANDED, VACUUM GRADE	1256
DPM8278/.25MDMD	RUBBER, SILICONE, EXPANDED, VACUUM GRADE	1256
DPM8278/.375MD	RUBBER, SILICONE, EXPANDED, VACUUM GRADE	1256
DPM8278/.5MD	RUBBER, SILICONE, EXPANDED, VACUUM GRADE	1256
DPM8278/.625FIRM	RUBBER, SILICONE, EXPANDED, VACUUM GRADE	1256
	RUBBER, SILICONE, EXPANDED,	

DPM8278/.625MD	VACUUM GRADE	1256
DPM282/1.5	INSULATION, GLASS BATT, SILICONE	1335
DPM8283	CURING AGENT, RAPID CURE, STO	912
DPM8389	TAPE, P/S, POLYIIDE	7270
DPM8296	TAPE, P/S, PTFE	7005
DPM8305	TAPE, P/S, FLASHBREAKER	712
DPM8325	ADHESIVE, ELECTRICAL, PASTE	2018
DPM8325/QT	ADHESIVE, ELECTRICAL, PASTE	2019
DPM8340/.06LBS PER SQ. FT.	ADHESIVE, FILM	730
DPM8345	FABRIC, GLASS, EPOXY PREPREG	7574/5622
DPM8347	TAPE, CARBON, EPOXY PREPREG	732
DPM8347-2	TAPE, CARBON, EPOXY PREPREG	733
DPM8348-1	TAPE, P/S, PTFE	6021/7015
DPM8348-1/.5WIDE	TAPE, P/S, PTFE	6021/7015
DPM8348-1/1WIDE	TAPE, P/S, PTFE	6021/7015
DPM8348-1/2 WIDE	TAPE, P/S, PTFE	6021/7015
DPM8365	TAPE, GRAPHITE, BMI PREPREG	753
DPM8370	ADHESIVE, EPOXY	753
DPM8371	ADHESIVE, EPOXY	758/759
DPM8372/.5	SLEEVING, CERAMIC, BRAIDED	807
DPM8375	THREAD, CERAMIC, SEWING	667
DPM8408	ADHESIVE, AEROSOL, HIGH	666
DPM8417	ADHESIVE, EPOXY	6598
DPM8438	ADHESIVE, SEALANT, SILICONE CONDUCTIVE, NON-CORROSIVE	774
DPM8439	COMPOUND, EPOXY, ELECTRICALLY	775/776
DPM8482-1/.210	CORD, DETONATING, 70 PETN	790
DPM8482-2/.235	CORD, DETONATING, 100 PETN	790
DPM8492	SEALANT, FABRIC SEAM	799
DPM8495	ADHESIVE, ACRYLIC BASED	800/1772
DPM8516	SEAL, SILICONE RUBBER,	805
DPM8516-1	SEAL, SILICONE RUBBER,	805
DPM8516-2	SEAL, SILICONE RUBBER,	805
DPM8517	RUBBER, SILICONE, EXPANDED, CONDUCTIVE	806
DPM8517-1	RUBBER, SILICONE, EXPANDED, CONDUCTIVE	806
DPM8517-2	RUBBER, SILICONE, EXPANDED, CONDUCTIVE	806
DPM8517-3	RUBBER, SILICONE, EXPANDED, CONDUCTIVE	806
DPM8518	FABRIC, CERAMIC	807
DPM8523	COATING, NYLON, TWO-PART, CLEAR	1598
DPM8526-1	PAINT, CONDUCTIVE	808
DPM853-4	TAPE, P/S, VINYL, CLEAR, WITH	742
DPM8542	SEALANT, LATEX, TX-16	606
DPM8558	COATING, ANTI-STATIC, AEROSOL	932
DPM8591	FILM, PLASTIC, ANTI-STATIC	932
DPM8601	ADHESIVE, SILICONE, 2	8048/8049

DPM8603/1	TAPE, P/S, FEP/SILVER, THERMAL	2081
DPM8639	SHEET, TEDLAR, .002 THICK, LEVEL 100 CLEAN	5873
DPM11028/GAAL	TOPCOAT, EPOXY, ALUMINUM	43
DPM11028/GABK	TOPCOAT, EPOXY, BLACK	43
DPM11028/GAGY	TOPCOAT, EPOXY, GRAY	43
DPM11028/GARE	TOPCOAT, EPOXY, RED	43
DPM11028/GATA	TOPCOAT, EPOXY, TAN	43
DPM11028/GAWH	TOPCOAT, EPOXY, WHITE	43
DPM11028/GAYE	TOPCOAT, EPOXY, YELLOW	43
DPM11029	THINNER, PAINT	44
DPM11031	LUBRICANT, SOLID FILM, HEAT	1480
DPM11034	COATING, POLYURETHANE, TAN	3276
DPM11035	COATING, POLYURETHANE, BLUE	6115
DPM11037	CATALYST, TRUE, CHEMGLASZE	6115
DPM11038	THINNER, POLYURETHANE	630
DPM11048	LUBRICANT, GREASE	5515
DPM11055	COATING, THERMAL CONTROL, INORGANIC, WHITE	5696
DPM11056	COATING, THERMAL CONTROL, CERAMIC, BLACK	4788
DPM11087-37886	PAINT, ENAMEL, URETHANE, HIGH SOLIDS, WHITE, LUSTERLESS	130/133
DPM11088-27925	PAINT, ENAMEL, URETHANE, HIGH SOLIDS, WHITE SEMI-GLOSS	131
DPM11090	PRIMER, IMPACE RESISTANT	7019/7020
DPM11096	COATING, PROTECTOR, FABRIC	7114
DPM1227	COATING, CHEMICAL FILM, FOR	46
DPM1278	CATALYST, DIETHYLENETRIAMINE	4818
DPM1309	PRIMER, ETCH	52
DPM1311	EPOXY RESIN-HARDENER	6162/6176
DPM1337-21302	PAINT, LACQER, NITROCELLULOSE, SEMI-GLOSS, RED	2109/6584/5712/2109/1838/ 2108/6510
DPM1337-23727	PAINT, LACQER, NITROCELLULOSE, SEMI-GLOSS, YELLOW	2109/6584/5712/2109/1838/ 2108/6510
DPM1337-27038	PAINT, LACQER, NITROCELLULOSE, SEMI-GLOSS, BLACK	2109/6584/5712/2109/1838/ 2108/6510
DPM1337-27875	PAINT, LACQER, NITROCELLULOSE, SEMI-GLOSS, WHITE	2109/6584/5712/2109/1838/ 2108/6510
DPM1337/37838	PAINT, LACQUER, FLAT BLACK	2109/6584/5712/2109/1838/ 2108/6510
DPM1339	LUBRICANT, GREASE	8120
DPM1369	EPOXY RESIN	64
DPM1432	INK, PRINTERS, BLACK	103
DPM1442	INK, STENCIL, FORPOROUS SURFACES, BLACK	104
DPM1442-33538	INK, RUBBER STAMP	104
DPM1442-37875	INK, STENCIL MARKING	104
DPM1445-17038	INK, RUBBER STAMP, BLACK	105/106/107/108/109/110/112

DPM1445-37838	INK, RUBBER STAMP, BLACK	105/106/107/108/109/110/112
DPM1445-37875	INK, RUBBER STAMP, WHITE	105/106/107/108/109/110/112
DPM1453-2/#12	COATING, CHEMICAL FILM, BRUSH-	1742
DPM152-3	GAS, HELIUM, 3500 PSI	4854
DPM1571	ETCHANT, PASTE, NITRIC ACID- PHOSPHORIC ACID, HYDROFLUORSILICIC ACID	119
DPM1983	LUBRICANT, OIL, PRESERVATIVE	2026
DPM2232	PRIMER, FLUID RESISTANT	7582/3052
DPM2249	INK, MARKING, YELLOW	5454/363
DPM2267-21302	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, RED	7792
DPM2267-23538	PAINT, ENAMEL, ALKYD, SEMI- GLOSS-YELLOW	7792
DPM2267-23727	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, BEIGE	7792
DPM2267-25102	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, BLUE	7792
DPM2267-25190	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, BLUE	7792
DPM2267-26173	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, GRAY	7792
DPM2267-26307	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, GREY, LOW VOC	7792
DPM2267-26440	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, GRAY	7792
DPM2267-27038	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, BLACK	7792
DPM2267-27875	PAINT, ENAMEL, ALKYD, SEMI- GLOSS, WHITE	7792
DPM2268	PRIMER, RED OXIDE	7173/512
DPM2393	LUBRICANT, DRY FILM	7795
DPM2667	PRIMER, PHENOLIC	4421
DPM3248	PAINT, VINYL SCREEN PROCESS	7411
DPM326	LUBRICANT, GREASE, AIRCRAFT AND INSTRUMENT GEAR AND ACTUATOR SCREW	1478
DPM3267-13531	INK, SILK SCREEN, CATALYZED, TAN	362/1985/7579/88/ 86/75/764/362/79
DPM3267-15200	INK, SILK SCREEN, CATALYZED, BLUE	362/1985/7579/88/ 86/75/764/362/79
DPM3267-16373	INK, SILK SCREEN, CATALYZED, GRAY	362/1985/7579/88/ 86/75/764/362/79
DPM3267-31136	INK, SILK SCREEN, CATALYZED, RED	362/1985/7579/88/ 86/75/764/362/79
DPM3267-33538	INK, SILK SCREEN, CATALYZED, YELLOW	362/1985/7579/88/ 86/75/764/362/79
DPM3267-36373	INK, SILK SCREEN, CATALYZED, GRAY	362/1985/7579/88/ 86/75/764/362/79
DPM3267-37078	INK, SILK SCREEN, CATALYZED, BLACK	362/1985/7579/88/ 86/75/764/362/79

DPM3267-37875	INK, SILK SCREEN, CATALYZED, WHITE	362/1985/7579/88/ 86/75/764/362/79
DPM3267-MDC BLUE	INK, SILK SCREEN, CATALYZED, MDC BLUE	362/1985/7579/88/ 86/75/764/362/79
DPM3329-1	LUBRICANT, GREASE, PROPELLANT COMPATIBLE	6543
DPM333	LUBRICANT, GREASE, PHEMATIC SYSTEMS	1287
DPM3438	CETYL ALCOHOL, TECHNICAL	5394
DPM3449	PAINT, SILICONE, AL, HIGH HEAT	202
DPM366-1	HYDRAULIC FLUID	1275
DPM3683-3	FILM, POLYETHYLENE, ANTI-STATIC	7696
DPM3700	ETCHANT, PASTE, SULFURIC ACID-CHROMIC ACID	266
DPM371	LUBRICANT, SILICONE, VALVE	1284
DPM376	LUBRICANT, ANTI-SEIZE	1276, 1300
DPM3761-1	LUBRICANT, COLID FILM	269
DPM3772	PAINT, EPOXY, ABLATIVE	274/275
DPM388-11	LUBRICANT, SOLID FILM	6209
DPM388-2	LUBRICANT, SOLID FILM	1480
DPM388-7C	LUBRICANT, SOLID FILM, AIR DRY	1908/5808
DPM388-7D	LUBRICANT, SOLID FILM	1062
DPM393/100 CS	LUBRICANT, SILICONE FLUID	1479/1285
DPM393/100,000 CS	LUBRICANT, SILICONE FLUID	1479/1285
DPM402	DOPE	5375
DPM408-31136	PAINT, ENAMEL, FLAT, RED	7258/1726
DPM408-37038	PAINT, ENAMEL, FLAT, BLACK	7258/1726
DPM408-37875	PAINT, ENAMEL, FLAT, WHITE	7258/1726
DPM408-37925	PAINT, ENAMEL, FLAT, WHITE	7258/1726
DPM417-11136	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM417-13538	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM417-14115	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM417-15045	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM417-17038	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM417-17875	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM417-17925	PAINT, ENAMEL, ALKYD, GLOSS,	7248
DPM424-37078	PAINT, LACQUER, CELLULOSE NITRATE, FLAT, BLACK	285/1550
DPM432-37038	PAINT, LACQUER, CAMOFLAGE, FLAT, BLACK	1324/286
DPM4425	MOLD RELEASE	7542
DPM4484-1	ANTI-STATIC SPRAY	341
DPM4562-17925	TOPCOAT, POLYURETHANE ENAMEL	343/344/346/347
DPM4562-33538	TOPCOAT, POLYURETHANE ENAMEL	343/344/346/347
DPM459-1	PRIMER, ZINC CHROMATE	290
DPM4615	PAINT, ELECTRO CONDUCTIVE,	6830
DPM4699	PRIMER, EPOXY, BLUE FLUID	395
DPM4795	FLUID, HYDRAULIC, FIRE RESISTANT	423
DPM4836	LUBRICATING GREASE, SYNTHETIC, LOW-OUTGASSING, BRAYCOATE 601	7522
DPM4838	PRIMER, EPOXY, LOW OUTGASSING	1294

DPM4661-1-11136	PAINT, URETHANE, ALIPHATIC, GLOSS, RED	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-15045	PAINT, URETHANE, ALIPHATIC, GLOSS, BLUE	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-17925	PAINT, URETHANE, ALIPHATIC, GLOSS, WHITE	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-23785	PAINT, URETHANE, ALIPHATIC, SEMI-GLOSS, YELLOW	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-31136	PAINT, URETHANE, ALIPHATIC, LUSTERLESS RED	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-37038	PAINT, URETHANE, ALIPHATIC, GLOSS, BLACK	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-37875	PAINT, URETHANE, ALIPHATIC, FLAT, WHITE	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-37886	PAINT, URETHANE, ALIPHATIC, FLAT, WHITE	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4861-1-37925	PAINT, URETHANE, ALIPHATIC, FLAT, WHITE	125/131/133/126/ 127/132/128/135/ 346/129/130/134
DPM4903	LUBRICANT, GREASE, LOW-OUTGASSING	443
DPM4913	PAINT, ENAMEL, POLYURETHANE, BLACK	447
DPM4934	COATING, SILICONE, DISPERSION	450
DPM4957	LEAK TEST SOLUTION	462
DPM4959-1	INK, SILK SCREEN, BLACK	362
DPM4964-1	SOLVENT-CLEANING COMPOUND	465
DPM4969-37875	PAINT, ENAMEL, SILK SCREEN, FLAT, WHITE	7820/7762/7763/7765
DPM4976-11136	PAINT, ENAMEL, EPOXY, GLOSS, RED	7820/7762/7763/7765
DPM4976-13538	PAINT, ENAMEL, EPOXY, GLOSS, YELLOW	7820/7762/7763/7765
DPM4976-14115	PAINT, ENAMEL, EPOXY, GLOSS, GREEN	7820/7762/7763/7765
DPM4976-15045	PAINT, ENAMEL, EPOXY, GLOSS, BLUE	7820/7762/7763/7765
DPM4976-15180	PAINT, ENAMEL, EPOXY, GLOSS, BLUE	7820/7762/7763/7765
DPM4976-17100	PAINT, ENAMEL, EPOXY, GLOSS, PURPLE	7820/7762/7763/7765
DPM4976-17875	PAINT, ENAMEL, EPOXY, GLOSS, WHITE	7820/7762/7763/7765
	PAINT, ENAMEL EPOXY, GLOSS,	

DPM4976-17925	WHITE	7820/7762/7763/7765
DPM4976-21105	PAINT, ENAMEL, EPOXY, SEMIGLOSS, RED	7820/7762/7763/7765
DPM4976-25183	PAINT, ENAMEL, EPOXY, SEMIGLOSS, BLUE	7820/7762/7763/7765
DPM4975-27875	PAINT, ENAMEL, EPOXY, TOPCOAT, SEMI-GLOSS	7820/7762/7763/7765
DPM4976-33538	PAINT, ENAMEL, EPOXY, FLAT, YELLOW	7820/7762/7763/7765
DPM4976-35338	PAINT, ENAMEL, EPOXY, FLAT, YELLOW	7820/7762/7763/7765
DPM4976-37038	PAINT, ENAMEL, EPOXY, FLAT, BLACK	7820/7762/7763/7765
DPM4976-37875	PAINT, ENAMEL, EPOXY, FLAT, WHITE	7820/7762/7763/7765
DPM499	VARNISH, FUNGICIDE	291
DPM500	SOLVENT, ACETONE	1793/1582
DPM530	SOLVENT, ISOPROPYL ALCOHOL	5805/489/5803/5804/3027/5584/5595/6531
DPM532	SOLVENT, METHANOL	1974
DPM540	SOLVENT, TOLUENE	496/6343/5841
DPM541	SOLVENT, TRICHLOROETHYLENE	7148/497,6344
DPM550-3	PENETRANT, FLUORESCENT, WATER WASHABLE	499/73331
DPM667-1	DISULFIDE, SILICONE COMPOUND, CORROSION PREVENTIVE	7783
DPM667-2	COATING, WAX, CORROSION PREVENTIVE	7783
DPM675	LUBRICANT, GREASE, PETROLEUM	3148
DPM8003	COATING, THERMAL CONTROL	530
DPM8059	PRIMER, EPOXY POLYAMIDE, HIGH SOLIDS	560/561/1647/956
DPM8089/AERSOL	LUBRICANT, FLUOROCARBON	5563/248
DPM8089/BULK	LUBRICANT, FLUOROCARBON	5563/248
DPM8089/GA	LUBRICANT, FLUOROCARBON	5563/248
DPM8117	LUBRICANT, GREASE	637/638/5842
DPM8151-26440	COATING, ENAMEL, ALIPHATIC POLYURETHANE, AIRCRAFT, GREEN	7995
DPM8151-37038	COATING, ENAMEL, ALIPHATIC POLYURETHANE, AIRCRAFT, BLACK	7995
DPM8159	LUBRICANT, SYNTHETIC OIL	611
DPM8181	COATING, CHEMICAL FILM, BRUSH-	596
DPM8226	SOLVENT, CLEANING,	593/1578
DPM8239	INK, SILK SCREEN, CATALYZED, BLUE	690/6919/75
DPM8316	STRIPPER, NEUTRAL, NON-EMBRITTLING	719
DPM8330	COATING, ORGANIC, WASH PRIMER	726,727
DPM83551	PRIMER, EPOXY, CHLOR. SOLV.	739/740/737
DPM8352-11105	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, RED	2020/2021

DPM8352-11136	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, RED	2020/2021
DPM8352-12246	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, ORANGE	2020/2021
DPM8352-13538	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, YELLOW	2020/2021
DPM8352-14062	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, GREEN	2020/2021
DPM8352-15045	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, BLUE	2020/2021
DPM8352-15080	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, BLUE	2020/2021
DPM8352-15180	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, BLUE	2020/2021
DPM8352-16440	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, GRAY	2020/2021
DPM8352-17142	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, GLOSS, VIOLET	2020/2021
DPM8352-25183	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, SEMI-GLOSS, BLUE	2020/2021
DPM8352-37925	PAINT, ENAMEL, EPOXY, CHLOR. SOLVENT, FLAT, WHITE	2020/2021
DPM8353-34088	PAINT, POLYURETHANE, ALIPHATIC, CHLOR. SOLVENT, FLAT, OLIVE DRAB	5745/743/1853/1854/745/ 1856/1857/5876/744
DPM8395	PAINT, URETHANE, BLACK	660
DPM8396	PAINT, URETHANE, BLACK THERMAL CONTROL	2080/3230
DPM8398	CATALYST, DIETHYLENETRIAMINE	661
DPM8422	LUBRICANT	765
DPM8432-1136	PAINT, ENAMEL, EPOXY, GLOSS RED	767
DPM8454	LUBRICANT, GREASE, HIGH VACUUM-APIEZON T	782
DPM8476	COMPOUND, CORROSION	786
DPM8485	PREVENTATIVE, CLEAR PAINT, ALKYD INTERNATIONAL BLAZE ORANGE	792
DPM8486	PAINT, ALKYD, CLEAR	794/802/1646/803/958
DPM8528-13538	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, GLOSS YELLOW	1608/809/5237/5235/7452/ 7312/810/5236/5234
DPM8528-15045	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, GLOSS BLUE	1608/809/5237/5235/7452/ 7312/810/5236/5234
DPM8528-17875	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, GLOSS WHITE	1608/809/5237/5235/7452/ 7312/810/5236/5234
DPM8528-21136	PAINT, ENAMEL, POLYURETHANE, SEMI-GLOSS RED	1608/809/5237/5235/7452/ 7312/810/5236/5234
DPM8528-26251	PAINT, ENAMEL, POLYURETHANE, SEMI-GLOSS GRAY	1608/809/5237/5235/7452/ 7312/810/5236/5234
	PAINT, ENAMEL, POLYURETHANE,	1608/809/5237/5235/7452/

DPM8528-37038	LUSTERLESS BLACK	7312/810/5236/5234
DPM8528-37925	PAINT, ENAMEL, POLYURETHANE, GLOSS WHITE	1608/809/5237/5235/7452/ 7312/810/5236/5234
DPM8531	PAINT, LACQUER, ACRYLIC CLEAR	812/1551
DPM8537	SOLVENT, METHANOL	1974
DPM8552	PRIMER, ZINC CHROMATE, AEROSOL, GREEN	7193/769/6096
DPM8564-17925	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, GLOSS WHITE	7914/7916/7920/7334/778/ 7918/7870/6436/7865/7868/ 7866/7864/7867/7871/7863/ 7869
DPM8564-27925	PAINT, ENAMEL, POLYURETHANE, SEMI-GLOSS WHITE	7914/7916/7920/7334/778/ 7918/7870/6436/7865/7868/ 7866/7864/7867/7871/7863/ 7869
DPM8364-33538	PAINT, ENAMEL, POLYURETHANE, LUSTERLESS YELLOW	7914/7916/7920/7334/778/ 7918/7870/6436/7865/7868/ 7866/7864/7867/7871/7863/ 7869
DPM8564-37925	PAINT, ENAMEL, POLYURETHANE, LUSTERLESS WHITE	7914/7916/7920/7334/778/ 7918/7870/6436/7865/7868/ 7866/7864/7867/7871/7863/ 7869
DPM8578	COOLANT, PLASMA ARC TORCH	920
DPM8579-1	PRIMER, EPOXY, HIGH SOLIDS, CORROSION INHIBITING	7253
DPM8579-11136	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, RED	7253
DPM8579-13538	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, YELLOW	7253
DPM8579-13655	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, YELLOW	7253
DPM8579-15045	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, BLUE	7253
DPM8579-15180	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, BLUE	7253
DPM8579-17875	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, WHITE	7253
DPM8579-21136	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, RED	7253
DPM8579-23538	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, YELLOW	7253
DPM8579-26251	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, GRAY	7253
DPM8579-26492	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, GRAY	7253
DPM8579-37038	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, BLACK	7253
DPM8579-37875	PAINT, ENAMEL, POLYURETHANE, HIGH SOLIDS, WHITE	7253
DPM8585	CLEANER, LIMONENE	4768
DPM8645-1	LUBRICANT, PTFE DISPERSION,	213

DPM8655	COATING, ORGANIC, PRIMER, SASH AND TRIM	1559
DPM8725	LUBRICANT, SOLID FILM INORGANIC, CRYOGENIC & HIGH	7200
DPM8738	CLEANER, AQUEOUS, HAND-WIPE	6801
DPM8763	COATING, STRAIN, GAGE	6843
DPM8765	COATING, ORGANIC, VARNISH, HEAT RESISTANT	7604
	ANHYDROUS AMMONIA (PG-2)	
	NICKEL-HYDROGEN BATTERY CELL (PG-2)	

MUA LOG

USAGE AGREEMENT	MUA ISSUE	ITEM DESCRIPTION	SYSTEM/SUBSYSTEM	HAZARD ISSUE	DATE REVIEWED	SAFETY APPROVED?	NASA APPROVED?	
1	1001-0002	Flammability/Toxicity	Reflective Cost TI SI Oxide	Cupola/ -	No hazardous prop., not Rated by M8FG-HDBK-527	2/19/92	Yes	Yes
2	1001-0004	Flammability/Toxicity	Ink on metallic tube	ECLSS; Regenerable	No hazardous prop., not Rated by M8FG-HDBK-527	N/A	N/A	Yes
3	1001-0005	Flammability/Toxicity	Laminating Mat. 93-500 Stil	Cupola/ -	None	2/19/92	Yes	
5	1001-0006	Flammability/Toxicity	Anti Reflection Coating MgF2	Cupola/ -	No hazardous prop., not Rated by M8FG-HDBK-527	2/19/92	Yes	Yes
6	1001-0007	Flammability/Toxicity	Conductive Cost Indium Tin Oxide		No hazardous prop., not Rated by M8FG-HDBK-527	2/19/92	Yes	Yes
11	1001-0010	Flammability/Toxicity	Ink Stamp	Cupola/ -	None	2/19/92	Yes	
12	1001-0010	Flam. Tox.	Ink Stamp	Cupola	Flam. Tox.	N/A	N/A	Yes
33	1001-0029A	Flammability, Are Tracking	Polyimide Dielectric Films	Distributed Systems	Kaplon issue	?	Yes	Yes
34	1001-0030	Flammability, toxicity	Dry lubricant	Track/hatch instal/Hatch assy. 683-13000	None	N/A	N/A	Yes
36	1001-0034	Flammability	Graphite/Epoxy	Distributed/Racks	None	?	Yes	
37	1001-0035	Flammability/Toxicity	E-Glass/Epoxy	Distributed/Racks	None	?	Yes	
38	1001-0036	Flammability, thermal vac. stability, toxicity	Dry Film Lubricants	ECLSS/ -	Toxicity. Hazard report MSFC-0255.	3/8/92	Yes	Yes
40	1001-0038	Flammability, toxicity	Dry Film Lubricant	Cupola/ -	None	?	Yes	Yes
45	1001-0045	Flammability, toxicity, lubrication	Lubricating Bearing Metal	Track/Hatch Installation/Hatch Assem.	Off-gassing if wt >4 lbs.	?	Yes	Yes
48	1001-0048	Flammability/Toxicity/TV8	Dry Film Lubricant	Distributed/Racks	Off-gassing issue if wt > 1.5 lbs.	?	Yes	Yes
49	1001-0049	Flammability/Toxicity	Adhesive	-	Flammability & toxicity	?	Yes	Yes
119	1004-0004	Flammability, toxicity	Ink, marking	WP01, THG, WP, C/U8	Flammability	N/A	N/A	Yes
122	1004-0007	Flammability, toxicity	Thread lubricant	THC/Cable Air	None	N/A	N/A	Yes
124	1004-0012	Flam, Tox.	Marking Ink	ECLSS/THC	Flam, Tox.	N/A	N/A	Yes
125	1004-0015	Toxicity	Dry Film Lube	ECLSS/THC	N/A	N/A	N/A	Yes
	1005-0009	Flammability, toxicity (replaces 1005-0002)	PEEK Insulation	PCWOM	Flammability(slight) and toxicity			
134	1005-0010	Toxicity & flammability	Gas-liquid separation membrane	PCWOM	Flammability	1/8/92	Yes	
210	1009-0002	Flammability, toxicity	Threadlocking compound	Internal Video	Flammability, Not non-propogating	3/8/93	Yes	Yes
211	1009-0003	Flammability, toxicity	Conformal coating	Internal Video	Flammability issue @ 30/10. OK at 23/14	3/8/93	Yes	Yes
215	1009-0010A	Flammability	Marking Ink	Internal Video	Not Rated @ 30%, Layered between 2 "a" rated mat	10/7/93	Yes	
217	1009-0018A	Toxicity	Conformal Coding	Internal Video	None. Meets allowable use quantity per NHB 8060.1B	9/19/94	Yes	
219	1009-0021	Toxicity	Silicone Adhesive	Internal Video	None, meets allowable use quantiy per NHB 8060.1B			
281	1010-0101A	flammability, toxicity, odor, fungus	ADC	AVDS	flammability, toxicity	11/28/93	Yes	
295	1011-0006A	Flammability	Footplate cushion-RTV630	Restraint and mobility aids	Flammability. "C" rated	6/10/93	Yes	Yes
296	1011-0008A	Flammability	M.O.N. CAT A Block Ink	Restraint and mobility aids	N/A	?	Yes	Yes
297	1011-0009D	Flamm, Tox	Primer, polyamide epoxy (flm)	Restraints and mobility	N/A	?	Yes	Yes
304	1014-0001	No test data	LNS. PTFE seal	ACS	None. PTFE is not expected to be flammable or toxic.	5/24/93	Yes	
306	1014-0003	Flammability	Loctite	TSE/GSE	Flammability (C rated at ambient)	5/24/93	Yes	
307	1014-0004	Flammability	Petroleum anti-seize grease	TSE/GSE	Flammability and contamination (C rated at ambient)	5/24/93	Yes	
308	1014-0005	Flammability	Thread lock compound	ACS and VS	Flammability (C rated at 25% O2)	5/24/93	Yes	
309	1014-0006	Flammability	LNS. Plug polyethylene	ACS	None on orbit. Ground and MSFC only.	5/24/93	Yes	Yes
314	1014-0010	Flammability, Toxicity	Identification tape	Vacuum system	Flammability (not A rated at 30% O2) OK for tox.	5/24/93	Yes	
315	1014-0011	Flammability	Adhesive	Vacuum system	Flammability (C rated at 30% O2)	5/24/93	Yes	
318	1014-0014	Flammability, Toxicity	Solid film lubricant	Vacuum system	Toxicity	3/2/93	Yes	
320	1014-0016	Flammability	Marking Ink	ACS and VS	None. A rated at 30% O2	5/24/93	Yes	
321	1014-0017	Flammability	Marking Ink	ALL TBE	Flammability. "C" rated	3/8/93	Yes	
322	1014-0018	Flammability, Toxicity	Marking Tape	ACS and VS	Flammability, Toxicity. No test data	5/24/93	Yes	
324	1014-0020	Flammability	TFE Copper Wire	Vacuum system	None. TFE is not flammable	5/24/93	Yes	Yes
327	1014-0023	Flammability	FEP Heat Sink Sleeving	Vacuum system	None. FEP compound are A rated.	5/24/93	Yes	Yes
331	1014-0027	Flammability	Conformal Coding	Vacuum system	Flammability. No data at 30% O2, C rated at 24.5% O2	5/24/93	Yes	Yes
349	1015-0013	Corrosion, Flammability, Toxicity, Stress Corr	Catalyst, Paladium on allumina	TCCS	None	1/26/93	Yes	Yes
354	1015-0020	Flammability, Toxicity	Viton O-rings seals	TCCS	None due to thickness of O-ring	3/9/93	Yes	Yes
355	1015-0021	Flammability, Toxicity	Marking on metallic surfaces	WP-01, TCCS	Flammability & Toxicity Note MUA 1001-0004	N/A	N/A	Yes
358	1015-0025	Flammability, Toxicity	Dry Film lubricant	WP-01, PGM, TCCS	None	N/A	N/A	Yes
360	1015-0027	Corrosion, Toxicity	Anhydrous Lithium Hydroxide	TCCS	Contamination H.R. MSFC-0255	N/A	N/A	Yes
362	1015-0029	Flammability, Toxicity	Charcoal	WP-01 PGM, TCCS	None	N/A	N/A	Yes

Page 19

NAS15-10000

Section J-13

MUA LOG

USAGE AGREEMENT	MUA ISSUE	ITEM DESCRIPTION	SYSTEM/SUBSYSTEM	HAZARD ISSUE	DATE REVIEWED	SAFETY APPROVED?	NASA APPROVED?	
366	1015-0033N	Flammability, Toxicity	Adhesive	TCCS	Flammability, Toxicity	7/19/93	Yes	No
368	1015-0035	Flammability, Toxicity	Adhesive	TCCS	None	1/28/93	Yes	Yes
372	1015-0040	Flammability, Toxicity	Spot filler and adhesive bond	TCCS	Flammability, Toxicity. (No test data)	7/19/93	Yes	No
373	1015-0042	Flammability, Toxicity	Adhesive/Primer	TCCS	Flammability, Toxicity. (No test data)	7/19/93	Yes	No
377	1015-0046	Flammability	Heat shrink tubing	TCCS	Flamm. Completely encapsulated by A rated materials	9/8/93	Yes	
	1015-0087	Flammability, Toxicity	Ceramic fiber paper	TCCS	Flammability, Toxicity			
	1015-0103	Flammability, Toxicity	Polyimide film tape/PSA	TCCS	Flammability, Toxicity			
	1015-0104	Flammability	Metamine insulation foam	TCCS	Flammability			
	1015-0105	Flammability	Silicone rubber tube	TCCS	Flammability			
	1015-0108	Flammability, Toxicity, SCC	Laminated shim	TCCS	Flammability, Toxicity, SCC			
	1015-0109	Flammability	Silicone rubber sponge	TCCS	Flammability			
	1015-0111	Flammability	Silicone rubber grommet	TCCS	Flammability			
	1015-0112	Flammability	Elastomer/lo adhesive	TCCS	Flammability			
425	1017-0021	Flammability	Filter	Rack essentials controller (REC)	None. No data, but not combustible	6/10/93	Yes	
427	1017-0022	Flammability	Conformal coding	Rack essentials controller (REC)	Flammability	6/10/93	Yes	
429	1017-0024	Flammability	Epoxy encapsulant	Rack essentials controller (REC)	Flammability	6/10/93	Yes	
430	1017-0025	Flammability	Insulator RNF100	Rack essentials controller (REC)	Flammability. No test data	6/10/93	Yes	
431	1017-0026	Flammability/Toxicity	Kaplon Tape	Rack essentials controller (REC)	No test data, but not combustible and does not off-gas above allowable limit	6/10/93	Yes	
432	1017-0027	Toxicity	Beryllium Oxide Washers	Rack essentials controller (REC)	None. Coating does not off-gas above allowable limit	6/10/93	Yes	
433	1017-0028	Flammability/Toxicity	Solder mask SR 2030	Rack essentials controller (REC)	Flammability/Toxicity. No test data	6/10/93	Yes	
434	1017-0029	Toxicity	Glass cloth tape	Rack essentials controller (REC)	None. Material does not off-gas above allowable limit	6/10/93	Yes	
453	PD-044	Flammability	Potting compound/cover, armyoke	Urinal system/ -	None	?	Yes	
461	PD-053	Flammability	Polyurethane coating	Urinal system/ -	None	?	Yes	
464	PD-057	Flammability	Stamp Ink	Urinal system/ -	None	?	Yes	
465	PD-058	Flammability	Kynor, polypropylene, PVC	Urinal system/ -	None	?	Yes	
469	PD-062	Flammability	Polyurethane paint & primer	Urinal subassembly	None	?	Yes	
472	PD-065	Flammability	Urinal, ozone, EIB	Urinal subassembly	None	?	Yes	

ATTACHMENT J-14

SPACE STATION FREEDOM EQUIPMENT LIST

I.D. NUMBER (SPEC/DRAWING NO.)	NOMENCLATURE	Comments
FLIGHT EQUIPMENT		
CI SPEC NO. SP-M-518	Control Moment Gyroscope	
1F01789	Caution & Warning Panel Design Spec	Withdrawn
SP M 191 (CI Spec)	Thermal Radiator Rotary Joing (TRRJ)	Withdrawn
1F03129	Radiator Beam Lock Assembly	Withdrawn
SP M 192	Solar Alpha Rotary Joint (SARJ)	Withdrawn
1F39755	SARJ Launch Restraint	Withdrawn
1F41226,5839152	SARJ Assembly	Withdrawn
1F03014, 1F26407, 1F26411	Segment primary structure and flight drawing	Withdrawn
1F66388, 1F29995	Umbilical Mechanism Assy. Installation	Withdrawn
10033497-1 10033525-1	Color TV Camera	Spec Correction
10033023	Pan Tilt Unit	
10033125	TV Camera Interface Converter	
1033705	Video Switch	
10033011	Standard TDRSS Transponder	
10033702	ACS RF Group	
10032331	ACS Baseband Signal Processor	
10033006	High Rate Modem	
10033034	High Rate Frame MUX	
10033009	SGS Parabolic Antenna	
10033277	SGS Transmitter Receiver Controller	
10033040	Video Baseband Signal Processor	
SP M 010	Mobile Transporter	Withdrawn
1F03872-1	Local Bus Controller	Withdrawn
1F67908	Capture Latch	Withdrawn
1F08580, 1F08583	Segment to Segment Attach System	Withdrawn
1F60999	Module to Truss Strut	Withdrawn
1F65076, 1F65108	ACS Deployment Antenna	Withdrawn
1F05101, 1F05104	Umbilical Mechanism Assembly	Withdrawn
1F03133	UHF Antenna Deployment Mechanism	Withdrawn
1F03158	Integrated Motor/Controller Actuator	Withdrawn
1F60973	Module to Truss Power Screw	Withdrawn
1F01165	EVA Element Light	Withdrawn
1F01194	Video Camera Light	Withdrawn
1F01195	Docking Target Light	Withdrawn
1F03046	CETA Light	Withdrawn
1F03047	Supplemental Assembly Light	Withdrawn
1F08090	Signal Conditioning Unit	
DETAIL PARTS FOR RESOURCE NODE SECONDARY STRUCTURE		
1F66344-1	Beam Assy, Avionics Support, Long-Midbay	
1F66345-1	Beam, Avionics Support, Long-Midbay	
1F67526-1	Bushing, Avionics Support-Midbay	

1F66346-1	Link, Beam, Avionics Support-Midbay	
1F66400-1	Fitting, Bulkhead Attach	
1F67412-1	Bushing, Avionics Support Midbay	Withdrawn
1F66393-1	Beam Assyl, Avionics Support, Intermediate, Left-Midbay	
1F66348-1	Beam, Avionics Support, Intermediate-Midbay	
1F66396-1	Fitting, Midring Attach, Left No.2	
1F67160-1	Beam Assy, Avionics Support, Short, Left-Midbay	
1F67161-1	Beam, Avionics Support, Short-Midbay	
1F66394-1	Fitting, Midring Attach, Left-No.1	
1F67162-1	Beam Assy, Avionics Support, Short, Right-Midbay	
1F66395-1	Fitting, Midring Attach, Right-No.1	
1F66347-1	Beam Assy, Avionics Support, Intermediate, Right-Midbay	
1F66397-1	Fitting, Midring Attach, Right-No.2	
1F33723-1	Support Beam, Heat Exchanger, Left	Withdrawn
1F33725-1	Support Beam, Heat Exchanger, Right	Withdrawn
1F64200-1	Cross Support, Heat Exchanger	Withdrawn
1F65666-1	Link, Heat Exchanger	Withdrawn
1F66420-1	Fitting, Rack Standoff, No. 1	
1F66424-1	fitting, Rack Standoff, No. 2	
1F64129-1	BRKT, Rack Standoff-STA 998.330	
1F64130-1	BRKT, Rack Standoff-STA 977.330	
1F67712-1	BRKT, Rack Standoff-Midbay, FWD	
1F64132-1	Strut Assy, Rack Standoff	Withdrawn
1F67613-1	Bearing, Rod End	
1F64134-1	Strut Fitting, Rack Standoff No.1	Withdrawn
1F67068-1	Bushing, Flanged	
1F64135-1	Strut Fitting, Rack Standoff No.2	Withdrawn
1F64140-1	Clip, Luminaire SPRT	
1F67716-1	BRKT, Rack Standoff-Midbay, AFT Zenith	
1F64131-1	BRKT, Rack Standoff-Midbay	
1F64151-1	Beam, Standoff Midbay Transition	Withdrawn
1F64152-1	BM, Cable SPRT, Midbay Transition Standoff	Withdrawn
1F64178-1	Beam, Standoff-Radial Port	
1F66320-1	Face Sheet, Panel, Front-Midbay, AFT	
1F66321-1	Honeycomb Core, Panel, Front-Midbay, AFT	
1F66324-1	Strut Assy, Long Intermediate Midbay	Withdrawn
1F67528-1	End, CLEVIS	
1F66326-1	Strut Assy, Short Midbay	Withdrawn
1F47555-1	Clip, Left-Outboard Back	
1F47557-1	Clip, Left-Outboard Front	
1F47564-1	Clip, Right-Outboard Back	
1F47565-1	Clip, Right-Outboard Front	
1F66328-1	Doubler, Left	
1F66329-1	Doubler, Right	
1F67158-1	Frame Panel, ECLSS Grille Hole	
1F67159-1	Stud, Quarter Turn Fastener	Withdrawn

1F66331-1	Face Sheet, Panel, Front-Midbay, Nadir	
1F66332-1	Honeycomb Core, Panel, Front-Midbay, NADIR	
1F66335-1	Front Panel Assy, Mid, Al Sandwich-Midbay, NADIR	
1F66336-1	Face Sheet, Panel, Front, Mid-Midbay, NADIR	
1F66337-1	Honeycomb Core, Panel, Front, Mid-Midbay, NADIR	
1F66357-1	Strut Assy, Short Intermediate Midbay	Withdrawn
1F47618-1	Clip-Left, Outboard Back, NADIR	
1F47620-1	Clip, Left-Outboard Front, NADIR	
1F47622-1	Clip, Left-Inboard Front, NADIR	
1F47624-1	Clip-Right, Outboard Back, NADIR	
1F47625-1	Clip, Right-Outboard Front, NADIR	
1F47629-1	Clip, Right-Inboard Front, NADIR	
1F47631-1	Doubler, Right, NADIR	
1F47632-1	Doubler, Left, NADIR	
1F47646-1	Internal Support Struct Assy, Midbay, FWD	Withdrawn
1F66342-1	Strut Assy, Long Midbay	Withdrawn
1F07420	Fitting, Tee	
1F25868	Fitting, Tee	
1F67390	Fitting, Elbow	
1F61482	Fitting, Elbow	
1F60697	Fitting, Elbow	
1F64880-1	Flange, V-Band Coupling	
SUPPORT EQUIPMENT		
SQ2-20068	Avionics Cooler	No DD250
GS2-20062	Berthing Port Fluids I/F Kit	No DD250
ST2-20165	Breakout Box/Test Adapter Kit	No DD250
TH2-20229	CMG Handling Sling	No DD250
TS2-20230	CMG Maintenance Kit	No DD250
SS2-20003	CMG Test Station	No DD250
ST2-20168	Cupola Cable Kit	No DD250
ST2-20064	Cupola to Node Jumper Set	No DD250
GZ2-20142	External TCS Valve Saver Set	
ST2-20064	Flight Connector Savers	No DD250
GH2-20140	GSE Trunnion	No DD250
SR2-20147	Heating Cart	No DD250
GZ2-20146	Internal ECLSS Valve Saver Set	No DD250
GS2-20061	Internal TCS Cooling Servicer	
GO2-20119	Internal TCS Fluid I/F Test Kit	No DD250
GS2-20060	Internal TCS Servicing Unit	
GZ2-20145	Internal TCS Valve Saver Set	
ST2-20113	KU Band Antenna Support Stand	No DD250
SF2-20026	Local Bus Controller	No DD250
SD2-20152	Mate 3	
ST2-20166	Mobile Transporter Cable Kit	No DD250
ST2-20024	MT Handling Fixture/Sling	No DD250
TF2-20202	MT Test Station	No DD250
ST2-20091	MT Translation Kit (Air Bearing)	No DD250

ST2-20154	Node 1 Cable Kit	No DD250
ST2-20155	Node 2 Cable Kit	No DD250
ST2-20037	Payload Strongback	No DD250
ST2-20169	PMA Cable Kit	No DD250
ST2-20045	PMA Handling Fixture	
ST2-20040	PMA Sling	
SQ2-20046	Pressurization Unit	No DD250
SQ2-20066	Rack Manifold Fixture	No DD250
ST2-20021	SO Support Stand	No DD250
ST2-20020	S1/P1 Support Stand	No DD250
ST2-20015	S3/P3 Support Stand	No DD250
SE2-20028	Secondary Power Unit	No DD250
ST2-20162	Segment P1 Cable Kit	No DD250
ST2-20164	Segment P3 Cable Kit	No DD250
ST2-20161	Segment S0 Cable Kit	No DD250
ST2-20158	Segment S1 Cable Kit	No DD250
ST2-20160	Segment S3 Cable Kit	No DD250
GF2-20007	Sensor and Effector Simulator	No DD250
ST2-20012	Solar Alpha Rotary Joint Handling Fixture	No DD250
GQ2-20138	Space to Ground Subsystem Test Set (KU-Band Test Set)	
SR2-20149	Subcooler Cart	No DD250
ST2-20151	Support Equipment Tow Bar	No DD250
ST2-20038	Support Stand Sling Set	No DD250
DE2-20231	Thermal Development Support Hardware-Electrical	No DD250
SF2-20102	Trailing Umbilical Sys. I/F Simulator	No DD250
TH2-20200	TRRJ Handling Fixture	No DD250
ST2-20118	TUS MT Motion Simulator	No DD250
GQ2-20118	UDS Fluid I/F Test Kit	No DD250
GQ2-20121	Video Test Set	
ST2-20112	Weight & Balance Test Set	No DD250
GE2-20237	APCU Power Simulator	
GQ2-20137	Assembly/Contingency Subsystem Test Set (S-Band Test Set)	No DD250
FIRMWARE (PG-1)		
	Communications & Tracking (C&T) Firmware CSCIs	
	S-Band Baseband Signal Processor FC	
	S-Band RF Group FC	
	Standard TDRSS Transponder FC	
	Ku-Band Transmitter/Receiver Controller FC	
	Ku-Band Video Baseband Signal Processor FC	
	Ku-Band High Rate Frame MUX FC	
	Ku-Band High Rate Modem FC	
	Video Switch FC	
	Guidance, Navigation and Control (GN&C) Firmware CSCIs	
	CMG Control FC	

	Rate Gyro FC	
	Integrated Motor Controller Assembly (IMCA) CSCI	
	MDM Common Firmware CSCIs	
	SPD 1553 FW	
	SSMDM Boot & Diagnostic FW	Withdrawn
	Enhanced SSMDM Boot & Diagnostic FW	Withdrawn
EPS FWCI	Power Converter Controller (PCC) FWCI	Duplicates
	Electronic Controller Unit (ECU)FWCI	Duplicates
	Local Data Interface (LDI) FWCI	Duplicates
	Remote Power Controller Module (RPCM) FWCI	Duplicates
	Switchgear Controller Assembly (SCA) FWCI	Duplicates
	Plasma Contractor FWCI	Duplicates
CSCI List (PG-2)	EPS Flight CSCIs and Major CSCs	
	Photovoltaic Controller Unit (PVCU) Software CSCI	
	Power Management Controller Unit (PMCU) Software CSCI	
	Secondary Electric Power System (SEPS) Software CSCI	
	EPS FWCI	
	Power Converter Controller (PCC) FWCI	
	Electronic Controller Unit (ECU) FWCI	
	Local Data Interface (LDI) FWCI	
	Remote Power Controller Module (RPCM) FWCI	
	Switchgear Controller Assembly (SCA) FWCI	
	Plasma Contactor FWCI	
	EPS Software Test Support Simulations	
	RPCM Type 1 Sim	Withdraw
	RPCM Type 2 Sim	Withdraw
	RPCM Type 3 Sim	Withdraw
	RPCM Type 4 Sim	Withdraw
	RPCM Type 5 Sim	Withdraw
	BCDU/Battery Sim	Withdraw
	DDCU-E Sim	Withdraw
	DDCU-I Sim	Withdraw
	SSU Sim	Withdraw
	RBI/MBSU Sim	Withdraw
	RBI/DCSU Sim	Withdraw
	PFCS Sim	Withdraw
	Plasma Contactor Sim	Withdraw
	End-item Test Support Equipment CSCIs	
	IEA Qual Test Automated Test Manager (ATM)	
	PV Module IACO ATM	
PG-2 Hardware	PV Module	Withdraw
	Battery Assembly	Withdraw
	BCDU	Withdraw
	Bearing, Motor, Roll Ring Module	Withdraw

	Electronics Control Unit	Withdraw
	Blanket/Box/Array, Left	Withdraw
	Blanket/Box/Array, Right	Withdraw
	DCSU	Withdraw
	DDCU-B	Withdraw
	DDCU-I	Withdraw
	Mast/Platform Assembly	Withdraw
	Sequential Shunt Unit	Withdraw
	PFCS	Withdraw
	PV Radiator Assembly	
	Cable Box Assemblies	Withdraw
	MBSU	Withdraw
	Plasma Contactor	Withdraw
	RPCM-I-T1	Withdraw
	RPCM-I-T2	Withdraw
	RPCM-E-T2	Withdraw
	RPCM-I-T3	Withdraw
	RPCM-E-T4	Withdraw
	RPCM-E-T4-	Withdraw
	RPCM-I-T5	Withdraw
	RPCM-I-T6	Withdraw
	RPCM-E-T6	Withdraw
	Cable Sets	Withdraw
	PVCU	Withdraw
	IEA	Withdraw
	Long Spacer	Withdraw
	Short Spacer	Withdraw
PG-1 Additions to Attachment J-14		Comments
1F45540	Coupling, Quick Disconnect, Male, Type I, Ammonia, External	1.MDA.043
1F45541	Coupling, Quick Disconnect, Female, Type I. Ammonia, External	1.MDA.044
1F45570	Coupling, Quick Disconnect, Male, Type I Water, External	1.MDA.045
1F45571	Coupling, Quick Disconnect, Female, Type I, Water, External	1.MDA.046
1F45580	Caps, Coupling, Quick Disconnect, Male, Type I, External	1.MDA.047
1F45581	Plugs, Coupling, Quick Disconnect, Female, Type I, External	1.MDA.048
1F70135	Coupling, Quick Disconnect, Male, Type I, Ammonia, External	1.MDA.049
1F70136	Coupling, Quick Disconnect, Female, Type I, Ammonia, External	1.MDA.050
PG-2 Additions to Attachment J-14		Comments
RE2800-1	Fluid Quick Disconnect Couple (FQDC)	2.RD.001

PG-3 Additions to Attachment J-14		Comments
2371654	Common Berthing Mechanism Bolt Controller (CBMBC) FC	3.BA.006
237165	Common Berthing Mechanisms Master/Latch Controller(CBMMLC)	3.BA.007
8000020	Audio Interface Unit Command (AIUC) FC	3.BA.008
8000032	Audio Interface Unit Audio (AIUA) FC	3.BA.009
8000006	Audio Management Processor (AMP) FC	3.BA.010
8000002	Audio Terminal Unit (ATU) FC	3.BA.011
8000001	Bus Management Processor (BMP) FC	3.BA.012
8000263	Tone Processor (TP) FC	3.BA.019
683G91A	Pressure Control Assembly (PCA) FC	3.BA.022
A930122	Major Constituent Analyzer (MCA) FC	3.BA.024
2354427	Pump/Fan Motor Controller	3.BA.025

11-Jan-95
PAS_SELECTION_RPT

Page 1

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
1	BOEING	4	1863	I1354208	33449A	PRINTER, ADP	3022A54739	1524
2	BOEING	4	2004	I1230929	JC1741UMA	DISPLAY UNIT	27D21958B	1450
3	BOEING	4	2004	I1293439	M0401	DISPLAY UNIT	5338656	300
4	BOEING	4	2004	I1293440	N5685	DISK DRIVE UNIT	F10171HWM5685	5120
5	BOEING	4	2004	I1294130	C2001A	PRINTER, ADP	JPB8013857	1983
6	BOEING	4	2004	I1297446	3030	COMPUTER, MICRO	4138HNB20543	6609
7	BOEING	4	2004	I1297891	ND141V+	DISPLAY UNIT	36470390	600
8	BOEING	4	2004	I1352108	425S/N	COMPUTER, MICRO	2J9RB	3465
9	BOEING	4	2004	I1355681	SYG200	COMPUTER, MICRO	286125066007	1687
10	BOEING	4	2004	I1355834	450DE	COMPUTER, MICRO	IVNMQ	4738
11	BOEING	4	2004	IG098704	JC1404HMA	DISPLAY UNIT	97K29651N	722
12	BOEING	4	2004	I1354200	JC1404	DISPLAY UNIT	08M71100	620
13	BOEING	4	2009	I0079164	007284	DISPLAY UNIT	FD6540877	500
14	BOEING	4	2009	I1115357	M5830	COMPUTER, MICRO	F3039N8GM5835	4353
15	BOEING	4	2009	I1115375	M0401	DISPLAY UNIT	5457334	584
16	BOEING	4	2009	I1231025	RE1422	DISPLAY UNIT	20275756	400
17	BOEING	4	2009	I1242339	PS08	PRINTER, ADP	0236390324	3700
18	BOEING	4	2009	I1294101	A1097C	DISPLAY UNIT	3151J66829	1081
19	BOEING	4	2009	I1294102	A2213A	COMPUTER, MICRO	6247A10218	6297
20	BOEING	4	2009	I1294104	A2213A	COMPUTER, MICRO	6247A10240	6297
21	BOEING	4	2009	I1294105	A1097C	DISPLAY UNIT	3151J66835	1081
22	BOEING	4	2009	I1294106	A2213A	COMPUTER, MICRO	6247A10243	6297
23	BOEING	4	2009	I1294108	CPR58E	DISK DRIVE UNIT	010727	1200
24	BOEING	4	2009	I1297466	RE1422	DISPLAY UNIT	FC9306015002	400
25	BOEING	4	2009	I1297470	RE1422	DISPLAY UNIT	FC9212055015	400
26	BOEING	4	2009	I1297481	486/50	COMPUTER, MICRO	FC9306015001	4526
27	BOEING	4	2009	I1297487	486/50	COMPUTER, MICRO	FC9303014001	4987
28	BOEING	4	2009	I1354206	JC1404	DISPLAY UNIT	08M71006	620
29	BOEING	4	2009	I1354207	EX3000D	COMPUTER, MICRO	CAW-03410116	2010
30	BOEING	4	2009	I1355672	286	COMPUTER, MICRO	SU88051572	2106
31	BOEING	4	2009	I1355690	486	COMPUTER, MICRO	FC9303023005	4738
32	BOEING	4	2009	I1355818	XC1429C	DISPLAY UNIT	003102824	650
33	BOEING	4	2009	I1357476	XC1429C	DISPLAY UNIT	005109749	650
34	BOEING	4	2018	I1353654	9070S	DISPLAY UNIT	64259020	500
35	BOEING	4	2018	I1353655	3200	COMPUTER, MICRO	320000062	4445
36	BOEING	4	2019	IG087122	308397	DISPLAY UNIT	028002180	4470
37	BOEING	4	2019	IG087123	3000	COMPUTER, MICRO	HO9ZRJ	30000
38	BOEING	4	2026	IG096967	2108	PRINTER, ADP	1136370253	3417
39	BOEING	4	2026	IG096924	DW3000	COMPUTER, MICRO	A00207766	10612
40	BOEING	4	2026	I1008680	007284	DISPLAY UNIT	FD6540870	500
41	BOEING	4	2031	I1355648	7596A	PLOTTER, ADP	2910A19900	8000
42	BOEING	4	2031B	I1294096	33440A	PRINTER, ADP		1073
43	BOEING	4	2031B	IG025995	JC1404HMA	DISPLAY UNIT	97K29485M	722
44	BOEING	4	2031C	I1174583	M5780	COMPUTER, MICRO	F1041142737	4191
45	BOEING	4	2031C	I1242217	M0401	DISPLAY UNIT	7087134M0401	644

11-Jan-95
PAS_SELECTION_RPT

Page 2

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
46	BOEING	4	2031C	I1293730	XC1429C	DISPLAY UNIT	005110998	650
47	BOEING	4	2031C	I1297705	SYS310	COMPUTER, MICRO	SYS310088J5	3035
48	BOEING	4	2031C	I1356421	M0401	DISPLAY UNIT	5173846	615
49	BOEING	4	2031C	IG087882	M5000	COMPUTER, MICRO	F9023NRM	13995
50	BOEING	4	2031D	I1355664	450M	COMPUTER, MICRO	2DNCY	4225
51	BOEING	4	2031D	IG016773	JC1404HMA	DISPLAY UNIT	93M04686S	700
52	BOEING	4	2031E	I1355411	S450DE	COMPUTER, MICRO	IVNMR	4738
53	BOEING	4	2031E	IG025975	JC1404HMA	DISPLAY UNIT	97K29484M	722
54	BOEING	4	2031F	I1355660	433M	COMPUTER, MICRO	27R3W	3131
55	BOEING	4	2031F	IG026033	JC1404HMA	DISPLAY UNIT	97L29992M	722
56	BOEING	4	1031G	I1242027	450DE	COMPUTER, MICRO	1VNLJ	4738
57	BOEING	4	1031G	I1294097	33440A	PRINTER, ADP	3002J12994	1073
58	BOEING	4	1031G	I1355654	S450DE	COMPUTER, MICRO	1VNNN	4738
59	BOEING	4	1031G	IG025991	JC1404HMA	DISPLAY UNIT	97K29637N	722
60	BOEING	4	2031H	I1241772	RE1422	DISPLAY UNIT	30033969	650
61	BOEING	4	2031H	I1264727	ADS450	COMPUTER, MICRO	GM9207057016	1948
62	BOEING	4	2043	IG096898	007284	DISPLAY UNIT	FD6540282	500
63	BOEING	4	2043	IG097261	008215-302	COMPUTER, MICRO	A00207350	11250
64	BOEING	4	2043	I1007333	OMNILASER2108	PRINTER, ADP	1136370305	3217
65	BOEING	4	209	I1355544	C1395	DISPLAY UNIT	KH1314474	1300
66	BOEING	4	209	I1355548	450DE	COMPUTER, MICRO	IVNPH	4738
67	BOEING	4	209	I1355828	DF SERIES	DISK DRIVE UNIT	DF30856	350
68	BOEING	4	209	I1355836	M5650	COMPUTER, MICRO	F102617HM5665	4182
69	BOEING	4	211	I1241980	XC1429C	DISPLAY UNIT	005109838	650
70	BOEING	4	211	I1242087	2540	COMPUTER, MICRO	4036HS7H0398	4701
71	BOEING	4	211	I1266457	EXPERT486/50	COMPUTER, MICRO	GM9301038002	2537
72	BOEING	4	211	I1293673	VC4	DISPLAY UNIT	U453019283	1824
73	BOEING	4	211	I1355657	450N	COMPUTER, MICRO	2DNCW	4225
74	BOEING	4	211	I1354089	JC1404	DISPLAY UNIT	08M71008	620
75	BOEING	4	213	I0149512	33440A	PRINTER, ADP	2718J54685	1672
76	BOEING	4	213	I1242344	PS08	PRINTER, ADP	0236390114	3700
77	BOEING	4	213	I1298651	A450CG	COMPUTER, MICRO	11162	1658
78	BOEING	4	213	I1298647	MD141V+	DISPLAY UNIT	36470384	600
79	BOEING	4	214	I1231029	ADS3486	COMPUTER, MICRO	FC9305044007	2650
80	BOEING	4	214	I1242191	A2213A	DISK DRIVE UNIT	6245A08336	6516
81	BOEING	4	214	I1242191	A2213A	DISK DRIVE UNIT	6247A1001	6297
82	BOEING	4	214	I1242196	A2213A	DISK DRIVE UNIT	6245A08334	6516
83	BOEING	4	214	I1242197	A2213A	DISK DRIVE UNIT	6245A08332	6516
84	BOEING	4	214	I1242348	PS08	PRINTER, ADP	1136390004	3726
85	BOEING	4	214	I1294111	98774B	DISPLAY UNIT	3201103268	500
86	BOEING	4	214	I1355406	C1395	DISPLAY UNIT	KB2462505	1300
87	BOEING	4	214	I1355694	A1097C	DISPLAY UNIT	3151J71125	1681
88	BOEING	4	214	I1355696	A1097C	DISPLAY UNIT	3151J71049	1681
89	BOEING	4	214	I1356051	A1097C	DISPLAY UNIT	3151J66700	1681
90	BOEING	4	214	I1356053	A1097C	DISPLAY UNIT	3151J71089	1681

11-Jan-95
PAS_SELECTION_RPT

Page 3

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	----	-----	-----	-----	-----	-----	-----
91	BOEING	4	214	I1354203	JC1404	DISPLAY UNIT	08M71007	620
92	BOEING	4	214	I1355961	RE1422	DISPLAY UNIT	20124372	350
93	BOEING	4	216	I1294115	A2213A	COMPUTER, MICRO	6247A10230	6297
94	BOEING	4	216	I1353345	M0401	DISPLAY UNIT	F427237	604
95	BOEING	4	216	I1353346	M5660	DISK DRIVE UNIT	41017629M5665	2895
96	BOEING	4	216	I1353347	PS80	PRINTER, ADP	0236390234	1900
97	BOEING	4	216A	I1242475	HP33491A	PRINTER, ADP	3211J54924	4718
98	BOEING	4	216A	I1294103	A1097C	DISPLAY UNIT	3151J66747	1081
99	BOEING	4	216A	I1297842	2261A	COMPUTER, MICRO	4036HS7H0191	4700
100	BOEING	4	216A	I1354091	JC1404	DISPLAY UNIT	08M71013	620
101	BOEING	4	216B	I1356348	DN3500	COMPUTER, MICRO	EA01300950	14233
102	BOEING	4	216B	I1356403	008399	DISPLAY UNIT	3938	500
103	BOEING	4	216C	I1293341	M0401	DISPLAY UNIT	5338649	300
104	BOEING	4	216C	I1293342	M5685	DISK DRIVE UNIT	F10171K8M5685	5120
105	BOEING	4	216E	I1297444	3030	COMPUTER, MICRO	41397HBN20382	6609
106	BOEING	4	216E	I1354093	JC1404	DISPLAY UNIT	08M71094	620
107	BOEING	4	217	I1238222	M1297	DISPLAY UNIT	7078462	604
108	BOEING	4	217	I1162777	33449A	PRINTER, ADP	3105J11435	1443
109	BOEING	4	217	I1239884	LC350	PRINTER, ADP	2925322469205	1325
110	BOEING	4	217	I1293398	M0401	DISPLAY UNIT	5298363	300
111	BOEING	4	217	I1293399	M5685	DISK DRIVE UNIT	F0100EWM5685	5417
112	BOEING	4	217	I1355848	XC1429C	DISPLAY UNIT	005109952	650
113	BOEING	4	217	I1353021	1570III	CALCULATOR, ELECTRONIC	049404926	173
114	BOEING	4	217	I1354201	EX3000D	COMPUTER, MICRO	CAW-033410152	2010
115	BOEING	4	217	I1355923	ADS486	COMPUTER, MICRO	FC9304038001	2565
116	BOEING	4	217	IG025127	M5835	COMPUTER, MICRO	F9234WS	5259
117	BOEING	4	219	I1174563	M6000	PRINTER, ADP	CA051857	3685
118	BOEING	4	219	I1231091	28608L	DISK DRIVE UNIT	28608L026991	2295
119	BOEING	4	219	I1241275	200	COMPUTER, MICRO	286125067529	2883
120	BOEING	4	219	I1241280	310	COMPUTER, MICRO	310048077	3015
121	BOEING	4	219	I1241282	200	COMPUTER, MICRO	286125067484	2953
122	BOEING	4	219	I1241284	310	COMPUTER, MICRO	310048075	3015
123	BOEING	4	219	I1241976	XC1429C	DISPLAY UNIT	004105508	650
124	BOEING	4	219	I1241991	XC1429C	DISPLAY UNIT	005110996	650
125	BOEING	4	219	I1241996	XC1429C	DISPLAY UNIT	005109927	650
126	BOEING	4	219	I1241997	XC1429C	DISPLAY UNIT	005109724	650
127	BOEING	4	219	I1293361	XC1429C	DISPLAY UNIT	004105160	650
128	BOEING	4	219	I1353029	1570III	CALCULATOR, ELECTRONIC	049404809	173
129	BOEING	4	219	I1353031	1570III	CALCULATOR, ELECTRONIC	049404807	173
130	BOEING	4	219	I1353033	1570III	CALCULATOR, ELECTRONIC	049404811	173
131	BOEING	4	220	I1009332	2569512-1001	PRINTER, ADP	2520710073	2478
132	BOEING	4	220	I1236884	6787	TYPEWRITER ELECTRIC	11-0149595	812
133	BOEING	4	220	I1241276	310	COMPUTER, MICRO	310048112	3015
134	BOEING	4	220	I1241983	XC1429C	DISPLAY UNIT	006111667	850
135	BOEING	4	220	I1242005	XC1429C	DISPLAY UNIT	005109962	650

11-Jan-95
PAS_SELECTION_RPT

Page 4

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
136	BOEING	4	220	I1293431	M0401	DISPLAY UNIT	5322835	300
137	BOEING	4	220	I1293432	M5685	DISK DRIVE UNIT	F0097U2M5685	5417
138	BOEING	4	220	I1321183	C2021A	PRINTER, ADP	JPBH024209	1983
139	BOEING	4	220	I1353252	JC1404	DISPLAY UNIT	08M71090	620
140	BOEING	4	220	I1355967	386/25M	COMPUTER, MICRO	6243HBR31008	5175
141	BOEING	4	220	I1353022	1570III	CALCULATOR, ELECTRONIC	049404925	173
142	BOEING	4	220A	I1298675	A450CG	COMPUTER, MICRO	11174	1658
143	BOEING	4	220A	I1298680	MD141V+	DISPLAY UNIT	36470569	600
144	BOEING	4	220B	I1117923	M5650	COMPUTER, MICRO	F10269Q3M5665	6182
145	BOEING	4	220B	I1241753	M0401	DISPLAY UNIT	5185119	575
146	BOEING	4	300B	IG097264	2108	PRINTER, ADP	0236390144	3147
147	BOEING	4	300B	IG097403	008398	DISPLAY UNIT	5185119	575
148	BOEING	4	300B	IG097404	DOMAIN SERIES3500	COMPUTER, MICRO	A00238817	10793
149	BOEING	4	361	I0082819	COMAIN SERIES3000CM	COMPUTER, MICRO	A00207765	10612
150	BOEING	4	361	I0861373	2108	PRINTER, ADP	1136370265	3417
151	BOEING	4	361	IG096923	007284	DISPLAY UNIT	FF6640081	500
152	BOEING	4	3805	I129409I	33440A	PRINTER, ADP		1073
153	BOEING	4	4307C	I1322102	M1350	COMPUTER, MICRO	SG251CG2385	1721
154	BOEING	413	A183	I0074074	2108	PRINTER, ADP	1136370295	486
155	BOEING	413	A183	I1165132	P149	CASSETTE MICRO DICTA	2829874	130
156	BOEING	45	100	I1352852	119-4438-00	DISPLAY UNIT	JPC3320219	4371
157	BOEING	45	100	I1352853	XP338P	EXPANSION UNIT	8040206	900
158	BOEING	45	3333E	I0721716	1121PD	CALCULATOR, ELECTRONIC	78564006	90
159	BOEING	45	3334A	IG022188	VX1652	CALCULATOR, ELECTRONIC	98100994	92
160	BOEING	4A	3212A	I1081921	EX3000D	COMPUTER, MICRO	CAW-03410102	3771
161	BOEING	4A	4202	I1006085	M5830	COMPUTER, MICRO	F102006JM5835	4712
162	BOEING	4S		I0082805	EX1000	PRINTER, ADP	EP15012068	486
163	BOEING	4S		I0231275	FX80	PRINTER, ADP	050506	361
164	BOEING	4S		I0231548	FX80	PRINTER, ADP	506429	699
165	BOEING	4S		I1008280	PC410-1521	COMPUTER, MICRO	36012221N	3858
166	BOEING	4S		I1233480	M4200	COMPUTER, MICRO	F521174CM4210	10541
167	BOEING	4S		I1241942	M0401	DISPLAY UNIT	5591593	689
168	BOEING	4S		IG087064	7596A	PLOTTER, GRAPHICS	2910A21969	10043
169	BOEING	4S		IG099808	JC1404HMA	DISPLAY UNIT	07M53641M	722
170	BOEING	4S		I1352348	F231700	INTERFACE UNIT	NBB00459	12750
171	BOEING	4S	3201	I1007152	M6000	PRINTER, ADP	CA030062%M6000	5639
172	BOEING	4S	3202	I1241827	M5000	COMPUTER, MICRO	F8355RSM5000	4307
173	BOEING	4S	3202	I1241939	M0401	DISPLAY UNIT	5047502	673
174	BOEING	4S	3202	I1241993	M0401	DISPLAY UNIT	5441755	650
175	BOEING	4S	3202	I1242236	M5780	COMPUTER, MICRO	F1207078716	3195
176	BOEING	4S	3202	I1354105	M5515LL/A	COMPUTER, MICRO	F3035N56C40	5987
177	BOEING	4S	3204	I1242202	GDM1950	DISPLAY UNIT	2323365/S000114262	2768
178	BOEING	4S	3204	I1242240	M5525	COMPUTER, MICRO	F3037NGLC42	5654
179	BOEING	4S	3204	I1293317	M0401	DISPLAY UNIT	5322834	300
180	BOEING	4S	3204	I1293318	M5685	DISK DRIVE UNIT	F0100F0M5685	5417

11-Jan-95
PAS_SELECTION_RPT

Page 5

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
181	BOEING	4S	3204	I1293429	JC1403HMA	DISPLAY UNIT	1ZW01266F	450
182	BOEING	4S	3204	I1293430	DESKPRO486/33M	COMPUTER, MICRO	4139HBN20149	6088
183	BOEING	4S	3204	I1354106	GDM1950	DISPLAY UNIT	2500434	3667
184	BOEING	4S	3204D	I1351505	M2113	COMPUTER, MICRO	FC35013L1CJ	1589
185	BOEING	4S	3204D	I1171182	H1297	DISPLAY UNIT	7092767	562
186	BOEING	4S	3204H	I1354104	33449A	PRINTER, ADP	3022A54728	1524
187	BOEING	4S	3205	I1163240	33449A	PRINTER, ADP	3104JC7501	1439
188	BOEING	4S	3205	I1242230	M5780	COMPUTER, MICRO	F12062PY716	3195
189	BOEING	4S	3205	I1293442	M0401	DISPLAY UNIT	7008608	669
190	BOEING	4S	3205	I1293443	M5030	COMPUTER, MICRO	F8046ZBM5030	6291
191	BOEING	4S	3205	I1321200	C2021A	PRINTER, ADP	JPBF090167	2119
192	BOEING	4S	3205	I1354109	JC1404	DISPLAY UNIT	08M71092	620
193	BOEING	4S	3205	I1355312	M5840	DISK DRIVE UNIT	F91067MM5835	6488
194	BOEING	4S	3205	I1115378	M0401	DISPLAY UNIT	5457325	584
195	BOEING	4S	3205H	I1242419	XJ-V60	PRINTER, ADP	503861/308ACY10363	5499
196	BOEING	4S	3205H	I1242477	HP333491A	PRINTER, ADP	3211J58418	4718
197	BOEING	4S	3206	I1007140	M6000	PRINTER, ADP	CA03006V%M6000	5639
198	BOEING	4S	3206	I1293322	XC1429C	DISPLAY UNIT	006112502	650
199	BOEING	4S	3206	I1293323	SYS310	COMPUTER, MICRO	SYS310048123	3015
200	BOEING	4S	3206C	I1351489	M2113	COMPUTER, MICRO	FC350S571CJ	1589
201	BOEING	4S	3206C	I1351657	M1212	DISPLAY UNIT	S140215X2B7	390
202	BOEING	4S	3207	I1297834	2261AA	COMPUTER, MICRO	4037HS7H0354	4700
203	BOEING	4S	3207	I1297839	420T	DISPLAY UNIT	02129816M825	463
284	BOEING	4S	3207	I1356219	486	COMPUTER, MICRO	FC93A7010001	2185
205	BOEING	4S	3207C	I0860462	M0401	DISPLAY UNIT	5176742	700
206	BOEING	4S	3207C	I1242241	M5000	COMPUTER, MICRO	F8050PBM5030	6291
207	BOEING	4S	3211	I1007141	M6000	PRINTER, ADP	CA030073%M6000	5639
208	BOEING	4S	3211	I1354110	GDM1950	DISPLAY UNIT	2500552	3667
209	BOEING	4S	9211	I1354111	M5515LL/A	COMPUTER, MICRO	F3035N5VC40	5987
210	BOEING	4S	3212	I1297732	M0401	DISPLAY UNIT	5047316	673
211	BOEING	4S	3212	I1297733	M5780	COMPUTER, MICRO	F12071SU716	3195
212	BOEING	4S	3212	I1322101	C2021A	PRINTER, ADP	JPBG035013	2119
213	BOEING	4S	3212	I1354114	M0402	DISPLAY UNIT	PH930BH0A15	1355
214	BOEING	4S	3212	I1354115	M5515LL/A	COMPUTER, MICRO	F94916L740	5987
215	BOEING	4S	3212A	I1293696	XC1429C	DISPLAY UNIT	005111190	650
216	BOEING	4S	3212A	I1354112	JC1404	DISPLAY UNIT	08M71017	620
217	BOEING	4S	3212B	I1353250	M0402	DISPLAY UNIT	PH930BGVA15	1355
218	BOEING	4S	3212B	I1353251	M5515LL/A	COMPUTER, MICRO	F94915V740	5987
219	BOEING	4S	3212C	I1241757	TPD19	DISPLAY UNIT	ZTF1002048	783
220	BOEING	4S	3212C	I1241814	M5000	COMPUTER, MICRO	F8046LKM5030	6291
221	BOEING	4S	3212C	I1293482	M0401	DISPLAY UNIT	5000709	300
222	BOEING	4S	3212C	I1293483	M5030	COMPUTER, MICRO	F7313HEM5030	3436
223	BOEING	4S	3212C	I1293484	M2688	DISK DRIVE UNIT	F40254LEM2688	1129
224	BOEING	4S	3212D	I1242088	2540	COMPUTER, MICRO	4036HS7H0389	4701
225	BOEING	4S	3212D	I1293659	XC1429C	DISPLAY UNIT	006111662	650

11-Jan-95
PAS_SELECTION_RPT

Page 6

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
226	BOEING	4S	3212D	I1354113	EX3000D	COMPUTER, MICRO	CAW-03410106	2010
227	BOEING	4S	3212D	I1354116	JC1404	DISPLAY UNIT	08M70973	620
228	BOEING	4S	3212H	I135579	PS2000-1	PRINTER, ADP	Q0026156	3726
229	BOEING	4S	3213	I1293700	M0401	DISPLAY UNIT	7058578M0401	689
230	BOEING	4S	3213	I1356400	008399-005R	DISPLAY UNIT	82013650	500
231	BOEING	4S	3213	I1356703	DN3500	COMPUTER, MICRO	EA01300991	14233
232	BOEING	4S	3213	I1354119	EX3000D	COMPUTER, MICRO	CAW-03410136	2010
233	BOEING	4S	3213	I1354118	JC1404	DISPLAY UNIT	08M71110	620
234	BOEING	4S	3217	I1293444	M0401	DISPLAY UNIT	7087138	644
235	BOEING	4S	3217	I1293445	M5780	COMPUTER, MICRO	F12124LN716	2281
236	BOEING	4S	3220	I0562285	670X	TYPEWRITER	4646598	740
237	BOEING	4S	3220	I0553550	670X	TYPEWRITER	48912809	610
238	BOEING	4S	3220	I1162998	M6000	PRINTER, ADP	CA109ZRJ%M6000	2459
239	BOEING	4S	3220	I1238983	M1297	DISPLAY UNIT	7051905	611
240	BOEING	4S	3220	I1239880	M5780	DISK DRIVE UNIT	F2222LD1716	3192
241	BOEING	4S	3220	I1354124	JC1404	DISPLAY UNIT	08M70976	620
242	BOEING	4S	3220	IIG087137	H6000	PRINTER, ADP	CA8031ECUM6000	1573
243	BOEING	4S	3220	I1355966	386/25M	COMPUTER, MICRO	6243HBR30997	5175
244	BOEING	4S	3220A	I1264661	1297	DISPLAY UNIT	7077560	650
245	BOEING	4S	3220A	I1008973	M5740LL/A	DISK DRIVE UNIT	F10456GG740	3970
246	BOEING	4S	3220B	I1231096	RE1422	DISPLAY UNIT	20125663	400
247	BOEING	4S	3320C	I1242486	M0360	COMPUTER, MICRO	FC24862KCB3	3228
248	BOEING	4S	3320D	I1355331	M0401	DISPLAY UNIT	5584289	609
249	BOEING	4S	3320D	I1355464	S450DE	COMPUTER, MICRO	IV28Q	4738
250	BOEING	4S	3320D	IG099822	JC1404HMA	DISPLAY UNIT	07M53634M	722
251	BOEING	4S	3320D	I1354123	EX3000D	COMPUTER, MICRO	CAW-03410149	2010
252	BOEING	4S	3320H	I1230983	PS3200-1	PRINTER, ADP	G0057177	22578
253	BOEING	4S	3220H	I1353910	PS2000-1	PRINTER	Q0045934	15263
254	BOEING	4S	3228	I0331260	670X	TYPEWRITER	6286532	575
255	BOEING	4S	3228	I1241560	DN3500	COMPUTER, MICRO	EA01300993	17140
256	BOEING	4S	3228	I1293437	M2688	DISK DRIVE UNIT	F40289LRM2688	1129
257	BOEING	4S	3228	IG026152	JC1404HMA	DISPLAY UNIT	95M15926T	636
258	BOEING	4S	3228H	I1293476	C2001A	PRINTER, ADP	JPBH028012	1983
259	BOEING	4S	3228H	IG097292	DESKPRO386/20E	COMPUTER, MICRO	4033HS7H0211	7492
260	BOEING	4S	3301	I1115372	M0401	DISPLAY UNIT	5457328	584
261	BOEING	4S	3301	I1230953	RE1422	DISPLAY UNIT	30022069	400
262	BOEING	4S	3301	I1230954	ADS486	COMPUTER, MICRO	FC9303099001	3011
263	BOEING	4S	3301	I1230987	M5780	COMPUTER, MICRO	F12461UD724	4100
264	BOEING	4S	3301	I1241953	VC3	DISPLAY UNIT	96K00488	936
265	BOEING	4S	3301	I1293319	M0401	DISPLAY UNIT	5002374	300
266	BOEING	4S	3301	I1293320	M5030	COMPUTER, MICRO	F7313H9M5030	3436
267	BOEING	4S	3301	I1293321	M2688	DISK DRIVE UNIT	F4029ACWM2688	1129
268	BOEING	4S	3301	I1351504	M2113	COMPUTER, MICRO	FC35014F1CJ	1589
269	BOEING	4S	3301	I1355559	JC1741C1MA	DISPLAY UNIT	35L18491B	1796
270	BOEING	4S	3302	I1241776	M5780	COMPUTER, MICRO	F120618Z716	3195

11-Jan-95
PAS_SELECTION_RPT

Page 7

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
271	BOEING	4S	3302	I1241790	M5650	COMPUTER, MICRO	F9345LMM5665	2941
272	BOEING	4S	3302	I1241809	M5525	COMPUTER, MICRO	F3043M56C42	5562
273	BOEING	4S	3302	I1293426	M0401	DISPLAY UNIT	5003863	300
274	BOEING	4S	3302	I1293427	M5030	COMPUTER, MICRO	F7313DZM5030	3436
275	BOEING	4S	3302	I1293428	M2688	DISK DRIVE UNIT	F4029ADFM2688	1129
276	BOEING	4S	3302	I1293434	M2688	DISK DRIVE UNIT	F40289RE	1129
277	BOEING	4S	3302	I1297718	M0401	DISPLAY UNIT	5185279	575
278	BOEING	4S	3302	I1297720	M5000	COMPUTER, MICRO	F849KD3M5000	3443
279	BOEING	4S	3302	I1355328	M0401	DISPLAY UNIT	5584293	609
280	BOEING	4S	3302	I1355352	GDM1950	DISPLAY UNIT	2503954	4385
281	BOEING	4S	3302	I1355564	M0401	DISPLAY UNIT	7082841	602
282	BOEING	4S	3302H	I1321182	C2021A	PRINTER, ADP	JPBF059641	1983
283	BOEING	4S	3303	I0860363	PS08	PRINTER, ADP	1136370346	3417
284	BOEING	4S	3303	I1170847	JC1404HMA	DISPLAY UNIT	03M18867A	722
285	BOEING	4S	3303	I1241979	VC2	DISPLAY UNIT	U410021634	650
286	BOEING	4S	3303	I1293363	2108	PRINTER, ADP	1136370316	3717
287	BOEING	4S	3303	I1354100	FM2	DISPLAY UNIT	01533082	757
288	BOEING	4S	3303	I1354101	DN3500	COMPUTER, MICRO	66043A51269	6898
289	BOEING	4S	3303	I1355420	S450DE	COMPUTER, MICRO	IV28R	4738
290	BOEING	4S	3303	I1355655	450M	COMPUTER, MICRO	2DNCS	4225
291	BOEING	4S	3303	I1355829	CA17	DISPLAY UNIT	A6KKU2705545	650
292	BOEING	4S	3303	I1355830	SYS200	COMPUTER, MICRO	286125079014	1276
293	BOEING	4S	3304	I1162781	3449A	PRINTER, ADP	3052J77923	1443
294	BOEING	4S	3304	I1241792	M5650	COMPUTER, MICRO	F9345WLM5665	2941
295	BOEING	4S	3304	I1241900	GDM1950	DISPLAY UNIT	2323407/S000114169	2768
296	BOEING	4S	3304	I1242238	M5525	COMPUTER, MICRO	F3042MZYC42	5654
297	BOEING	4S	3304	I1293359	M0404	DISPLAY UNIT	HT93535VM0404	692
298	BOEING	4S	3304	I1293360	M5665	COMPUTER, MICRO	F9345MFM5665	2941
299	BOEING	4S	3304	I1354107	GDM1950	DISPLAY UNIT	2500384	3667
300	BOEING	4S	3304	I1354108	M5515LL/A	COMPUTER, MICRO	F3035N5WC40	5987
301	BOEING	4S	3304	I1355306	M0401	DISPLAY UNIT	5173392	700
302	BOEING	4S	3304	I1355409	S450DE	COMPUTER, MICRO	IV26Y	4738
303	BOEING	4S	3304	IG026003	JC1404HMA	DISPLAY UNIT	97L29999N	722
304	BOEING	4S	3304A	I1351495	M2113	COMPUTER, MICRO	FC350S6G1CJ	1589
305	BOEING	4S	3304A	I1357211	M1212	DISPLAY UNIT	S13502DXE04	390
306	BOEING	4S	3304F	I1351478	M2113	COMPUTER, MICRO	FC3500151CJ	1589
307	BOEING	4S	3306	I1006090	M0401	DISPLAY UNIT	5470858	584
308	BOEING	4S	3306	I1242235	M5780	COMPUTER, MICRO	F12067H1716	3195
309	BOEING	4S	3306	I1293315	M0401	DISPLAY UNIT	5322832	300
310	BOEING	4S	3306	I1293316	M5685	DISK DRIVE UNIT	F0100XRM5685	5417
311	BOEING	4S	3306	I1294191	008399	DISPLAY UNIT	94931373	1507
312	BOEING	4S	3306	I1294192	DN3500	COMPUTER, MICRO	EA01300960	16000
313	BOEING	4S	3308	I1174527	GDM1950	DISPLAY UNIT	5302764	2415
314	BOEING	4S	3308	I1216255	FDSK262F0	DISK DRIVE UNIT	H0Q3P2	4590
315	BOEING	4S	3308	I1230427	B43011230	COMPUTER, MICRO	HORAZ96	11750

11-Jan-95
PAS_SELECTION_RPT

Page 8

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
316	BOEING	4S	3308	I1230428	HDSP1020C	DISPLAY UNIT	HORF6K	3000
317	BOEING	4S	3308	I1233421	HDSP1020C	DISPLAY UNIT	HORF77	2000
318	BOEING	4S	3308	I1233422	IP2430	COMPUTER, MICRO	HOR6WW	19800
319	BOEING	4S	3308	I1241849	B73031230	COMPUTER, MICRO	H115K3	4590
320	BOEING	4S	3308	I1241853	HDSP1020C	DISPLAY UNIT	H117GL	3000
321	BOEING	4S	3308	I1241864	FDSK261F9	DISK DRIVE UNIT	HONPW5	4590
322	BOEING	4S	3308	I1241867	FDSK379K5	DISK DRIVE UNIT	HORTVJ	4590
323	BOEING	4S	3308	I1241870	FDSK335F1	DISK DRIVE UNIT	HOR4V4	795
324	BOEING	4S	3308	I1242296	MDSP09006	DISPLAY UNIT	HOFXX7	1000
325	BOEING	4S	3308	I1242297	TXM3201A1	DISK DRIVE UNIT	1660001707	793
326	BOEING	4S	3308	I1242298	FMTF129F8	TAPE DRIVE UNIT	HONPZR	4787
327	BOEING	4S	3308	I1274531	FDSK335KA	DISK DRIVE UNIT	HOTOPC	3080
328	BOEING	4S	3308	I1293423	M0401	DISPLAY UNIT	5001304	300
329	BOEING	4S	3308	I1293424	M5030	COMPUTER, MICRO	F7313MPM5030	3436
330	BOEING	4S	3308	I1293425	M2688	DISK DRIVE UNIT	F40289ROM2688	1129
331	BOEING	4S	3308	I1297832	LPP130	PRINTER, ADP	0012170	3999
332	BOEING	4S	3308	I1355363	M5525	COMPUTER, MICRO	F3126MGNC42	5653
333	BOEING	4S	3320	I0158924	450PD	CALCULATOR, ELECTRONIC	8110146	86
334	BOEING	4S	3320	I1007138	M6000	PRINTER, ADP	CA03006YtM6000	5639
335	BOEING	4S	3320	I1008016	M5780	COMPUTER, MICRO	F12263DB724	4400
336	BOEING	4S	3320	I1172376	JC2002VMA	DISPLAY UNIT	22D20003S	2200
337	BOEING	4S	3320	I1241941	CM2085MU	DISPLAY UNIT	Y1J014790	2299
338	BOEING	4S	3320	I1293633	M5650	COMPUTER, MICRO	F93433QM5665	2941
339	BOEING	4S	3320	I1293658	M1030	DISPLAY UNIT	HT934205%M0404	692
340	BOEING	4S	3320	I1322111	M1350	COMPUTER, MICRO	SG2504CW3B5	1721
341	BOEING	4S	3320	I1065626	GDM1952	DISPLAY UNIT	2023705	3762
342	BOEING	4S	3320	I1241033	P52DR	CALCULATOR, ELECTRONIC	N/A	53
343	BOEING	4S	3320A	I1119692	M6000	PRINTER, ADP	CA050A4N%M6000	2395
344	BOEING	4S	3320A	I1293637	M5000	COMPUTER, MICRO	F72679CM5000	4512
345	BOEING	4S	3320A	I1356299	M0401	DISPLAY UNIT	5163376	714
346	BOEING	4S	3320B	I1006117	M5830	COMPUTER, MICRO	F3031MS5M5835	4712
347	BOEING	4S	3320B	I1242145	M0401	DISPLAY UNIT	5041900	689
348	BOEING	4S	3320B	I1293385	SYS320LX	COMPUTER, MICRO	S320LX001991	2110
349	BOEING	4S	3320B	IG036804	VCS	DISPLAY UNIT	81132356	650
350	BOEING	4S	3320C	I1241922	M0401	DISPLAY UNIT	5028807	689
351	BOEING	4S	3320D	I1009032	M0401	DISPLAY UNIT	5562569	584
352	BOEING	4S	3324	I1356981	M0401	DISPLAY UNIT	5187302	650
353	BOEING	4S	3325	I1091724	M0401	DISPLAY UNIT	7023342	650
354	BOEING	4S	3325	I1174579	M5780	COMPUTER, MICRO	F1041141737	4191
355	BOEING	4S	3325A	I1006082	M0401	DISPLAY UNIT	5445945	584
356	BOEING	4S	3325A	I1006116	M5830	COMPUTER, MICRO	F3031MREM5835	4712
357	BOEING	4S	3325A	I1298625	TX1713MV	DISPLAY UNIT	4131235557	697
358	BOEING	4S	3325A	I1298626	A450CG	COMPUTER, MICRO	11134	2742
359	BOEING	4S	3325B	I1355798	TPD19	DISPLAY UNIT	DCH1000615	783
360	BOEING	4S	3325B	I1355806	M5525	COMPUTER, MICRO	F3119MELC42	4578

11-Jan-95
PAS_SELECTION_RPT

Page 9

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
361	BOEING	4S	3325C	I1293314	DESKPRO486/33M	COMPUTER, MICRO	4139HBN20141	6088
362	BOEING	4S	3325D	I1293675	CCM5414S	DISPLAY UNIT	045DA1C0606	650
363	BOEING	4S	3325D	I1352077	SYS310	COMPUTER, MICRO	SYS3100881Y	3015
364	BOEING	4S	3325E	I1297893	MD141V+	DISPLAY UNIT	36470086	600
365	BOEING	4S	3325E	I1298671	A450CG	COMPUTER, MICRO	11172	1658
366	BOEING	4S	3325F	I1242010	XC1429C	DISPLAY UNIT	00611679	650
367	BOEING	4S	3325F	I1293610	325	COMPUTER, MICRO	09MZU	3685
368	BOEING	4S	3325G	I1115380	M0401	DISPLAY UNIT	547326	584
369	BOEING	4S	3325G	I1230914	M5780	COMPUTER, MICRO	F1246B11724	4100
370	BOEING	4S	3325H	I1266460	33491A	PRINTER, ADP	3211J61362	4718
371	BOEING	4S	3325H	I1293339	M0401	DISPLAY UNIT	5322837	300
372	BOEING	4S	3325H	I1293340	M5685	DISK DRIVE UNIT	F0087X6M5685	5417
373	BOEING	4S	3329	I1355825	M1297	DISPLAY UNIT	9002471	626
374	BOEING	4S	3329	I1355826	M5780	COMPUTER, MICRO	F11502LC724	3894
375	BOEING	4S	3329A	I1351463	H2113	COMPUTER, MICRO	FC35015N1CJ	1589
376	BOEING	4S	3329A	I1354760	M0401	DISPLAY UNIT	5066626	655
377	BOEING	4S	3329B	I1356351	JC2002VMA1	DISPLAY UNIT	1XC01342S	1700
378	BOEING	4S	3329B	I1351462	M2113	COMPUTER, MICRO	FC35016Y1CJ	1589
379	BOEING	4S	3329C	I1009044	M0401	DISPLAY UNIT	5562403	584
380	BOEING	4S	3329C	I1355821	M5780	COMPUTER, MICRO	F11502F9724	3894
381	BOEING	4S	3329D	IG016561	M5410	COMPUTER, MICRO	F9053EF	3987
382	BOEING	4S	3329D	IG024237	M5401	DISPLAY UNIT	5304512	600
383	BOEING	4S	3331	I1002866	M5650	COMPUTER, MICRO	F10270FYM5665	6383
384	BOEING	4S	3331	I1230925	M5780	COMPUTER, MICRO	F12462PD724	4100
385	BOEING	4S	3331	I1356641	M5780	COMPUTER, MICRO	F11502L7724	3894
386	BOEING	4S	3331E	I0040241	325N60MB	COMPUTER, NOTEBOOK	0MUIW	2730
387	BOEING	4S	3331E	I1296601	PA1103U	COMPUTER, MICRO	03329184	5256
388	BOEING	4S	3331E	I1321068	M4440	COMPUTER, MICRO	FC311SKM440	4346
389	BOEING	4S	3331E	I1321177	M5409	COMPUTER, MICRO	FCZZ90EM800	2500
390	BOEING	4S	3331E	I1321178	M4440	COMPUTER, MICRO	FC3144LS441	5363
391	BOEING	4S	3331E	I1354097	33449A	PRINTER, ADP	3022A54730	1524
392	BOEING	4S	3331E	IG020907	PA7048U	COMPUTER, PORTABLE	01921052	2379
393	BOEING	4S	3331E	IG042813	386SX20	COMPUTER, MICRO	9102024	3370
394	BOEING	4S	3331E	IG042848	386SX20	COMPUTER, MICRO	9101988	2890
395	BOEING	4S	3331E	IG097340	ZWL0200-4B	COMPUTER, MICRO	005DF001320	2500
396	BOEING	4S	3331E	IG097341	ZWL0200-4B	COMPUTER, MICRO	017DC003617	2500
397	BOEING	4S	3403A	I1294188	IPS/A-I1200US	POWER SUPPLY	6523	1095
398	BOEING	4S	3422	I1115365	M5830	COMPUTER, MICRO	F3039NAAM5835	4353
399	BOEING	4S	3422	I1230919	JC1741UMA	DISPLAY UNIT	26D00617A	1450
400	BOEING	4S	3422	I1240305	9550	PROJECTOR, OVERHEAD	422847	535
401	BOEING	4S	3422	I1353609	M2688	DISK DRIVE	F40254K9	1129
402	BOEING	4S	3422	I1353742	9070S	DISPLAY UNIT	63829010	500
403	BOEING	4S	3422	I1353743	9671	COMPUTER, MICRO	967100003	3425
404	BOEING	4S	3422	I1354126	JC1404	DISPLAY UNIT	08M71001	620
405	BOEING	4S	3422	I1354127	EX3000D	COMPUTER, MICRO	CAW-03410122	2010

11-Jan-95
PAS_SELECTION_RPT

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	----	-----	-----	-----	-----	-----	-----
406	BOEING	4S	3422A	I1293307	M5404	COMPUTER, MICRO	F9052PSM5404	4540
407	BOEING	4S	3422A	I1293308	M0401	DISPLAY UNIT	5179324	300
408	BOEING	4S	3422A	I1293309	M2688	DISK DRIVE UNIT	F40254L3M2688	1129
409	BOEING	4S	3422A	I1321003	JC1531VMA	DISPLAY UNIT	02K09180H	904
410	BOEING	4S	3422A	IG097200	DESKPRO386/20E	COMPUTER, MICRO	4030HS7H0297	7492
411	BOEING	4S	3422B	I1004313	M5650	DISK DRIVE UNIT	F0061PDM5685	4950
412	BOEING	4S	3422B	I1006229	M5830	COMPUTER, MICRO	F30334NHCM5835	4712
413	BOEING	4S	3422B	I1356210	XC1429C	DISPLAY UNIT	106069470	650
414	BOEING	4S	3422B	I1356990	SY3310	COMPUTER, MICRO	SYS310048007	3035
415	BOEING	4S	3422B	I1357067	M0401	DISPLAY UNIT	5187313	650
416	BOEING	4S	3422D	I1355316	M5840	DISK DRIVE UNIT	F9105AU	6488
417	BOEING	4S	3422H	I1241618	Q03100	COPYBOARD, ELECTRONIC	D3228004	3788
418	BOEING	4S	3428	I1354128	JC1404	DISPLAY UNIT	08M70974	620
419	BOEING	4S	3428	I1354129	JC1404	DISPLAY UNIT	08M70972	620
420	BOEING	4S	3430	I1241797	M5650	COMPUTER, MICRO	F9342CZM5615	2941
421	BOEING	4S	3430	I1241935	M0401	DISPLAY UNIT	7009159	669
422	BOEING	4S	3432	I1355692	S450	DISPLAY UNIT	1V26C	4738
423	BOEING	4S	3432	IG017118	JC1404HMA	DISPLAY UNIT	93L01604S	528
424	BOEING	4S	3432H	I1249190	VT320A3	DISPLAY UNIT	HK02792705	499
425	BOEING	4S	3723	I1355413	S450DE	COMPUTER, MICRO	IV28B	4738
426	BOEING	4S	3800	I1091722	M0401	DISPLAY UNIT	5457691	650
427	BOEING	4S	3800	I1242239	M5525	COMPUTER, MICRO	F3043M4SC42	5654
428	BOEING	4S	3800	I1354160	386/33	COMPUTER, MICRO	SPECBOE93000107	975
429	BOEING	4S	3800	I1354162	M5515LL/A	COMPUTER, MICRO	F3037M18C40	5987
430	BOEING	4S	3800	I1354163	GDM1950	DISPLAY UNIT	2500083	3667
431	BOEING	4S	3800	IG026208	JC1404HMA	DISPLAY UNIT	98N03567K	722
432	BOEING	4S	3800H	I1162275	33449A	PRINTER, ADP	3048A80470	1397
433	BOEING	4S	3801	IG097213	3436	PRINTER-PLOTTER ELEC	C43116005	50215
434	BOEING	4S	3802	I1352746	M0401	DISPLAY UNIT	7046595	644
435	BOEING	4S	3802	I1353911	98774B	DISPLAY UNIT	32011T03182	500
436	BOEING	4S	3802	I1353912	425T	COMPUTER, MICRO	6233A20394	6451
437	BOEING	4S	3802	I1357054	M5000	COMPUTER, MICRO	F9052W3M5404	3443
438	BOEING	4S	3802B	I1230534	M1297	DISPLAY UNIT	7104630	604
439	BOEING	4S	3802B	I1351458	M2113	COMPUTER, MICRO	FC35014Q1CJ	1589
440	BOEING	4S	3802D	I1297910	A450CG	COMPUTER, MICRO	11178	1658
441	BOEING	4S	3802D	I1297869	MD141V+	DISPLAY UNIT	36470641	600
442	BOEING	4S	3802E	I1355418	S450DE	COMPUTER, MICRO	IV26L	4738
443	BOEING	4S	3802E	IG098573	JC1404HMA	DISPLAY UNIT	01L52772U	722
444	BOEING	4S	3804	I1242215	M0401	DISPLAY UNIT	7046591M0401	644
445	BOEING	4S	3804	I1242242	M5780	COMPUTER, MICRO	F1137341716	2879
446	BOEING	4S	3804	I1353613	008399-003	DISPLAY UNIT	FF9360420	500
447	BOEING	4S	3804	I1353614	DN5500	COMPUTER, MICRO	EA01202129	35746
448	BOEING	4S	3804	I1354059	425T	COMPUTER, MICRO	6232A20094	6451
449	BOEING	4S	3804	I1354060	82088	DISPLAY UNIT	KR02006240	500
450	BOEING	4S	3804	I1354153	JC2002VMA1	DISPLAY UNIT	18D00307S	1400

11-Jan-95
PAS_SELECTION_RPT

Page 11

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
451	BOEING	4S	3804	I1354154	386/33	COMPUTER, MICRO	SPECBOE3000110	975
452	BOEING	4S	3804	I1355417	S450DE	COMPUTER, MICRO	IVNJ9	4738
453	BOEING	4S	3804	IG026035	JC1404HMA	DISPLAY UNIT	97L30005N	722
454	BOEING	4S	3805	I1174572	M0401	DISPLAY UNIT	7013158	608
455	BOEING	4S	3805	I1174580	M5780	COMPUTER, MICRO	F10360EA737	4191
456	BOEING	4S	3805	I1231100	ADS450	COMPUTER, MICRO	FC9212055006	3445
457	BOEING	4S	3805	I1241759	0350	DISPLAY UNIT	WT8231A10212	2068
458	BOEING	4S	3805	I1242022	450DE	COMPUTER, MICRO	1VNLV	4738
459	BOEING	4S	3805	I1242478	HP33491A	PRINTER, ADP	3211J57684	4718
460	BOEING	4S	3805	I1293301	RE1422	DISPLAY UNIT	20122796	400
461	BOEING	4S	3805	I1293407	M0401	DISPLAY UNIT	5322836	300
462	BOEING	4S	3805	I1293408	M5685	DISK DRIVE UNIT	F00948UM5685	5417
463	BOEING	4S	3805	I1294095	33440A	PRINTER, ADP	3002J06375	1170
464	BOEING	4S	3805	I1297913	MD141V+	DISPLAY UNIT	36471029	600
465	BOEING	4S	3805	I1298646	A450CG	COMPUTER, MICRO	11156	1658
466	BOEING	4S	3805	I1355812	M4300	COMPUTER, MICRO	F32496N0673	4182
467	BOEING	4S	3805	IG026015	JC1404HMA	DISPLAY UNIT	97L29996N	722
468	BOEING	4S	3805	I1451041	1451GM	DISPLAY UNIT	A90-42809206	330
469	BOEING	4S	3805	I1451039	486SX33	COMPUTER, MICRO	VL205159	2008
470	BOEING	4S	3805	I1298657	A450CG	COMPUTER, MICRO	11165	1658
471	BOEING	4S	3805	I1297897	MD141V+	DISPLAY UNIT	36470075	600
472	BOEING	4S	3805A	I1241929	M0401	DISPLAY UNIT	5266314	629
473	BOEING	4S	3805A	I1242042	SYS310/4	COMPUTER, MICRO	SYS310033821	3823
474	BOEING	4S	3805A	I1355314	M5840	DISK DRIVE UNIT	F9101Q1M5835	6488
475	BOEING	4S	3805A	I1355650	XC1429C	DISPLAY UNIT	004107432	850
476	BOEING	4S	3806	I1354138	JC2002VMA1	DISPLAY UNIT	18D01426S	1400
477	BOEING	4S	3806	I1354139	386/33	COMPUTER, MICRO	SPECBOE93000104	975
478	BOEING	4S	3806A	I1354143	M5515LL/A	COMPUTER, MICRO	F3037M1CC40	5987
479	BOEING	4S	3806A	I1355325	M0401	DISPLAY UNIT	5383553	928
480	BOEING	4S	3806C	I1355665	S450DE	COMPUTER, MICRO	1VNJ8	4736
481	BOEING	4S	3806D	I1354142	GDM1950	DISPLAY UNIT	2500360	3667
482	BOEING	4S	3806E	I1355801	M1297	DISPLAY UNIT	5021955	575
483	BOEING	4S	3807	I1241257	XC1429C	DISPLAY UNIT	00611552	650
484	BOEING	4S	3807	I1293478	M0401	DISPLAY UNIT	5000098	300
485	BOEING	4S	3807	I1293479	M5030	COMPUTER, MICRO	F7313FHM5030	3436
486	BOEING	4S	3807	I1293480	M2688	DISK DRIVE UNIT	F4029AD6M2688	1129
487	BOEING	4S	3807	I1352105	SYS333D	COMPUTER, MICRO	0FBCG	4635
488	BOEING	4S	3807B	I1242189	A1097C	DISPLAY UNIT	3151J66034	1681
489	BOEING	4S	3807B	I1353704	M2688	DISK DRIVE	F40289JZ	1129
490	BOEING	4S	3807B	I1353706	M5030	COMPUTER, MICRO	F73113JT	3436
491	BOEING	4S	3807B	I1355472	A2213	COMPUTER, MICRO	6247A10238	6297
492	BOEING	4S	3807D	I1353745	MC-14SBM	DISPLAY UNIT	B6490261	500
493	BOEING	4S	3807D	I1353746	9671	COMPUTER, MICRO	967100026	3245
494	BOEING	4S	3807F	I1355395	A1097C	DISPLAY UNIT	3151J71086	1681
495	BOEING	4S	3807F	I1355466	A2213A	COMPUTER, MICRO	6247A10024	7681

11-Jan-95
PAS_SELECTION_RPT

Page 12

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
496	BOEING	4S	3807H	I1355474	A2213	COMPUTER, MICRO	6247A10234	6297
497	BOEING	4S	3807H	I1356078	A1097C	DISPLAY UNIT	3151J71083	1681
498	BOEING	4S	3807H	I1353707	M2688	DISK DRIVE UNIT	F40289SH	1129
499	BOEING	4S	3808	I1241825	M5000	COMPUTER, MICRO	F824B5THM5000	1177
500	BOEING	4S	3808	I1293328	M6000	PRINTER, ADP	CA0354GN%M6000	1340
501	BOEING	4S	3808	I1354140	GDM1950	DISPLAY UNIT	2500391	3667
502	BOEING	4S	3808	I1354141	M5515LL/A	COMPUTER, MICRO	F3035N55C40	5987
503	BOEING	4S	3808	I1354146	JC2002VMA1	DISPLAY UNIT	1ID013005	1400
504	BOEING	4S	3808	I1354147	386/33	COMPUTER, MICRO	SPECBOE93000121	975
505	BOEING	4S	3808	I1355320	M0401	DISPLAY UNIT	538352	928
506	BOEING	4S	3808	I1355360	M5525	COMPUTER, MICRO	F3126MGLC42	5653
507	BOEING	4S	3808	I1355364	M5525	COMPUTER, MICRO	F3127M54C42	5653
508	BOEING	4S	3808H	I1293355	PS3200-1	PRINTER, ADP	Q0053344	22447
509	BOEING	4S	3809	I1240318	9550	PROJECTOR, OVERHEAD	422837	535
510	BOEING	4S	3809	I1242229	M5650	COMPUTER, MICRO	F012747M5615	5491
511	BOEING	4S	3809	I1297726	M5780	COMPUTER, MICRO	F12071QQ716	3195
512	BOEING	4S	3809	I1297736	M5525	COMPUTER, MICRO	F3135MSMC42	7719
513	BOEING	4S	3809	I1297739	GDM1950	DISPLAY UNIT	SND1008820	2299
514	BOEING	4S	3809	I1297744	0350	DISPLAY UNIT	WTA152A10143	1857
515	BOEING	4S	3809	I1354150	GDM1950	DISPLAY UNIT	2500413	3667
516	BOEING	4S	2809B	I1353702	M0401	DISPLAY UNIT	5003728	639
517	BOEING	4S	2809B	I1353703	M5030	COMPUTER, MICRO	F7313L2	3436
518	BOEING	4S	2809G	I1242472	A1097C	DISPLAY UNIT	3151J71356	1681
519	BOEING	4S	2809G	I1355481	Z2213A	COMPUTER, MICRO	6247A10242	6297
520	BOEING	4S	3811	I0850941	M5000	COMPUTER, MICRO	F9023NWM5000	2799
521	BOEING	4S	3811	I1242049	M5650	COMPUTER, MICRO	F102617CM5665	2824
622	BOEING	4S	3811	I1293695	M1297	DISPLAY UNIT	5205623	650
523	BOEING	4S	3811	I1354134	GDM1950	DISPLAY UNIT	2500465	3667
524	BOEING	4S	3811	I1355317	M0401	DISPLAY UNIT	5176348	700
525	BOEING	4S	3811	I1355335	M0401	DISPLAY UNIT	5584291	609
526	BOEING	4S	3811	I1355358	M5525	COMPUTER, MICRO	F3114M73C42	5653
527	BOEING	4S	3811E	I1355478	A2213A	COMPUTER, MICRO	6247A10231	6297
528	BOEING	4S	3811E	I1355583	A1097C	DISPLAY UNIT	3151J71138	1681
529	BOEING	4S	3811G	I1266408	A1097C	DISPLAY UNIT		1100
530	BOEING	4S	3811G	I1355467	A2213A	COMPUTER, MICRO	6247A10224	6297
531	BOEING	4S	3812	I1170416	M0401	DISPLAY UNIT	7050695	584
532	BOEING	4S	3812	I1241559	DN4000	DISK DRIVE UNIT	6119A51215	10867
533	BOEING	4S	3812	I1241570	008399	DISPLAY UNIT	713535	336
534	BOEING	4S	3812	I1242214	M0401	DISPLAY UNIT	5264542M0401	629
535	BOEING	4S	3812	I1242234	M5650	COMPUTER, MICRO	F9345W4M5665	2941
526	BOEING	4S	3812	I1354174	M5515LL/A	COMPUTER, MICRO	F3037M1BC40	2987
537	BOEING	4S	3812C	I1241815	M5000	COMPUTER, MICRO	F8344H4M5404	5129
538	BOEING	4S	3814	I10861279	FDSP107F4	DISK DRIVE UNIT	M06TB3	36470
539	BOEING	4S	3814	I0861370	MDSP0720V	DISPLAY UNIT	NONE	500
540	BOEING	4S	3814	I0861371	2217	PRINTER, ADP	943020	10707

11-Jan-95
PAS_SELECTION_RPT

Page 13

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
541	BOEING	4S	3814	I1009329	FMTP129F8	CARTRIDGE TAPE DRIVE	HONMB6	4787
542	BOEING	4S	3814	I1009337	FMTP129F8	CARTRIDGE TAPE DRIVE	HOLAK9	4787
543	BOEING	4S	3814	I1172379	FDSK257	DISK DRIVE UNIT	1Z60100880	826
544	BOEING	4S	3814	IG097405	C33436	PLOTTER GRAPHICS SIX	C43124107	50215
545	BOEING	4S	3814	IG097407	MDSP07208	DISPLAY UNIT	HOFXNN	1480
547	BOEING	4S	3814C	I1354151	JC1404	DISPLAY UNIT	08M71996	620
548	BOEING	4S	3814C	I1354152	EX3000D	COMPUTER, MICRO	CAW-03410151	2010
549	BOEING	4S	3814F	I1355415	S450DE	COMPUTER, MICRO	IVNJ4	4738
550	BOEING	4S	3814F	IG025808	JC1404HMA	DISPLAY UNIT	97K29630N	722
551	BOEING	4S	3815	I0893425	M0401	DISPLAY UNIT	5044843	679
522	BOEING	4S	3815	I1241563	DN4000	DISK DRIVE UNIT	6119A51214	10867
553	BOEING	4S	3815	I1241566	008399	DISPLAY UNIT	81010827	336
554	BOEING	4S	3815	I1241798	M5650	COMPUTER, MICRO	F9345WUM5665	2941
555	BOEING	4S	3815	I1241799	M5650	COMPUTER, MICRO	F93433KM5665	2941
556	BOEING	4S	3815	I1297730	M0401	DISPLAY UNIT	502881	689
557	BOEING	4S	3815	I1354132	FM2	DISPLAY UNIT	01132638	757
558	BOEING	4S	3815	I1354133	DN3500	COMPUTER, MICRO	6043A51313	6898
559	BOEING	4S	3815	I1354135	M5515LL/A	COMPUTER, MICRO	F3035H4AC40	5987
560	BOEING	4S	3815	I1354137	JC1404	DISPLAY UNIT	08M71102	620
561	BOEING	4S	3815	I1355311	M0401	DISPLAY UNIT	5173389	700
562	BOEING	4S	3815	I1355329	M401	DISPLAY UNIT	5584290	609
563	BOEING	4S	3815	I1355421	S450DE	COMPUTER, MICRO	1V28X	4738
564	BOEING	4S	3815F	I1242187	Z1097C	DISPLAY UNIT	3151J71054	1681
565	BOEING	4S	3815F	I1355468	A2213A	COMPUTER, MICRO	6247A10012	6297
566	BOEING	4S	3817	I1242054	M560	COMPUTER, MICRO	F102617NM5665	2824
567	BOEING	4S	3817	I1354136	JC1404	DISPLAY UNIT	08M71010	620
568	BOEING	4S	3817	I1354144	JC2002VMA1	DISPLAY UNIT	18D01282S	1400
569	BOEING	4S	3817	I1354145	386/33	COMPUTER, MICRO	SPECBOE93000102	975
570	BOEING	4S	3817	I1355334	M0401	DISPLAY UNIT	5584297	609
571	BOEING	4S	3817	I1355410	S450DE	COMPUTER, MICRO	IV28S	4738
572	BOEING	4S	3817	I1355414	S450DE	COMPUTER, MICRO	IV26R	4738
573	BOEING	4S	3817	I1356350	DN4000	DISK DRIVE UNIT	6119A51186	8659
574	BOEING	4S	3817	I1356380	008399	DISPLAY UNIT	71402741	1300
575	BOEING	4S	3817	IG025608	JC1404HMA	DISPLAY UNIT	97K29730K	722
576	BOEING	4S	3817E	I1355487	147B	COMPUTER, SPARCSTATI	027F0527	9830
577	BOEING	4S	3817F	I1355526	411	DISK DRIVE UNIT	125G3130	800
578	BOEING	4S	3817F	I1366271	4125FMB	DISPLAY UNIT	133G0286	3346
579	BOEING	4S	3820	I0150602	701FX	TYPEWRITER	133G0286	534
580	BOEING	4S	3820	I1239176	6781-011	TYPEWRITER, WHEELWRIT	11-VA098	452
581	BOEING	4S	3820	I1239179	6781-011	TYPEWRITER WHEELWRIT	11-VCC86	452
582	BOEING	4S	3820	I1240302	9550	PROJECTOR, OVERHEAD	422864	535
503	BOEING	4S	3820	I1240308	9550	PROJECTOR, OVERHEAD	422846	535
584	BOEING	4S	3820	I1240317	9550	PROJECTOR, OVERHEAD	422838	535
585	BOEING	4S	3820	I1241819	M5000	COMPUTER, MICRO	F8050K7H5030	6291

11-Jan-95
PAS_SELECTION_RPT

Page 14

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
586	BOEING	4S	3820	I1293313	SD4533C	DISPLAY UNIT	U453306022	500
587	BOEING	4S	3820	I1354130	M5515LL/A	COMPUTER, MICRO	F3035WZC40	5987
588	BOEING	4S	3820	I1354131	GDM1950	DISPLAY UNIT	2500441	3667
589	BOEING	4S	3820	IG022192	VX1652	CALCULATOR, ELECTRONIC	98094074	92
590	BOEING	4S	3820A	I1355327	M0401	DISPLAY UNIT	5584292	609
591	BOEING	4S	3820A	I1355349	M5525	COMPUTER, MICRO	F3115MY5C40	6019
592	BOEING	4S	3820B	I1241800	M5650	COMPUTER, MICRO	F1040088M5665	2941
593	BOEING	4S	3820B	I1241930	M0401	DISPLAY UNIT	5107031	656
594	BOEING	4S	3820C	I1240313	9550	PROJECTOR, OVERHEAD	422841	535
595	BOEING	4S	3820C	I1241764	M0401	DISPLAY UNIT	5264381	629
596	BOEING	4S	3820C	I1241780	M5780	COMPUTER, MICRO	F113733X716	2879
597	BOEING	4S	3820D	I1355337	M0401	DISPLAY UNIT	5584287	609
598	BOEING	4S	3820D	I1355365	M5525	COMPUTER, MICRO	F3126MG0C42	5653
599	BOEING	4S	3820D	I1065624	M5840	COMPUTER, MICRO	F10140SFM5835	4805
600	BOEING	4S	3820D	I1357068	M0401	DISPLAY UNIT	5423780	603
601	BOEING	4S	3822A	I1297833	LPP130	PRINTER, ADP	0012156	3999
602	BOEING	4S	3900	I0860374	008398-001	DISPLAY UNIT	FF8340467	4000
603	BOEING	4S	3900	I0860375	COMAIN SERIES3500	COMPUTER, MICRO	A00238827	9643
604	BOEING	4S	39900	I1354161	JC1404	DISPLAY UNIT	08M70997	620
605	BOEING	4S	3900	I1354165	386/33	COMPUTER, MICRO	SPECBOE93000112	975
606	BOEING	4S	3900	I1355408	S450DE	COMPUTER, MICRO	IV26J	4738
607	BOEING	4S	3900	I1355412	S450DE	COMPUTER, MICRO	IV26G	4738
608	BOEING	4S	3900	I1356401	008399	DISPLAY UNIT	F1402585	1300
609	BOEING	4S	3900	I1356712	DN4000	DISK DRIVE UNIT	6119A51183	8659
610	BOEING	4S	3900	IG026029	JC1404HMA	DISPLAY UNIT	97L29997N	722
611	BOEING	4S	3901	I1241760	GDM1950	DISPLAY UNIT	SND1008810	2299
612	BOEING	4S	3901	I1265467	0350	DISPLAY UNIT	WTB228A10347	1880
613	BOEING	4S	3901	I1297443	2108	PRINTER, ADP	1736390044	3417
614	BOEING	4S	3901	I1356349	DN3500	COMPUTER, MICRO	EA92101209	18157
615	BOEING	4S	3901	I1356402	008399	DISPLAY UNIT	83518426	5500
616	BOEING	4S	3901	I1356705	DN4000	DISK DRIVE UNIT	6123651514	13489
617	BOEING	4S	3901	IG022289	008399	DISPLAY UNIT	71402610	1300
618	BOEING	4S	3901	I1230625	M1297	DISPLAY UNIT	7130814	604
619	BOEING	4S	3901	I1008975	M5740LL/A	DISK DRIVE UNIT	F10456D1740	3970
620	BOEING	4S	3901C	I1242192	A2213A	DISK DRIVE UNIT	6245A08339	6516
621	BOEING	4S	3901C	I1355693	A1097C	DISPLAY UNIT	3151J71143	1681
622	BOEING	4S	3901D	I1355469	A2213A	COMPUTER, MICRO	6247A10239	6297
623	BOEING	4S	3901D	I1356054	A1097C	DISPLAY UNIT	3151J71051	1681
624	BOEING	4S	3903A	I1354170	FM2	DISPLAY UNIT	00532214	757
625	BOEING	4S	3903A	I1354171	DN3500	COMPUTER, MICRO	6043A52100	6898
626	BOEING	4S	3903A	I1356347	DN3500	DISK DRIVE UNIT	EA92501758	10010
627	BOEING	4S	3903A	I1356379	008399	DISPLAY UNIT	82415170	1300
628	BOEING	4S	3903B	I1174576	GDM1950	DISPLAY UNIT	5302728	2415
329	BOEING	4S	3903B	I1241743	0350	DISPLAY UNIT	WTA151A10004	1857
630	BOEING	4S	3903B	I1241940	GDM1950	DISPLAY UNIT	232208	2768

11-Jan-95
PAS_SELECTION_RPT

Page 15

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	----	-----	-----	-----	-----	-----	-----
631	BOEING	4S	3903B	I1293306	M5685	DISK DRIVE UNIT	F10171JVM5685	5120
632	BOEING	4S	3903B	I1297445	486/50	COMPUTER, MICRO	FC9212055001	3966
633	BOEING	4S	3903B	I1008971	M5740LL/A	DISK DRIVE UNIT	F10456GE740	3970
634	BOEING	4S	3904	I1242050	M5650	COMPUTER, MICRO	FFF10334HPM5615	2824
635	BOEING	4S	3904	I1293397	M5665	COMPUTER, MICRO	F934STNM5665	2941
636	BOEING	4S	3904	I1355333	M0401	DISPLAY UNIT	5584295	609
637	BOEING	4S	3905	I1292555	500AJH	PROJECTOR, OVERHEAD	975443	535
638	BOEING	4S	3905A	I1356052	A1097C	DISPLAY UNIT	3151J71059	1681
639	BOEING	4S	3905B	I1242194	A2213A	DISK DRIVE UNIT	6247A10229	6297
640	BOEING	4S	3905B	I1356055	A1097C	DISPLAY UNIT	3151J66833	1681
641	BOEING	4S	3905C	I1266410	A1097C	DISPLAY UNIT	3151J07135	1100
642	BOEING	4S	3905C	I1266411	710	COMPUTER, MICRO	6247A10236	5500
643	BOEING	4S	3905D	I1355470	A2213	COMPUTER, MICRO	6242A05550	6103
644	BOEING	4S	3905E	I1242193	A2213A	DISK DRIVE UNIT	6247A10233	6297
645	BOEING	4S	3905E	I1355473	A2213	COMPUTER, MICRO	6247A10215	6103
646	BOEING	4S	3905E	I1356079	A1097C	DISPLAY UNIT	3151J71053	1681
647	BOEING	4S	3905E	I1356949	A1097C	DISPLAY UNIT	3151J70720	1681
648	BOEING	4S	3906	I1241813	M5000	COMPUTER, MICRO	F8046KWM5030	6291
649	BOEING	4S	3906	I1293481	C2001A	PRINTER, ADP	JPBH013687	1983
650	BOEING	4S	3906	I1354179	JC2002VMA1	DISPLAY UNIT	1XD00114S	1400
651	BOEING	4S	3906	I1354180	386/33	COMPUTER, MICRO	SPECBOE9300119	975
652	BOEING	4S	3906	I1354181	JC2002VMA1	DISPLAY UNIT	18D01433S	1400
653	BOEING	4S	3906	I1354182	386/33	COMPUTER, MICRO	SPECBOE93000117	975
654	BOEING	4S	3906	I1355563	M0401	DISPLAY UNIT	5022786	689
655	BOEING	4S	3909	I1241557	DN3500	DISK DRIVE UNIT	EA92502883	10010
656	BOEING	4S	3909	I1241561	DN4000	DISK DRIVE UNIT	6119851198	8659
657	BOEING	4S	3909	I1241565	008399	DISPLAY UNIT	74707131	336
658	BOEING	4S	3909	I1241569	008399	DISPLAY UNIT	71302506	336
659	BOEING	4S	3909	I1354172	FM2	DISPLAY UNIT	00532198	757
660	BOEING	4S	3909	I1354173	DN3500	COMPUTER, MICRO	6043A51832	6898
661	BOEING	4S	3909	I1354177	GDM1950	DISPLAY UNIT	2500070	3667
662	BOEING	4S	3909	I1354178	M5515LL/A	COMPUTER, MICRO	F3037M1GC40	5987
663	BOEING	4S	3910	I1354183	GDM1950	DISPLAY UNIT	2500354	3667
664	BOEING	4S	3910	I1354184	M5515LL/A	COMPUTER, MICRO	F3036MDPC40	5987
665	BOEING	4S	3910	IL017398	VS42A-BW	COMPUTER, MICRO	AB949048FR	8490
666	BOEING	4S	3910	IL017399	VR299DA	DISPLAY UNIT	FF052342881	1600
667	BOEING	4S	3910	IL017400	TK50Z-GA	TAPE DRIVE	AB02101HKG	3016
668	BOEING	4S	3910H	I1241619	Q03100	COPYBOARD, ELECTRONI	D3273005	3788
669	BOEING	4S	3910H	I1293477	C2001A	PRINTER, ADP	JPBH017936	1983
670	BOEING	4S	3910H	I1354185	JC1404	DISPLAY UNIT	08M71014	620
671	BOEING	4S	3911	I1007198	M6000	PRINTER, ADP	CA0302ZRP%M6000	5639
672	BOEING	4S	3911	I1242212	M0401	DISPLAY UNIT	5030291M0401	689
673	BOEING	4S	3911	I1242237	5000	COMPUTER, MICRO	F8046Z0M5030	6291
674	BOEING	4S	3911	I1293329	M5030	COMPUTER, MICRO	F7313MBM5030	3436
675	BOEING	4S	3911	I1293330	M0401	DISPLAY UNIT	S000093	300

11-Jan-95
PAS_SELECTION_RPT

Page 16

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	----	-----	-----	-----	-----	-----	-----
676	BOEING	4S	3911	I1293331	M2688	DISK DRIVE UNIT	F40254LT2688	1129
677	BOEING	4S	3911	I1293433	M0401	DISPLAY UNIT	5003693	300
678	BOEING	4S	3911	I1293435	M5030	COMPUTER, MICRO	F7313J4M5030	3436
679	BOEING	4S	3911	I1297728	M5000	COMPUTER, MICRO	F8090FFM5000	3654
680	BOEING	4S	3911	I1353785	M5030	COMPUTER, MICRO	F7313EB	3436
681	BOEING	4S	3911	I1353816	M0401	DISPLAY UNIT	5000387	639
682	BOEING	4S	3911	I1354175	JC2002VMA1	DISPLAY UNIT	18D000251S	1400
683	BOEING	4S	3911	I1354176	386/33	COMPUTER, MICRO	SPECBOE93000123	975
683	BOEING	4S	3911	I1354186	EX3000D	COMPUTER, MICRO	CAW=03410127	2010
685	BOEING	4S	3911	I1355394	C1395	DISPLAY UNIT	KH314051	1300
686	BOEING	4S	3911	I1356301	386S	COMPUTER, MICRO	4038HT6H0121	4935
687	BOEING	4S	3911	I1356643	SYS310	COMPUTER, MICRO	SYS310048051	5866
688	BOEING	4S	3914	I1239132	1570A	CALCULATOR, ELECTRONIC	029202321	76
689	BOEING	4S	3920	I1351488	M2113	COMPUTER, MICRO	FC50S581CJ	1589
690	BOEING	4S	4206	I1241951	JC1403HMA	DISPLAY UNIT	94M30313M	629
691	BOEING	4S	4206	I1242021	SYS200	COMPUTER, MICRO	286125067483	2953
692	BOEING	4S	4206	I1242232	M5525	COMPUTER, MICRO	F3042NDLC42	5654
693	BOEING	4S	4206	I1351480	M2113	COMPUTER, MICRO	F350S511CJ	1589
694	BOEING	4S	4206	I1351493	M2113	COMPUTER, MICRO	FC350SC11CJ	1589
695	BOEING	4S	4206	IG087136	M0401	DISPLAY UNIT	5271460	296
696	BOEING	4S	4206B	I1357200	M1212	DISPLAY UNIT	S13502KNE04	390
697	BOEING	4S	4206C	I1357220	M1212	DISPLAY UNIT	S13502KVE04	390
698	BOEING	4S	4208	I1008015	M5780	COMPUTER, MICRO	F12263FQ724	4400
699	BOEING	4S	4208	I1117920	GDM1950	DISPLAY UNIT	2323575	4400
700	BOEING	4S	4208	I1242023	11FX	COMPUTER, MICRO	F3135MSUC42	4446
701	BOEING	4S	4208	I1293741	0350	DISPLAY UNIT	WTA152A10117	1857
702	BOEING	4S	4208	I1322104	M1350	COMPUTER, MICRO	SG2504CB3B5	1721
703	BOEING	4S	4208	I1355799	M4300	COMPUTER, MICRO	F32392VZ671	4527
704	BOEING	4S	4208	I1355800	B190T	DISK DRIVE UNIT	JC12340451	980
705	BOEING	4S	4208B	I1242248	GDM1950	DISPLAY UNIT	2061973/SND1008687	2299
706	BOEING	4S	4208F	I1242206	VO-9850	RECORDER, VIDEO CASS	74795	5800
707	BOEING	4S	4208F	I1242211	CT1382Y	DISPLAY UNIT	MB20490988	750
708	BOEING	4S	4208F	I1242224	4200	COMPUTER, MICRO	F520928E255	4527
709	BOEING	4S	4208F	I1297741	GDM1950	DISPLAY UNIT	SND1008693	2299
710	BOEING	4S	4303A	I1351464	M2113	COMPUTER, MICRO	FC35013T1CJ	1589
711	BOEING	4S	4403	IL017239	7207	TAPE DRIVE UNIT	2639608	1593
712	BOEING	4S	4403	IL017368	7207	TAPE DRIVE UNIT	2639589	1593
713	BOEING	4S	4403A	I1009328	APC-H702KB	COMPUTER, MICRO	1107273UB	13797
714	BOEING	4S	4403A	I1172361	DESKPRO	COMPUTER, MICRO	6215HBP10473	10000
915	BOEING	4S	4403A	I1172365	DESKPRO	COMPUTER, MICRO	6215HBP10469	9423
716	BOEING	4S	4403A	I1230958	SD4533C	DISPLAY UNIT	U453314089	500
717	BOEING	4S	4403A	I1242035	SYS310	COMPUTER, MICRO	SYS310048113	3015
718	BOEING	4S	4403A	I1242444	XC1429C	DISPLAY UNIT	005110711	850
719	BOEING	4S	4403A	I1293358	TK5026A	DISK DRIVE UNIT	AB01605X49	1000
720	BOEING	4S	4403A	I1293701	VC10B	DISPLAY UNIT	U430015476	1200

11-Jan-95
PAS_SELECTION_RPT

Page 17

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
721	BOEING	4S	4403A	I1293731	XC1429C	DISPLAY UNIT	05110740	650
722	BOEING	4S	4403A	I1294013	N/A	COMPUTER, MICRO	903333	7700
723	BOEING	4S	4403A	I1294954	EXH8500ST	TAPE DRIVE UNIT	1506598	2350
724	BOEING	4S	4403A	I1322135	EXB8505ST	TAPE DRIVE UNIT	8500553	2991
725	BOEING	4S	4403A	I1353265	6091-016	DISPLAY UNIT	23-AH466	1872
726	BOEING	4S	4403A	I1353266	6091-016	DISPLAY UNIT	23-AH421	1872
727	BOEING	4S	4403A	IG097334	DESCPRO386/20	COMPUTER, MICRO	4029HS7H0720	7492
728	BOEING	4S	4403A	IG097349	DESKPRO386/20E	COMPUTER, MICRO	4034HS7H0292	7492
729	BOEING	4S	4403A	IL017238	7013-560	COMPUTER, MICRO	2630349	55449
730	BOEING	4S	4403A	IL017240	6091-016	DISPLAY UNIT	23-AH421	1872
731	BOEING	4S	4403A	IL017366	7013-560	COMPUTER, MICRO	2630347	55449
732	BOEING	4S	4403A	IL017367	6091-016	DISPLAY UNIT	23-AH466	1872
733	BOEING	4S	4403A	I1353271	7013-560	COMPUTER, MICRO	2630349	55449
734	BOEING	4S	4403A	I1353272	7207	TAPE DRIVE UNIT	2639608	1593
735	BOEING	4S	4403A	I1353273	7207	TAPE DRIVE UNIT	2639589	1593
736	BOEING	4S	4403A	I1353274	7013-560	COMPUTER, MICRO	2630347	55449
737	BOEING	4S	4530	I0721477	SF-C2	FILING CABINET LEG 2	1241327	770
738	BOEING	4S	4530	I0833510	HP33440A	PRINTER, ADP	2652J83686	1470
739	BOEING	4S	4530	I1081958	CPD1304	DISPLAY UNIT	5022386	640
740	BOEING	4S	4530	I1083035	2530	COMPUTER, MICRO	4038HT6H0736	4845
741	BOEING	4S	4530	I1239122	1570A	CALCULATOR, ELECTRONIC	029202808	76
742	BOEING	4S	4530	I1293312	ADS486	COMPUTER, MICRO	FC93020633001	2965
743	BOEING	4S	4530	IG026031	JC1404HMA	DISPLAY UNIT	97K29644N	722
744	BOEING	4S	4716A	I1231012	ADS3486	COMPUTER, MICRO	FC9305044011	2650
745	BOEING	4S	4716A	I1231013	RE1422	DISPLAY UNIT	20276058	400
746	BOEING	4S	4716C	I1352093	SYS310	COMPUTER, MICRO	310048067	3015
347	BOEING	4S	4716C	IG098557	JC1404HMA	DISPLAY UNIT	01L52767U	722
748	BOEING	4S	4716D	I0039321	M5409	COMPUTER, MICRO	FC2251VP803	3520
749	BOEING	4S	4716D	I0158936	450PD	CALCULATOR, ELECTRONIC	81101430	86
750	BOEING	4S	4716D	I1169396	ZWL0200-48	COMPUTER, MICRO	005DE001321	2500
751	BOEING	4S	4716D	I1231030	JC1531VMA10K	DISPLAY UNIT	33K15588C	850
752	BOEING	4S	4716D	I1298636	A450CG	COMPUTER, MICRO	11132	2004
753	BOEING	4S	4716D	IG097064	ZWL020004	COMPUTER, MICRO	92DF019903	2800
754	BOEING	4S	4716E	I1297721	M5030	COMPUTER, MICRO	F8050K5M5030	6291
755	BOEING	4S	4716E	I1297725	M0401	DISPLAY UNIT	5028806	689
756	BOEING	4S	4716E	I1297877	MD141V+	DISPLAY UNIT	23470149	600
757	BOEING	4S	4716F	I1297876	A450CG	COMPUTER, MICRO	11139	1658
758	BOEING	4S	4720	I1008164	C2001A	PRINTER	UPBJ021036	1390
759	BOEING	4S	4720	I1295053	214S	DISPLAY UNIT	109319846.28	279
760	BOEING	4S	4722	I1006099	M0401	DISPLAY UNIT	5444001	584
761	BOEING	4S	4722	I1241787	M5650	COMPUTER, MICRO	F9342DAM5615	2941
762	BOEING	4S	4724	I1293304	M0401	DISPLAY UNIT	5289162	300
763	BOEING	4S	4724	I1293305	M5685	DISK DRIVE UNIT	F9489U7M5685	4834
764	BOEING	4S	4726	I1170423	M0401	DISPLAY UNIT	7076415	584
765	BOEING	4S	4726	I1293411	M5920	COMPUTER, MICRO	F11485VNC81	5070

11-Jan-95
PAS_SELECTION_RPT

Page 18

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
766	BOEING	4S	4728	I1241765	M0401	DISPLAY UNIT	5041908	689
767	BOEING	4S	4728	I1241796	M5650	COMPUTER, MICRO	F9345WHM5665	2941
768	BOEING	4S	4728	I1242015	4331M	COMPUTER, MICRO	27R3V	4738
769	BOEING	4S	4728	IG098745	JC1404HMA	DISPLAY UNIT	01M0019S	722
770	BOEING	4S	4804A	I1117921	GDM1950	DISPLAY UNIT	2323010	1500
771	BOEING	4S	4804A	I1242384	M6000	PRINTER, ADP	CA8E50%M6000	2819
772	BOEING	4S	4804A	I1293400	M5780	COMPUTER, MICRO	F113556C716	2879
773	BOEING	4S	4804A	I1321193	JC2141UMA	DISPLAY UNIT	34C02748A	2296
774	BOEING	4S	4804A	I1321194	JC2141UMA	DISPLAY UNIT	34C02114A	2296
775	BOEING	4S	4804B	I1293381	M5780	COMPUTER, MICRO	F11355YX716	7719
776	BOEING	4S	4804C	I1293403	M0401	DISPLAY UNIT	5004341	689
777	BOEING	4S	4804C	I1293404	M5780	COMPUTER, MICRO	F1137340716	2879
778	BOEING	4S	4804D	I1241793	M5650	COMPUTER, MICRO	F9345WQM5665	2941
779	BOEING	4S	4804D	I1241938	GDM1950	DISPLAY UNIT	5014805	2299
780	BOEING	4S	4804E	I1242293	M4300	COMPUTER, MICRO	F3239306671	4927
781	BOEING	4S	4804E	I1357069	M0401	DISPLAY UNIT	5172694	603
782	BOEING	4S	4804F	I1293414	M1297	DISPLAY UNIT	7078978	611
783	BOEING	4S	4806	I1297714	M5030	COMPUTER, MICRO	F8047GM5030	6291
784	BOEING	4S	4806A	I0331323	670X	TYPEWRITER	6282583	575
785	BOEING	4S	4806A	I1092068	M0401	DISPLAY UNIT	3457790	650
786	BOEING	4S	4806B	I1293401	M0401	DISPLAY UNIT	5322831	300
787	BOEING	4S	4806B	I1293402	M5685	DISK DRIVE UNIT	F009DA9M5685	5417
788	BOEING	4S	4806D	I1297844	2261A	COMPUTER, MICRO	4037HS7H0266	4700
789	BOEING	4S	4806D	I1297851	4201	DISPLAY UNIT	02914544M860	463
790	BOEING	4S	4806E	I1354202	33449A	PRINTER, ADP	3022A54737	1524
791	BOEING	4S	4806E	I1355305	5840	DISK DRIVE UNIT	F909CE0M5835	6488
792	BOEING	4S	4806E	I1352090	VC10B	DISPLAY UNIT	V430015850	1280
793	BOEING	4S	4806E	I1352095	4255M	COMPUTER, MICRO	2J9R9	3465
794	BOEING	4S	4806F	IG097272	2108	PRINTER, ADP	0236390234	3147
795	BOEING	4S	4807A	I1297784	XC1429C	DISPLAY UNIT	006111674	650
796	BOEING	4S	4807A	I1355901	ADS486	COMPUTER, MICRO	FC9302057001	3165
797	BOEING	4S	4807B	I1356771	M0401	DISPLAY UNIT	5000162	639
798	BOEING	4S	4807B	IG087045	M5000	DISK DRIVE UNIT	F8467SY	3500
799	BOEING	4S	4807B	IG097377	420	DISPLAY UNIT	93314544F586	468
800	BOEING	4S	4807C	I1241811	M5525	COMPUTER, MICRO	F3135MT4C42	4520
801	BOEING	4S	4807C	I1355795	M1297	DISPLAY UNIT	5261244	564
802	BOEING	4S	4807D	I1091732	M5780	COMPUTER, MICRO	F11061FE774	4688
803	BOEING	4S	4807D	I1355319	M0401	DISPLAY UNIT	5373969	928
804	BOEING	4S	4807E	I1004412	M5650	COMPUTER, MICRO	F9489VBM5685	4950
805	BOEING	4S	4807E	I1241254	M0401	DISPLAY UNIT	5187301	650
806	BOEING	4S	4807E	I1297920	A450CG	COMPUTER, MICRO	11181	1658
807	BOEING	4S	4807F	I1009141	M5775LL/A	DISK DRIVE UNIT	F11102EY774	3970
808	BOEING	4S	4807F	I1293694	M0401	DISPLAY UNIT	7087132M0401	644
809	BOEING	4S	4807G	I1242089	2540	COMPUTER, MICRO	4037HS7H0285	4701
810	BOEING	4S	4807H	I1242084	420T	DISPLAY UNIT	029145440577	463

11-Jan-95
PAS_SELECTION_RPT

Page 19

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
811	BOEING	4S	4807H	I1297850	2261A	COMPUTER, MICRO	4037HS7H0299	4700
812	BOEING	4S	4900	I1293636	M5000	COMPUTER, MICRO	F7282KXM5030	3962
813	BOEING	4S	4900	I1354122	JC1404	DISPLAY UNIT	08M70971	620
814	BOEING	4S	4900	I1355677	SYS200	COMPUTER, MICRO	286125067551	2953
815	BOEING	4S	4900	I1355839	XC1429C	DISPLAY UNIT	005109815	650
816	BOEING	4S	4900	IG087084	2572	COMPUTER, MICRO		8139
817	BOEING	4S	4900A	I1298672	MD141V+	DISPLAY UNIT	36470959	600
818	BOEING	4S	4900A	I1298681	Z450CG	COMPUTER, MICRO	11183	1658
819	BOEING	4S	4900C	I1009268	33449A	PRINTER, ADP	3033A31639	1758
820	BOEING	4S	4900C	I1231015	RE1422	DISPLAY UNIT	20275293	400
821	BOEING	4S	4900C	I1231016	ADS3486	COMPUTER, MICRO	FC9305044003	2650
822	BOEING	4S	4900D	I1353595	M0401	DISPLAY UNIT	5000102	639
823	BOEING	4S	4900D	I1353596	M5030	COMPUTER, MICRO	F7312JZ	3436
824	BOEING	4S	4900D	I1353597	M5030	COMPUTER, MICRO	F7313H2	3436
825	BOEING	4S	4900E	I1233474	JC1532VMA	DISPLAY UNIT	29M13592C	700
826	BOEING	4S	4900E	I1297468	486/50	COMPUTER, MICRO	FC212055007	3966
827	BOEING	4S	4900F	I1353679	M0401	DISPLAY UNIT	5003958	639
828	BOEING	4S	4900F	I1353680	M5030	COMPUTER, MICRO	F7313MM	3436
829	BOEING	4S	4900F	I1353681	M2688	DISK DRIVE	F4029ADB	1129
630	BOEING	4S	4900H	I1008035	HP33491A	PRINTER, ADP	3211J01219	8375
831	BOEING	4S	4901A	I1092051	M0401	DISPLAY UNIT	7028346	650
632	BOEING	4S	4901A	I1239881	M5780	DISK DRIVE UNIT	F2222LDJ716	3192
833	BOEING	4S	4901B	I1241783	M5780	COMPUTER, MICRO	F11247WN765	3195
834	BOEING	4S	4901B	I1322122	M1212	DISPLAY UNIT	S13212GAE04	472
835	BOEING	4S	4901C	I1356928	M1297	DISPLAY UNIT	7078979	611
836	BOEING	4S	4901C	I1356938	M5780	COMPUTER, MICRO	F12071SSM716	4195
837	BOEING	4S	4901D	I1093440	M5780	COMPUTER, MICRO	F11061DW774	4688
838	BOEING	4S	4901E	I1174585	M5780	COMPUTER, MICRO	F1033024737	4191
839	BOEING	4S	4901E	I1357499	M0401	DISPLAY UNIT	5171939	603
840	BOEING	4S	4901F	I1242243	M5780	COMPUTER, MICRO	F1135564716	5951
841	BOEING	4S	4901F	I1356930	M0401	DISPLAY UNIT	5009806	689
842	BOEING	4S	4902A	IG017090	JC1404HMA	DISPLAY UNIT	93K122895	528
843	BOEING	4S	4902A	IG097288	DESKPRO386/20E	COMPUTER, MICRO	4032HS7H0098	7492
844	BOEING	4S	4902B	I1174545	M0401	DISPLAY UNIT	7011986	608
845	BOEING	4S	4902B	I1297716	M5000	COMPUTER, MICRO	F8484A8M5000	1177
846	BOEING	4S	4902B	I1451042	1451GM	DISPLAY UNIT	A90-42809182	330
847	BOEING	4S	4902B	I1451038	486SX33	COMPUTER, MICRO	VL204422	2008
848	BOEING	4S	4902C	I1091738	M0401	DISPLAY UNIT	7028351	650
849	BOEING	4S	4902C	I1241828	M5000	COMPUTER, MICRO	F80908PM5000	3654
850	BOEING	4S	4902C	I1293409	CM8428MX	DISPLAY UNIT	322323245	548
851	BOEING	4S	4902D	I1005048	33449A	PRINTER, ADP	3015J96946	1543
852	BOEING	4S	4902D	I1297886	A450CG	COMPUTER, MICRO	11144	1658
853	BOEING	4S	4902D	I1297881	MD141V+	DISPLAY UNIT	36470648	600
854	BOEING	4S	4902E	I1297901	MD141V+	DISPLAY UNIT	36470985	600
855	BOEING	4S	4902E	I1297892	A450CG	COMPUTER, MICRO	11147	1658

11-Jan-95
PAS_SELECTION_RPT

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
856	BOEING	4S	4902G	I1006239	M0401	DISPLAY UNIT	7052950	584
857	BOEING	4S	4902G	I1066735	M5840	COMPUTER, MICRO	F932N7XM5865	7861
858	BOEING	4S	4906	I1163231	33449A	PRINTER, ADP	3104JC7527	1439
859	BOEING	4S	4906	I1241269	200	COMPUTER, MICRO	286125003532	2841
860	BOEING	4S	4906	I1241978	XC1429C	DISPLAY UNIT	005109899	650
861	BOEING	4S	4906	I1297450	3030	COMPUTER, MICRO	4139HBN20529	6609
862	BOEING	4S	4906	I1297872	A450CG	COMPUTER, MICRO	11137	1658
863	BOEING	4S	4906	I1297887	MD141V+	DISPLAY UNIT	36470469	600
864	BOEING	4S	4906	I1297908	A450CG	COMPUTER, MICRO	11179	1658
865	BOEING	4S	4906	I1298643	MD141V+	DISPLAY UNIT	23470613	600
866	BOEING	4S	4906A	I1298684	MD141V+	DISPLAY UNIT	36470525	600
867	BOEING	4S	4906A	I1297899	MD141V+	DISPLAY UNIT	36470398	600
868	BOEING	4S	4906A	I1298669	A450CG	COMPUTER, MICRO	11171	1658
869	BOEING	4S	4906D	I1298662	MD141V+	DISPLAY UNIT	36470066	600
870	BOEING	4S	4906D	I1297902	A450CG	COMPUTER, MICRO	11152	1658
871	BOEING	4S	4906H	I1230962	PS3200-1	PRINTER, ADP	0057181	22578
872	BOEING	4S	4907B	I1357056	M5780	COMPUTER, MICRO	F113556E716	2879
873	BOEING	4S	4907B	I1357071	M0401	DISPLAY UNIT	5172835	603
874	BOEING	4S	4907C	I1293550	M2688	DISK DRIVE UNIT	F40289QJM2688	1129
875	BOEING	4S	4907C	I1293351	M0401	DISPLAY UNIT	5002378	300
876	BOEING	4S	4907C	I1293352	M5030	COMPUTER, MICRO	F7313H4M5030	3436
877	BOEING	4S	4910D	IG087980	MD401	DISPLAY UNIT	5357610	1062
878	BOEING	4S	4911A	I1241260	325D	COMPUTER, MICRO	0F3UH	4635
879	BOEING	4S	4911A	I1297912	A450CG	COMPUTER, MICRO	11177	1658
880	BOEING	4S	4911A	IG098730	JC1404HMA	DISPLAY UNIT	94K19668T	722
881	BOEING	4S	4911A	I1298658	MD141V+	DISPLAY UNIT	36471042	600
882	BOEING	4S	4911B	I1230988	ADS486	COMPUTER, MICRO	FC9301036006	2415
883	BOEING	4S	4911B	I1239103	1570A	CALCULATOR, ELECTRONIC	029202796	76
884	BOEING	4S	4911B	I1239123	1570A	CALCULATOR, ELECTRONIC	02902807	76
885	BOEING	4S	4911B	I1242462	KC1429C	DISPLAY UNIT	005110193	650
886	BOEING	4S	4911B	I1297463	RE9512	DISPLAY UNIT	FC9303014003	280
887	BOEING	4S	4911C	I1230989	AD486	COMPUTER, MICRO	FC9301036007	2415
888	BOEING	4S	4911C	I1238194	1560A	CALCULATOR, ELECTRONIC	019202151	145
889	BOEING	4S	4911C	I1297746	XC1429C	DISPLAY UNIT	005109720	650
890	BOEING	4S	4911D	I0080597	33440A	PRINTER	2826J24684	1629
891	BOEING	4S	4911D	I1293348	DESKPRO50M	COMPUTER, MICRO	6217HBP20249	5383
893	BOEING	4S	4911D	I1298650	MD141V+	DISPLAY UNIT	36470556	600
893	BOEING	4S	4911D	I1297890	A450CG	COMPUTER, MICRO	11146	1658
894	BOEING	4S	4911E	I1241794	M5650	COMPUTER, MICRO	F9345X2M5665	2941
895	BOEING	4S	4911E	I1293346	M0401	DISPLAY UNIT	5179328	300
896	BOEING	4S	4911F	I1239129	1570A	CALCULATOR, ELECTRONIC	029202318	76
897	BOEING	4S	4911H	I0899196	HP33440A	PRINTER, ADP	2803J20283	1470
898	BOEING	4S	4914	I1233424	HP33491A	PRINTER, ADP	3201J89543	8375
899	BOEING	4S	4914	I1354188	EX3000D	COMPUTER, MICRO	CHG-03410156	2010
900	BOEING	4S	4914A	I1239139	1570A	CALCULATOR, ELECTRONIC	029202946	76

11-Jan-95
PAS_SELECTION_RPT

Page 21

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
901	BOEING	4S	4914A	I1241829	M500	COMPUTER, MICRO	F902395M5000	3443
902	BOEING	4S	4914A	I1241921	M0401	DISPLAY UNIT	5029549	689
903	BOEING	4S	4914A	IL017403	110EB2	BINDER, ELECTRIC	CC01400	5000
904	BOEING	4S	4914B	I1008307	COMPUTER, MICRO43	DISPLAY UNIT	234JP000U20420	307
905	BOEING	4S	4914B	I1115366	M0401	DISPLAY UNIT	5457332	584
906	BOEING	4S	4914B	I1241781	M5780	COMPUTER, MICRO	F12071SK716	3195
907	BOEING	4S	4914B	I1008308	S092090090	COMPUTER, MICRO	C003542	1055
908	BOEING	4S	4914C	I1293379	M0401	DISPLAY UNIT	5383831	300
909	BOEING	4S	4914C	I1293380	M5685	DISK DRIVE UNIT	F10171K6M5685	5120
910	BOEING	4S	4914D	I1354090	EX3000D	COMPUTER, MICRO	CAW-03410168	2010
911	BOEING	4S	4914E	I1174507	M0401	DISPLAY UNIT	7013159	608
912	BOEING	4S	4914E	I1239121	1570A	CALCULATOR, ELECTRONIC	029202201	76
913	BOEING	4S	4914E	I1353588	M0401	DISPLAY UNIT	5322833	500
914	BOEING	4S	4914E	I1353589	M5030	COMPUTER, MICRO	F7304HB	3436
915	BOEING	4S	4914E	I1395117	M5000	COMPUTER, MICRO	F7410T4M5030	3500
916	BOEING	4S	4914F	I1357401	M5000	COMPUTER, MICRO	F8435JAM5000	4900
917	BOEING	4S	4914F	I1168180	M1297	DISPLAY UNIT	7154072	579
918	BOEING	4S	4919	I1354187	JC1404	DISPLAY UNIT	0YD02752	620
919	BOEING	4S	4920	I0553552	670X	TYPEWRITER	4892722	610
920	BOEING	4S	4920	I1231093	M0401	DISPLAY UNIT	5361082	300
921	BOEING	4S	4920	I1231094	M5685	DISK DRIVE UNIT	F00981GM5685	5417
922	BOEING	4S	4920	I1231097	M6000	PRINTER, ADP	CA128V8H%M6000	3337
923	BOEING	4S	4920	I1231098	M1297	DISPLAY UNIT	7097985	621
924	BOEING	4S	4920	I1231099	M5780	COMPUTER, MICRO	F2223HJT716	2286
925	BOEING	4S	4920A	I1241789	M5650	COMPUTER, MICRO	F10400BGM5665	2819
926	BOEING	4S	4920A	I1241994	M0401	DISPLAY UNIT	5442159	650
927	BOEING	4S	4920B	I1241779	M5780	COMPUTER, MICRO	F1235423716	2710
928	BOEING	4S	4920B	IG021760	M0401	DISPLAY UNIT	5096778	699
929	BOEING	4S	4920C	I1241777	M5780	COMPUTER, MICRO	F1135568716	2879
930	BOEING	4S	4920C	I1241949	M0401	DISPLAY UNIT	5187303	650
931	BOEING	4S	4920D	I1117925	M5650	COMPUTER, MICRO	F10270G5M5665	6182
932	BOEING	4S	4920D	I1241754	M0401	DISPLAY UNIT	5187304	650
933	BOEING	4S	5201	I1297848	2261A	COMPUTER, MICRO	4036HS7H0366	4700
934	BOEING	4S	5201	I1354193	JC1404	DISPLAY UNIT	08H70995	620
935	BOEING	4S	5207	I0079199	2108	PRINTER, ADP	11363780225	3417
936	BOEING	4S	5207	I0665675	CS4166	CALCULATOR, ELECTRONIC	09004277	293
937	BOEING	4S	5207	I1165018	420T	DISPLAY UNIT	03214544P919	457
938	BOEING	4S	5207	I1233488	386/25	COMPUTER	4209HBR10278	3859
939	BOEING	4S	5207	I1242479	HP33491A	PRINTER, ADP	3211J57489	4718
940	BOEING	4S	5207	I1265472	207XL	PRINTER, ADP	2920720258	4110
941	BOEING	4S	5207	I1297268	3030	COMPUTER, MICRO	4139HBN20431	6609
942	BOEING	4S	5207	I1297447	3030	COMPUTER, MICRO	4139HBN20610	6609
943	BOEING	4S	5207	I1297835	420T	DISPLAY UNIT	029145440584	463
944	BOEING	4S	5207	IG096851	OMNILASER2108	PRINTER, ADP	1736390038	3417
945	BOEING	4S	5207	IG097310	DESKPRO386/20E	COMPUTER, MICRO	4033HS7H0312	7492

11-Jan-95
PAS_SELECTION_RPT

Page 22

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
946	BOEING	4S	5207	IG097390	420	DISPLAY UNIT	91714544B506	418
947	BOEING	4S	5307	I1007166	M6000	PRINTER, ADP	CA030ZRJ%M6000	5639
948	BOEING	4S	5307	I1241845	NONE	DISPLAY UNIT	028002121	500
949	BOEING	4S	5307	I1241876	FDSF107F4	COMPUTER, MICRO	H06T9P	4590
950	BOEING	4S	5307	I1242287	XC1429C	DISPLAY UNIT	005110994	680
951	BOEING	4S	5307	I1354120	M0402	DISPLAY UNIT	PH028C48A15	1355
952	BOEING	4S	5307	I1354121	M5515LL/A	COMPUTER, MICRO	F9492JT740	5987
953	BOEING	4S	5308	I1091735	M0401	DISPLAY UNIT	5457802	650
954	BOEING	4S	5309	I1355398	JC1741UMA	DISPLAY UNIT	27D01795B	2800
955	BOEING	4S	5309	I1355423	S450DE	COMPUTER, MICRO	IV28T	4738
956	BOEING	4S	5309B	I1355371	M0360	COMPUTER, MICRO	F114440C53	2851
957	BOEING	4S	5309E	I1242464	JC1741UMA	DISPLAY UNIT	35L184608	1796
958	BOEING	4S	5309E	I1355465	S450DE	COMPUTER, MICRO	IV26V	4738
959	BOEING	4S	5313	I1240312	9550	PROJECTOR, OVERHEAD	422843	535
960	BOEING	4S	5313	I1241804	M4990	COMPUTER, MICRO	FC2262C6803	4653
961	BOEING	4S	5313	I1355566	XC1429C	DISPLAY UNIT	005111284	650
962	BOEING	4S	5325	I1292550	500AJH	PROJECTOR, OVERHEAD	975440	535
963	BOEING	4S	5326	I1119459	M6000	PRINTER, ADP	CA1124BX%M6000	2417
964	BOEING	4S	5326	I1241770	XC1429C	DISPLAY UNIT	106069578	650
965	BOEING	4S	5326	I1242171	28608L	COMPUTER, MICRO	026966	2295
966	BOEING	4S	5403A	I1294993	CMS1461	DISPLAY UNIT	A70-33101797	350
967	BOEING	4S	5403A	I1294995	N/A	FILE SERVER	903744	6200
968	BOEING	4S	5909	I1002108	FL6615ATK	DISPLAY UNIT	910000045	1497
969	BOEING	4S	5909	I1091725	M0401	DISPLAY UNIT	5457683	650
970	BOEING	4S	5909	I1092050	M2850	DISK DRIVE UNIT	F4043315	584
971	BOEING	4S	5909	I1092052	0277	DISPLAY UNIT	TNB121A10031	1201
972	BOEING	4S	5909	I1092055	M1030	DISPLAY UNIT	HT952E09M0404	650
973	BOEING	4S	5909	I1092059	GDM1662B	DISPLAY UNIT	365113-01	650
974	BOEING	4S	5909	I1092065	EXP2	DISK DRIVE UNIT	110G2224	3900
975	BOEING	4S	5909	I1092066	147	COMPUTER, MICRO	110F5801	10797
976	BOEING	4S	5909	I1092069	DAT2000	DISK DRIVE UNIT	H020371E2	2285
977	BOEING	4S	5909	I1093481	M5780	COMPUTER, MICRO	F12094Z3724	3075
978	BOEING	4S	5909	I1119463	M6000	PRINTER, ADP	CA11248Z%M600	2417
979	BOEING	4S	5909	I1162780	33449A	PRINTER, ADP	3052J77924	1443
980	BOEING	4S	5909	I1264662	M5780	COMPUTER, MICRO	F121535H716	3210
981	BOEING	4S	5909	I1264664	M1297	DISPLAY UNIT	7065029	650
982	BOEING	4S	5909	I1264665	M5780	COMPUTER, MICRO	FF1218BYV724	3210
983	BOEING	4S	5909	I1265479	M5780	COMPUTER, MICRO	F3204MPFC42	3210
984	BOEING	4S	5909	I1293333	M0401	DISPLAY UNIT	5338659	300
985	BOEING	4S	5909	I1351461	M2113	COMPUTER, MICRO	FC3501561CJ	1589
986	BOEING	4S	5909	I1355537	411	DISK DRIVE UNIT	124G1515	766
987	BOEING	4S	5909	I1230634	M1297	DISPLAY UNIT	7125953	604
988	BOEING	4S	5909	I1136793	5130D	DISK DRIVE UNIT	DAT-0074	5200
989	BOEING	4S	5909B	I1351454	M2113	COMPUTER, MICRO	FC35016G1CJ	1589
990	BOEING	4S	5909B	I1351501	M2113	COMPUTER, MICRO	FC35014B1CJ	1589

11-Jan-95
PAS_SELECTION_RPT

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
991	BOEING	4S	5909B	I1357205	M1212	DISPLAY UNIT	S13502E0E04	390
992	BOEING	4S	5909B	I1357214	M1212	DISPLAY UNIT	S13502L3E04	390
993	BOEING	4S	5THFL	I1234876	RB17KNOAC	REFRIGERATOR-FREEZER	DV39371345	483
994	BOEING	4S	A11D5	I1357075	TR142M4TD	DISPLAY UNIT	2450535	485
995	BOEING	4S	A29	I1353705	M0401	DISPLAY UNIT	5002393	639
996	BOEING	4S	PA59	I1229683	5536	PLOTTER, GRAPHICS	9234306004	10995
997	BOEING	BOENG		I0080988	JC1404HMA	DISPLAY UNIT	93M04486S	528
998	BOEING	BOENG		I1353731	M0401	DISPLAY UNIT	500328	639
999	BOEING	BOENG		I1353828	M2688	DISK DRIVE	F40254LB	1129
1000	BOEING	BOENG		I1353913	836CS	PLOTTER	16300	8191
1001	BOEING	BOENG	211	I1353647	M5404	COMPUTER, MICRO	F9052VC	4540
1002	BOEING	BOENG	211	I1353786	M2688	DISK DRIVE, EXTERNAL	F40254LH	1129
1003	BOEING	BOENG	211	I1353829	M0401	DISPLAY UNIT	5003880	639
1004	BOEING	BOENG	212	I1353830	M5030	COMPUTER, MICRO	F7311EM	3436
1005	BOEING	BOENG	212	I1353364	M2688	DISK DRIVE UNIT	F40254KWM2688	1129
1006	BOEING	BOENG	B21B	I1353365	MD1588-02-6	DISK DRIVE UNIT	1051550143	8500
1007	BOEING	BOENG	B21B	I1353366	M13350	DISK DRIVE UNIT	F13142V03B5	1917
1008	BOEING	BOENG	B22B	I1353560	M2688	DISK DRIVE	F40254KJ	1129
1009	BOEING	BOENG	B22B	I1353710	M0401	DISPLAY UNIT	5000105	639
1010	BOEING	BOENG	B22B	I1353788	M5030	COMPUTER, MICRO	F73108Q	3436
1011	BOEING	BOENG	B24A	I1354148	780+	DISPLAY UNIT	2500340	3667
1012	BOEING	BOENG	B24A	I1354149	M5515LL/A	COMPUTER, MICRO	F3035N63C40	5987
1013	BOEING	BOENG	B24C	I1355841	M5650	COMPUTER, MICRO	F1026117MM5665	4182
1014	BOEING	BOENG	B24C	I1355846	M0401	DISPLAY UNIT	5423757	626
1015	BOEING	BOENG	B24C	I1355847	A9M0110	DISK DRIVE UNIT	H828637	350
1016	BOEING	BOENG	824D	I1355309	M0401	DISPLAY UNIT	5173388	700
1017	BOEING	BOENG	824D	I1355326	M5840	DISK DRIVE UNIT	F90926GM5835	6488
1018	BOEING	BOENG	B25C	I1293635	M5000	COMPUTER, MICRO	F90361SM5333	1177
1019	BOEING	CLDF	2004	I1294110	PS-810	PRINTER	0001272	3736
1020	BOEING	CLDF	2058	IG098722	JC1404HMA	DISPLAY UNIT	01M00025S	722
1021	BOEING	CLDF	2068	I1241817	M5000	COMPUTER, MICRO	F8153RBM5030	3670
1022	BOEING	CLDF	2068	I1241971	M0401	DISPLAY UNIT	5442158	650
1023	BOEING	CLDF	2072	IG021606	M0401	DISPLAY UNIT	5176839	615
1024	BOEING	CLDF	2076	I1294113	PS-810	PRINTER	0008031	3736
1025	BOEING	CLDF	2080	I1241564	DN3500	COMPUTER, MICRO	EA01300957	16000
1026	BOEING	CLDF	2080	I1241567	008399	DISPLAY UNIT	94931386	336
1027	BOEING	CLDF	2090	I1230921	JC1741UMA	DISPLAY UNIT	26D00615A	1450
1028	BOEING	CLDF	2105	I1172374	SD4533C	DISPLAY UNIT	U453307989	500
1029	BOEING	CLDF	2105	IG097307	DESKPRO386/20E	COMPUTER, MICRO	4033HS7H0380	7492
1030	BOEING	CLDF	2120	I0833621	M0401	DISPLAY UNIT	5002353	700
1031	BOEING	CLDF	2120	I1241812	M5000	COMPUTER, MICRO	FB088KNM5000	3654
1032	BOEING	CLDF	2142	I1241788	M5650	COMPUTER, MICRO	F9345WMM5665	2941
1033	BOEING	CLDF	2163	I0842733	M0401	DISPLAY UNIT	5095367	350
1034	BOEING	CLDF	2163	I0843243	M5030	COMPUTER, MICRO	F838A1C	4755
1035	BOEING	CLDF	2165	I1091728	M5780	COMPUTER, MICRO	F11061FG774	4688

11-Jan-95

Page 24

PAS_SELECTION_RPT

BOEING DEFENSE & SPACE GROUP
PROPERTY MANAGEMENT SYSTEM
PAS ITEM REPORT BY SECONDARY LOCATION/BUILDING LOCATION/AREA LOCATION

	SECOND LOCATION	BLDG	AREA	CONTROL NUMBER	PART NUMBER	NOMENCLATURE	SERIAL NUMBER	UNIT PRICE
	-----	-----	-----	-----	-----	-----	-----	-----
1036	BOEING	CLDF	2165	I1241936	M0401	DISPLAY UNIT	5441777	608
1037	BOEING	CLDF	2174	I1266444	M0401	DISPLAY UNIT	5264376	629
1038	BOEING	CLDF	2178	I1242265	M0401	DISPLAY UNIT	5081507	760
1039	BOEING	CLDF	2180	I1241818	M5000	COMPUTER, MICRO	F9013B1M5000	3693
1040	BOEING	CLDF	2192	I1293660	TPD	DISPLAY UNIT	D000012375	942
1041	BOEING	CLDF	2196	I1241822	M5000	COMPUTER, MICRO	F849KDSM5000	3443

								3355525

J-16

**CHANGES APPLICABLE TO THE CONTRACT UNDER CONTRACT
PROVISION H.21**

1. The following SSCNs were added to this attachment pursuant to the settlement of Group 1 on June 8, 1996. The Group 1 changes generate a net "contract debit" offset of \$4,669,970 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
63	101	170
67	105	174
68	114	178
72	118	182
73	125	194
76	126	200
79	140	214
86	141	278
99	147	
100	157	

2. The following SSCNs were added to this attachment pursuant to the settlement of Group 2. The Group 2 changes generate a net "contract debit" offset of \$5,071,900 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
137	199	253	207
158	209	256	
162	221	257	
168	232	260	
180	236	261	
185	237	264	
187	238	269	
188	240	271	
191	245	273	
192	252	281	

J-16 Con't

3. The following SSCNs were added to this attachment pursuant to the settlement of Group 2.6. The Group 2.6 changes generate a net "contract debit" offset of \$854,500 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
229	233	234	235
267	336	365	

4. The following SSCNs were added to this attachment pursuant to the settlement of the following Group 2.2 changes. These Group 2.2 changes generate a net "contract debit" offset of \$13,004 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>
197	276

5. The following SSCN's were added to this attachment pursuant to the settlement of the following Group 2 subsequent changes. These Group 2 subsequent changes generate a net "contract debit" offset of \$1,066,008 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
285	286	301	302
310	318	332	334
343	345	347	357
409			

- 6 The following SSCN's were added to this attachment pursuant to the settlement of the following Group 2 subsequent changes. These Group 2 subsequent changes generate a net "contract debit" offset of \$265,941 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>
424	449

J-16 Con't

7. The following NASA action is added to this attachment pursuant to the settlement of agreements reached for a net "contract credit" of (\$24,678).

NASA Contracts Action 96-098/Additional GFP/SA 349

8. The following SSCN's were added to this attachment pursuant to the settlement of the following changes. These changes generate a net "contract debit" offset of \$252,054 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
288	320	344	354
363	370	373	396
425			

9. The following SSCN's were added to this attachment pursuant to the settlement of the following changes. These changes generate a net "contract debit" offset of \$5,074,669 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
266	293	297	299
307	308	317	324
325	330	333	335
341	342	346	351
352	355	356	368
369	372	375	379
380	394	405	407
410	412	413	418
420	427	432	443
447	451	550	554

10. The following SSCN's were added to this attachment pursuant to the settlement of the following changes. These changes generate a net "contract debit" offset of \$351,064 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>
433	460

J-16 Con't

11. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$1,012,180 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
349	374	398	428
435	454	464	466
514	551		

12. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$1,303,541 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
322	339	393	397
465	516	517	536
539	547		

13. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$2,989,400 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
479	480	481	482	483
484	485	486	487	488
489	490	491	492	493
494	495	496	497	498
499	500	501	502	503
504	505	506	507	

14. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$1,311,867 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
313	422	436	532	542
557				

15. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$474,836 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
321	376	349	402	404
429	430	441	442	467
519	543	544	572	

J-16 Con't

16. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$190,680 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
431	457	465	573
574	577	585	586

17. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$2,182,794 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
210	326	367	403
428	520	521	553
588	589	601	604
609	611	643	681
690	702	809	817

18. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$1,528,413 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
392	473	476	651
663	669	670	671
676	682	696	711
732	823	845	855

19. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$502,729 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
440	552	563	684
687	801	816	830
832	833	841	892

The total cost added to J-16 through S/A 491 is \$29,090,872.

20. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new “contract debit” offset of \$712,340 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
583	706	730	740

21. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new “contract credit” offset of (\$25,723) against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
306	533	556	558
668	686	728	858

22. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new “contract debit” offset of \$1,340,454 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
568	642	701	707
722	731	773	824
853	873	887	894
935	961	979	1026

23. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new “contract debit” offset of \$1,398,707 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
591	780	850	879
911	943	987	993

The total cost added to J-16 through S/A 543 is \$32,516,650.

J-16 Con't

24. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$1,295,292 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
736	840	982	998
1068	1075		

25. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$535,200 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
555	812	1192	1292

26. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$611,145 against the \$40M cap on the swing clause.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
678	937	1022	1273
1384			

27. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$45,500 against the \$40M cap.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
802	919	1072	1412

The total cost added to J-16 through S/A 635 is \$35,003,787.

J-16 Con't

28. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$704,200 against the \$40M cap.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
819	944	1168	1282
1283	1402		

29. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$2,660,000 against the \$40M cap.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
891	949	976	977
1097	1149	1172	1220
1225	1235	1240	1275
1287	1397	1398	1461

30. The following SSCNs were added to this attachment pursuant to the settlement of the following changes. These changes generate a new "contract debit" offset of \$1,631,600 against the \$40M cap.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
821	1204	1238	1341
1344	1352	1430	

The total cost added to J-16 through S/A 717 is \$39,999,587.

J-17

**CHANGES APPLICABLE TO THE CONTRACT UNDER CONTRACT
PROVISION H.32**

1. The following SSCNs were added to this attachment pursuant to the settlement of Group 2.1 on August 9, 1996. The Group 2.1 changes generate a net "contract debit" of \$6,337,892, which is not added to Target Cost in Section B of the contract.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
97	124	167
193	201	203

2. The following SSCNs were added to this attachment pursuant to the settlement of the Group 2.2 changes on September 28 and September 30, 1996. These Group 2.2 changes generate a net "contract debit" of \$5,344,140, which is not added to Target Cost in Section B of the contract.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
138	224	250

3. The following SSCNs were added to this attachment pursuant to the settlement of the Group 2.3 changes on October 17, October 18, and November 07, 1996. These Group 2.3 changes generate a net "contract debit" of \$7,743,987, which is not added to Target Cost in Section B of the contract.

<u>SSCN</u>	<u>SSCN</u>	<u>SSCN</u>
208	222	225
244	255	

4. SSCN 416 is added to this attachment pursuant to the settlement of April 30, 1997. This change generates a net "contract debit" of \$808,944, which is not added to Target Cost in Section B of the contract.

5. SSCN 294 is added to this attachment pursuant to the settlement of June 10, 1997. This change generates a net "contract debit" of \$5,429,869, which is not added to Target Cost in Section B of the contract.

6. SSCN 287 is added to this attachment pursuant to the settlement of July 22, 1997. This change generates a net "contract debit" of \$341,405, which is not added to Target Cost in Section B of the contract.

7. SSCN 364 is added to this attachment pursuant to the settlement of August 28, 1997. This change generates a net "contract debit" of \$6,890,980, which is not added to Target Cost in Section B of the contract.

The total cost added to J-17 through S/A 436 is \$32,897,217.

J-17 Con't

8. SSCN 468 is added to this attachment pursuant to the settlement of December 5, 1997. This change generates a net "contract debit" of \$1,284,922, which is not added to Target Cost in Section B of the contract.

9. SSCN 311 is added to this attachment pursuant to the settlement of May 6, 1998, and SSCN 778 is added pursuant to the settlement of June 11, 1998. These changes generate a net "contract debit" of \$11,050,928, which is not added to Target Cost in Section B of the contract.

10. SSCN 459 is added to this attachment pursuant to the settlement of September 28, 1998. This change generate a net "contract debit" of \$540,000, which is not added to Target Cost in Section B of the contract.

11. SSCN 584 is added to this attachment pursuant to the settlement of December 4, 1998, and SSCN 600 is added pursuant to the settlement of December 23, 1998. These changes generate a net "contract debit" of \$4,224,903, which is not added to Target Cost in Section B of the contract.

The total cost added to J-17 through S/A 717 is \$49,997,970.

Attachment J-18

**FORM TO BE UTILIZED FOR TASK ORDERS UNDER PARAGRAPH 1.10 OF THE STATEMENT OF
WORK (SECTION C) OF THIS CONTRACT
(No Longer Required After FY99)**

Attachment J-18 - No Longer Required After FY99

SPACE STATION PANEL/BOARD
(OICP/MICP/HICP/ASCP/T&VCP/DCB/PCB)
TECHNICAL DEFINITION AUTHORIZATION FORM

AUTHORIZATION NUMBER: ____ (Will be assigned by the Contracting Officer)

SSCN NUMBER: ____

TITLE OF PROPOSED CHANGE/TECHNICAL DEFINITION REQUIREMENT:

DESCRIPTION:

ESTIMATED COMPLETION DATE: _____

TECHNICAL DEFINITION AUTHORIZATION

Direct Labor Hours Authorized: _____

Material Dollars: _____

Travel Dollars: _____

NEED DATE IF CHANGE IS IMPLEMENTED:

Total Rough Order Magnitude (ROM) if Implemented \$ Est: _____ (if available)

ROM Fiscal Year Funding Requirement if Implemented, Prime Only (if available)

FY97	FY98	FY99	FY00	FY01	FY02
\$	\$	\$	\$	\$	\$

NASA AUTHORIZED SIGNATURE

PRIME AUTHORIZED SIGNATURE

DATE

DATE

NASA CONTRACTING OFFICER
ACKNOWLEDGMENT/ACCEPTANCE

BOEING RECEIPT

DATE

DATE

Section J-19

See Contract Modification S/A 471 for a copy of the Settlement file.

PART III - LIST OF DOCUMENTS, EXHIBITS
AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

ATTACHMENT

TITLE

J-19

Settlement Agreement

ATTACHMENT J-19
SETTLEMENT AGREEMENT

ATTACHMENT J-20
CONTRACT LABOR CONFIRMATION OF NEGOTIATIONS

August 13, 1998

National Aeronautics & Space Administration
Lyndon B. Johnson Space Center
Houston, TX 77058

Attention: Herb Baker, Contracting Officer

Defense Contract Management Command
Boeing Seattle

Attention: Paul Karkainen

Subject: Contract NAS15-10000, International Space Station,
Contract Labor, Confirmation of Negotiations

Reference: Special Contract Requirement H-30, "Advance Agreement
Regarding Direct and Indirect Rates As A Basis For
Negotiation Settlement and Allocation Of Prime Contractor
Indirect Cost To Certain Subcontract Labor"

The Boeing Company, Information, Space and Defense Systems
(Boeing), is pleased to confirm that negotiations to settle the "Contract
Labor" issue were concluded on August 13, 1998.

The basis for this agreement is reflected below:

1. Boeing will make an accounting change effective calendar year 1999 that will establish combined site resource overhead pools for Houston/Huntsville. The pool separation from Puget Sound pools will include Engineering and Manufacturing resource overhead expenses, Material and Factory Direct Support distributed direct costs, Produce Pool 01, and the establishment of separate Engineering, Manufacturing and Product Computing Cost Centers and Lump sum factors for the allocation of Lump Sum payments. It should be noted that this change affects only heritage Boeing Defense & Space Group accounting and, therefore, has no impact on entities of The Boeing Company operating under heritage McDonnell Douglas or Rockwell accounting systems.

2. Boeing will credit a net of \$1.2M to the ISS contract specifically for 1998 sustaining engineering in accordance with the accounting changes described in paragraph 1 above. These costs will be reallocated to other cost objectives as appropriate.
3. Boeing will credit a net of \$1.7M to the ISS contract for the “pre-conversion” period of November 1993 through March 1995. These costs will be reallocated to other cost objectives as appropriate.
4. Boeing has accepted a challenge to reduce prospective contract cost by \$14,276,000 over the remaining lifetime of the subject contract through the conversion of approximately 50% of existing contract engineering arrangements to purchased engineering arrangements in a manner consistent with Boeing’s disclosed practices and procedures.
5. A modification to the subject contract shall be executed by both parties not later than August 24, 1998 that incorporates the following:
 - a. An adjustment to target cost and fee as follows:

Target Cost	\$64,812,090.00
Incentive Fee	\$ 3,240,605.00
Award Fee	<u>\$ 3,240,605.00</u>
Total	\$71,293,300.00
Maximum Incentive Fee	\$ 9,721,814.00
Minimum Incentive Fee	\$ 1,296,242.00
 - b. Deletion of Special Contract Requirement H-30 in its entirety.
 - c. A full and final accord, satisfaction and mutual release covering the issues arising out of ASBCA Cases 49874, 50699, and 50700.
6. Boeing shall make the accounting adjustments necessary to effect the credits described in paragraphs 2 and 3 no later than 15 days after execution of the contract modification described in paragraph 5.
7. NASA shall release the \$48,369,570 currently being withheld for

this issue within 15 days of receiving a suitable public voucher for the withhold from Boeing. There will be no further withholds on subsequent billings for this issue unless the time frames for completing the settlement modification described in paragraph 5 above or the accounting adjustments addressed in paragraph 6 are not met.

8. Both parties shall immediately cease all litigation associated with this issue.
9. Upon the signature date of the modification described in paragraph 5 or the release of the withhold described in paragraph 7, whichever occurs last, Boeing will withdraw its appeals from the ASBCA which are currently docketed under ASBCA cases 49874, 50699, and 50700 and will request that the ASBCA dismiss these appeals with prejudice.

Questions concerning this correspondence may be directed to the undersigned at (253) 773-1230.

Original Signed By

Robert J. Ingersoll
Vice President-Contracts and Pricing
The Boeing Company
Information, Space and Defense Systems

Concurrence:

Original Signed By

Herb Baker
Contracting Officer

Original Signed By

Paul Karkainen
Divisional Administrative Contracting Officer

~~ATTACHMENT J-21~~

~~US RACK, TRUSS, AND UOP LEVEL PAYLOADS FOR ISS~~

ATTACHMENT J-21

US RACK, TRUSS, AND UOP LEVEL PAYLOADS FOR ISS

<u>Flight</u>	<u>Name of Rack</u>
2A.1	IMAX3D UOP Payload
2A.2B	Middeck Active Control Experiment Reflight (MACE II)
5A.1	Human Research Facility #1
6A	EXPRESS Rack #1 EXPRESS Rack #2 with ARIS (RME)
7A.1	EXPRESS Rack #5 MISSE EXPRESS Rack #4
UF-1	Minus 80 Freezer (MELFI) Material Science Glovebox
UF-2	EXPRESS Rack #3 with ARIS Window Observational Research Facility
12A.1	Human Research Facility #2
UF-3	Gravitational Biology Facility # 1 Fluids/Combustion (FCF) #1 with ARIS Furnace/Materials (MSRF) #1 with ARIS MELFI #2 (Reflight) FSL (ESA) Rack Life Sciences Glovebox EXPRESS Pallet #1
UF-4	Alpha Magnetic Spectrometer
UF-5	Fluids/Combustion (FCF) #2 with ARIS X-Ray Diffraction MELFI #2 ReFlight EXPRESS Pallet #2 Commercial EXPRESS Rack #6 with ARIS
17A	Materials with ARIS Gravitational Biology Facility #2 EXPRESS #7 with ARIS
1E	MELFI #2 Reflight

18A	EXPRESS Pallet #3
19A	EXPRESS Rack #8
HTV-2	NASA JEM-EF Payload #1
UF-6	MELFI #2 ReFlight
	Cyro Rack
GAM/UF-7	Fluids/Combustion (FCF) #3 with ARIS AC/AC+
	BioTechnology Facility AC/AC+
16A	Furnace/Materials (MSRF) #3 with ARIS AC/AC+
	Furnace/Materials (MSRF) #2 with ARIS AC/AC+
	Advanced Human Support Technology

ATTACHMENT J-22

INFORMATION TECHNOLOGY EQUIPMENT/SERVICES

ATTACHMENT J-22

INFORMATION TECHNOLOGY EQUIPMENT/SERVICES

SSCN	Item Nomenclature	Model	Qty	Remarks
2030	Base Unit	E4500	1	Quote Item 1.1
2030	Processors	2560A	8	Quote Item 1.2
2030	Memory	7023A	8	Quote Item 1.3
2030	CPU/Memory Expansion Boards	2602A	3	Quote Item 1.4
2030	Disks-Internal Disk Board	5162A	1	Quote Item 1.5
2030	Disks-External			
2030	StorEdge A1000 Tabletop 109 GB	A1000	2	Quote Item 1.6
2030	I/O Cards			
2030	1063A SBus Single F/W SCSI Host Adapter	1063A	1	Quote Item 1.17
2030	1065A SBus Ultra F/W SCSI Host Adapter	1065A	2	Quote Item 1.10
2030	2612A Sbus	2612A	2	Quote Item 1.7
2030	6731A GBIC Modules	6731A	1	Quote Item 1.16
2030	X3856A Cable	X3856A	1	Quote Item 1.18
2030	902A Cable	902A	1	Quote Item 1.11
2030	Monitor-21 in	X7121A	1	Quote Item 1.13
2030	Country Kit	X3540A	1	Quote Item 1.15
2030	Power Supplies	X954A	2	Quote Item 1.8
2030	Color Frame Buffer	7110A Graphics Card	1	Quote Item 1.14
2030	Tape Drive	SG-XTAPAMM-031A-StorEdge 72-144 GB auto loader	1	Quote Item 1.12
2030	Operating System Software	SOLMS-070W9999	1	Quote Item 1.9
2030	36 Month Warranty		1	SEWP II
2488	COLD FUSION *maint incl	SOFTWARE	2	pcms/sdil ftp supt
2488	URM MANAGER	OMNIGUARD SW	4	security tool
2488	URM MANAGER MAINT.	OMNIGUARD SW	12	security tool
2488	URM AGENT	OMNIGUARD SW	6	security tool
2488	URM AGENT MAINT.	OMNIGUARD SW	18	security tool
2488	URM AGENT WORKSTATION	OMNIGUARD SW	340	security tool
2488	URM AGENT WORKSTATION MAINT.	OMNIGUARD SW	1020	security tool

SSCN	Item Nomenclature	Model/Software	Qty	Remarks
2488	100BASET, 2-Chnl Port Adapter	PA-2FEISL-TX	1	network
2488	1GB EDO DIMM Kit (4X256/60ns) for PL6000	241774-B21	2	
2488	Pentium II 450MHZ SLOT 2 512K Xenon Processor Kit	328812-B21	1	
2488	ProLiant 6000 Pentium II 450MHZ/512K/128MB/24X	386668-001	1	
2488	Compaq V75 Color Monitor	307710-001	1	
2488	9.1GB Pluggable Wide Ultra SCSI-3 1	336357-B21	3	
2488	Internal 20/40-GB DLT Drive	340743-B21	1	
2488	612 STACK STATION	DLSSU-VA	3	network
2488	900XX MODULE	DVNXX-MX	6	network
2488	900EX MODULE	DVNEX-MX	1	network
2488	900 100BASETX I/F MODULE	DEXYU-AA	22	network
2488	900 POWER SUPPLY	H7894-MA	1	network
2488	ADVANCE STACK 2000 BACKPLANE	J3100B	1	network
2488	FAST ETHERNET 100BT, 2 PORT INTERFACE MODULE	J3191A	3	network
2488	FDDI MODULE	J3108A	1	network
2488	PRO CURVE SWITCH 8 PORT 10/100BaseT MODULE	J4111A	1	network
2488	40 PORT 10/100BaseT SWITCH ASSEMBLY	J4121A	6	network
2488	NW MGR	LKM2000-N2	1	network
2488	NetScout Mgr Plus for NT or UNIX	9180	1	network
2488	AppScout v1.2 for Windows NT (ships w/10 ART MIB licenses)	9220	1	network
2488	FasT Ether-Channel Probe (Fast EtherChannel 100BaseT/Ethernet Managed 128M)	8281ET/128	1	network
2488	Netflow Monitor Option	NFM	1	network
2488	Resource Monitor Option	NRM	1	network
2488	VLAN Monitor Option	VLAN-Mon	1	network
2488	Warranty/Maint for NetScout Mgr Plus 5.5		3	network
2488	Warranty/Maint for AppScout v1.2		3	network
2488	Warranty/Maint for Fast Ethernet Probe		3	network
2488	E450 SERVER BASE (See Quote)	SFSEWP3120A25-BAP	1	sun 20164 replacement
2488	CPU, 400MHZ w/4MB E-cache	SFSEWP31232244A P	2	sun 20164 replacement
2488	RAM, 512MB EXPANSION	SFSEWP16917005A P	4	sun 20164 replacement
2488	8-Bay Internal Storage Exp	SFSEWP31256601A P	2	sun 20164 replacement
2488	SECOND 10/100BASET I/F	SFSEWP15371032A P	1	sun 20164 replacement
2488	DDS3 TAPE DRIVE, INTERNAL	SFSEWP09576286A P	1	sun 20164 replacement

SSCN	Item Nomenclature	Model/Software	Qty	Remarks
2488	DISKS, 9.1 GB, 7200 RPM	SFSEWP23035229A P	20	sun 20164 replacement
2488	E450 SERVER BASE (See Quote)	SFSEWP3120A25- BAP	1	sdil ftp server replacement
2488	CPU, 400MHZ w/4MB E-cache	SFSEWP31232244A P	2	sdil ftp server replacement
2488	RAM, 256MB EXPANSION	SFSEWP03397004A P	2	sdil ftp server replacement
2488	8-Bay Internal Storage Exp	SFSEWP31256601A P	2	sdil ftp server replacement
2488	SECOND 10/100BASET I/F	SFSEWP15371032A P	1	sdil ftp server replacement
2488	DDS3 TAPE DRIVE, INTERNAL	SFSEWP09576286A P	1	sdil ftp server replacement
2488	DISKS, 9.1 GB, 7200 RPM	SFSEWP23035229A P	20	sdil ftp server replacement
2488	STOREDGE L3500, 7 DLT 7000 DRIVES	6080A	1	lab server backups
2488	A3500 CONTROLLER MODULE	SFSEWP2872X6537 AP	1	add'l controller
2488	STOREDGE A3500 (545GB)	SFSEWP316SG- 545-GBXARY360A- 545GP	1	Wally replacement array
2488	1GB MEMORY EXPANSION	SFSEWP0236X7023 AP	6	1/Buffy; 5/Wally
2488	32MB Memory Expansion for SPARCsystem 5	X132M	12	Staging Platform & TEWs
2488	333 MHz Ultra 5, 256MB RAM, 9.1GB HD	A21UHC1A9P- B256CP	5	Staging Platform & TEWs
2488	21-inch Color Monitor	X7121A	5	Staging Platform & TEWs
2488	Video Cable	470A	5	Staging Platform & TEWs
2488	Desktop Solaris 2.6 Media	SOLMS-251WD999	1	Staging Platform & TEWs

ATTACHMENT J-23
EXTRAVEHICULAR ACTIVITY HARDWARE

ATTACHMENT J-23

EXTRAVEHICULAR ACTIVITY HARDWARE

EVA Hardware	Type	Deliver no later than	Return no later than
Amphenol NZGL EVA Connectors (Plug & Receptacle), Size 17	FEU	11/96	10/97
Amphenol NZGL EVA Connectors (Plug & Receptacle), Size 25	FEU	11/96	10/97
Amphenol NZGL EVA Connectors (Plug & Receptacle), Size 25L	FEU	11/96	10/97
Amphenol NZGL EVA Connectors (Plug & Receptacle), Size 37	FEU	11/96	10/97
Fiber Optic Line with Connector (NZGL)	FEU	11/96	10/97
Symetrics 1" Pressure Cap	FEU	11/96	10/97
Symetrics 1" QD Connectors, Male (2)	FEU	11/96	10/97
Symetrics 1" QD Connectors, Female (2)	FEU	11/96	10/97
Symetrics 1-1/2" QD Connectors, Male (2)	FEU	11/96	10/97
Symetrics 1-1/2" QD Connectors, Female (2)	FEU	11/96	10/97
Symetrics 1" QD Connectors, Male (modified) (2)	FEU	3/97	10/97
Symetrics 1" QD Connectors, Female (modified) (2)	FEU	3/97	10/97
Symetrics 1-1/2" QD Connectors, Male (modified) (2)	FEU	3/97	10/97
Symetrics 1-1/2" QD Connectors, Female (modified) (2)	FEU	3/97	10/97
Symetrics Pressure Cap 1-1/2"	FEU	3/97	10/97
Symetrics QD Clip Assembly (2) for 1" QD's	QUAL	3/97	10/97
Amphenol NZGL EVA Connectors, Size 17 (Min Force)	FEU	11/96	10/97
TA Clamps Three sizes 7/8", 1-1/4", and 1-3/4"	QUAL	2/97	10/97
Amphenol Non-NZGL EVA Plug/Plug Connectors, Size 15	FEU	4/97	10/97
Amphenol Non-NZGL EVA Plug/Plug Connectors, Size 21	FEU	4/97	10/97

EVA Hardware	Type	Deliver no later than	Return no later than
Amphenol Non-NZGL EVA Plug/Plug Connectors, Size 23	FEU	4/97	10/97
Amphenol Non-NZGL EVA Plug/Plug Connectors, Size 33	FEU	4/97	10/97
PMA 1/Node 1 Primary Umbilical (GFE)	FEU	7/97	N/A
PMA 1/FGB Umbilical (GFE)	FEU	7/97	N/A
Umbilical Stanchion	FEU	7/97	1/98
Utility Feedthrough	QUAL	6/97	1/98
Utility Feedthrough Cap (2) SN-1001 and SN-1002	FLT	6/97	1/98
Expandable Diameter Fastener (GFE)	FEU	11/97	2/98
ORU Status Indicators, Batt Box and DDCU	FLT	11/97	2/98
High Pressure Gas Tank Attach Mechanism	FLT	11/97	2/98
ACBM Deployable Petal Launch Restraints	FLT	11/97	2/98
SSRMS Heavy End Bolts (GFE)	FEU	5/98	10/98
Symetrics Connector, 3/4", C6F14 (GFE)	FEU	5/98	10/98
Symetrics 1" QD with Vent Tool (Ammonia)	QUAL	5/98	10/98
Symetrics Connector, 1", Water	QUAL	5/98	10/98
RPCM Utility Rail, Platform and Frame	QUAL	5/98	10/98
Z1 Keel Launch Restraint Fastener	QUAL	5/98	10/98
Z1 to P6 Fine Alignment Mechanisms	QUAL	5/98	10/98
BMRRM EVA Interfaces	QUAL	5/98	10/98
High Pressure N2 Line and Connectors	FLT	5/98	10/98
PCA Vent	QUAL	5/98	6/98
Endcone Heat Exchanger Fluid Lines (Lab)	FLT	5/98	6/98
Keel Pin Launch Restraint	QUAL	12/98	5/99
Lab Forward Avionics Rigid Umbilical Hinge (No RU lines)	QUAL	12/98	5/99
HAB A Rigid Umbilical Telescoping Strut	QUAL	12/98	5/99
MTS Telescoping Struts w/strut clamps	QUAL	12/98	5/99
S0-S1 Segment-to-Segment Fluid Jumper & receptacle panels (1 of 2)	QUAL	12/98	5/99
APFR Launch Clamp (Worst case PWP Clamp)	QUAL	12/98	5/99
PWP & Energy Absorber Clamps	QUAL	12/98	5/99
MT Stop (P3/S3)	QUAL	12/98	5/99
Tether Shuttle Stops (P3/S3)	QUAL	12/98	5/99
SAJR Cover MLI Clamp	QUAL	12/98	5/99

EVA Hardware	Type	Deliver no later than	Return no later than
TRRJ Torque Box Fluid Line Flex Hose Assembly (1 of 2)	QUAL	6/99	10/99
RBVM-B Fluid Lines (2 of 4)	QUAL	6/99	10/99
Radiator Beam Launch Lock	QUAL	6/99	10/99
Adjustable Diameter Pin	QUAL	6/99	10/99
SARJ Launch Locks, Bolts, Essex Cheater, 50#	QUAL	6/99	10/99
MT/CETA Rail to Rail Fasteners	QUAL	6/99	10/99
HRS Heat Rejection System Radiator Synch (S1/P1)	QUAL	<u>6/99</u>	<u>10/99</u>
HRS Heat Rejection System Radiator Synch (S1/P1) test fixture	Test Fixture	6/99	10/99
Radiator Cinch	QUAL	6/99	10/99
Radiator Cinch test fixture	Test Fixture	6/99	10/99
MTS Strut Anchor plate (2)	Test Fixture	9/99	1/00
MTS Strut Anchor hinge plate	Test Fixture	9/99	1/00
MTS Strut Anchor weight relief adapter	Test Fixture	9/99	1/00
MTS Strut clamp test fixture	Test Fixture	9/99	1/00
Solar Array Motor Drive Assembly EVA Override	QUAL	9/99	1/00
S1/P1 MT Stop	QUAL		
S0 Keel Drag Link	QUAL		
S0 Keel Drag Link Kit	KIT		
MT/CETA Rail	QUAL Fidelity		
ITS S0 Cable Assemblies	QUAL Fidelity		
Note: (1) Equipment availability subject to Contractor's scheduled needs.			

ATTACHMENT J-24
LOANED EQUIPMENT LIST

ATTACHMENT J-24
LOANED EQUIPMENT LIST

ITEM	Part Number	FROM	Equip Type	Quantity	Complex /Non-Complex
MATE 3	SD2-20152	HB	STE	1	C
CBM Simulator	FE-1410	HSV	FE	1	C
MDM Flight Equivalent Unit (FEU)	TBD	HB	FEU	1	C
MRDL test set(Ethernet Test Set)	FE-1415	HSV	FE	1	C
EM Internal Audio Controller IAC	300000016	HSV	EM	1	N
EM Audio Terminal Unit (ATU) (for Audio Test Set)	3000001	HSV	EM	1	N
Boeing Audio Test Set	FE 1309	HSV	FE	1	N
Lockheed Martin Video Test Set	GQ2-20121	HB	GSE	1	C
Optical Attenuater	683-50357	HSV	FE	1	N
Optical Power Meter	683-51307	HSV	FE	1	N
Internal TCS Cooling Servicer	GS2-20061	HB, StL	GSE	1	C
Internal TCS Fluids I/F Test Kit	GS2-20119	HB	FE	1	C
Pump Subassembly	2353160-1-1	HSV	TSE	1	N
Gas Trap Mount (Pump)	2351190-2-1	HSV	TSE	1	N

ITEM	Part Number	FROM	Equip Type	Quantity	Complex /Non-Complex
HI-FI Dev. Quantity Sensor (Pump)	1151424-1-1	HSV	TSE	1	N
System Flow Controller	2353114-1-1	HSV	TSE	1	N
Controller, Modulation, 3-Way	2704385-1-1	HSV	TSE	1	N
Controller, Modulating Valve	2704385-1-1	HSV	TSE	1	N
Valve, 3-Port Mix	3204818-1	HSV	TSE	1	N
Valve-Flow Control	3204820-1	HSV	TSE	1	N
Passive Avionics Cooler	TR2-20238	HB, StL	STE	1	N
Vacuum Pumping System/Leak Test Equipment	FE 1118A	HSV	FE	1	N

ATTACHMENT J-25

BOEING ISS SAFETY AND HEALTH PLAN

ATTACHMENT J-25

BOEING ISS SAFETY AND HEALTH PLAN

The following plan becomes a part of this contract pursuant to the requirements of NFS 18-52.223-73 Safety and Health Plan and conforms to the requirements of NFS 18-52.223-70, Safety and Health (APRIL 2002).

Document: Section 7 of <u>Safety & Mission Assurance / Risk Management Plan</u> , D684-11719-01	Safety and Health for Operations
Rev. Basic	
Final updates submitted to NASA via Boeing letter 2-1150-03-0583:	12/12/2003
NASA S&MA approval of submission:	12/12/2003

SECTION J-26

MANAGEMENT OF POST-DD250 PROPERTY

This attachment (reference Clause G.16) defines the items that will be included and accounted for as well as excluded from Management of Post-DD250 Property. The primary tracking mechanism will be the GOLD (inventory management database) system used for inventory management, viewing the International Space Station as a separate segregation code and distinguishing between installed items and spare items.

Items included for Management of Post-DD250 Property

A. Orbit Support Equipment (OSE)

These are hardware items on orbit to support operations such as Extravehicular Activities (EVAs). Most of these items are covers or containers to protect items from damage. Some other examples of OSE are:

- Portable foot restraint
- Power data grapple fixture
- Temporary power fixtures

The number of items in this category is not currently known, but both OSE and FSE are believed to be in the neighborhood of 200 items.

These items will be included in Boeing Post DD250 Property Management.

B. Flight Support Equipment

Flight Support Equipment is similar to OSE and includes items required to transport equipment from ground to orbit. Most of the items are protective containers and covers. They may also be used to “condition” equipment such as temperature control or “trickle charge” to keep components warm. Other examples are “Express Pallets” and fixtures in the cargo bay. These items will be included in Boeing Post DD250 Property Management.

C. Orbital Replacement Units (ORUs)

ORUs will receive a high level of tracking and reporting in Post DD250 Property Management. ORUs will be identified in the inventory management database (GOLD) and cost information will be provided for the financial aspects of Post DD250 Property Management. Movement of ORUs from ground to ISS or back down will be updated in the GOLD system using segregation codes (OBI for On-Orbit Installed or OBS for On-Orbit Spare) based on the Launch and Return Manifests for each trip to ISS.

Examples of these ORUs are:

- heat exchanger
- radiator
- pump module
- multiplexer-demultiplexer
- GFE (Government Furnished Equipment) ORUs will be included in this category

D. Shop Replaceable Units (SRUs)

SRUs that may be a “Remove and Replace” while on orbit will be included in on-orbit accountability. These are items that are removable from an ORU once the ORU has been released, and will have spares stored on orbit for intermediate level maintenance actions. They will also be categorized by OBI or OBS segregation codes within the GOLD system.

An example could be a multiplexer card, which can be replaced once the multiplexer is removed from the rack.

SRUs supplied as GFE List Items will be tracked in this category

E. Payload Items

These are items that are used for conducting the primary business of the ISS, which is performing scientific research and technology development in space. Payload support hardware consists of payload facility racks, transportation racks (which remain on-orbit for a short time) and Laboratory Support Equipment, such as freezers, instruments, and microscopes. These items will be included in Boeing Post DD250 Property Management, but experiments conducted on Station will not be in Post DD250 Property Management.

F. Crew Health Care Hardware

Crew Health Care hardware, which is expected to remain on station for the life of the program, will be included in Boeing Post DD250 Property Management. This hardware includes:

- Treadmill Assembly
- Heart rate monitor
- IRED (Interim Resistance Exercise Device)
- CEVIS (Cycle Ergometer/Vibration Isolation System)
- Defibrillator
- Blood pressure/ECG monitor

Boeing will track all Crew Health Care Hardware on-orbit. Boeing Post-DD250 Property Management will report year-end value of these items while on-orbit. However, sustaining engineering and actual accomplishment of repairs, procurement of spares, and any ground warehousing of these items would remain with Wyle.

Items not included in Boeing Post-DD250 Property Management

- **Crew Health Care System Consumables (CheCS)**

These are health care items provided primarily by Wyle Labs. Wyle reports that they ship to USA, Spacehab, or USA, depending on where it will be loaded on the shuttle. However, they also report that they have a sustaining engineering function with a presence at the MER, and they will provide on-orbit accountability for consumable CheCS items. Examples of these items are:

- medical supplies
- surface sampler kits
- sample containers

- **Non-consumable material not accountable to NASA 15-10000**, such as cargo transfer bags (PGOC)

- **Flight Crew Equipment**

These are a variety of items that are used by the crew, in most cases hand held, such as

- Cameras, TVs, and related cabling and connectors, film, lenses, adapters, etc..
- Space suits and consumables such as oxygen, filters, etc.
- Consumables, such as water, food, batteries of many sizes
- Personal hygiene items such as clothes, washcloths, towels
- Galley in mid-deck (bolted in)
- Sleep stations
- EVA tools (such as wrenches, diagnostic tools, bags, provided by Lockheed Martin from vendors, of which Ham Sundstrand is one)
- IVA tools (provided by Snap-On via NASA contract with Lockheed Martin)
- Umbilical hoses, some bags, liners, cushions, foam inserts

In some cases, these items have been procured by NASA and will be turned over to USA for accountability at a later time.

- **Software** (Not in Federal Acquisition Regulations)

- **IP – owned hardware** (BSCO/PGOC)

- **Payload items used in experiments** (Experimenter)

- **IMAX-3D Items**

These items are property of IMAX, but are delivered and accounted for through Lockheed Martin, who also track items on-orbit, spares, and arrangements for items returned from orbit.

The following table summarizes where the accountability resides for the various categories.

<u>Category</u>	<u>Prime Accountability</u>	<u>Non-Prime Accountability</u>
OSE (including GFP items)	x	
FSE (including GFP items)	x	
ORUs (including GFP ORUs)	x	
SRUs (including GFP SRUs)	x	
Payload ex. Experiments	x	
IP-owned	*	IP
CheCs	Hardware	Consumables (Wyle)
FCE		SFOC
Experiments		Experimenter
Software		Non Accountable in FAR
Logistics Payload Carriers		CAPPS
IMAX/3D		Lockheed-Martin

- If accountability is transferred to Boeing/NASA

Contract NAS15-10000

Section J
Attachment J-27
Deliverable Items List

Contract End Items with delivery dates after 31 December 2003

Revision 78
Modification 2054

NOTE: See Attachments J-5 and J-9 for Contract End Items with delivery dates through 31 December 2003

J-27 DIL - Legend & User Notes

This is Contract NAS15-10000 Attachment J-27 Deliverable Items List (DIL) for hardware and software deliverables added to this contract beginning 01 January 2004. See Contract NAS15-10000 Attachment J-5 DIL for DDT&E and OPD or Attachment J-9 DIL for Spare orders placed prior to 31 December 2003 and not transferred to this attachment.

Table Column Header Titles	Table Column Header Title Description
CHANGE NUMBER	SSCN or letter reference
DIL ID NO. (DIL UNIQUE)	Identification number unique to this DIL (indicates: 1) Boeing site responsible for acquisition of OPD items; AND 2) 2XXXX series for spare items (Exception: PO83-01)) (ID numbers begin with 1, 2, 3, 4, 5, or 6, and as many following digits needed to support that series. NOTE: Transfers from Attachment J-5. DDT&E and OPD CEIs, and Attachment J-9, PIO Spares CEIs, those with negotiated DD-250 dates after 01JAN04, retain their unique DIL numbers.
1XXXX series	Series when the responsible site is Boeing Huntington Beach CA
2XXXX series	Series for spares items (SPR) - independent of responsible site (Exception: PO83-01)
3XXXX series	Series when the responsible site is Boeing Marshall Space Flight Center, Huntsville AL
4XXXX series	Series when the responsible site is Boeing Canoga Park CA
5XXXX series	Series when the responsible site is Boeing Houston TX
6XXXX series	Series when the responsible site is Boeing Kennedy Space Center FL
PART NUMBER	Part number of deliverable from engineering drawing
NOMENCLATURE	Full name of deliverable from engineering drawing
QTY	Quantity (total of that line) to be delivered
UNIT OF ISSUE	Unit of issue or measure (i.e., EA for each, KT for kit, LB for pound, FT or feet, etc.) of deliverable
HWD TYPE	"Hardware Type" or deliverable category
OPD	Other Product Development
SPR	Spares
TOTAL COST	Total cost of this line item (as negotiated)
DESTINATION	Final destination of deliverable
DELIVERY DATE	Negotiated delivery date of entire quantity of deliverables (can be more than one and early delivery is ok). This is the date of the provisional DD-250 and NOT physical shipment for site of manufacture or acquisition.
DD 250 Point	Contact Clause E.4 INSPECTION AND ACCEPTANCE classification to determine point of inspection and acceptance.
D&D	Data and Documentation
FLT	Flight
GSE	Ground Support Equipment
NFSW	Non-Flight Software
ODH	Other Deliverable Hardware
ORU-SE	On-orbit ORU Support Equipment
REMARKS	As set forth in the negotiated change or as agreed to by the parties. Includes each related DD-250 number and the date thereof. Also includes notes. NOTE 1 - on DIL Rev 80 - Due after Jan 1 2004 (trans to new J-X) NOTE 2 - Transferred from Clause H.72, Deliverables after Contract Period of Performance on DIL Rev 80, but NOT listed as due after Jan 1 2004

J-27 DIL - ACTIVE LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
Pxx Series PIOs											
None.											
20xxx Series PIOs											
20020	PIO 87; Mod 1508 (H.57)	Flexible Hose Rotary Coupler, Spare Assembly	5849811-503	1	EA	NFS	\$ 26,555,142.75	LMMS	KSC	11/01/11	Added per PIO 87 on Mod 1508. Part number corrected per letter 09-0478 dated 12/01/2009.
20053	PIO 89/SSCN 10695; Mod 1552	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT	\$ 3,360,217.64	HSSSI	KSC	12/30/12	Added per PIO 89/SSCN 10695 on Mod 1552. Changed part number per letter 10-0420 concurrence dated 07/29/2010. Updated delivery date per S/A 2013.
20054	PIO 89/SSCN 10695; Mod 1552	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT	\$ 3,369,139.93	HSSSI	KSC	04/30/13	Added per PIO 89/SSCN 10695 on Mod 1552. Changed part number per letter 10-0420 concurrence dated 07/29/2010. Updated delivery date per S/A 2013.
20055	PIO 89/SSCN 10695; Mod 1552	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT	\$ 3,364,727.65	HSSSI	KSC	08/30/13	Added per PIO 89/SSCN 10695 on Mod 1552. Changed part number per letter 10-0420 concurrence dated 07/29/2010. Updated delivery date per S/A 2013.
20120	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT	\$ 43,446.33	HI	KSC	07/30/12	Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.
20121	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT	\$ 43,446.33	HI	KSC	11/30/12	Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.
20134	PIO 84B; Mod 1519 (H.57)	Fluids Control and Pump ORU	683-17117-1	1	EA	FLT	\$ 2,262,981.00	B-MFSC	KSC	12/31/12	Added per PIO 84B on Mod 1519
20144	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT	\$ 1,525,189.90	Harris	KSC	01/01/12	Added per PIO 94 on Mod 1560
20145	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT	\$ 1,399,809.93	Harris	KSC	04/01/12	Added per PIO 94 on Mod 1560
20190	PIO 98; S/A 1790	Pan and Tilt Unit (PTU)	10033212	1	EA	FLT	N/A	L3	KSC	04/23/14	Added per PIO 98 definitized on S/A 1790.
20191	PIO 98; S/A 1790	Pan and Tilt Unit (PTU)	10033212	1	EA	FLT	N/A	L3	KSC	09/18/14	Added per PIO 98 definitized on S/A 1790.
20192	PIO 98; S/A 1790	Pan and Tilt Unit (PTU)	10033212	1	EA	FLT	N/A	L3	KSC	02/17/15	Added per PIO 98 definitized on S/A 1790.
20234	PIO 101; S/A 1816 (H.57)	Kit, Control Moment Gyro (CMG), Mechanical Assembly (Spare)	TBD	1	KT	FLT	N/A	L3	KSC	03/31/16	Added per PIO 101 definitized on S/A 1816.
20235	PIO 103; S/A 1952 (H.57)	Ammonia Tank Assembly (ATA) - ORU	1F28801-501	1	EA	FLT	N/A	BHOU	KSC	07/28/16	Added per PIO 103 definitized on S/A 1952.
20236	PIO 103; S/A 1952 (H.57)	Ammonia Tank Assembly (ATA) - ORU	1F28801-501	1	EA	FLT	N/A	BHOU	KSC	10/11/16	Added per PIO 103 definitized on S/A 1952. Updated delivery date per letter 13-014591 concurrence dated 09/25/2013.
20237	PIO 103; S/A 1952	Transducer, Pressure, Absolute	1F08004-1	4	EA	FLT	N/A	KSC	KSC	12/01/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20238	PIO 103; S/A 1952	Transducer, Pressure, Differential	1F08008-1	4	EA	FLT	N/A	Tavis	KSC	08/11/14	Added per PIO 103 definitized on S/A 1952.
20239	PIO 103; S/A 1952 (H.57)	Isolation Valve	1F39991-507	7	EA	FLT	N/A	Marotta	KSC	09/22/16	Added per PIO 103 definitized on S/A 1952.
20240	PIO 103; S/A 1952 (H.57)	Ammonia Tank	1F40057-503	4	EA	FLT	N/A	Honeywell	KSC	08/29/16	Added per PIO 103 definitized on S/A 1952.
20241	PIO 103; S/A 1952	Quick Disconnect (QD)	1F45540-513	4	EA	FLT	N/A	Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20242	PIO 103; S/A 1952	Cap, Pressure	1F45580-1	3	EA	FLT	N/A	Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20243	PIO 103; S/A 1952	Quick Disconnect, Cap	1F45580-501	4	EA	FLT	N/A	Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20244	PIO 103; S/A 1952	Quick Disconnect, Cap	1F45581-501	4	EA	FLT	N/A	Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20245	PIO 103; S/A 1952	Shear Pin	1F96384-1	6	EA	FLT	N/A	KSC	KSC	06/27/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
20246	PIO 103; S/A 1952	Housing, Bolt	1F96385-1	6	EA	FLT	N/A	KSC	KSC	06/27/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20247	PIO 103; S/A 1952	Blanket Assembly, Left	1F96391-1	2	EA	FLT	N/A	Boeing-KSC	KSC	04/07/14	Added per PIO 103 definitized on S/A 1952.
20248	PIO 103; S/A 1952	Blanket Assembly, Right	1F96392-1	2	EA	FLT	N/A	Boeing-KSC	KSC	04/07/14	Added per PIO 103 definitized on S/A 1952.
20249	PIO 103; S/A 1952	Blanket Assembly, End Shield	1F96393-1	4	EA	FLT	N/A	Boeing-KSC	KSC	04/07/14	Added per PIO 103 definitized on S/A 1952.
20250	PIO 103; S/A 1952 (H.57)	Electronic Control Unit (ECU)	1F98802-501	6	EA	FLT	N/A	Marotta	KSC	10/26/15	Added per PIO 103 definitized on S/A 1952.
20253	PIO 103; S/A 1952	Fitting, Tee	684-020073-0001	4	EA	FLT	N/A	KSC	KSC	11/24/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20255	PIO 103; S/A 1952	Fitting Elbow	684-020074-0001	4	EA	FLT	N/A	KSC	KSC	11/24/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20256	PIO 103; S/A 1952	Connector	NATC06G11N35 SA	2	EA	FLT	N/A	KSC	KSC	02/26/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20257	PIO 103; S/A 1952	Backshell	NZGA-JG-11-N- 16	6	EA	FLT	N/A	KSC	KSC	02/26/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20258	PIO 103; S/A 1952	Connector	NZGL07T2119N3 2PN	2	EA	FLT	N/A	KSC	KSC	02/26/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20261	PIO 102; S/A 1826	Water Delivery - ORU	SV825449-2/ PLSV28744	1	EA	FLT	N/A	HSSSI	KSC	02/20/14	Added per PIO 102 definitized on S/A 1826.
20262	PIO 106; S/A 1922	Isolator Assy, X-Axis	1F16152-1	6	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20263	PIO 106; S/A 1922	Isolator Assy, Y-Axis	1F16153-1	6	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20264	PIO 106; S/A 1922	Isolator Assy, Z-Axis	1F16154-1	6	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20265	PIO 106; S/A 1922	Isolator Assy, Upper Axis	1F16155-1	6	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20267	PIO 106; S/A 1922	Stabilizer	1F16225-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20268	PIO 106; S/A 1922	Stabilizer	1F16225-2	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20271	PIO 106; S/A 1922	Snubber Cup Assy, Lower Right	684-0140672- 0001	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20272	PIO 106; S/A 1922	Snubber Cup Assy, Lower Left	684-0140672- 0002	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20273	PIO 106; S/A 1922	Snubber Cup Assy, Upper Right	684-0140672- 0003	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20274	PIO 106; S/A 1922	Snubber Cup Assy, Upper Left	684-0140672- 0004	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20275	PIO 106; S/A 1922	Attachment Assy, Upper	1F16179-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20276	PIO 106; S/A 1922	Snubber Assy, Lower	1F16183-501	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20277	PIO 106; S/A 1922	Snubber Assy, Lower	1F16183-502	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20278	PIO 106; S/A 1922	Snubber Assy, Upper	1F16190-501	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20279	PIO 106; S/A 1922	Snubber Assy, Upper	1F16190-502	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20283	PIO 106; S/A 1922	Center Frame Mounting Assy	1F16215-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20284	PIO 106; S/A 1922	Standoff Arm Attachment Assy	1F16223-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20285	PIO 106; S/A 1922	Standoff Arm Attachment Assy	1F16223-2	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20286	PIO 106; S/A 1922	Standoff Arm Assy	1F16172-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20289	PIO 106; S/A 1922	Standoff Arm Assy	1F16199-2	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20290	PIO 105; S/A 1961 (H.57)	SPCU Heat Exchanger	2351350-2-2	1	EA	FLT	N/A	Vender	KSC	04/25/16	Added per PIO 105 definitized on S/A 1961.
20291	PIO 105; S/A 1961	CDRA Housing Assembly, Matched Set	2351939-1	1	EA	FLT	N/A	Vendor	Vendor	07/23/15	Added per PIO 105 definitized on S/A 1961.
20292	PIO 105; S/A 1961	CDRA Housing Assembly, Matched Set	2351939-1	1	EA	FLT	N/A	Vendor	Vendor	07/23/15	Added per PIO 105 definitized on S/A 1961.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
20293	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT	N/A	Vendor	KSC	01/16/15	Added per definitization of PIO 107 on S/A 2026.
20294	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT	N/A	Vendor	KSC	01/30/15	Added per definitization of PIO 107 on S/A 2026.
20295	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT	N/A	Vendor	KSC	02/12/15	Added per definitization of PIO 107 on S/A 2026.
20296	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT	N/A	Vendor	KSC	02/23/15	Added per definitization of PIO 107 on S/A 2026.
20297	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT	N/A	Vendor	KSC	02/01/16	Added per definitization of PIO 107 on S/A 2026.
20298	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT	N/A	Vendor	KSC	04/26/16	Added per definitization of PIO 107 on S/A 2026.
20310	PIO 104; S/A 1936	Pump Manifold Assy	96M12317-1	1	EA	FLT	N/A	B-MSFC	KSC	01/09/15	Added per PIO 104 definitized on S/A 1936.
20311	PIO 104; S/A 1936	Station Pump Assembly	96M12316-3	1	EA	FLT	N/A	B-MSFC	KSC	05/05/14	Added per PIO 104 definitized on S/A 1936.
20312	PIO 104; S/A 1936	Shoulder, Screw	96M35071-1	4	EA	FLT	N/A	B-MSFC	KSC	04/16/14	Added per PIO 104 definitized on S/A 1936.
20314	PIO 104; S/A 1936	Wire Harness Assy, Russian Compressor Power, Node 3 WRS	96M23056-1	2	EA	FLT	N/A	B-MSFC	JSC	06/23/14	Added per PIO 104 definitized on S/A 1936. Changed destination per S/A 1985.
20315	PIO 104; S/A 1936	Wire Harness Assy, Condensate Transfer Pump Power, WRS	96M23055-3	1	EA	FLT	N/A	B-MSFC	KSC	06/13/14	Added per PIO 104 definitized on S/A 1936.
20316	PIO 104; S/A 1936	Shutoff Valve Assy, Product Tee	96M35035-1	1	EA	FLT	N/A	B-MSFC	KSC	08/20/14	Added per PIO 104 definitized on S/A 1936.
20317	PIO 104; S/A 1936	Cooling Jacket Purge Assembly	96M12559-1	1	EA	FLT	N/A	B-MSFC	KSC	09/19/14	Added per PIO 104 definitized on S/A 1936.
20318	PIO 104; S/A 1936	Cooling Jacket Purge Assembly	96M12559-3	1	EA	FLT	N/A	B-MSFC	KSC	05/01/14	Added per PIO 104 definitized on S/A 1936.
20319	PIO 104; S/A 1936	WPA Purge Assembly	96M35027-1	1	EA	FLT	N/A	B-MSFC	KSC	04/04/14	Added per PIO 104 definitized on S/A 1936.
20320	PIO 104; S/A 1936	WPA Purge Assembly	96M35027-3	1	EA	FLT	N/A	B-MSFC	KSC	03/31/14	Added per PIO 104 definitized on S/A 1936.
20321	PIO 104; S/A 1936	WPA OGA Controller Purge Assembly	96M35028-1	1	EA	FLT	N/A	B-MSFC	KSC	06/17/14	Added per PIO 104 definitized on S/A 1936.
20322	PIO 104; S/A 1936	WPA OGA Controller Purge Assembly	96M35028-3	1	EA	FLT	N/A	B-MSFC	KSC	08/15/14	Added per PIO 104 definitized on S/A 1936.
20323	PIO 104; S/A 1936	WRS High/Low Speed Pump Fuse	FM09A-3A	4	EA	FLT	N/A	Bussman	KSC	05/01/14	Added per PIO 104 definitized on S/A 1936.
20324	PIO 104; S/A 1936	Pump Tubing	96M12588-1	4	EA	FLT	N/A	B-MSFC	KSC	04/17/14	Added per PIO 104 definitized on S/A 1936.
20325	PIO 104; S/A 1936	Exit Filter, RFTA	96M12564-1	4	EA	FLT	N/A	B-MSFC	KSC	09/10/14	Added per PIO 104 definitized on S/A 1936.
20326	PIO 104; S/A 1936	WRS Condensate Manifold Tube Clamp	9579K65	4	EA	FLT	N/A	Academic Products	KSC	05/01/14	Added per PIO 104 definitized on S/A 1936.
20327	PIO 104; S/A 1936	Purge Adapter, Hydrogen Sensor ORU	SV1013102-1	1	EA	FLT	N/A	HSSSI	KSC	01/27/15	Added per PIO 104 definitized on S/A 1936.
20328	PIO 104; S/A 1936	Union and Fitting, Purge Adapter	SV1013141-1	1	EA	FLT	N/A	HSSSI	KSC	01/27/15	Added per PIO 104 definitized on S/A 1936.
20329	PIO 104; S/A 1936	Coupling and Nut, Purge Adapter	SV1013145-1	1	EA	FLT	N/A	HSSSI	KSC	01/27/15	Added per PIO 104 definitized on S/A 1936.
20330	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-1	1	EA	FLT	N/A	B-MSFC	KSC	10/02/14	Added per PIO 104 definitized on S/A 1936.
20331	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-3	1	EA	FLT	N/A	B-MSFC	KSC	08/08/14	Added per PIO 104 definitized on S/A 1936.
20332	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-5	1	EA	FLT	N/A	B-MSFC	KSC	08/25/14	Added per PIO 104 definitized on S/A 1936.
20333	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-7	1	EA	FLT	N/A	B-MSFC	KSC	09/08/14	Added per PIO 104 definitized on S/A 1936.
20334	PIO 104; S/A 1936	Thermal Expansion Device-OGA	SV1012789-1	2	EA	FLT	N/A	HSSSI	KSC	01/20/15	Added per PIO 104 definitized on S/A 1936.
20335	PIO 104; S/A 1936	Thermal Expansion Assy, Hydrogen ORU	96M35019-1	1	EA	FLT	N/A	B-MSFC	KSC	06/13/14	Added per PIO 104 definitized on S/A 1936.
20336	PIO 104; S/A 1936	Female QD	502060-3102U	4	EA	FLT	N/A	Parker Hanifan	KSC	09/25/14	Added per PIO 104 definitized on S/A 1936.
20337	PIO 104; S/A 1936	Male QD	502060-1191	2	EA	FLT	N/A	Parker Hanifan	KSC	09/25/14	Added per PIO 104 definitized on S/A 1936.
20338	PIO 104; S/A 1936	Check/Relief Valve	96M12040-11	2	EA	FLT	N/A	MSFC	KSC	09/25/14	Added per PIO 104 definitized on S/A 1936.
20339	PIO 104; S/A 1936	Motor	379072	2	EA	FLT	N/A	Maxon Precision Motors	KSC	05/30/14	Added per PIO 104 definitized on S/A 1936.
20340	PIO 104; S/A 1936	Valve, Shutoff	9232T-6BB	1	EA	FLT	N/A	Circor Aerospace	KSC	10/09/14	Added per PIO 104 definitized on S/A 1936. Updated part number per letter 13-003686 concurrence dated 03/06/2013.
20341	PIO 104; S/A 1936	QD Male	2001-A12C-T05U	3	EA	FLT	N/A	Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20342	PIO 104; S/A 1936	Quick Disconnect	TA505009-423	4	EA	FLT	N/A	Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20343	PIO 104; S/A 1936	Quick Disconnect, Female	2000-A0BC-T06U	9	EA	FLT	N/A	Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20344	PIO 104; S/A 1936	Coupling, Thread-LOK	2000-A08C-G12U	3	EA	FLT	N/A	Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20345	PIO 104; S/A 1936	Flex Line Assy	201H-96M-001	2	EA	FLT	N/A	Parker Hanifan	KSC	09/25/15	Added per PIO 104 definitized on S/A 1936.
20346	PIO 104; S/A 1936	Fitting, Plug Modified	96M12559-5	1	EA	FLT	N/A	B-MSFC	KSC	09/10/15	Added per PIO 104 definitized on S/A 1936.
20347	PIO 104; S/A 1936	Syringe	309661	1	EA	FLT	N/A	Becton Dickinson Acute Care	KSC	04/30/15	Added per PIO 104 definitized on S/A 1936.
20348	PIO 104; S/A 1936	Hose Assembly	171001-4CR-0060	2	EA	FLT	N/A	Parker Hanifan	KSC	09/10/15	Added per PIO 104 definitized on S/A 1936.
20349	PIO 104; S/A 1936	O-Ring	3-908 V0747-75	2	EA	FLT	N/A	Parker Hanifan	KSC	10/16/15	Added per PIO 104 definitized on S/A 1936.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
20350	PIO 104; S/A 1936	Ring, Seal	KC103-4	2	EA	FLT	N/A	KSC	KSC	09/24/15	Added per PIO 104 definitized on S/A 1936.
20351	PIO 104; S/A 1936	Fitting, Adapter	KC115K8-4	2	EA	FLT	N/A	KSC	KSC	09/24/15	Added per PIO 104 definitized on S/A 1936.
20352	PIO 104; S/A 1936	Fitting, Plug	KC130K4	1	EA	FLT	N/A	KSC	KSC	09/24/15	Added per PIO 104 definitized on S/A 1936.
20353	PIO 104; S/A 1936	Distillate to QD-33M Hose	683-93490-1	1	EA	FLT	N/A	B-MSFC	KSC	10/19/15	Added per PIO 104 definitized on S/A 1936.
20354	PIO 104; S/A 1936	Gas Separator Purge Hose	683-93490-2	1	EA	FLT	N/A	B-MSFC	KSC	10/19/15	Added per PIO 104 definitized on S/A 1936.
20355	PIO 104; S/A 1936	Recycle Tank Feed Hose	683-93490-3	2	EA	FLT	N/A	B-MSFC	KSC	10/19/15	Added per PIO 104 definitized on S/A 1936.
20382	PIO 114; S/A 1957	Valve, Manual, 0.125 inch	683-19393-1	1	EA	FLT	N/A	Carleton	KSC	01/30/15	Added per PIO 114 definitized on S/A 1957.
20383	PIO 114; S/A 1957	Valve, Manual, 0.125 inch	683-19393-1	1	EA	FLT	N/A	Carleton	KSC	01/30/15	Added per PIO 114 definitized on S/A 1957.
20384	PIO 114; S/A 1957	Valve, Three-Way, 1.75 inch	683-19401-1	1	EA	FLT	N/A	Valve Tech	KSC	01/30/15	Added per PIO 114 definitized on S/A 1957.
20402	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT	N/A	Vendor	KSC	07/23/15	Added per definitization of PIO 116 on S/A 2012.
20403	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT	N/A	Vendor	KSC	07/30/15	Added per definitization of PIO 116 on S/A 2012.
20404	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT	N/A	Vendor	KSC	09/11/15	Added per definitization of PIO 116 on S/A 2012.
20405	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT	N/A	Vendor	KSC	09/18/15	Added per definitization of PIO 116 on S/A 2012.
20406	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT	N/A	Vendor	KSC	09/30/15	Added per definitization of PIO 116 on S/A 2012.
20407	PIO 109; S/A 1981	IAPS Power Supply Module	960530-009	1	EA	HIG	N/A	SEAKR	KSC	09/25/14	Added per PIO 109 definitized on S/A 1981.
20408	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT	N/A	Vendor	KSC	05/05/16	Added per definitization of PIO 107 on S/A 2026.
20409	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT	N/A	Vendor	KSC	05/20/16	Added per definitization of PIO 107 on S/A 2026.
20510	Letter 13-004578	Beta Gimbal Roll Ring Subsystem (BGRRS) S/N 96120102 (as-is condition)	8261601-901	1	EA	HIG	N/A	HIG	HIG	12/20/13	Added per letter 13-004578 concurrence dated 03/25/2013.
20511	PIO 103; Letter 13-006139	Fitting	684-020072-0001	4	EA	FLT	N/A	KSC	KSC	11/24/14	Added per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
4xxx Series											
None.											
10xxx Series											
10022	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power Transfer System 095 SAIL	N/A	1	KT	FEU	N/A	FEU	JSC	11/04/05	SSCN 8554 definitized on Mod 1323.
10023	SSCN 8554; S/A 1323	SSPTS Displays & Controls Panel; 095 - Mod Kit	N/A	1	KT	FEU	N/A	FEU	JSC	11/04/05	SSCN 8554 definitized on Mod 1323.
10024	SSCN 8554; S/A 1323	Mod Kit - SSPTS - Model C70-1140 for SAIL	N/A	1	KT	GSE	N/A	GSE	JSC	11/04/05	SSCN 8554 definitized on Mod 1323.
10026	SSCN 9425; S/A 1334	AFT COMPARTMENT MOD KIT - IMPLEMENTATION OF STATION/SHUTTLE POWER TRANSFER SYSTEM OV-103	N/A	1	KT	FLT	N/A	FLT	KSC	11/30/05	SSCN 9425 definitized per S/A 1334.
30xxx Series											
32257	SSCN 12441; S/A 1802	Installation Kit, NORS - Airlock	683-98100-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	10/28/13	Added per SSCN 12441 definitized on S/A 1802.
32259	SSCN 12441; S/A 1802	Internal Fill Assembly, N2	683-98124-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/15/13	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.
32260	SSCN 12441; S/A 1802	Internal Fill Assembly, O2	683-98123-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/08/13	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.
32262	SSCN 12441; S/A 1802	External Fill Assembly, NORS	683-98101-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/01/13	Added per SSCN 12441 definitized on S/A 1802.
32264	SSCN 12441; S/A 1802	Internal Fill Assembly, N2 (Spare)	683-98124-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	02/13/15	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.
32266	SSCN 12441; S/A 1802	External Fill Assembly, NORS (Spare)	683-98101-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/13/14	Added per SSCN 12441 definitized on S/A 1802.
32268	SSCN 12441; S/A 1802	Internal Fill Assembly, O2 (Spare)	683-98123-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	01/15/15	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.
32271	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	2	EA	FLT	N/A	B-MSFC	B-MSFC	10/31/13	Added per SSCN 12441 definitized on S/A 1802.
32272	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	5	EA	FLT	N/A	B-MSFC	B-MSFC	12/20/13	Added per SSCN 12441 definitized on S/A 1802.
32273	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT	N/A	B-MSFC	B-MSFC	01/20/14	Added per SSCN 12441 definitized on S/A 1802.
32274	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT	N/A	B-MSFC	B-MSFC	04/21/14	Added per SSCN 12441 definitized on S/A 1802.
32275	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT	N/A	B-MSFC	B-MSFC	06/18/14	Added per SSCN 12441 definitized on S/A 1802.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
32276	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	5	EA	FLT	N/A	B-MSFC	B-MSFC	07/22/14	Added per SSCN 12441 definitized on S/A 1802.
32277	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT	N/A	B-MSFC	B-MSFC	09/19/14	Added per SSCN 12441 definitized on S/A 1802.
32278	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT	N/A	B-MSFC	B-MSFC	06/26/15	Added per SSCN 12441 definitized on S/A 1802.
32279	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	3	EA	FLT	N/A	B-MSFC	B-MSFC	08/28/15	Added per SSCN 12441 definitized on S/A 1802.
32281	SSCN 12378; S/A 1803	Mod Kit, iPEHB, Worf Rack	683-99856-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	04/04/14	Added per SSCN 12378 definitized on S/A 1803.
32282	SSCN 12378; S/A 1803	Mod Kit, iPEHB, Express Rack (with ARIS)	683-99855-1	4	KT	FLT	N/A	B-MSFC	B-MSFC	06/19/14	Added per SSCN 12378 definitized on S/A 1803.
32288	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	12/06/13	Added per SSCN 12378 definitized on S/A 1803.
32289	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	12/13/13	Added per SSCN 12378 definitized on S/A 1803.
32290	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	01/27/14	Added per SSCN 12378 definitized on S/A 1803.
32291	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	01/30/14	Added per SSCN 12378 definitized on S/A 1803.
32292	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	03/03/14	Added per SSCN 12378 definitized on S/A 1803.
32293	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	03/10/14	Added per SSCN 12378 definitized on S/A 1803.
32294	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	03/18/14	Added per SSCN 12378 definitized on S/A 1803.
32295	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	04/21/14	Added per SSCN 12378 definitized on S/A 1803.
32314	SSCN 12441; S/A 1802	Hose Assembly, N2 IFA, NORS	683-98127-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/18/13	Added per SSCN 12441 definitized on S/A 1802.
32315	SSCN 12441; S/A 1802	Hose Assembly, N2 IFA, NORS (Spare)	683-98127-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32316	SSCN 12441; S/A 1802	Hose Assembly, O2 IFA, NORS	683-98127-2	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/11/13	Added per SSCN 12441 definitized on S/A 1802.
32317	SSCN 12441; S/A 1802	Hose Assembly, O2 IFA, NORS (Spare)	683-98127-2	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32320	SSCN 12441; S/A 1802	NORS Manifold Assembly (Spare)	683-98135-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	12/19/14	Added per SSCN 12441 definitized on S/A 1802.
32321	SSCN 12441; S/A 1802	HOSE ASSEMBLY - N2	683-98163-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32322	SSCN 12441; S/A 1802	HOSE ASSEMBLY - N2	683-98163-2	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32323	SSCN 12441; S/A 1802	HOSE ASSEMBLY – O2	683-98163-3	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802. Changed part number per letter 12-005284 concurrence dated 08/03/12.
32324	SSCN 12441; S/A 1802	EXTERNAL N2 REG COVER 1	683-98171-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/04/13	Added per SSCN 12441 definitized on S/A 1802.
32325	SSCN 12441; S/A 1802	EXTERNAL N2 REG COVER 2	683-98171-2	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/04/13	Added per SSCN 12441 definitized on S/A 1802.
32326	SSCN 12441; S/A 1802	EXTERNAL HOSE ASSEMBLY, NORS	683-98176-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/04/13	Added per SSCN 12441 definitized on S/A 1802.
32327	SSCN 12441; S/A 1802	EXTERNAL HOSE ASSEMBLY, NORS (Spare)	683-98176-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32328	SSCN 12441; S/A 1802	KIT, RTA QD KEYING	683-98180-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	10/31/13	Added per SSCN 12441 definitized on S/A 1802. Updated qty per letter 13-011836 concurrence dated 08/07/2013.
32332	SSCN 12378; S/A 1803	Mod Kit, iPEHG, Express Rack (without ARIS)	683-99855-2	3	EA	FLT	N/A	B-MSFC	B-MSFC	10/16/14	Added per SSCN 12378 definitized on S/A 1803.
32333	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	05/02/14	Added per SSCN 12378 definitized on S/A 1803. Delivery date changed per MOD 1832.
32334	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	05/09/14	Added per SSCN 12378 definitized on S/A 1803. Delivery date changed per MOD 1832.
32335	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	06/17/14	Added per SSCN 12378 definitized on S/A 1803. Delivery date changed per MOD 1832.
32336	SSCN 12378; S/A 1803	Mod Kit, iPEHG, HRF Rack	683-99857-1	2	KT	FLT	N/A	B-MSFC	B-MSFC	11/27/14	Added per SSCN 12378 definitized on S/A 1803.
32337	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	06/24/14	Added per SSCN 12378 definitized on S/A 1803.
32338	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT	N/A	GISR	GISR	07/31/14	Added per SSCN 12378 definitized on S/A 1803.
32355	SSCN 12803; S/A 1859	Advanced Recycle Filter Tank Assemblies (ARFTA) Tank Assembly	683-93450-4	1	EA	FLT	N/A	B-MSFC	B-MSFC	04/04/14	Added per SSCN 12803 definitized on S/A 1859
32371	SSCN 12916; S/A 1947	Remote Advanced Payload Test Rig (RAPTR) Command and Data Handling (C&DH) Module	HVP-02005	24	EA	GSE	N/A	B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32372	SSCN 12916; S/A 1947	RAPTR Analog and Discrete (A&D) Module	HVP-02015	7	EA	GSE	N/A	B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32373	SSCN 12916; S/A 1947	EXPRESS Logistics Carrier (ELC) Interface Cable	683-85752-1	7	EA	GSE	N/A	B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32374	SSCN 12916; S/A 1947	Columbus Interface Cable	683-85753-1	2	EA	GSE	N/A	B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32375	SSCN 12916; S/A 1947	Japanese Experiment Module (JEM) Exposed Facility (EF) Interface Cable	683-85754-1	2	EA	GSE	N/A	B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32377	SSCN 12916; S/A 1947	Payload Rack Checkout Unit (PRCU) Interface Cable	683-98320-1	7	EA	GSE	N/A	B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32379	SSCN 12639; S/A 1860	Mod Kit, Rack (includes Coldplate w/ CTPA), C2V2	683-98360-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	08/13/14	Added per SSCN 12639 definitized on S/A 1860.
32380	SSCN 12639; S/A 1860	Mod Kit, U.S. Lab, C2V2	683-98359-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	08/13/14	Added per SSCN 12639 definitized on S/A 1860.
32397	SSCN 13197; S/A 2000	TBD - Mod Kit, WRS2 Fill/Drain	683-TBD-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/02/15	Added per SSCN 13197 definitized on S/A 2000.
32398	SSCN 12803; S/A 1859	Advanced Recycle Filter Tank Assemblies (ARFTA) Tank Assembly	683-93450-4	1	EA	FLT	N/A	B-MSFC	B-MSFC	08/03/14	Added per SSCN 12803 definitized on S/A 1859
32399	SSCN 12803; S/A 1859	Advanced Recycle Filter Tank Assemblies (ARFTA) Tank Assembly	683-93450-4	1	EA	FLT	N/A	B-MSFC	B-MSFC	09/04/14	Added per SSCN 12803 definitized on S/A 1859
32404	SSCN 13324; S/A 1960	Modification Kit, Worf Shutter Acuator System (SAS)	683-98456-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	06/16/14	Added per SSCN 13324 definitized on S/A 1960.
32405	SSCN 13383; S/A 1905	Adapter, QD Depress, N2/O2	683-98110-17	2	EA	FLT	N/A	B-MSFC	B-MSFC	11/18/13	Added per SSCN 13383 definitized on S/A 1905. Updated nomenclature and part number per letter 13-010844 concurrence dated 07/24/2013.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
32426	SSCN 13501; S/A 1989	Mod Kit, Shell Heaters, Airlock	683-98330-0001	1	EA	FLT	N/A	B-MSFC	B-MSFC	06/20/14	Added per SSCN 13501 definitized on S/A 1989. Updated nomenclature and part number per letter 13-013329 concurrence dated 08/29/2013.
32427	SSCN 13501; S/A 1989	Wire Harness Assy - Crew Lock Heater	683-101892-0001	8	EA	FLT	N/A	B-MSFC	B-MSFC	06/20/14	Added per SSCN 13501 definitized on S/A 1989. Updated nomenclature, part number and qty per letter 13-013329 concurrence dated 08/29/2013.
32429	SSCN 13684; S/A 2041	Recharge Tank Assembly, NORS	683-98102-1	2	EA	FLT	N/A	B-MSFC	B-MSFC	08/28/15	Added per SSCN 13684 definitized on S/A 2041.
32449	SSCN 13781; S/A 2005	Cable, Data	683-44267-4	2	EA	FLT	N/A	B-MSFC	B-MSFC	02/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32450	SSCN 13781; S/A 2005	Cable, Power	683-44024-4	2	EA	FLT	N/A	B-MSFC	B-MSFC	02/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32451	SSCN 13758; S/A 2006	Flexhose Assembly	683-TBD-1	2	EA	FLT	N/A	B-MSFC	B-MSFC	01/30/15	Added per definitization of SSCN 13758 on S/A 2006.
32452	SSCN 13758; S/A 2006	Flexhose Assembly	683-TBD-1	2	EA	FLT	N/A	B-MSFC	B-MSFC	01/30/15	Added per definitization of SSCN 13758 on S/A 2006.
32458	SSCN 13781; S/A 2005	Cable, Data	683-44267-4	4	EA	FLT	N/A	B-MSFC	B-MSFC	03/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32459	SSCN 13781; S/A 2005	Cable, Power	683-44024-4	4	EA	FLT	N/A	B-MSFC	B-MSFC	03/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32465	SSCN 13822; S/A 2035	Jumper, Avionics Restart	683-TBD-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/13/14	Added per definitization of SSCN 13822 on S/A 2035.
32466	SSCN 13822; S/A 2035	Jumper, NCS Restart	683-TBD-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/13/14	Added per definitization of SSCN 13822 on S/A 2035.
32468	SSCN 13501; S/A 1989	Wire Harness Assy - Crew Lock Heater	683-101892-0002	4	EA	FLT	N/A	B-MSFC	B-MSFC	06/20/14	Added per letter 13-013329 concurrence dated 08/29/2013.
32470	SSCN 13121; S/A 1959	Mod Kit, Node 3 Aft IMV	684-99503-0001	1	EA	FLT	N/A	B-MSFC	B-MSFC	11/13/14	Added per SSCN 13121 definitized on S/A 1959. Updated DIL ID, nomenclature, part number and destination per letter 13-013413 concurrence dated 09/06/2013.
40xxx Series											
None.											
50xxx Series											
51358	SSCN 12198; S/A 1795	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT	N/A	Vendor	KSC	02/04/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51359	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT	N/A	Vendor	KSC	06/13/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51360	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT	N/A	Vendor	KSC	06/13/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51361	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT	N/A	Vendor	KSC	08/22/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51362	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT	N/A	Vendor	KSC	08/22/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51370	SSCN 12443; CCO 1666; S/A 1771	Mod Kit, External Wireless System	684-015273-0001	1	KT	FLT	N/A	BHOU	BHOU	05/03/11	Added per SSCN 12443 authorized on CCO 1666.
51394	SSCN 12443; CCO 1666; S/A 1771	Mod Kit, USL External EWC Coax Cable	684-015289-0001	1	KT	FLT	N/A	BHOU	BHOU	02/15/11	Added per SSCN 12443 authorized on CCO 1666.
51476	SSCN 12443; S/A 1854	Mod Kit, ELC Wireless Communications, WAP – US Lab	684-015641-0001	1	KT	FLT	N/A	BHOU	BHOU	03/26/12	Added per SSCN 12443 definitized on S/A 1854.
51490	SSCN 12719; S/A 1728	Mod Kit, Grapple Bar Assembly, FRGF Re-Clock	684-015840-0001	1	KT	FLT	N/A	KSC	KSC	01/31/12	Added per SSCN 12719 definitized on S/A 1728. Changed nomenclature per letter 11-011362 concurrence dated 09/01/2011.
51494	SSCN 12283; S/A 1794	Power Distribution Unit	11M156M	1	EA	FLT	N/A	Moscow	Moscow	11/12/13	Added per SSCN 12283 definitized on S/A 1794.
51495	SSCN 12283; S/A 1794	Main Bus Assembly	БСШ-2	1	EA	FLT	N/A	Moscow	Moscow	01/21/14	Added per SSCN 12283 definitized on S/A 1794.
51496	SSCN 12283; S/A 1794	Filter Unit	БФ-2	1	EA	FLT	N/A	Moscow	Moscow	01/21/14	Added per SSCN 12283 definitized on S/A 1794.
51512	SSCN 12202; S/A 1792	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	08/14/15	Added per SSCN 12202 definitized on S/A 1792.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51513	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	10/15/15	Added per SSCN 12202 definitized on S/A 1792.
51514	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	12/15/15	Added per SSCN 12202 definitized on S/A 1792.
51515	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	02/15/16	Added per SSCN 12202 definitized on S/A 1792.
51516	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	04/15/16	Added per SSCN 12202 definitized on S/A 1792.
51517	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	06/15/16	Added per SSCN 12202 definitized on S/A 1792.
51518	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	08/15/16	Added per SSCN 12202 definitized on S/A 1792.
51519	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	10/14/16	Added per SSCN 12202 definitized on S/A 1792.
51520	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	12/15/16	Added per SSCN 12202 definitized on S/A 1792.
51521	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	02/15/17	Added per SSCN 12202 definitized on S/A 1792.
51522	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	04/14/17	Added per SSCN 12202 definitized on S/A 1792.
51523	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	06/15/17	Added per SSCN 12202 definitized on S/A 1792.
51524	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	08/15/17	Added per SSCN 12202 definitized on S/A 1792.
51525	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	10/16/17	Added per SSCN 12202 definitized on S/A 1792.
51526	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	12/15/17	Added per SSCN 12202 definitized on S/A 1792.
51527	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	02/15/18	Added per SSCN 12202 definitized on S/A 1792.
51528	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	04/16/18	Added per SSCN 12202 definitized on S/A 1792.
51529	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	06/15/18	Added per SSCN 12202 definitized on S/A 1792.
51530	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	08/14/15	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51531	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	10/15/15	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51532	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	12/15/15	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51533	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	02/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51534	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	04/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51535	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	06/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51536	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	08/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51537	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	10/14/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51538	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	12/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51539	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	02/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51540	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	04/14/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51541	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	06/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51542	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	08/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51543	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	10/16/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51544	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	12/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51545	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	02/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51546	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	04/16/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51547	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	06/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51548	SSCN 12202; S/A 1792	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017101-0001	1	KT	FLT	N/A	BHOU	BHOU	09/14/15	Added per SSCN 12202 definitized on S/A 1792.
51549	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017102-0001	1	KT	FLT	N/A	BHOU	BHOU	11/15/15	Added per SSCN 12202 definitized on S/A 1792.
51550	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017103-0001	1	KT	FLT	N/A	BHOU	BHOU	01/15/16	Added per SSCN 12202 definitized on S/A 1792.
51551	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017104-0001	1	KT	FLT	N/A	BHOU	BHOU	03/15/16	Added per SSCN 12202 definitized on S/A 1792.
51552	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017105-0001	1	KT	FLT	N/A	BHOU	BHOU	05/15/16	Added per SSCN 12202 definitized on S/A 1792.
51553	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017106-0001	1	KT	FLT	N/A	BHOU	BHOU	07/15/16	Added per SSCN 12202 definitized on S/A 1792.
51554	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017107-0001	1	KT	FLT	N/A	BHOU	BHOU	09/15/16	Added per SSCN 12202 definitized on S/A 1792.
51555	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017108-0001	1	KT	FLT	N/A	BHOU	BHOU	11/14/16	Added per SSCN 12202 definitized on S/A 1792.
51556	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017109-0001	1	KT	FLT	N/A	BHOU	BHOU	01/15/17	Added per SSCN 12202 definitized on S/A 1792.
51557	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017110-0001	1	KT	FLT	N/A	BHOU	BHOU	03/15/17	Added per SSCN 12202 definitized on S/A 1792.
51558	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017111-0001	1	KT	FLT	N/A	BHOU	BHOU	05/14/17	Added per SSCN 12202 definitized on S/A 1792.
51559	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017112-0001	1	KT	FLT	N/A	BHOU	BHOU	07/15/17	Added per SSCN 12202 definitized on S/A 1792.
51560	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017113-0001	1	KT	FLT	N/A	BHOU	BHOU	09/15/17	Added per SSCN 12202 definitized on S/A 1792.
51561	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017114-0001	1	KT	FLT	N/A	BHOU	BHOU	11/16/17	Added per SSCN 12202 definitized on S/A 1792.
51562	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017115-0001	1	KT	FLT	N/A	BHOU	BHOU	01/15/18	Added per SSCN 12202 definitized on S/A 1792.
51563	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017116-0001	1	KT	FLT	N/A	BHOU	BHOU	03/15/18	Added per SSCN 12202 definitized on S/A 1792.
51564	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017117-0001	1	KT	FLT	N/A	BHOU	BHOU	05/16/18	Added per SSCN 12202 definitized on S/A 1792.
51565	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017118-0001	1	KT	FLT	N/A	BHOU	BHOU	07/15/18	Added per SSCN 12202 definitized on S/A 1792.
51566	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	18	EA	FLT	N/A	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51567	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	18	EA	FLT	N/A	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51568	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	18	EA	FLT	N/A	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51569	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	18	EA	FLT	N/A	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51570	SSCN 12202; S/A 1792 (H.57)	Tie-down, Rear	684-017037-0001	18	EA	FLT	N/A	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51571	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	72	EA	FLT	N/A	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792.
51574	SSCN 12202; S/A 1792 (H.57)	Status/Charging Unit, Lithium-Ion Battery (STE)	684-017045-0001	3	EA	STE	N/A	Vendor	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792.
51575	SSCN 12831; S/A 1834	Mod Kit, Node 1, Isolation Jumpers	683-99494-1	1	KT	FLT	N/A	BHOU	BHOU	04/26/12	Added per SSCN 12831 definitized on S/A 1834.
51611	SSCN 12443; S/A 1854	Antenna, Internal – EWC	684-017259-0001	20	EA	FLT	N/A	BHOU	BHOU	05/25/12	Added per SSCN 12443 definitized on S/A 1854.
51616	SSCN 12639; S/A 1860	Mod Kit, CAA External Cable (w/ CAA), C2V2	684-017333-0001	1	KT	FLT	N/A	BHOU	BHOU	08/13/14	Added per SSCN 12639 definitized on S/A 1860.
51624	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT	N/A	BHOU	BHOU	10/28/13	Added per SSCN 12441 definitized on S/A 1802.
51626	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT	N/A	BHOU	BHOU	01/27/14	Added per SSCN 12441 definitized on S/A 1802.
51627	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT	N/A	BHOU	BHOU	01/27/14	Added per SSCN 12441 definitized on S/A 1802.
51628	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	6	EA	FLT	N/A	BHOU	BHOU	04/28/14	Added per SSCN 12441 definitized on S/A 1802.
51629	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT	N/A	BHOU	BHOU	07/28/14	Added per SSCN 12441 definitized on S/A 1802.
51637	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792.
51638	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	10/15/18	Added per SSCN 12202 definitized on S/A 1792.
51639	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	12/15/18	Added per SSCN 12202 definitized on S/A 1792.
51640	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51641	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	10/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51642	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	12/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51643	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017119-0001	1	KT	FLT	N/A	BHOU	BHOU	09/15/18	Added per SSCN 12202 definitized on S/A 1792.
51644	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017120-0001	1	KT	FLT	N/A	BHOU	BHOU	11/15/18	Added per SSCN 12202 definitized on S/A 1792.
51645	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017121-0001	1	KT	FLT	N/A	BHOU	BHOU	01/15/19	Added per SSCN 12202 definitized on S/A 1792.
51646	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51647	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	3	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51648	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51649	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51650	SSCN 12202; S/A 1792 (H.57)	Tie-down, Rear	684-017037-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51651	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	12	EA	FLT	N/A	BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51652	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792.
51653	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	04/15/19	Added per SSCN 12202 definitized on S/A 1792.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51654	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	06/15/19	Added per SSCN 12202 definitized on S/A 1792.
51655	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51656	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	04/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51657	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	06/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51658	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017122-0001	1	KT	FLT	N/A	BHOU	BHOU	03/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51659	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017123-0001	1	KT	FLT	N/A	BHOU	BHOU	05/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51660	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017124-0001	1	KT	FLT	N/A	BHOU	BHOU	07/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51661	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	3	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51662	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	3	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51663	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	3	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51664	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	3	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51665	SSCN 12202; S/A 1792 (H.57)	Kit, Tie-down, Rear	684-017037-0001	3	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51666	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	12	EA	FLT	N/A	BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792.
51667	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792.
51668	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	10/15/19	Added per SSCN 12202 definitized on S/A 1792.
51669	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	N/A	HSR	KSC	12/15/19	Added per SSCN 12202 definitized on S/A 1792.
51670	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51671	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51672	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	3	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51673	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51674	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51675	SSCN 12202; S/A 1792 (H.57)	Kit, Tie-down, Rear	684-017037-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51676	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	12	EA	FLT	N/A	BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51710	SSCN 13241; S/A 1974	Adapter Plate Assembly	TBD	1	KT	FLT	N/A	BHOU	BHOU	12/11/14	Added per SSCN 13241 definitized on S/A 1974.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51720	SSCN 13209; S/A 1878	Condition Diagnostics Instrumentation Device (CDID)	TBD	1	EA	FLT	N/A	Moscow	Moscow	09/30/13	Added per SSCN 13209 definitized on S/A 1878.
51722	SSCN 13231; S/A 2016	International Docking Adapter #1	684-022499-0001	1	EA	FLT	N/A	BHOU	BHOU	01/19/15	Added per SSCN 13231 definitized on S/A 2016.
51723	SSCN 13231; S/A 2016	International Docking Adapter #2	684-022499-0501	1	EA	FLT	N/A	BHOU	BHOU	07/24/15	Added per SSCN 13231 definitized on S/A 2016.
51728	SSCN 13231; S/A 2016	IDA Control Panel (ICP)	482001-1	2	EA	FLT	N/A	BHOU	BHOU	09/30/14	Added per SSCN 13231 definitized on S/A 2016.
51729	SSCN 13231; S/A 2016	PMA-IDA On-Orbit Kit	684-022309-0001	1	EA	FLT	N/A	BHOU	BHOU	05/30/14	Added per SSCN 13231 definitized on S/A 2016.
51737	SSCN 13209; S/A 1878	Cables, Power	TBD	1	SET	FLT	N/A	Moscow	Moscow	09/30/13	Added per SSCN 13209 definitized on S/A 1878.
51739	SSCN 13149; S/A 1984	Cable, External, EHDV	684-TBD-0001	5	EA	FLT	N/A	BHOU	BHOU	02/28/14	Added per SSCN 13149 definitized on S/A 1984.
51812	SSCN 13477; S/A 1966	TBD – PPA ORU, FSE	684-TBD-0001	2	EA	FSE	N/A	BHOU	BHOU	02/25/14	Added per SSCN 13477 definitized on S/A 1966.
51813	SSCN 13477; S/A 1966	TBD – Water Assembly ORU, FSE	684-TBD-0001	1	EA	FSE	N/A	BHOU	BHOU	02/25/14	Added per SSCN 13477 definitized on S/A 1966.
51823	SSCN 13231; S/A 2016	PMA-IDA On-Orbit Kit	684-022309-0001	1	KT	FLT	N/A	BHOU	BHOU	08/29/14	Added per SSCN 13231 definitized on S/A 2016.
51824	SSCN 13231; S/A 2016	Mod Kit, High Speed IMV Fan	SVK1023474	2	KT	FLT	N/A	UTAS	UTAS	10/31/13	Added per SSCN 13231 definitized on S/A 2016. Changed destination per letter 13-015791 concurrence dated 10/17/2013.
51825	SSCN 13231; S/A 2016	Mod Kit, High Speed IMV Fan	SVK1023474	1	KT	FLT	N/A	UTAS	UTAS	02/28/14	Added per SSCN 13231 definitized on S/A 2016. Changed destination per letter 13-015791 concurrence dated 10/17/2013.
51826	SSCN 13231; S/A 2016	IDA Control Panel (Flight Spare)	482001-1	1	EA	FLT	N/A	BHOU	BHOU	12/19/14	Added per SSCN 13231 definitized on S/A 2016.
51827	SSCN 13641; S/A 1975	MDM EXT	8259065-911	1	EA	FLT	N/A	HI	HI	01/15/14	Added per SSCN 13641 definitized on S/A 1975.
51836	SSCN 13305; S/A 2047	Cover ESSMDM, EPIC	TBD	1	EA	FLT	N/A	AERO	BHOU	04/28/14	Added per SSCN 13305 definitized on S/A 2047.
51837	SSCN 13305; S/A 2047	Cover ESSMDM, EPIC	TBD	1	EA	FLT	N/A	AERO	BHOU	05/22/14	Added per SSCN 13305 definitized on S/A 2047.
51838	SSCN 13305; S/A 2047	Cover ESSMDM, EPIC (Spare)	TBD	1	EA	FLT	N/A	AERO	BHOU	05/12/14	Added per SSCN 13305 definitized on S/A 2047.
51839	SSCN 13305; S/A 2047	W0087 EXT MDM Ethernet Cable Kit (Including 3 spare Ethernet and 2 spare 1553 lines)	TBD	1	KT	FLT	N/A	BHOU	BHOU	02/16/14	Added per SSCN 13305 definitized on S/A 2047.
51841	SSCN 13209; Letter 13-003410	Load Simulator IN-50	TBD	1	EA	FLT	N/A	Moscow	Moscow	09/30/13	Added per letter 13-003410 concurrence dated 03/06/2013.
51842	SSCN 13641; S/A 1975	0.015” Chotherm	TBD	2	EA	FLT	N/A	HI	HI	11/15/13	Added per SSCN 13641 definitized on S/A 1975.
51864	SSCN 13825; S/A 2048	Common Cabin Air Assembly (CCAA) Heat Exchanger (HX) FSE	684-TBD-0001	1	EA	FSE	N/A	BHOU	BHOU	10/02/14	Added per SSCN 13825 definitized on S/A 2048.
51866	SSCN 13805; S/A 2045	Jumper	684-TBD-0001	40	EA	FLT	N/A	BHOU	BHOU	06/06/14	Added per SSCN 13805 definitized on S/A 2045.
51867	SSCN 13805; S/A 2045	Installation/Removal Tool	684-TBD-0001	6	EA	FLT	N/A	BHOU	BHOU	06/06/14	Added per SSCN 13805 definitized on S/A 2045.
100xxx Series											
None.											
End of List											

- 1) (COMPLETED TAB) Moved completed DILs from ACTIVE TAB to COMPLETED TAB.
- 2) (ACTIVE) Changed part number of DIL 20052-20057 per letter 10-0420 concurrence dated 07/29/2010.
- 3) (ACTIVE) Added DIL 51497 per letter 11-006800 concurrence dated 05/24/2011.
- 4) (ACTIVE) Changed part number of DILs 51306 and 51335 per letter 11-006901 concurrence dated 05/26/2011.
- 5) (ACTIVE) Changed nomenclature and unit of DIL 32138 per letter 11-008041 concurrence dated 07/14/2011.
- 6) (ACTIVE) Changed nomenclature of DIL 32142 per letter 11-008041 concurrence dated 07/14/2011.
- 7) (ACTIVE) Changed part number of DIL 20186 per letter 11-008647 concurrence dated 07/05/2011.
- 8) (ACTIVE) Changed delivery date of DILs 20157-20159 per letter 11-009898 concurrence dated 08/05/2011.
- 9) (ACTIVE) Changed delivery destination of DILs 20084-20087 per letter 11-010283 concurrence received 08/24/2011.
- 10) (ACTIVE) Changed delivery destination of DIL 20159 per letter 11-010642 concurrence dated 08/17/2011.
- 11) (ACTIVE) Added DIL 51632 per CO E-mail dated 09/07/2011.
- 12) (ACTIVE) Added DIL 51487 per definitization of SSCN 12693 on S/A 1736.
- 13) (ACTIVE) Added DILs 51504-51506 per definitization of SSCN 12648 on S/A 1738.
- 14) (ACTIVE) Added DIL 51375 per definitization of SSCN 12446 on S/A 1742.
- 15) (ACTIVE) Added DIL 51511 per definitization of SSCN 12810 on S/A 1743.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
Pxx Series PIOs											
P014B-01	SSCN 5265 (PIO 14B);	JOURNAL BEARING, ASSY-SET	818772-1	10	SE				HAMSUND/CT	01/29/04	COMPLETE ON BHB2378. 03/09/2004.
P014B-02	SSCN 5265 (PIO 14B);	BEARING, THRUST SET-FAN INLET END	818776-2	2	EA				HAMSUND/CT	01/29/04	COMPLETE ON BHB2347. 02/18/2004.
P014B-03	SSCN 5265 (PIO 14B);	BEARING, THRUST SET-FAN OUTLET END	818777-2	2	EA				HAMSUND/CT	01/29/04	COMPLETE ON BHB2347. 02/18/2004.
P014B-30	SSCN 5265 (PIO 14B);	FAN, CIRCULATING - AVIONICS AIR	SV812743-3	3	EA		tbd		HAMSUND/CT	04/26/04	COMPLETE ON BHB2447. 06/18/2004.
P014B-34	SSCN 5265 (PIO 14B);	CIRCUIT CARD ASSY, CONTROLLER	SV817609-5	10	EA		tbd		HAMSUND/CT	09/01/04	COMPLETE ON BHB2525. 12/10/2004.
P014B-35	SSCN 5265 (PIO 14B);	CIRCUIT CARD ASSY, FILTER	SV817637-1	10	EA		tbd		HAMSUND/CT	09/01/04	COMPLETE ON BHB2525. 12/10/2004.
P23A-087	SSCN 1926 (PIO 23A);	Controller, Embedded	2354532-1-1	1	EA				HW/TOR	03/23/04	COMPLETE ON BHB2416. 05/04/2004.
P23A-089	SSCN 1926 (PIO 23A);	CCA, Snsr, Cbn Pres A7	2355132-1-1	1	EA				HW/TOR	02/15/04	COMPLETE ON BHB2416. 05/04/2004.
P023B-28	SSCN 5121 (PIO 23B);	CONTROLLER, EMBEDDED	2354532-1-1	1	EA				HW/TOR	05/30/04	COMPLETE ON BHB2457. 07/14/2004.
P31A-034	SSCN 1669 (PIO 31A);	CIRCUIT CARD ASSY, FILTER	SV812762-1	2	EA		tbd		HAMSD/CT	03/09/04	COMPLETE ON BHB2384. 03/23/2004.
P31A-036	SSCN 1669 (PIO 31A);	HEAT EXCHANGER, CABIN AIR	SV813900-2	1	EA		tbd		KSC/PPS	05/12/04	COMPLETE ON BHB2472. 11/15/2004.
P31A-065	SSCN 1669 (PIO 31A);	CIRCUIT CARD ASSY, CONTROLLER	SV812756-4	3	EA				HAMSD/CT	01/20/04	COMPLETE ON BHB2395. 04/06/2004.
P055-10	SSCN 1874 (PIO 55); S/A	ACTUATOR ASSEMBLY	683-61592-5	1	EA				KSC/PPS	07/31/05	COMPLETE ON BHB1190. 03/02/2001.
P055-11	SSCN 1874 (PIO 55); S/A	ACTUATOR ASSEMBLY	683-61592-6	1	EA				KSC/PPS	07/31/05	COMPLETE ON BHB1195. 03/02/2001.
P055-16	SSCN 1874 (PIO 55); S/A	REM ELECT ASSY	683-61623-3	1	EA		tbd		KSC/PPS	07/31/05	COMPLETE ON BHB1194. 03/29/2001.
P055-20	SSCN 1874 (PIO 55); S/A	ACTUATOR DRIVER	683-61760-1	1	EA		tbd		KSC/PPS	07/31/05	COMPLETE ON BHB1193. 03/14/2001.
P058-02	SSCN 2922 (PIO 58); S/A	BATTERY ASSEMBLY	RE1804-12	7	EA		tbd		LORAL	12/12/04	COMPLETE ON BHB2557. 02/18/2005.
P058-03	SSCN 2922 (PIO 58); S/A	BATTERY ASSEMBLY	RE1804-12	7	EA		tbd		LORAL	12/12/05	COMPLETE ON BHB2756. 12/08/2005.
P061-05	SSCN 4766 (PIO 61); S/A	KU-BAND SSPA	K10048978-501	2	EA		tbd		KSC/PPS	03/15/04	COMPLETE ON BHB2534. 01/06/2005.
P064A-04	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA		\$307,723		KSC	01/30/04	COMPLETE ON BHB2360. 02/18/2004.
P064A-05	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA		\$307,723		KSC	02/28/04	COMPLETE ON BHB2375. 03/04/2004.
P064A-06	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA		\$307,723		KSC	03/30/04	COMPLETE ON BHB2390. 03/19/2004.
P064A-07	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA		\$307,723		KSC	04/30/04	COMPLETE ON BHB2415. 05/04/2004.
P064A-08	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	4	EA		\$123,089		KSC	05/30/04	COMPLETE ON BHB2421. 05/18/2004.
P065-01	PIO 65; S/A 1171	TOP WINDOW, DEBRIS ASSEMBLY-CUPOLA	683-11583-1	1	EA		\$ 77,214.00		BMSFC	03/31/04	COMPLETE ON BHB2470. 09/10/2004.
P065-02	PIO 65; S/A 1171	TOP WINDOW, SCRATCH ASSEMBLY-CUPOLA	683-11576-1	1	EA		\$119,205		BMSFC	03/31/04	COMPLETE ON BHB2411. 06/28/2004.
P065-03	PIO 65; S/A 1171	PANE , PRESSURE-TOP WINDOW, CUPOLA	683-11591-2	1	EA		\$341,079		BMSFC	03/31/04	COMPLETE ON BHB2412. 06/21/2004.
P065-04	PIO 65; S/A 1171	PANE, PRESSURE-TOP WINDOW, CUPOLA	683-11591-2	1	EA		\$ 135,633.00		KSC/PPS	03/31/04	COMPLETE PER LETTER 06-0206 CONCURRENCE DATED
P065-05	PIO 65; S/A 1171	SIDE WINDOW, DEBRIS ASSEMBLY-CUPOLA	683-11584-1	1	EA		\$171,057		BMSFC	03/31/04	COMPLETE ON BHB2409. 05/19/2004.
P065-06	PIO 65; S/A 1171	SIDE WINDOW, SCRATCH ASSEMBLY-CUPOLA	683-11577-1	1	EA		\$118,424		BMSFC	03/31/04	COMPLETE ON BHB2374. 04/12/2004.
P065-07	PIO 65; S/A 1171	PANE, PRESSURE-SIDE WINDOW - CUPOLA	683-11592-2	2	EA		\$ 313,924.00		BMSFC	03/31/04	COMPLETE PER LETTER 06-0206 CONCURRENCE DATED
P065-08	PIO 65; S/A 1171	PANE, PRESSURE-SIDE WINDOW - CUPOLA	683-11592-2	1	EA		\$161,519		KSC/PPS	03/31/04	COMPLETE ON BHB2391. 04/16/2004.
P065-09	PIO 65; S/A 1171	WINDOW ASSY (LAB-ORU)	683-11401-6	1	EA		\$ 94,001.00		KSC/PPS	06/15/07	COMPLETE ON BHB2996. 06/15/2007.
P065-10	PIO 65; S/A 1171	PANE ASSEMBLY-DEBRIS (LAB-ORU)	683-11446-3	1	EA		\$ 329,580.00		KSC/PPS	03/31/04	COMPLETE ON BHB2851. 05/17/2006.
P74A-001	04-0084	BALL, 440 CRES	1/4 DIA. BALL4	724	EA		\$ 809.80		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-002	04-0084	BALL, 316C	1/8 DIA. BALL	380	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-003		BALL, 1/8" DIA.	1/8 DIA. BALL4	6241	EA		\$ 20,927.35		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-004		SEAL, BOSS	10061-05-0-0	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-005		SLEEVE, ACT./QQ-A-225/8	145569-02-270	2	EA		\$ 630.40		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-006		SLEEVE, ACT/QQ-A-225	145569-04-105	2	EA		\$ 763.38		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-007		SLEEVE, ACT/QQ-A-225	145569-04-130	2	EA		\$ 762.16		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-008		SLEEVE, ACT/QQ-A-225	145569-04-155	2	EA		\$ 762.16		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-009		SLEEVE, ACT/QQ-A-225	145569-04-180	2	EA		\$ 764.82		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-010		SLEEVE, ACT/QQ-A-225/8	145569-04-45	2	EA		\$ 763.38		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-011		SLEEVE, ACT/QQ-A-225	145569-04-75	2	EA		\$ 763.36		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-012		SLEEVE, ACT./QQ-A-225/8	145569-04-U	2	EA		\$ 457.74		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-013		FERRULE	1511	171	EA		\$ 774.11		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-014	04-0084	FERRULE	1512	117	EA		\$ 270.01		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-015	04-0084	HOOK, 302/316	1515	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-016	04-0084	1/32 7X7 CABLE (23.25)	1517-22	28	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-017		1/32 7X7 CABLE (9.25 IN.)	1517-8	80	EA		\$ 473.60		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-018	04-0084	1/32 7X7 CABLE (10.25 IN.)	1517-9	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-019	04-0084	3/64 7X7 CABLE (13.00 INCHES)	1518-11	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-020	04-0084	3/64 7X7(14.0) IN LONG	1518-12	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-021	04-0084	3/64 7X7 CABLE (15.00 IN.)	1518-13	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-022	04-0084	3/64 7X7 CABLE (16.00 IN.)	1518-14	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-023	04-0084	3/64 7X7 CABLE (17.0 IN)	1518-15	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-024	04-0084	B/RING, 316	1520-07	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-025	04-0084	B/RING, 316	1520-08	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-026	04-0084	RING, CRES 302/316	1521-6	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-027	04-0084	1/32 3X7 5.25 LONG CABLE	1524-4	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-028	04-0084	1/32 3X7 7.25 LONG CABLE	1524-6	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-029	04-0084	1/32 3X7 8.25 LONG CABLE	1524-7	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-030	04-0084	RING, 316	1526-3	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-031		LUG	1529-1	84	EA		\$ 634.88		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-032	04-0084	I.D. PLATE	1532	27	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-033	04-0084	SLEEVE, TEFLON TUBING	1540	165	EA		\$ 269.98		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-034		HOUSING	155551-04A	2	EA		\$ 1,613.88		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-035		HOUSING	155556-04G	2	EA		\$ 1,110.14		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-036		SPACER/AMS 5659	155567-02	2	EA		\$ 461.94		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-037		SPACER	155567-04	8	EA		\$ 487.36		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-038		SPACER	155567-06	49	EA		\$ 1,882.49		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-039		SPACER	155567-06-1	15	EA		\$ 555.65		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-040		SPACER	155567-10	155	EA		\$ 4,229.80		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-041		SPACER	155567-12	31	EA		\$ 830.96		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-042		SPACER	155567-16	79	EA		\$ 1,648.19		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-043	04-0084	SPRING/AMS 5678	155568-02	14	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-044	04-0084	SPRING	155568-04-1	14	EA		\$ 281.28		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-045		SPRING	155568-06	49	EA		\$ 509.02		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-046	04-0084	SPRING	155568-06-1	26	EA		\$ 270.05		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-047		SPRING	155568-10	155	EA		\$ 977.90		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-048		SPRING	155568-12	31	EA		\$ 342.09		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-049		SPRING	155568-16	79	EA		\$ 808.42		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-050		SLEEVE, ACT.	155569-04	2	EA		\$ 411.70		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-051		SLEEVE, ACT.	155569-06-105	3	EA		\$ 965.45		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-052		SLEEVE, ACT.	155569-06-130	3	EA		\$ 763.16		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-053		SLEEVE, ACT.	155569-06-155	2	EA		\$ 818.92		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-054		SLEEVE, ACT.	155569-06-180	4	EA		\$ 1,161.80		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-055		ACT.SLEEVE	155569-06-230	3	EA		\$ 928.07		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-056		SLEEVE, ACT.	155569-06-255	2	EA		\$ 807.56		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-057		SLEEVE ACT.	155569-06-280	2	EA		\$ 705.16		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-058		ACTUATING SLEEVE	155569-06-75	21	EA		\$ 1,588.28		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-059		SLEEVE, ACT.	155569-06-U	7	EA		\$ 610.10		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-060		SLEEVE, ACT.	155569-08-105	38	EA		\$ 3,206.30		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-061		SLEEVE, ACT.	155569-08-135	2	EA		\$ 953.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-062		SLEEVE, ACT.	155569-08-165	4	EA		\$ 895.84		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-063		SLEEVE, ACT.	155569-08-195	3	EA		\$ 1,122.41		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-064		SLEEVE, ACT.	155569-08-225	2	EA		\$ 979.20		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-065		SLEEVE, ACT	155569-08-315	2	EA		\$ 987.92		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-066		SLEEVE, ACT	155569-08-45	2	EA		\$ 855.60		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-067		SLEEVE, ACT	155569-08-75	46	EA		\$ 3,286.92		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-068		SLEEVE, ACT.	155569-08-U	20	EA		\$ 1,475.40		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-069		SLEEVE, ACT	155569-116-120	16	EA		\$ 2,378.08		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-070		ACT. SLEEVE	155569-116-60	9	EA		\$ 1,622.27		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-071		SLEEVE, ACT.	155569-12-120	11	EA		\$ 1,952.92		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-072		SLEEVE, ACT	155569-12-240	9	EA		\$ 1,742.06		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-073		SLEEVE, ACT	155569-12-U	2	EA		\$ 642.42		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-074		SLEEVE, ACT.	155569-16-180	15	EA		\$ 1,414.70		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-075		SLEEVE, ACT.	155569-16-240	4	EA		\$ 1,276.28		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-076		SLEEVE, ACT.	155569-16-300	3	EA		\$ 1,127.48		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-077		SLEEVE, ACT.	155569-16-U	13	EA		\$ 1,282.95		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-078	04-0084	RETAINER .035/ASTM A 313	155570-202	10	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-079	04-0084	RETAINER_.051	155570-204	9	EA		\$ 269.97		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-080		RETAINER .051	155570-206	49	EA		\$ 402.20		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-081		RETAINER,.062	155570-210	112	EA		\$ 736.80		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-082	04-0084	RETAINER .062	155570-212	220	EA		\$ 269.92		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-083		RETAINER,.062	155570-216	60	EA		\$ 517.40		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-084	04-0084	SPRING	155572	120	EA		\$ 269.96		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-085	04-0084	O-RING, TEFLON	155583-632	30	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-087	04-0084	O-RING, SILICONE	155585-009	8	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-088	04-0084	O-RING, SILICONE	155585-011	8	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-089	04-0084	O-RING, SILICONE	155585-012	8	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-090	04-0084	O-RING, SILICONE	155585-903	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-091	04-0084	O-RING, FLUOROCARBON, V747-75	155586-009	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-092	04-0084	O-RING, FLUOROCARBON, V747-75	155586-011	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-093	04-0084	O-RING, FLUOROCARBON, V747-75	155586-012	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-094	04-0084	O-RING, FLUOROCARBON, V747-75	155586-903	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-095	04-0084	SPRING/AMS 5834 .032	155772	12	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-096		HOUSING/AMS 5662	157751-02A	2	EA		\$ 2,420.86		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-097		HOUSING	159551-0408P	8	EA		\$ 3,953.12		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-098		HOUSING/AMS5659	159556-904J124	4	EA		\$ 2,719.04		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-099		HOUSING/AMS5662	159751-0408P	2	EA		\$ 3,022.48		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-100		HOUSING/AMS5662	159756-903J124	2	EA		\$ 5,082.74		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-101		HOUSING/AMS5662	159756-904J124	2	EA		\$ 3,562.78		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-102		HOUSING/AMS 5657	159951-04A	2	EA		\$ 2,316.90		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-103		HOUSING/AMS 5659	159951-04BT	2	EA		\$ 2,188.20		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-104	04-0084	O-RING (PARKER,S383-70)	2-031-S-1	100	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-105	04-0084	O-RING (PARKER,S383-70)	2-033-S-1	100	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-106	04-0084	O-RING,ZZ-R-765,GR70,CL1B	2-035-S-1	60	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-107	04-0084	O-RING,ZZ-R-765,GR70,CL1B	2-037-S-1	60	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-108	04-0084	O-RING (ZZ-R-765,GR70,CL 1B	2-038-S-1	60	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-109	04-0084	O-RING (ZZ-R-765,,GR70,CL 1B	2-040-S-1	60	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-110		PLUG,LOCK	20989-5	207	EA		\$ 2,946.98		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-111		8X8X4 CUDDLEPAK	287110	13	EA		\$ 625.15		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-112	04-0084	BALL, CRES 440	3/16 DIA. BALL4	340	EA		\$ 269.90		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-113	04-0084	BALL, CRES 440	3/32 DIA. BALL4	1285	EA		\$ 515.42		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-114	04-0084	BACK FERRULE	4BF4-316	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-115	04-0084	FRONT FERRULE	4FF4-316	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-116	04-0084	NUT	4NU4-316	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-117	04-0084	B/AS568-008 E-515-80	502009	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-118	04-0084	O-RING	502009-1	5	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-119		O-RING,FLUOROCARBON,V747-75	502009-2	2	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-120		SLEEVE ACT	502017-2	2	EA		\$ 1,038.64		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-121		SLEEVE ACT	502017-3	3	EA		\$ 1,219.19		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-122		SLEEVE ACT	502017-4	2	EA		\$ 1,230.70		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-123		WASHER	502019	6	EA		\$ 277.94		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-124		HOUSING	502021-51	5	EA		\$ 862.05		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-125	04-0084	WASHER	502022	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-126		SPRING	502023	5	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-127		HOUSING, AFT	502024-04A-3	2	EA		\$ 624.84		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-128		HOUSING AFT	502024-06G	5	EA		\$ 830.40		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-129		POPPET	502025	5	EA		\$ 791.30		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-130		SPRING	502027	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-131		WASHER	502033	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-132		SPACER	502034	6	EA		\$ 535.34		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-133		HOUSING	502038-2	2	EA		\$ 641.58		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-134		HSG	502038-3	2	EA		\$ 749.96		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-135		HSG	502038-4	2	EA		\$ 767.58		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-136		HOUSING	502038-5	2	EA		\$ 978.22		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-137		HOUSING FLANGE	502041-04A-3	2	EA		\$ 1,394.36		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-138		HOUSING FLANGE	502041-04M-1	2	EA		\$ 1,169.78		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-139		HOUSING FLANGE	502041-06G	3	EA		\$ 1,643.15		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-140	04-0084	BACK-UP RING	502049	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-141		HOUSING FWD	502056	6	EA		\$ 1,219.64		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-142		SLEEVE	502078	6	EA		\$ 407.72		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-143		STOP	502079-2	6	EA		\$ 770.96		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-144		CAP	502082-1	3	EA		\$ 853.73		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-145		PLUG	502082-2	3	EA		\$ 375.92		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-146		SPRING, 17-7	502223-1	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-147		CUP	502230	6	EA		\$ 474.08		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-148		LOCK	502314	6	EA		\$ 558.80		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-149		SUPPORT	502315	2	EA		\$ 1,076.54		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-150		SUPPORT	502315-10	2	EA		\$ 1,189.24		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-151		SUPPORT	502315-10-1	2	EA		\$ 1,361.74		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-152		SUPPORT	502315-8	2	EA		\$ 1,303.68		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-153		SUPPORT	502315-8-1	2	EA		\$ 1,430.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-154		RETAINER	502316	6	EA		\$ 406.34		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-155		CAP BUTTON	502323-2	2	EA		\$ 383.18		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-156		WASHER	502327	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-157		RETAINER	502328	6	EA		\$ 483.38		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-158		SLEEVE	502337-10	3	EA		\$ 621.23		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-159		SLEEVE	502337-3	2	EA		\$ 607.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-160		SLEEVE	502337-8-1	4	EA		\$ 919.96		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-161		RETAINER	502338-3	8	EA		\$ 291.04		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-162		PIN	502339	8	EA		\$ 389.28		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-163		SPRING	502344	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-164		RING, RELEASE	502346	6	EA		\$ 405.08		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-165		RING	502347	6	EA		\$ 811.52		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-166		SPRING	502348	23	EA		\$ 825.69		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-167		PIN	502349	17	EA		\$ 547.17		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-168		PIN	502349-1	6	EA		\$ 416.54		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-169		SLIDE	502350	6	EA		\$ 361.46		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-170		CUP, SPRING	502351	23	EA		\$ 900.44		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-171		RING,SPLIT	502353-10	6	EA		\$ 403.28		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-172		BUTTON ASSY	502370	4	EA		\$ 995.12		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-173		BUTTON ASSY	502370-1	2	EA		\$ 757.08		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-181		STOP ASSY	5050-08E	6	EA		\$ 591.62		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-182		HOUSING FWD.	505011-04-2	2	EA		\$ 2,358.20		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-183		HOUSING,FORWARD	505011-06-1	9	EA		\$ 2,757.26		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-184		HOUSING, FWD/AMS 5659	505011-08-1	30	EA		\$ 8,467.40		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-185		HOUSING, FWD	505011-08-2	99	EA		\$ 29,625.95		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-186		HOUSING,FWD	505011-08-3	5	EA		\$ 2,786.10		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-187		HOUSING,FWD	505011-08-5	26	EA		\$ 8,049.32		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-188		HOUSING FWD	505011-106-2	29	EA		\$ 9,703.97		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-189		HOUSING FWD.	505011-106-20	4	EA		\$ 2,741.56		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-190		HOUSING FWD.	505011-108-2	2	EA		\$ 2,303.18		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-191		HOUSING, FORWARD	505011-116-21	30	EA		\$ 14,569.10		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-192		HOUSING,FWD	505011-12-1	15	EA		\$ 5,104.10		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-193		HOUSING,FWD	505011-12-2	5	EA		\$ 2,870.20		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-194		HOUSING,FWD	505011-12-3	3	EA		\$ 3,135.29		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-195		HOUSING, FWD	505011-16-11	42	EA		\$ 21,177.92		KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-196		HOUSING, FORWARD	505011-16-21	14	EA		\$ 6,267.64		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-197		HOUSING, FORWARD	505011-16-31	2	EA		\$ 3,117.48		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-198		SPRING	505013-06	42	EA		\$ 427.82		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-199		SPRING/.051 AMS5678	505013-08	161	EA		\$ 1,013.37		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-200		SPRING	505013-12	23	EA		\$ 651.81		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-201		SPRING	505013-16	30	EA		\$ 1,733.90		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-202		SPRING	505013-16-1	55	EA		\$ 3,131.90		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-203	04-0084	SPRING/ELGILOY, AMS5834	505013-706-1	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-204	04-0084	SPRING/ELGILOY, AMS5834	505013-708-1	8	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-205		SLEEVE,SPRING	505014-06	42	EA		\$ 1,616.42		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-206		SLEEVE, SPRING	505014-08	149	EA		\$ 4,490.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-207		SLEEVE,SPRING	505014-08-1	13	EA		\$ 712.38		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-208		SLEEVE,SPRING	505014-12	23	EA		\$ 1,109.51		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-209		SLEEVE, SPRING	505014-16	85	EA		\$ 3,152.25		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-210		HOUSING AFT	505015-03A	2	EA		\$ 1,464.84		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-211		HOUSING AFT	505015-04S	2	EA		\$ 1,188.84		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-212		HOUSING, AFT	505015-04WA-2	3	EA		\$ 1,162.46		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-213		HOUSING, AFT	505015-0604A	2	EA		\$ 651.74		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-214		HOUSING, AFT	505015-0604J2	2	EA		\$ 1,055.52		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-215		HOUSING AFT.	505015-0608C	4	EA		\$ 712.12		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-216		HOUSING, AFT	505015-0612V	2	EA		\$ 920.56		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-217		HOUSING, AFT	505015-06-245	2	EA		\$ 958.16		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-218		HOUSING, AFT	505015-06A	13	EA		\$ 1,177.00		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-219		HOUSING,INNER	505015-06CV	4	EA		\$ 1,402.60		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-220		HOUSING, AFT	505015-06FL-5	2	EA		\$ 1,223.22		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-221		HOUSING AFT	505015-06G	5	EA		\$ 900.10		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-222		HOUSING, AFT	505015-06P	2	EA		\$ 622.38		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-223		HOUSING, AFT	505015-0804J2	2	EA		\$ 764.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-224		HOUSING, AFT	505015-0812J3	2	EA		\$ 763.96		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-225		HOUSING, AFT	505015-0812V	2	EA		\$ 950.46		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-226		HOUSING	505015-08-130	2	EA		\$ 701.90		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-227		HOUSING/AMS 5659	505015-08-510	2	EA		\$ 641.62		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-228		HOUSING, AFT	505015-08A	9	EA		\$ 922.79		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-229		HOUSING, AFT	505015-08A-3	2	EA		\$ 841.20		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-230		HOUSING, AFT	505015-08HF	13	EA		\$ 3,293.53		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-231		HOUSING AFT	505015-08P	3	EA		\$ 886.13		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-232		HOUSING, AFT	505015-08Q	2	EA		\$ 778.66		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-233		HOUSING, AFT/AMS 5659	505015-08S	2	EA		\$ 633.28		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-234		HOUSING, AFT	505015-08X	9	EA		\$ 1,704.26		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-235		HOUSING AFT	505015-112A	2	EA		\$ 985.06		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-236		HOUSING, AFT	505015-1208A	2	EA		\$ 1,140.40		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-237		HOUSING, AFT	505015-1208A-3	2	EA		\$ 1,154.78		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-238		HOUSING, AFT	505015-12-510	2	EA		\$ 1,234.88		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-239		HOUSING, AFT	505015-12A	2	EA		\$ 930.52		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-240		HOUSING, AFT	505015-12P	7	EA		\$ 1,440.58		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-241		HOUSING, AFT	505015-12U	4	EA		\$ 1,445.44		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-242		HOUSING, AFT	505015-12V	2	EA		\$ 1,346.68		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-243		HOUSING, AFT	505015-1606A	2	EA		\$ 1,052.50		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-244		HOUSING, AFT	505015-1612HF	15	EA		\$ 5,742.20		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-245		HOUSING, AFT	505015-1612V	2	EA		\$ 739.64		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-246		HOUSING, AFT	505015-16-510	2	EA		\$ 1,320.02		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-247		HOUSING, AFT	505015-16A	9	EA		\$ 1,692.02		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-248		HOUSING, AFT	505015-16G	2	EA		\$ 1,184.80		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-249		HOUSING, AFT	505015-16HF	6	EA		\$ 2,181.68		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-250		HOUSING, AFT	505015-16N100	2	EA		\$ 995.34		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-251		HOUSING, AFT	505015-204	2	EA		\$ 1,550.10		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-252		HOUSING, AFT	505015-206	6	EA		\$ 1,556.12		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-253		HOUSING, AFT	505015-208-1	6	EA		\$ 1,316.36		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-254		HOUSING, AFT	505015-208-3	2	EA		\$ 1,135.58		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-255		HOUSING, AFT	505015-216	2	EA		\$ 1,307.30		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-256		HOUSING, AFT	505015-216-1	26	EA		\$ 4,340.68		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-257		HOUSING, AFT	505015-908A	2	EA		\$ 2,232.06		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-258		INDEX RING/AMS 5659	505016-02-270	2	EA		\$ 506.82		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-259		INDEX RING/AMS 5659	505016-04-105	2	EA		\$ 744.28		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-260		INDEX RING/AMS 5659	505016-04-130	2	EA		\$ 725.26		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-261		INDEX RING/AMS 5659	505016-04-155	2	EA		\$ 744.14		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-262		INDEX RING/AMS 5659	505016-04-180	2	EA		\$ 744.28		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-263		INDEX RING/5659	505016-04-45	3	EA		\$ 819.02		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-264		INDEX RING/AMS 5659	505016-04-75	4	EA		\$ 889.24		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-265		INDEX RING	505016-06-180	4	EA		\$ 884.48		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-266		INDEX RING	505016-06-75	2	EA		\$ 1,045.78		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-267		RING, INDEX	505016-08-105	2	EA		\$ 1,188.16		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-268		RING, INDEX	505016-08-75	2	EA		\$ 1,113.40		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-269		RING,INDEX	505016-12-120	2	EA		\$ 1,063.96		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-270		RING,INDEX	505016-12-240	2	EA		\$ 1,142.38		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-271		INDEX, RING	505016-16-180	2	EA		\$ 1,162.14		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-272		RING, INDEX	505016-16-240	2	EA		\$ 1,233.74		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-273		RETAINER .050/AMS 5678	505017-02	2	EA		\$ 288.04		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-274		RETAINER .062	505017-04	11	EA		\$ 270.03		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-275		RETAINER .062	505017-06	44	EA		\$ 458.24		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-276		RETAINER .062	505017-08	163	EA		\$ 942.58		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-277		RETAINER	505017-12	20	EA		\$ 883.40		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-278		RETAINER	505017-16	84	EA		\$ 3,290.96		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-279		HOUSING	505021-0408A	2	EA		\$ 989.54		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-280		HOUSING	505021-04-245	2	EA		\$ 723.40		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-281		HOUSING	505021-04-510	2	EA		\$ 523.30		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-282		HOUSING	505021-04A	2	EA		\$ 956.40		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-283		HOUSING	505021-04M	2	EA		\$ 1,007.42		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-284		HOUSING	505021-0608C	2	EA		\$ 654.20		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-285		HOUSING	505021-0612V	2	EA		\$ 746.20		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-286		HOUSING	505021-06-245	4	EA		\$ 1,162.20		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-287		HOUSING	505021-06-510	2	EA		\$ 861.28		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-288		HOUSING	505021-06A	11	EA		\$ 1,024.63		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-289		HOUSING	505021-06G	14	EA		\$ 2,163.26		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-290		HOUSING	505021-0804A	2	EA		\$ 645.28		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-291		HOUSING	505021-0810M	2	EA		\$ 1,203.82		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-292		HOUSING	505021-0812A	2	EA		\$ 1,252.94		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-293		HOUSING	505021-0812V	3	EA		\$ 1,358.42		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-294		HOUSING	505021-08-130	3	EA		\$ 896.15		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-295		HOUSING	505021-08-245	2	EA		\$ 786.36		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-296		HOUSING/AMS 5659	505021-08-510	2	EA		\$ 637.12		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-297		HOUSING	505021-08A	15	EA		\$ 1,452.35		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-298		HOUSING/AMS 5659	505021-08S	2	EA		\$ 655.78		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-299		HOUSING	505021-12A	11	EA		\$ 2,206.03		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-300		HOUSING	505021-12V	2	EA		\$ 929.14		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-301		HOUSING/15-5, AMS 5659	505021-1606A	2	EA		\$ 1,321.84		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-302		HOUSING	505021-1608U	2	EA		\$ 1,398.04		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-303		HOUSING	505021-1612A	2	EA		\$ 1,564.54		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-304		HOUSING	505021-1612V	2	EA		\$ 1,597.64		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-305		HOUSING	505021-16A	2	EA		\$ 1,564.62		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-306		HOUSING	505021-16EG	2	EA		\$ 1,921.96		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-307		HOUSING	505021-16N100	2	EA		\$ 1,037.70		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-308		HOUSING	505021-204	2	EA		\$ 826.16		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-309		HOUSING	505021-206	3	EA		\$ 1,245.83		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-310		HOUSING	505021-208	17	EA		\$ 2,419.04		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-311		HOUSING	505021-20804U	2	EA		\$ 1,067.98		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-312		HOUSING	505021-20812U	2	EA		\$ 1,246.78		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-313		HOUSING	505021-212	2	EA		\$ 1,199.60		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-314		HOUSING	505021-216	23	EA		\$ 3,340.05		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-315		HOUSING/AMS 5659	505021-904J6	2	EA		\$ 3,183.22		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-316		HOUSING/AMS 5659	505021-912J7	2	EA		\$ 3,447.88		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-317		HOUSING/QQ-S-763	505021-9208U	2	EA		\$ 3,170.18		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-318		STOP	505022-06	40	EA		\$ 6,369.20		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-319		STOP	505022-08	111	EA		\$ 14,433.35		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-320		STOP	505022-12	22	EA		\$ 3,842.28		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-321		STOP	505022-16	2	EA		\$ 1,696.88		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-322		SLEEVE	505025-06	40	EA		\$ 2,785.60		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-323		SLEEVE	505025-08	111	EA		\$ 8,217.35		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-324		SLEEVE	505025-12	22	EA		\$ 2,502.70		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-325		SLEEVE	505025-16	60	EA		\$ 5,218.40		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-326		SLEEVE	505025-706	4	EA		\$ 764.76		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-327		SPRING	505026-06	40	EA		\$ 615.60		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-328		SPRING	505026-08	111	EA		\$ 712.64		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-329		SPRING	505026-12	22	EA		\$ 776.36		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005
P74A-330		SPRING	505026-16	60	EA		\$ 2,099.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-331		SPRING/ELGILOY, AMS5834	505026-706-1	4	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-332		COVER/MIL-T-6845	505027-02	2	EA		\$ 555.82		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-333		COVER	505027-04	7	EA		\$ 634.32		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-334		COVER	505027-06	49	EA		\$ 2,192.17		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-335		COVER	505027-08	112	EA		\$ 5,799.20		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-336		COVER	505027-12	22	EA		\$ 1,471.56		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-337		COVER/304,MIL-T-6845	505027-16	60	EA		\$ 4,226.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-338		SUPPORT/AMS 5659	505028-02	2	EA		\$ 1,124.76		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-339		SUPPORT	505028-04	7	EA		\$ 1,924.21		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-340		SUPPORT	505028-06	49	EA		\$ 8,642.04		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-341		SUPPORT	505028-08	112	EA		\$ 20,793.76		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-342		SUPPORT	505028-116	60	EA		\$ 38,714.00		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-343		SUPPORT	505028-12	22	EA		\$ 5,070.54		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-344		HOUSING	505087-06-245	2	EA		\$ 930.80		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-345		HOUSING, AFT	505087-06A	2	EA		\$ 756.94		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-346		FILTER_(EJAY,90409)	505090-08	2	EA		\$ 701.74		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-347		JAM NUT	505160-122-18	33	EA		\$ 1,692.77		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-348		NUT, JAM	505160-126-18	2	EA		\$ 789.56		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-349		JAM NUT	505160-138-16	30	EA		\$ 1,782.20		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-350		JAM NUT	505160-14-14	2	EA		\$ 451.18		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-351		NUT,JAM	505160-20-18	2	EA		\$ 492.60		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-352		JAM NUT	505160-22-18	4	EA		\$ 915.16		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-353		NUT, JAM	505160-26-18	104	EA		\$ 3,870.08		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-354		NUT,JAM	505160-31-16	8	EA		\$ 547.92		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-355		NUT, JAM	505160-38-16	14	EA		\$ 993.70		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-356		THERMAL ISOLATOR	505185-04	4	EA		\$ 477.48		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-357		THERMAL ISOLATOR	505185-06	7	EA		\$ 1,007.98		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-358		THERMAL ISOLATOR	505185-08	204	EA		\$ 17,374.28		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-359		THRM ISOLATOR	505185-12	13	EA		\$ 1,513.31		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-360		THERMAL ISOLATOR	505185-16	28	EA		\$ 1,915.88		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-361		THRM ISOLATOR	505186-08	5	EA		\$ 826.40		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-362		THRM ISOLATOR	505186-12	3	EA		\$ 757.28		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-363		THERMAL ISOLATOR	505186-16	2	EA		\$ 994.68		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-364		FITTING,SWIVEL	505187	3	EA		\$ 723.59		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-365	04-0084	RETAINER,SWIVEL .051	505188	7	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-366		SHIPPING CAP 1"	505905-16	2	EA		\$ 698.24		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-370		HOUSING,CUP	505921-04	2	EA		\$ 559.30		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-371		HOUSING,CUP	505921-06	11	EA		\$ 1,125.28		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-372		HOUSING,CUP	505921-08	43	EA		\$ 2,851.98		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-373		HOUSING,CUP	505921-12	9	EA		\$ 1,022.51		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-374		HOUSING,CUP	505921-16	19	EA		\$ 1,913.35		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-375		SUPPORT	505922-04	2	EA		\$ 1,074.72		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-376		SUPPORT	505922-06	15	EA		\$ 2,953.40		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-377		SUPPORT	505922-08	43	EA		\$ 7,887.28		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-378		SUPPORT	505922-12	9	EA		\$ 2,654.84		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-379		SUPPORT	505922-16	19	EA		\$ 12,542.14		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-380		ACT.SLEEVE	505923-06	15	EA		\$ 2,003.90		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-381		ACT. SLEEVE	505923-08	43	EA		\$ 3,395.50		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-382		ACT.SLEEVE	505923-12	9	EA		\$ 1,286.75		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-383		ACT.SLEEVE	505923-16	19	EA		\$ 2,504.06		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-384	04-0084	RETAINER .062	505924-06	28	EA		\$ 270.05		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-385		RETAINER	505924-08	43	EA		\$ 1,498.77		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-386		RETAINER	505924-12	9	EA		\$ 459.29		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-387		RETAINER .088	505924-16	19	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-388		PLUG	505925-04-5	2	EA		\$ 1,337.32		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-389		PLUG	505925-06	8	EA		\$ 2,252.00		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-390		PLUG	505925-06-1	2	EA		\$ 1,605.96		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-391		PRESSURE PLUG	505925-08	28	EA		\$ 5,843.72		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-392		PLUG	505925-08-1	3	EA		\$ 1,392.68		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-393		PLUG	505925-12	7	EA		\$ 2,448.65		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-394		PLUG	505925-12-1	2	EA		\$ 1,375.46		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-395		PLUG	505925-16	14	EA		\$ 4,877.30		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-396		PLUG	505925-16-1	2	EA		\$ 1,987.08		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-397		PIN	505926	86	EA		\$ 2,756.52		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-398		PIN	505928	2	EA		\$ 453.66		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-399		RETAINER/AMS 5678	505929-1	2	EA		\$ 284.54		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-400		HOUSING,FORWARD	507011-06-1	2	EA		\$ 2,304.28		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-401		HOUSING, FWD	507011-08-1	2	EA		\$ 2,620.38		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-402		HOUSING FWD	507011-106-2	4	EA		\$ 4,026.52		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-403		HOUSING, FWD/AMS 5737	509011-08-1	4	EA		\$ 2,429.84		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-404		HOUSING FWD/AMS5737	509011-108-2	2	EA		\$ 2,795.82		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-405		SPRING/.052 ASTM A313	509013-08	5	EA		\$ 272.30		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-406		SLEEVE, SPRING/AMS5737	509014-08	5	EA		\$ 409.70		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-407		HOUSING, AFT	509015-08AK	2	EA		\$ 1,184.14		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-408		HOUSING, AFT/AMS5737	509015-08FL	2	EA		\$ 1,370.02		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-409		HOUSING, AFT/AMS5737	509015-08FLM	3	EA		\$ 1,398.35		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-410		STOP	509022-08	2	EA		\$ 1,670.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-411		SLEEVE	509025-08	2	EA		\$ 714.64		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-412		SPRING/.059 ASTM A313	509026-08	2	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-413		HSG/HOSE ASSY	514011-110	2	EA		\$ 3,160.16		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-414		HOSE ASSY	514011-160	2	EA		\$ 3,164.94		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-415		JAM NUT	514012	3	EA		\$ 592.85		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-416		SLEEVE, ACT.	514013	6	EA		\$ 1,194.20		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-417		HOUSING,CUP	514014	2	EA		\$ 557.34		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-418		HOUSING	514016-0604V	2	EA		\$ 1,107.46		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-419		HSG/HOSE ASSY	514016-120	2	EA		\$ 1,354.68		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-420		HSG/HOSE ASSY	514016-150	2	EA		\$ 1,254.86		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-421		BACK UP RING	515067-017	23	EA		\$ 491.73		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-422	04-0084	BACK UP RING	515067-125	6	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-423	04-0084	SPRING	515117-10-3	26	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-424		SPRING	515117-10-4	2	EA		\$ 289.60		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-425		BACK UP RING	515153-023-3	12	EA		\$ 356.36		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-426		PLUG, STOP	515154-212	12	EA		\$ 717.56		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-427		RETAINER,,020	515157-04	40	EA		\$ 1,287.60		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-428	04-0084	RETAINER,,031	515157-12	347	EA		\$ 624.17		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-429	04-0084	RETAINER,,047	515157-16	144	EA		\$ 319.40		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-430		RETAINER,,020	515157-704	4	EA		\$ 274.24		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-431	04-0084	SPRING .025/AMS 5834	5153-702	14	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-432	04-0084	BACK-UP RING, TEFLON	5155-019-1	12	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-433	04-0084	B/BACK-UP RING, TEFLON	5155-02	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-434	04-0084	BACK-UP RING, TEFLON	5155-021-1	11	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-435	S/A 1275	BACK-UP RING, TEFLON	5155-05	130	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-436	S/A 1275	BACK-UP RING, TEFLON	5155-06	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-437	04-0084	BACK-UP RING, TEFLON	5155-10	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-438		POPPET/AMS 5662	5156-702	2	EA		\$ 740.20		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-439		RETAINER/AMS 5662	5157-702	2	EA		\$ 1,090.20		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-440		SPACER/AMS 5662	5158-702	2	EA		\$ 693.36		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-441		CAP,DUST	516001-DC-1	2	EA		\$ 660.12		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-442		PLUG,DUST	516001-DP-1	2	EA		\$ 660.68		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-443		HOUSING,FLANGE	516011-10-1	2	EA		\$ 1,415.10		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-444		POPPET ASSY	516012-10C1	2	EA		\$ 1,506.86		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-445		POPPET ASSY	516012-10E	2	EA		\$ 1,506.86		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-446		HOUSING INNER	516014-10	2	EA		\$ 971.06		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-447		HOUSING, AFT	516015-10C	2	EA		\$ 994.64		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-448		HOUSING AFT	516015-10M	2	EA		\$ 1,182.08		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-449		SPACER	516016-10	2	EA		\$ 378.12		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-450		PIN	516017-10	9	EA		\$ 481.25		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-451	04-0084	RETAINER, HOUSING	516018-10	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-452		SPRING	516019-10	2	EA		\$ 286.24		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-453		WIPER	516020-10	2	EA		\$ 366.42		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-454		HOUSING,FLANGE	516022-10-1	2	EA		\$ 1,669.78		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-455		STOP ASSY	516023-10C1	2	EA		\$ 790.86		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-456		STOP ASSY	516023-10E	2	EA		\$ 766.06		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-457		SLEEVE	516025-10-N	2	EA		\$ 558.84		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-458		HOUSING, AFT	516026-10C	2	EA		\$ 875.10		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-459		HOUSING, AFT	516026-10M	2	EA		\$ 892.74		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-460		SPRING	516027-10	2	EA		\$ 285.68		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-461	04-0084	RETAINER, HOUSING	516028-10	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-462		RETAINER, STOP	516029-1	2	EA		\$ 365.02		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-463		POPPET ASSY	516102-12E7	2	EA		\$ 2,296.64		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-464		SLEEVE, SPRING	516103-12	2	EA		\$ 577.42		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-465		HOSE ASSY	516104-12J	2	EA		\$ 32,363.16		KSC/PPS	11/01/04	COMPLETE ON BHB2794. 02/02/2006.
P74A-466		HOUSING, AFT	516105-12U	2	EA		\$ 1,278.90		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-467		HOUSING, AFT	516106-12U	2	EA		\$ 1,996.44		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-468		STOP	516107-12	2	EA		\$ 1,549.92		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-469		SLEEVE ASSY	516109-12E7	2	EA		\$ 1,549.92		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-470		SPRING	516111-12-2	6	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-471		SPRING	516112-12-4	2	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-472		RING, DETENT	516116-12	2	EA		\$ 599.12		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-473		HOSE ASSEMBLY	516117-12J	2	EA		\$ 36,967.98		KSC/PPS	11/01/04	COMPLETE ON BHB2794. 02/02/2006.
P74A-474	04-0084	RETAINER,,031/ASTM A313	519157-12	19	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-475		HOUSING, OUTER	525051-12	2	EA		\$ 2,289.02		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-476		HOUSING, OUTER	525051-1204	2	EA		\$ 2,175.44		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-477		HOUSING, OUTER	525051-1204-1	2	EA		\$ 2,897.44		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-478		HOUSING ASSY	525052-1204E7	2	EA		\$ 2,232.58		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-479		HOUSING ASSY	525052-12E	2	EA		\$ 3,461.80		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-480		HOUSING ASSY	525052-12E7	4	EA		\$ 4,784.12		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-481		HOUSING ASSY	525052-12V	2	EA		\$ 3,944.28		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-482		POPPET ASSY	525053-1204E7	2	EA		\$ 1,390.12		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-483		POPPET ASSY	525053-12E	2	EA		\$ 2,410.48		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-484		POPPET ASSY	525053-12E7	4	EA		\$ 2,191.36		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-485		POPPET ASSY	525053-12V	2	EA		\$ 1,990.16		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-486		SLEEVE	525055-12	7	EA		\$ 337.10		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-487		SLEEVE, SPRING	525055-1204	2	EA		\$ 473.80		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-488	04-0084	RETAINER, .066	525056-12	16	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-489		HOUSING, OUTER	525061-12	2	EA		\$ 1,991.68		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-490		HOUSING, OUTER	525061-1204	2	EA		\$ 3,322.32		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-491		HOUSING, OUTER	525061-1206-1	2	EA		\$ 2,206.90		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-492		HOUSING, OUTER	525061-1208-1	2	EA		\$ 2,091.42		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-493		HOUSING, OUTER	525061-1216-1	2	EA		\$ 2,324.38		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-494		HOUSING, INNER	525062-11-1	3	EA		\$ 1,734.89		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-495		HOUSING, INNER	525062-12-1	3	EA		\$ 2,279.87		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-496		STOP ASSY	525063-1204E7	2	EA		\$ 2,394.58		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-497		STOP ASSY	525063-12E	2	EA		\$ 3,089.12		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-498		STOP ASSY	525063-12E7	2	EA		\$ 2,475.10		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-499		STOP ASSY	525063-12V	2	EA		\$ 3,045.56		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-500		SLEEVE ASSY	525065-11E7	3	EA		\$ 1,888.40		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-501		SLEEVE ASSY	525065-12E-5	2	EA		\$ 2,816.66		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-502		SLEEVE ASSY	525065-12V-5	2	EA		\$ 2,708.98		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-503		SPACER, HALF	525068-12	12	EA		\$ 697.76		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-504		HOUSING	525151-1206A	2	EA		\$ 1,972.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-505		HOUSING	525151-1208A	2	EA		\$ 1,820.38		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-506		HOUSING	525151-1216CH	2	EA		\$ 2,018.42		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-507	04-0084	RETAINER	5259-04	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-508		BACK-UP RING	545067-012	2	EA		\$ 330.22		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-509	04-0084	SPACER	55158-04	36	EA		\$ 269.96		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-510		SPACER	55178-04	2	EA		\$ 645.58		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-511	04-0084	SPRING, SLEEVE	55254-04	8	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-512		STOP ASSY	5555-702E-1	2	EA		\$ 506.26		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-513	04-0084	SPRING, COMP/AMS 5384 .040	55754-04	11	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-514	04-0084	O-RING, TEFLON	5-632-1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-515	04-0084	SPRING	5654-08	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-516		SPRING	565514-12	15	EA		\$ 739.70		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-517		RETAINER, WIRE	565515-11	12	EA		\$ 510.08		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-518		RETAINER, WIRE	565515-12	15	EA		\$ 669.20		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-519		RETAINER, WIRE	565515-13	15	EA		\$ 669.50		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-520		RETAINER, SWAGE	565516-212	15	EA		\$ 747.20		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-521		SPRING	565524-12	12	EA		\$ 313.88		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-522		HOUSING	565611-A08	2	EA		\$ 859.28		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-523		HOUSING	565611-T06	3	EA		\$ 841.64		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-524		HOUSING	565612-A08	4	EA		\$ 993.28		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-525		RETAINER, SWAGE	565613-212	12	EA		\$ 480.92		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-526		RETAINER, SWAGE	565613-213	15	EA		\$ 655.10		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-527		SPACER	565615-08	4	EA		\$ 346.40		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-528		SPACER	565615-13	15	EA		\$ 352.85		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-529		SPACER	565615-16	8	EA		\$ 390.64		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-530		SPACER	565615-17	6	EA		\$ 379.40		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-531	04-0084	SPACER GUIDE	565615-18	10	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-532		HOUSING	565616-T04	4	EA		\$ 971.08		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-533		HOUSING	565616-T08	3	EA		\$ 1,022.21		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-534	04-0084	RETAINER .050	565618-04	26	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-535	04-0084	RETAINER .050	565618-08	26	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-536		NUT	565619-04	4	EA		\$ 580.56		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-537		NUT	565619-08	3	EA		\$ 928.16		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-538		HOUSING	565621-081	6	EA		\$ 802.64		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-539		SLEEVE	565622-08	6	EA		\$ 635.66		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-540		COVER, SLEEVE	565625-08	6	EA		\$ 467.06		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-541		COVER, SLEEVE	565625-13	12	EA		\$ 800.36		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-542		HOUSING	565631-04	15	EA		\$ 1,211.90		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-543		HOUSING	565632-04	15	EA		\$ 3,089.30		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-544		RETAINER	565633-04	15	EA		\$ 314.60		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-545		RETAINER	58117	19	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-546		RETAINER	58120	19	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-547		RETAINER	58157-04	12	EA		\$ 308.36		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-548		RETAINER	58177-04	2	EA		\$ 1,033.86		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-549		RETAINER	58413	4	EA		\$ 725.48		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-550		RING, SPLIT	58414	4	EA		\$ 586.76		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-551	04-0084	SPRING	58418	7	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-552		RETAINER	58419	6	EA		\$ 484.52		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-553	04-0084	SPRING AMS 5834	590021-702	15	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-554		SLEEVE/AMS 5662	590052-702	2	EA		\$ 910.30		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-555		STOP ASSY	591221-E	15	EA		\$ 1,850.15		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-556		POPPET	593112	19	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-557		POPPET	593112-3	12	EA		\$ 441.68		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-558		RETAINER	593113	19	EA		\$ 428.12		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-559		SPACER	593114	19	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-560	04-0084	SPRING	593116	28	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-561		HOUSING	593120-041	3	EA		\$ 326.60		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-562		HOUSING	593120-041-1	2	EA		\$ 1,022.64		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-563		STOP ASSY	593121-E	2	EA		\$ 915.10		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-564		STOP ASSY	593121-V	2	EA		\$ 830.36		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-565		SLEEVE	593122-5	4	EA		\$ 410.92		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-566		SLEEVE	593122-6	15	EA		\$ 1,444.25		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-567	04-0084	SPRING	593123	23	EA		\$ 270.04		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-568		SLEEVE	593124-1	15	EA		\$ 651.35		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-569		WASHER	593126-5	4	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-570	04-0084	CAP	593127	24	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-571		HOUSING	593130-1	15	EA		\$ 1,337.60		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-572		HOUSING	593130-T04	4	EA		\$ 710.20		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-573		HOUSING	593131-T04	4	EA		\$ 641.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-574		POPPET/AMS 5662	593172-3	2	EA		\$ 925.34		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-575		STOP ASSY	59353-04E-1	2	EA		\$ 1,014.78		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-576		STOP ASSY	59393-04E-1	4	EA		\$ 1,135.92		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-577		SLEEVE	59753-04-1	2	EA		\$ 1,007.06		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-578		STOP ASSY	59793-04E-1	2	EA		\$ 1,089.32		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-579		SLEEVE	59953-04-1	6	EA		\$ 582.74		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-580	S/A 1275	ROD SEAL	62350-XX017-02	7	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-581	04-0084	BALL	7/32 DIA. BALL4	849	EA		\$ 1,515.26		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-582		SPRING	80293-08	4	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-583		RETAINER	80295-08-1	4	EA		\$ 292.68		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-584	04-0084	RETAINER	85157-08	9	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-585	04-0084	FERRULE,BACK	8BF8-316	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-586	04-0084	FERRULE,BACK	8FF8-316	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-587	04-0084	NUT (STAINLESS STEEL)	8NU8-316	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-588		POPPET	9156-08	4	EA		\$ 377.64		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-589		POPPET ASSY	A505012-06-E	39	EA		\$ 9,093.74		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-590		POPPET ASSY.	A505012-06-V	4	EA		\$ 1,990.44		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-591		POPPET ASSY	A505012-08-E	3	EA		\$ 1,950.20		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-592		POPPET ASSY	A505012-12-E	2	EA		\$ 2,059.56		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-593		POPPET ASSY	A505012-T06-E	4	EA		\$ 1,555.60		KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-594		POPPET ASSY	A505012-T08-E	160	EA		\$ 30,564.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-595		POPPET ASSY	A505012-T12-E	22	EA		\$ 8,542.36		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-596		POPPET ASSY	A505012-T16-E	85	EA		\$ 26,823.05		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-597		STOP PLUG ASSY	A505024-06-E	36	EA		\$ 5,627.72		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-598		STOP PUUG ASSY	A505024-06-V	4	EA		\$ 1,365.48		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-599		STOP PLUG ASSY	A505024-08-E	111	EA		\$ 16,746.59		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-600		STOP PLUG ASSY	A505024-12-E	22	EA		\$ 2,727.76		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-601		STOP PLUG ASSY	A505024-16-E	60	EA		\$ 11,574.80		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-602		STOP PLUG ASSY	A505024-T06-E	4	EA		\$ 1,015.52		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-603		POPPET ASSY	A509012-08-V	5	EA		\$ 1,889.60		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-604		STOP PLUG ASSY	A509024-08-V	2	EA		\$ 905.08		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-605		HOUSING ASSY	A516101-12-2E7	2	EA		\$ 2,330.18		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-606		HOUSING ASSY	A516101-12-E7	2	EA		\$ 2,321.00		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-607		STOP PLUG ASSY	A516108-12-E7	2	EA		\$ 1,078.36		KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-608		POPPET ASSY	A80292-T08-E	4	EA		\$ 512.24		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-609	04-0084	NUT	AN924-6K	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-610	04-0084	WIRE RETAINER	AS1791-04	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-611	04-0084	WIRE,RETAINER (PURCHASE PART)	AS1791-12	42	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-612		NUT,SWIVEL (PURCHASED PART)	AS4370J12-N	8	EA		\$ 320.16		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-613	S/A 1275	NUT,SWIVEL	AS4370K04-N	4	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-614	04-0084	NUT,SWIVEL (PURCHASED PART)	AS4370R12-N	13	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-615	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-008-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-616	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-009-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-617	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-011-E	210	EA		\$ 269.90		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-618	04-0084	O-RING, FLUOROCARBON	AS568-011-V	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-619	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-012-E	250	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-620	04-0084	O-RING, FLOUROCARBON	AS568-012-V	30	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-621	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-013-E	80	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-622	04-0084	O-RING, EPR(E515-80)	AS568-014-E	182	EA		\$ 415.10		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-623	04-0084	O-RING, FLUOROCARBON	AS568-014-V	50	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-624	04-0084	O-RING, EPR, PARKER E515-80	AS568-015-E	570	EA		\$ 270.23		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-625	04-0084	O-RING, FLUOROCARBON	AS568-015-V	90	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-626	04-0084	O-RING, NEOPRENE	AS568-016-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-627	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-016-E	1529	EA		\$ 741.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-628	04-0084	O-RING, FLUOROCARBON	AS568-016-V	90	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-629	04-0084	O-RING, NEOPRENE PARKER	AS568-017-C1	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-630	S/A 1275	O-RING, ETHYLENE PROPYLENE	AS568-017-E	1146	EA		\$ 591.20		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-631	S/A 1275	O-RING	AS568-017-V	50	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-632	04-0084	O-RING, NEOPRENE_PARKER	AS568-018-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-633	04-0084	O-RING, EPR(E515-80)	AS568-018-E	1230	EA		\$ 451.73		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-634	04-0084	O-RING, FLUOROCARBON	AS568-018-V	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-635	04-0084	O-RING, NEOPRENE_PARKER	AS568-019-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-636		O-RING, EPR(E515-80)	AS568-019-E	174	EA		\$ 789.08		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-637	04-0084	O-RING, FLUOROCARBON	AS568-019-V	50	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-638	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-020-E	230	EA		\$ 270.01		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-639	04-0084	O-RING, NEOPRENE_PARKER	AS568-021-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-640	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-021-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-641	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-022-E	118	EA		\$ 269.92		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-642	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-022-E7	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-643	04-0084	O-RING, TEFLON	AS568-023-1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-644	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-023-E	114	EA		\$ 269.83		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-645	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-023-E7	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-646	04-0084	O-RING, FLUOROCARBON	AS568-023-V	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-647	04-0084	O-RING,ETHYLENE PROPYLENE	AS568-024-E7	60	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-648	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-025-E	422	EA		\$ 354.90		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-649	S/A 1275; 04-0084	O-RING, ETHYLENE PROPYLENE	AS568-026-E	182	EA		\$ 270.01		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-650	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-027-E	422	EA		\$ 270.20		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-651	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-028-E	422	EA		\$ 270.20		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-652	04-0084	O-RING,SILICONE,PARKER,S383-70	AS568-030-S1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-653	04-0084	O-RING,SILICONE,PARKER S383-70	AS568-032-S1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-654	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-112-E	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-655	04-0084	O-RING, NEOPRENE PARKER	AS568-116-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-656	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-116-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-657	S/A 1275	O-RING, NEOPRENE PARKER	AS568-117-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-658	S/A 1275	O-RING, ETHYLENE PROPYLENE	AS568-117-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-659	04-0084	O-RING, NEOPRENE PARKER	AS568-118-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-660	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-118-E	80	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-661	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-118-E60	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-662	04-0084	O-RING, NEOPRENE PARKER	AS568-120-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-663	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-120-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-664	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-121-E	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-665	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-121-E7	160	EA		\$ 270.08		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-666	04-0084	O-RING, FLUOROCARBON	AS568-121-V	80	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-667	S/A 1275	O-RING, NEOPRENE PARKER	AS568-122-C1	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-668	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-122-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-669	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-125-E	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-670	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-125-E7	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-671	04-0084	O-RING PARKER V747-75	AS568-125-V	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-672	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-128-E	227	EA		\$ 382.10		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-674	04-0084	CAP,DUST	EC-25	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-675	04-0084	BACK-UP RING, TEFLON	F5155-08	100	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-676	04-0084	SPACER	F5158-08	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-685	04-0084	I.D. BAND	I113-32CR	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-686	S/A 1275	I.D. BAND	I113-40CR	70	EA		\$ 269.97		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-687	04-0084	I.D. BAND	I113-67CR	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-688	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-016	120	EA		\$ 269.96		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-689	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-017	120	EA		\$ 269.96		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-690	04-0084	O-RING,EHTYLENE PROPYLENE	M83285/1-022	150	EA		\$ 270.05		KSC/PPS	11/01/04	COMPLETE ON BHB2794. 02/02/2006.
P74A-691	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-117	120	EA		\$ 269.96		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-692	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-120	150	EA		\$ 270.05		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-693	04-0084	O-RING,ETHYLENE,PROPYLENE	M83285/1-122	150	EA		\$ 270.05		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-694	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-125	157	EA		\$ 270.12		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-695	04-0084	RETAINING RING	MS16624-4025	30	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-696	04-0084	1/8 DIA. BALL4 (CRES 440C)	MS19060-4808	1030	EA		\$ 392.86		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-697	04-0084	BALL, 7/32 DIA.	MS19060-4813	110	EA		\$ 270.03		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-699	04-0084	BACK-UP RING	MS27595-009	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-700	04-0084	BACK-UP RING, TEFLON	MS27595-011	670	EA		\$ 274.60		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-701	04-0084	BACK-UP RING, TEFLON	MS27595-012	70	EA		\$ 269.97		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-702	04-0084	BACK UP RING, TEFLON	MS27595-015	440	EA		\$ 269.92		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-703	04-0084	BACK UP RING, TEFLON	MS27595-017	728	EA		\$ 436.64		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-704	04-0084	BACK UP RING, TEFLON	MS27595-022	220	EA		\$ 269.92		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-705	04-0084	BACK UP RING	MS27595-024	60	EA		\$ 270.02		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-706	04-0084	BACK UP RING	MS27595-027	201	EA		\$ 288.80		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-707	04-0084	BACK-UP RING, TEFLON	MS27595-112	80	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-708	04-0084	BACK-UP RING, TEFLON	MS27595-117	230	EA		\$ 270.01		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-709	04-0084	BACK UP RING	MS27595-120	127	EA		\$ 269.90		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-710	04-0084	BACK-UP RING, TEFLON	MS27595-125	30	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-711	04-0084	BACK UP RING	MS28774-022	40	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-712	04-0084	NUT	NAS1423C12	6	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-713	04-0084	O-RING, ETHYLENE PROPYLENE	NAS1611-011	450	EA		\$ 270.20		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-714	04-0084	O-RING, ETHYLENE PROPYLENE	NAS1611-211	150	EA		\$ 270.05		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-715	04-0084	O-RING, ETHYLENE PROPYLENE	NAS1612-3	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-717		CAPTIVE FASTENER	PLDA7900-10-B-	18	EA		\$ 625.88		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-718		GAMAH RETAINING RING	R14104C	4	EA		\$ 282.60		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-719		GAMAH RETAINING RING	R14105C	14	EA		\$ 295.38		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-720		GAMAH RETAINING RING	R14110C	4	EA		\$ 352.56		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-721	04-0084	BACK-UP RING, TEFLON	R5155-02	20	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-722		GAMAH SEAL RING	S14704C	4	EA		\$ 989.84		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-723		GAMAH SEAL RING	S14705C	14	EA		\$ 2,408.54		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-724		GAMAH SEAL RING	S14710C	4	EA		\$ 899.36		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-732	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735D6D6E011	2	EA		\$ 7,190.52		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-733	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735D6F6F064	2	EA		\$ 13,112.34		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-734	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735E8D8E011	2	EA		\$ 12,015.76		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-735	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735E8F8F024	3	EA		\$ 14,435.81		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-736	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735E8F8F060	3	EA		\$ 10,206.11		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-737	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1738H16B16C0	2	EA		\$ 8,866.08		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-738	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1738H16C16C0	2	EA		\$ 17,950.88		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-739		HOUSING	T155556-04A5	2	EA		\$ 632.56		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-740	04-0084	BACK-UP RING	T502049-1	33	EA		\$ 270.00		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-741		SLEEVE,SPRING	T505014-06	4	EA		\$ 504.16		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-742		SLEEVE,SPRING/AMS4928	T505014-08	2	EA		\$ 485.92		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-743		HOUSING, AFT	T505015-04AK	2	EA		\$ 902.40		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-744		HOUSING, AFT	T505015-04FLM	2	EA		\$ 954.04		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-745		HOUSING, AFT	T505015-04J4	2	EA		\$ 794.04		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-746		HOUSING, AFT	T505015-06P	2	EA		\$ 903.66		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-747		HOUSING, AFT	T505015-0806A	2	EA		\$ 1,230.06		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-748		HOUSING	T505015-08-130	2	EA		\$ 1,011.18		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-749		HOUSING	T505015-08-410	2	EA		\$ 1,285.38		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-750		HOUSING	T505015-08-510	19	EA		\$ 3,051.64		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-751		HOUSING, AFT	T505015-08A	57	EA		\$ 9,490.55		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-752		HOUSING, AFT	T505015-08BF	13	EA		\$ 3,985.00		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-753		HOUSING	T505015-08FLM	2	EA		\$ 1,089.90		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-754		HOUSING, AFT	T505015-08G	14	EA		\$ 2,212.96		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-755		HOUSING, AFT	T505015-08P	2	EA		\$ 957.70		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-756		HOUSING, AFT	T505015-08U	6	EA		\$ 1,395.20		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-757		HOUSING, AFT	T505015-108G	2	EA		\$ 1,411.64		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-758		HOUSING, AFT	T505015-112G	2	EA		\$ 1,276.68		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-759		HOUSING, AFT	T505015-12-510	2	EA		\$ 1,319.52		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-760		HOUSING	T505015-128-130	2	EA		\$ 1,038.42		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-761		HOUSING, AFT	T505015-12A	3	EA		\$ 1,034.45		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-762		HOUSING, AFT	T505015-12G	2	EA		\$ 992.42		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-763		HOUSING, AFT	T505015-16-130	2	EA		\$ 949.94		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-764		HOUSING	T505015-16-510	2	EA		\$ 1,093.32		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-765		HOUSING, AFT	T505015-16BF	4	EA		\$ 2,238.56		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-766		HOUSING, AFT	T505015-16G	11	EA		\$ 2,853.82		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-767		HOUSING, AFT	T505015-16G-3	2	EA		\$ 1,385.38		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-768		HOUSING, AFT	T505015-16GF	7	EA		\$ 1,730.03		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-769		HOUSING, AFT	T505015-16U	2	EA		\$ 868.28		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-770		HOUSING	T505015-904J4	2	EA		\$ 2,797.06		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-771		RING,INDEX	T505016-06-105	2	EA		\$ 1,051.52		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-772		RING,INDEX	T505016-06-130	2	EA		\$ 1,336.66		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-773		RING,INDEX	T505016-06-155	2	EA		\$ 981.98		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-774		RING,INDEX	T505016-06-180	2	EA		\$ 977.86		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-775		RING,INDEX	T505016-06-205	2	EA		\$ 886.78		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-776		RING,INDEX	T505016-06-230	3	EA		\$ 1,014.95		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-777		RING,INDEX	T505016-06-255	2	EA		\$ 1,078.12		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-778		INDEX RING	T505016-06-280	2	EA		\$ 950.62		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-779		INDEX RING	T505016-06-315	2	EA		\$ 989.04		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-780		RING,INDEX	T505016-06-45	2	EA		\$ 1,022.80		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-781		RING,INDEX	T505016-06-75	29	EA		\$ 3,977.63		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-782		RING,INDEX	T505016-08-105	79	EA		\$ 7,739.09		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-783		RING,INDEX/MIL-T-9047	T505016-08-135	2	EA		\$ 1,106.06		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-784		RING,INDEX	T505016-08-165	4	EA		\$ 1,401.92		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-785		RING,INDEX	T505016-08-195	3	EA		\$ 1,220.90		KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-786		RING,INDEX	T505016-08-225	2	EA		\$ 1,171.42		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-787		RING,INDEX/MIL-T-9047	T505016-08-255	2	EA		\$ 1,165.28		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-788		RING,INDEX/MIL-T-9047	T505016-08-285	2	EA		\$ 1,145.10		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-789		RING,INDEX	T505016-08-315	2	EA		\$ 1,024.44		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-790		RING, INDEX	T505016-08-45	3	EA		\$ 1,247.93		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-791		RING,INDEX	T505016-08-75	71	EA		\$ 11,776.18		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-792		RING,INDEX	T505016-116-120	18	EA		\$ 3,447.02		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-793		INDEX RING	T505016-116-60	12	EA		\$ 3,455.24		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-794		RING,INDEX	T505016-12-120	11	EA		\$ 2,104.06		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-795		RING,INDEX	T505016-12-240	9	EA		\$ 1,699.22		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-796		RING,INDEX	T505016-16-180	30	EA		\$ 5,021.30		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-797		RING,INDEX	T505016-16-240	8	EA		\$ 2,582.56		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-798		RING,INDEX	T505016-16-300	15	EA		\$ 3,513.05		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-799		HOUSING	T505021-04A	2	EA		\$ 1,241.84		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-800		HOUSING	T505021-04J4	4	EA		\$ 820.68		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-801		HOUSING	T505021-08	2	EA		\$ 991.02		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-802		HOUSING	T505021-0806A	2	EA		\$ 1,172.00		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-803		HOUSING	T505021-08-130	2	EA		\$ 851.88		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-804		HOUSING	T505021-08-410	2	EA		\$ 1,100.04		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-805		HOUSING	T505021-08-510	20	EA		\$ 3,562.80		KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-806		HOUSING	T505021-08A	19	EA		\$ 3,076.53		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-807		HOUSING	T505021-08G	26	EA		\$ 4,166.74		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-808		HOUSING	T505021-08J4	2	EA		\$ 725.56		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-809		HOUSING	T505021-12-510	4	EA		\$ 1,033.68		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-810		HOUSING	T505021-128-130	2	EA		\$ 888.64		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-811		HOUSING	T505021-1608G	7	EA		\$ 1,440.09		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-812		HOUSING	T505021-16-130	2	EA		\$ 1,078.36		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-813		HOUSING	T505021-16-410	2	EA		\$ 1,021.92		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-814		HOUSING	T505021-16-510	2	EA		\$ 965.84		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-815		HOUSING	T505021-168-130	2	EA		\$ 1,111.92		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-816		HOUSING	T505021-16A	3	EA		\$ 1,826.60		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-817		HOUSING	T505021-16G	11	EA		\$ 3,252.46		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-818		HOUSING/MIL-T-9047	T505021-912EL-	3	EA		\$ 6,561.20		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-819		HOUSING	T505021-916EA	2	EA		\$ 5,076.44		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-820		HOUSING	T505021-916EL-	2	EA		\$ 5,334.72		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-821		HOUSING	T505021-F08-510	2	EA		\$ 913.50		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-822		STOP	T505022-06	4	EA		\$ 1,236.80		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-823		STOP	T505022-16	58	EA		\$ 10,566.72		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-824		HOUSING,CUP	T505921-06	3	EA		\$ 498.50		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-825	04-0084	BACK-UP RING, TEFLON	T5155-02-1	30	EA		\$ 269.99		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-826		HOUSING OUTER TITANIUM	T565511-12	15	EA		\$ 3,120.05		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-827		HOUSING,INNER	T565512-12-1	15	EA		\$ 1,530.20		KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-828		POPPET (TITANIUM)	T565513-12	15	EA		\$ 2,731.25		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-829		HOUSING (TITANIUM)	T565521-12	12	EA		\$ 1,371.32		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-830		STOP (TITANIUM)	T565522-12	12	EA		\$ 2,745.80		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-831		SLEEVE (TITANIUM)	T565523-12	12	EA		\$ 1,137.44		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P079-001		Hatch Window Inner Replacment Kit	683-61498-1	1	KT		\$ 286,025.00		KSC/PPS	12/31/04	COMPLETE ON BHB2501. 11/17/2004

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P079-002		SEAI, Window Pane	683-13032-1	6	EA		\$32,711		KSC/PPS	12/31/04	COMPLETE ON BHB2421. 05/18/2004.
P079-004		WINDOW ASSY, DEBRIS, SIDE PANEL CUPOLA	683-11584-1	1	EA		\$109,225		KSC/PPS	12/31/04	COMPLETE: This item was delivered via DD1149 as a special
P083-01	PIO 83; S/A 1372	CDRA Pre cooler	2352530-1-2	2	EA		\$ 399,891.00		In Place	08/01/07	COMPLETE ON BHB3053. 10/29/2007.
20xxx Series PIOs											
20000	SSCN 8474; S/A 1306	Condensing Heat Exchanger - Weldment	SV811602-1	1	EA	FLT	tbd	FLT	HSSSI	05/26/06	COMPLETE ON BHB2846. 05/03/2006.
20001	PIO 80; S/A 1396 (H.57)	Battery Charge Discharge Unit (BCDU)	RE1807-03	1	EA	FLT	\$ 8,503,520.00	FLT	at Vendor	03/31/09	COMPLETE ON BHB3155. 01/28/2009.
20007	SSCN 9191; S/A 1340	SPACE STATION BUFFER AMPLIFIER (SSBA)	51612-0411-3	1	EA	FLT	tbd		KSC	02/15/07	COMPLETE ON BHB2944. 03/21/2007.
20008	SSCN 8756; S/A 1349	Local Data Interface Assy	R072491-151	3	EA	FLT	tbd	FLT	KSC	09/30/06	COMPLETE ON BHB3120. 03/26/2008.
20009	SSCN 8756; S/A 1349	Local Data Interface Assy	R072491-101	1	EA	FLT	tbd	FLT	KSC	09/30/06	COMPLETE ON BHB3158. 02/06/2009.
20010	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		\$ 56,962.00		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20011	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		\$ 56,962.00		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20012	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		\$ 56,962.00		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20013	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		\$ 56,962.00		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20014	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		\$ 56,962.00		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20015	PIO 84; Mod 1460 (H.57)	Desiccant/Adsorbent Bed	2352540-1-1	1	EA		\$ 1,427,563.00		KSC	06/07/09	COMPLETE ON BHB3259. 01/28/2010.
20017	PIO 85; Mod 1472 (H.57)	S-Band Support Assembly with Assembly	1F80536-1	1	EA	FLT	\$ 27,249,217.00		KSC	12/04/09	COMPLETE ON BHB3258. 02/12/2010.
20018	PIO 85; Mod 1472 (H.57)	S-Band Support Assembly with Assembly	1F80536-1	1	EA	FLT	\$ 710,147.00		KSC	04/19/10	COMPLETE ON BHB3270. 03/04/2010.
20019	PIO 87; Mod 1508 (H.57)	Flexible Hose Rotary Coupler, Spare Assembly	5849811-503	1	EA	NFS	\$ 23,170,109.00	LMMS	KSC	11/01/09	COMPLETE ON BHB3256. 02/25/2010.
20021	PIO 87; Mod 1508 (H.57)	Rotary Joint Motor Controller	5842400-507	1	EA	FLT	\$ 14,742,313.06	LMMS	KSC	09/01/11	COMPLETE ON BHB3562. 05/03/2013.
20022	PIO 87; Mod 1508 (H.57)	Rotary Joint Motor Controller	5842400-507	1	EA	FLT	\$ 9,454,738.86	LMMS	KSC	07/01/12	COMPLETE ON BHB3574. 09/05/2013. Added per PIO 87 on Mod 1508. Changed part number per letter 11-014158 concurrence dated 11/01/2011.
20023	PIO 87; Mod 1508 (H.57)	Utility Transfer Assembly	1F81164-1	1	EA	FLT	\$ 17,050,496.71	LMMS	KSC	07/12/12	COMPLETE ON BHB3504. 07/09/2012. Added per PIO 87 on Mod
20024	PIO 87; Mod 1508 (H.57)	Charcoal Bed Assembly	5823608-501	1	EA	FLT	\$ 1,370,653.69	KSC	KSC	10/14/10	COMPLETE ON BHB3412. 06/13/2011. Ship short on BHB3386
20025	PIO 87; Mod 1508 (H.57)	Charcoal Bed Assembly	5823608-501	1	EA	FLT	\$ 1,391,001.94	KSC	KSC	03/01/11	COMPLETE ON BHB3413. 06/13/2011. Ship short on BHB3387
20026	PIO 87; Mod 1508 (H.57)	Sorbent Bed Assembly	5823623-503	1	EA	FLT	\$ 1,169,819.41	KSC	KSC	04/01/11	COMPLETE ON BHB3414. 06/13/2011. Ship short on BHB3377
20027	PIO 87; Mod 1508 (H.57)	Sorbent Bed Assembly	5823623-503	1	EA	FLT	\$ 1,169,819.41	KSC	KSC	04/01/11	COMPLETE ON BHB3388. 06/17/2011. Added per PIO 87 on Mod
20028	PIO 87; Mod 1508 (H.57)	Sorbent Bed Assembly	5823623-503	1	EA	FLT	\$ 1,196,545.13	KSC	KSC	04/01/11	COMPLETE ON BHB3389. 06/13/2011. Added per PIO 87 on Mod
20029	PIO 87; Mod 1508 (H.57)	Catalytic Oxidizer Assembly	5823630-503	1	EA	FLT	\$ 1,784,745.36	KSC	KSC	12/23/10	COMPLETE ON BHB3392. 06/23/2011. Added per PIO 87 on Mod
20030	PIO 87; Mod 1508 (H.57)	Catalytic Oxidizer Assembly	5823630-503	1	EA	FLT	\$ 1,784,745.36	KSC	KSC	03/01/11	COMPLETE ON BHB3415. 06/13/2011. Ship short on BHB3364
20031	PIO 87; Mod 1508 (H.57)	Blower Assembly	5844815-501	1	EA	FLT	\$ 12,906,463.30	LMMS	KSC	12/01/11	COMPLETE ON BHB3573. 08/22/2013. Added per PIO 87 on Mod 1508
20032	PIO 87; Mod 1508 (H.57)	Blower Assembly	5844815-501	1	EA	FLT	\$ 7,751,401.38	LMMS	KSC	09/01/12	COMPLETE ON BHB3493. 07/24/2012. Added per PIO 87 on Mod
20033	PIO 86; Mod 1481 (H.57)	HRDL-Input/Output	8265999-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3216. 07/29/2009. Added per PIO 86 on Mod
20034	PIO 86; Mod 1481 (H.57)	HRDL-Input/Output	8265999-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20035	PIO 86; Mod 1481 (H.57)	HRDL-Input/Output	8265999-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3217. 08/05/2009. Added per PIO 86 on Mod
20036	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20037	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20038	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3214. 07/23/2009. Added per PIO 86 on Mod
20039	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3214. 07/23/2009. Added per PIO 86 on Mod
20040	PIO 86; Mod 1481 (H.57)	SSMMU Controller CCA	8269130-902	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20041	PIO 86; Mod 1481 (H.57)	SSMMU Controller CCA	8269130-902	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3217. 08/05/2009. Added per PIO 86 on Mod
20042	PIO 86; Mod 1481 (H.57)	SSMMU Daughterboard	8269128-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3214. 07/23/2009. Added per PIO 86 on Mod
20043	PIO 86; Mod 1481 (H.57)	SSMMU Daughterboard	8269128-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20044	PIO 86; Mod 1481 (H.57)	HRDL Processor CCA	8264898-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20045	PIO 86; Mod 1481 (H.57)	HRDL Processor CCA	8264898-901	1	EA	FLT	\$ 88,345.23		HI	08/28/09	COMPLETE ON BHB3217. 08/05/2009. Added per PIO 86 on Mod
20046	PIO 88/SSCN 11221; Mod	Main Bus Switching Unit (MBSU)	R072591-41	1	EA	FLT	\$ 4,268,929.04	HSR	KSC	09/09/11	COMPLETE ON BHB3450. 09/09/2011. Added per PIO 88/SSCN
20047	PIO 88/SSCN 11221; Mod	Main Bus Switching Unit (MBSU)	R072591-41	1	EA	FLT	\$ 3,915,009.96	HSR	KSC	05/04/12	COMPLETE ON BHB3475. 02/22/2012. Added per PIO 88/SSCN
20048	PIO 88/SSCN 11221; Mod	Electronic Control Unit (ECU)	R072341-61	1	EA	FLT	\$ 1,430,550.51	HSR	KSC	10/31/11	COMPLETE ON BHB3396. 08/24/2011. Added per PIO 88/SSCN
20049	PIO 88/SSCN 11221; Mod	Electronic Control Unit (ECU)	R072341-61	1	EA	FLT	\$ 1,193,657.93	HSR	KSC	03/15/12	COMPLETE ON BHB3459. 02/01/2012. Added per PIO 88/SSCN
20050	PIO 88/SSCN 11221; Mod	Direct Current Switching Unit (DCSU)	R072610-71	1	EA	FLT	\$ 6,925,158.39	HSR	KSC	07/25/12	COMPLETE ON BHB3503. 06/26/2012. Added per PIO 88/SSCN
20051	PIO 88/SSCN 11221; Mod	Direct Current Switching Unit (DCSU)	R072610-71	1	EA	FLT	\$ 5,766,694.17	HSR	KSC	10/06/12	COMPLETE ON BHB3516. 09/25/2012. Added per PIO 88/SSCN
20052	PIO 89/SSCN 10695; Mod	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT	\$ 7,030,103.16	HSSSI	KSC	12/30/11	COMPLETE ON BHB3421. 06/22/2011. Added per PIO 89/SSCN
20056	PIO 89/SSCN 10695; Mod	Verification Gas Assembly (VGA)	359850-006	1	EA	FLT	\$ 1,629,180.54	HSSSI	KSC	03/30/12	COMPLETE ON BHB3489. 04/23/2012. Added per PIO 89/SSCN

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
20057	PIO 89/SSCN 10695; Mod	Verification Gas Assembly (VGA)	359850-006	1	EA	FLT	\$ 598,037.13	HSSSI	KSC	07/30/12	COMPLETE ON BHB3510. 12/12/2012. Added per PIO 89/SSCN
20058	PIO 89/SSCN 10695; Mod	Sample Pump Assembly, Series	359425-005	1	EA	FLT	\$ 2,398,593.95	HSSSI	KSC	06/30/12	COMPLETE ON BHB3479. 04/23/2012. Added per PIO 89/SSCN
20059	PIO 90; Mod 1486 (H.57)	Television Camera Interface Controller	10033211-501	1	EA	FLT	\$ 3,148,540.50		KSC	11/09/09	COMPLETE ON BHB3236. 11/09/2009. Added per PIO 90 on Mod
20060	PIO 90; Mod 1486 (H.57)	Television Camera Interface Controller	10033211-501	1	EA	FLT	\$ 3,081,459.50		KSC	04/08/10	COMPLETE ON BHB3281. 03/24/2010. Added per PIO 90 on Mod
20063	PIO 91 Mod 1503 (H.57)	Motor Controller	2354164-2-1	1	EA	FLT	\$ 932,992.06		KSC	07/19/10	COMPLETE ON BHB3448. 08/10/2011. Added per PIO 91 on Mod
20064	PIO 91 Mod 1503 (H.57)	Two Stage Pump	2352730-1-5	1	EA	FLT	\$ 535,813.86		KSC	06/21/10	COMPLETE ON BHB3308. 08/27/2010. Added per PIO 91 on Mod
20065	PIO 91 Mod 1503 (H.57)	Blower/Precooler	2352550-1-2	1	EA	FLT	\$ 567,787.96		KSC	04/23/10	COMPLETE ON BHB3336. 12/03/2010. Added per PIO 91 on Mod
20066	PIO 91 Mod 1503 (H.57)	Heater Controller	2354222-2-1	1	EA	FLT	\$ 545,076.44		KSC	07/19/10	COMPLETE ON BHB3378. 06/06/2011. Added per PIO 91 on Mod
20067	PIO 92/SSCN 10622; Mod	WPA Process Controller	SV826000-1	1	EA	FLT	\$ 11,719,651.59	HSSSI	KSC	11/30/10	COMPLETE ON BHB3333. 11/15/2010. Added per PIO 92/SSCN
20068	PIO 92/SSCN 10622; Mod	WPA Process Controller	SV826000-1	1	EA	FLT	\$ 11,719,651.59	HSSSI	KSC	08/30/11	COMPLETE ON BHB3452. 08/30/2011. Added per PIO 92/SSCN
20069	PIO 92/SSCN 10622; Mod	Catalytic Reactor	SV825455-3	1	EA	FLT	\$ 11,507,308.57	HSSSI	KSC	02/28/12	COMPLETE ON BHB3478. 02/28/2012. Added per PIO 92/SSCN
20074	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	06/30/10	COMPLETE ON BHB3302. 06/29/2010. Added per PIO 92/SSCN
20075	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	08/30/10	COMPLETE ON BHB3303. 08/27/2010. Added per PIO 92/SSCN
20076	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	10/29/10	COMPLETE ON BHB3327. 08/27/2010. Added per PIO 92/SSCN
20077	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	12/30/10	COMPLETE ON BHB3334. 10/29/2010. Added per PIO 92/SSCN
20078	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	02/28/11	COMPLETE ON BHB3348. 01/20/2011. Added per PIO 92/SSCN
20079	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	04/29/11	COMPLETE ON BHB3353. 02/18/2011. Added per PIO 92/SSCN
20080	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	06/30/11	COMPLETE ON BHB3353. 02/18/2011. Added per PIO 92/SSCN
20081	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	08/30/11	COMPLETE ON BHB3383. 04/21/2011. Added per PIO 92/SSCN
20082	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	10/31/11	COMPLETE ON BHB3418. 06/29/2011. Added per PIO 92/SSCN
20083	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	KSC	12/30/11	COMPLETE BHB3418. 06/29/2011. Added per PIO 92/SSCN
20084	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	HSSSI	02/28/12	COMPLETE ON BHB3453. 09/01/2011. Added per PIO 92/SSCN
20085	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	HSSSI	04/30/12	COMPLETE ON BHB3453. 09/01/2011. Added per PIO 92/SSCN
20086	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	HSSSI	06/30/12	COMPLETE ON BHB3473. 01/25/2012. Added per PIO 92/SSCN
20087	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT	\$ 1,255,964.02	HSSSI	HSSSI	08/30/12	COMPLETE ON BHB3505. 06/18/2012. Added per PIO 92/SSCN
20088	PIO 92/SSCN 10622; Mod	Hydrogen ORU	SV827305-1	1	EA	FLT	\$ 11,543,618.01	HSSSI	KSC	02/11/11	COMPLETE ON BHB3350. 02/08/2011. Added per PIO 92/SSCN
20089	PIO 92/SSCN 10622; Mod	Sensor ORU	SV825447-1	1	EA	FLT	\$ 4,159,342.56	HSSSI	HSSSI	05/30/12	COMPLETE ON BHB3384. 04/28/2011. Added per PIO 92/SSCN
20090	PIO 92/SSCN 10622; Mod	OGA Process Controller	SV826025-2	1	EA	FLT	\$ 9,334,930.74	HSSSI	KSC	02/28/11	COMPLETE ON BHB3394. 05/05/2011. Added per PIO 92/SSCN
20102	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT	\$ 586,616.69	HSSSI	KSC	09/30/11	COMPLETE ON BHB3248. 12/15/2009. Added per PIO 92/SSCN
20103	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT	\$ 586,616.69	HSSSI	KSC	11/30/11	COMPLETE ON BHB3251. 12/15/2009. Added per PIO 92/SSCN
20104	PIO 92/SSCN 10622; Mod	Gas Separator	SV1006464-2	1	EA	FLT	\$ 2,354,574.69	HSSSI	KSC	12/30/12	COMPLETE ON BHB3537. 12/19/2012. Change delivery date per
20105	PIO 92/SSCN 10622; Mod	Inlet Deionizing Bed	SV825569-1	1	EA	FLT	\$ 817,627.29	HSSSI	KSC	05/30/12	COMPLETE ON BHB3301. 06/09/2010. Added per PIO 92/SSCN
20107	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT	\$ 676,289.89	HSSSI	KSC	01/29/10	COMPLETE ON BHB3249. 12/15/2009. Added per PIO 92/SSCN
20108	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT	\$ 676,289.89	HSSSI	KSC	03/30/10	COMPLETE ON BHB3253. 12/15/2009. Added per PIO 92/SSCN
20109	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT	\$ 676,289.89	HSSSI	KSC	05/31/10	COMPLETE ON BHB3276. 02/19/2010. Added per PIO 92/SSCN
20110	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT	\$ 676,289.89	HSSSI	KSC	07/30/10	COMPLETE ON BHB3329. 09/01/2010. Added per PIO 92/SSCN
20111	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT	\$ 676,289.89	HSSSI	KSC	09/30/10	COMPLETE ON BHB3291A. 06/09/2010. Added per PIO 92/SSCN
20115	PIO 93; Mod 1481 (H.57)	Sequential Shunt Unit (SSU)	RE1806-04	1	EA	FLT	\$ 8,113,800.00		SS/L	03/30/11	COMPLETE ON BHB3320. 08/26/2010. Added per PIO 93 on Mod
20116	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap	2353170-2-4	1	EA	FLT	\$ 43,446.33	HI	KSC	03/30/11	COMPLETE ON BHB3552. 03/29/2013. Updated nomenclature
20117	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT	\$ 43,446.33	HI	KSC	07/29/11	COMPLETE ON BHB3577. 08/07/2013. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578.
20118	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT	\$ 43,446.33	HI	KSC	11/30/11	COMPLETE ON BHB3583. 09/10/2013. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578.
20119	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT	\$ 43,446.33	HI	KSC	03/30/12	COMPLETE ON BHB3602. 10/07/2013. Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.
20124	PIO 84A; Mod 1519	3-Way Mix Valve	683-56185-1	1	EA	FLT	\$ 146,231.00	HI	KSC	04/29/11	COMPLETE ON BHB3472. 01/26/2012. Added per PIO 84A on
20125	PIO 84A; Mod 1519	3-Way Mix Valve	683-56185-1	1	EA	FLT	\$ 146,231.00	HI	KSC	08/30/11	COMPLETE ON BHB3482. 03/22/2012. Added per PIO 84A on
20128	PIO 84A; Mod 1519	System Flow Control Assembly	683-56187-2	1	EA	FLT	\$ 10,591,823.50	HI	KSC	07/29/11	COMPLETE ON BHB3528. 10/31/2012. Changed part number per
20129	PIO 84A; Mod 1519	System Flow Control Assembly	683-56187-2	1	EA	FLT	\$ 10,591,823.50	HI	KSC	11/30/11	COMPLETE ON BHB3538. 12/18/2012. Changed part number per
20132	PIO 84A; Mod 1519	Loop Crossover Assembly	683-56188-1	1	EA	FLT	\$ 263,213.00	HI	KSC	07/29/11	COMPLETE ON BHB3552. 01/30/2013. Added per PIO 84A on

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
20133	SSCN 10736; Mod 1516	Pump Control Valve Package (PCVP)	SV819421-7	1	EA	FLT	\$ 2,013,518.00	HSSSI	BHOU	08/20/08	COMPLETE ON BHB3153. 12/06/2009. Added per SSCN 10736
20135	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT	\$ 586,616.69	HSSSI	KSC	01/30/12	COMPLETE ON BHB3252. 12/15/2009. Added per PIO 92/SSCN
20136	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT	\$ 586,616.69	HSSSI	KSC	03/30/12	COMPLETE ON BHB3290. 06/09/2010. Added per PIO 92/SSCN
20137	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT	\$ 586,616.69	HSSSI	KSC	05/30/12	COMPLETE ON BHB3290. 06/09/2010. Added per PIO 92/SSCN
20138	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT	\$ 586,616.69	HSSSI	KSC	07/30/12	COMPLETE ON BHB3290. 06/09/2010. Added per PIO 92/SSCN
20139	PIO 92/SSCN 10622; Mod	Gas Separator	SV1006464-2	1	EA	FLT	\$ 2,354,574.69	HSSSI	KSC	02/28/13	COMPLETE ON BHB3556. 02/21/2013. Changed delivery date per
20140	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT	\$ 1,561,558.47	Harris	KSC	01/01/11	COMPLETE ON BHB3255. 12/14/2009. Added per PIO 94 on Mod
20141	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT	\$ 1,699,322.38	Harris	KSC	04/01/11	COMPLETE ON BHB3332. 10/27/2010. Added per PIO 94 on Mod
20142	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT	\$ 1,538,608.24	Harris	KSC	07/01/11	COMPLETE ON BHB3352. 02/10/2011. Added per PIO 94 on Mod
20143	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT	\$ 1,589,646.06	Harris	KSC	10/01/11	COMPLETE ON BHB3368. 03/15/2011. Added per PIO 94 on Mod
20146	PIO 94; Mod 1560 (H.57)	Internal Audio Controller (IAC)	3000016-301	1	EA	FLT	\$ 837,048.72	Harris	KSC	07/01/11	COMPLETE ON BHB3243. 12/02/2009. Added per PIO 94 on Mod
20147	PIO 94; Mod 1560 (H.57)	Internal Audio Controller (IAC)	3000016-301	1	EA	FLT	\$ 957,108.50	Harris	KSC	10/01/11	COMPLETE ON BHB3342. 10/27/2010. Added per PIO 94 on Mod
20148	PIO 94; Mod 1560	Audio Bus Coupler (ABC)	3000005-301	1	EA	FLT	\$ 988,964.19	Harris	KSC	01/01/10	COMPLETE ON BHB3224. 09/30/2009. Added per PIO 94 on Mod
20149	PIO 94; Mod 1560	Audio Bus Coupler (ABC)	3000005-301	1	EA	FLT	\$ 1,068,030.91	Harris	KSC	07/28/10	COMPLETE ON BHB3268. 02/06/2010. Added per PIO 94 on Mod
20150	PIO 94; Mod 1560	Audio Bus Coupler (ABC)	3000005-301	1	EA	FLT	\$ 956,524.42	Harris	KSC	09/30/10	COMPLETE ON BHB3322. 08/31/2010. Added per PIO 94 on Mod
20151	PIO 94; Mod 1560	ACS/UCS Audio I/F Unit (AU/AI)	3000022-301	1	EA	FLT	\$ 628,188.27	Harris	KSC	05/01/10	COMPLETE ON BHB3224. 09/30/2009. Added per PIO 94 on Mod
20152	PIO 95; Mod 1557 (H.57)	Oxygen Generator Assembly Pump ORU	SV825565-2	1	EA	FLT	\$ 664,852.90	HSSSI	HSSSI	10/01/10	COMPLETE ON BHB3330. 10/08/2010. Added per PIO 95 on Mod
20153	PIO 95; Mod 1557 (H.57)	Oxygen Generator Assembly Pump ORU	SV825565-2	1	EA	FLT	\$ 664,852.90	HSSSI	HSSSI	04/14/11	COMPLETE ON BHB3382. 04/13/2011. Added per PIO 95 on Mod
20154	PIO 95; Mod 1557 (H.57)	Oxygen Generator Assembly Pump ORU	SV825565-2	1	EA	FLT	\$ 664,852.90	HSSSI	HSSSI	07/01/11	COMPLETE BHB3419. 07/01/2011. Added per PIO 95 on Mod
20155	PIO 95; Mod 1557 (H.57)	Start-up Filter ORU	SV825425-1	1	EA	FLT	\$ 274,734.11	HSSSI	KSC	05/01/10	COMPLETE ON BHB3287. 04/30/2010. Added per PIO 95 on Mod
20156	PIO 95; Mod 1557 (H.57)	Oxygen Filter ORU	SV828118-1	1	EA	FLT	\$ 434,678.86	HSSSI	KSC	06/01/10	COMPLETE ON BHB3296. 05/27/2010. Added per PIO 95 on Mod
20157	PIO 95; Mod 1557 (H.57)	Water ORU	SV827690-3	1	EA	FLT	\$ 4,120,021.38	HSSSI	KSC	09/13/11	COMPLETE ON BHB3457. 09/13/2011. Added per PIO 95 on Mod
20158	PIO 95; Mod 1557 (H.57)	Pump Separator	SV825426-1	1	EA	FLT	\$ 1,758,066.14	HSSSI	HSSSI	10/29/10	COMPLETE ON BHB3321. 07/26/2010. Added per PIO 95 on Mod
20159	PIO 95; Mod 1557 (H.57)	Pump Separator	SV825426-2	1	EA	FLT	\$ 1,758,066.14	HSSSI	HSSSI	08/19/11	COMPLETE ON BHB3490. 04/23/2012. Ship short on BHB3451
20185	PIO 95; Mod 1557 (H.57)	OGA Heat Exchanger	SV828200-1	1	EA	FLT	tbd	HSSSI	KSC	10/28/11	COMPLETE ON BHB3462. 10/26/2011. Added per PIO 95 on Mod
20186	PIO 95; Mod 1557 (H.57)	WPA Heat Exchanger	SV1017926-1	1	EA	FLT	tbd	HSSSI	KSC	07/29/11	COMPLETE ON BHB3436. 07/25/2011. Added per PIO 95 on Mod
20187	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828406-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20189	PIO 97; Mod 1570 (H.57)	Video Switch	10033180-501	1	EA	FLT	tbd	Vendor	KSC	10/31/11	COMPLETE ON BHB3494. 06/07/2012. Added per PIO 97 on Mod
20193	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828406-2	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20194	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828409-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3369. 03/28/2011. Added per PIO 95 on Mod
20195	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828412-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20196	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828413-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20197	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828414-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20198	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828415-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20199	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828416-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3369. 03/28/2011. Added per PIO 95 on Mod
20200	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828417-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20201	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828418-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20202	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828425-1	1	EA	FLT	tbd	HSSSI	KSC	03/31/11	COMPLETE ON BHB3369. 03/28/2011. Added per PIO 95 on Mod
20210	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827959-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20211	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828009-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20212	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828009-2	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20213	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828010-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20219	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828013-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20220	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828014-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20221	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828015-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20222	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828016-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20223	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828017-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20224	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828018-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20230	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828073-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	COMPLETE ON BHB3397. 05/27/2011. Added per PIO 95 on Mod
20231	PIO 99; S/A 1698	Synchronization Control Unit (SCU) Assembly	1360AE7010-302	1	EA	FLT	tbd	Vendor	KSC	06/17/13	COMPLETE ON BHB3566. 05/22/2013. Added per PIO 99
20232	PIO 99; S/A 1698	Synchronization Control Unit (SCU) Assembly	1360AE7010-302	1	EA	FLT	tbd	Vendor	KSC	10/17/13	COMPLETE ON BHB3579. 08/16/2013. Added per PIO 99 definitized on MOD 1698.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
20251	PIO 103; S/A 1952	Reducer	684-014106-0001	4	EA	FLT	N/A	KSC	KSC	11/24/14	COMPLETE ON BHB3575. 07/22/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
20252	PIO 103; S/A 1952	Fitting	684-014103-0001	4	EA	FLT	N/A	KSC	KSC	11/24/14	COMPLETE ON BHB3575. 07/22/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
20254	PIO 103; S/A 1952	Fitting	684-014102-0001	4	EA	FLT	N/A	KSC	KSC	11/24/14	COMPLETE ON BHB3575. 07/22/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
20259	PIO 102; S/A 1826	Pump I Separator - ORU	SV825426-2/	1	EA	FLT	N/A	HSSSI	KSC	01/30/13	COMPLETE ON BHB3536. 12/19/2012. Changed delivery date per
20260	PIO 102; S/A 1826	Hydrogen Dome Assembly - ORU	SV827305-1/	1	EA	FLT	N/A	HSSSI	HSSSI	07/15/13	COMPLETE ON BHB3565. 05/15/2013. Changed destination per
20266	PIO 106; S/A 1922	Sorbothane Cup, Front	090715B	32	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20269	PIO 106; S/A 1922	Spacer Bar	1F16169-1	3	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20270	PIO 106; S/A 1922	Isolator Adjustment Tool	1F16227-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20280	PIO 106; S/A 1922	Bridge Bracket Assy	1F16204-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20281	PIO 106; S/A 1922	Heave Attachment Assy	1F16206-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20282	PIO 106; S/A 1922	Heave Attachment Assy	1F16206-2	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20287	PIO 106; S/A 1922	Standoff Arm Assy	1F16172-2	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20288	PIO 106; S/A 1922	Standoff Arm Assy	1F16199-1	1	EA	FLT	N/A	BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20313	PIO 104; S/A 1936	Roller, Resin	96M35073-1	4	EA	FLT	N/A	B-MSFC	KSC	04/17/14	COMPLETE ON BHB3587. 09/17/2013. Added per PIO 104 definitized on S/A 1936.
4xxx Series											
4072	CCM 843	OFFSET TOOL	N/A	2	EA	OSE	N/A		CSAP	01/31/07	COMPLETE ON BHB3026. 08/28/2007. DD250 date change per
4468	SSCN 6647A	RPCM Type II Internal		1	EA	OPD		FLT	BMSFC	07/30/04	COMPLETE ON BHB2443. 07/01/2004. NOTE 1
4475	SSCN 7786, 03-0380, 04-	DDCU-I SPECIAL PURPOSE CONNECTOR MOD	N/A	1	KT		N/A	FLT	KSC	01/30/04	COMPLETE ON BHB2552. 01/31/2005. NOTE 1
4476	SSCN 7786; 03-0380; 04-	DDCU-I SPECIAL PURPOSE CONNECTOR MOD	N/A	1	KT		N/A	FLT	KSC	01/30/04	COMPLETE ON BHB2553. 03/31/2005. NOTE 1
4477	SSCN 7786 03-0380; 03-	DDCU-I SPECIAL PURPOSE CONNECTOR MOD	N/A	1	KT		N/A	FLT	B-MSFC	01/30/04	COMPLETE ON BHB2554. 01/31/2005. NOTE 1; Changed per
4478	SSCN 7786 03-0380; 04-	DDCU-I SPECIAL PURPOSE CONNECTOR	N/A	2	EA		N/A	FLT	KSC	01/30/04	COMPLETE ON BHB2555. 01/31/2005. NOTE 1
4481	SSCN 7828; S/A 1230	FET CONTROLLER HYBRID	N/A	700	EA		N/A	FLT	B-CP	10/11/05	COMPLETE ON BHB3005. 07/05/2007. NOTE 1
4482	SSCN 7828; S/A 1230	FET CONTROLLER HYBRID	N/A	50	EA		N/A	FLT	B-CP	10/11/05	COMPLETE ON BHB3046. 09/28/2007. NOTE 1
10xxx Series											
10000	SSCN 9425; SSCN 8554;	SSPTS Display & Control Panel OV103 Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	02/27/06	COMPLETE 09/25/2005. Delivery date change per sscn 9425
10001	SSCN 9425; SSCN 8554;	SSPTS Mod Avionic Subsystem OV103 Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	05/01/06	COMPLETE 11/15/2005. Delivery date change per sscn 9425
10002	SSCN 9425; SSCN 8554;	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT	N/A	FLT	KSC	05/01/06	COMPLETE ON BHB2971. 07/01/2005. Delivery date change per
10003	SSCN 9425; SSCN 8554;	Kit, Mid Fuselage SSPTS Mod; OV-103	N/A	1	KT	FLT	N/A	FLT	KSC	05/01/06	COMPLETE ON BHB2971. 07/01/2005. Delivery date change per
10004	SSCN 8554; S/A 1323	Kit TCS SSPTS Upgrade, OV103	N/A	1	KT	FLT	N/A	FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10005	SSCN 8554; S/A 1323	Mod Kit - Implementation of Station/Shuttle Power	N/A	1	KT	FLT	N/A	FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10006	SSCN 8554; S/A 1323	Support-Harness Routing; ISSA/ODS - Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10007	SSCN 8554; S/A 1323	Kit - APCU Support Brackets, Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10008	SSCN 8554; S/A 1323	SSPTS Display & Control Panel OV104 Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
10009	SSCN 8554; S/A 1323	SSPTS Mod Avionic Subsystem OV104 Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10010	SSCN 8554; S/A 1323	Mod Kit - Vehicle Wiring OV104	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10011	SSCN 8554; S/A 1323	Kit, Mid Fuselage SSPTS Mod; OV-104	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10012	SSCN 8554; S/A 1323	Kit, TCS SSPTS Upgrade, OV-104	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10013	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10014	SSCN 8554; S/A 1323	Support-Harness Routing; ISSA/ODS - Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10015	SSCN 8554; S/A 1323	SSPTS Display & Control Panel OV105 Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10016	SSCN 8554; S/A 1323	SSPTS Mods; Avionic Subsystem OB105-Kit	N/A	1	KT	FLT	N/A	FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10017	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT	N/A	FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10018	SSCN 8554; S/A 1323	Kit, Mid Fuselage SSPTS Mod; OV-105	N/A	1	KT	FLT	N/A	FLT	KSC	07/15/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10019	SSCN 8554; S/A 1323	Kit, TCS SSPTS Upgrade, OV-105	N/A	1	KT	FLT	N/A	FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10020	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT	N/A	FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10021	SSCN 8554; S/A 1323	Support-Harness Routing; ISSA/ODS - Mod Kit	N/A	1	KT	FLT	N/A	FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10025	SSCN 9425; S/A 1334	CREW MODULE MOD KIT - IMPLEMENTATION OF STATION/SHUTTLE POWER TRANSFER SYSTEM OV-103	N/A	1	KT	FLT	N/A	FLT	KSC	02/27/06	COMPLETE 12/14/2005. SSCN 9425 definitized per S/A 1334.
30xxx Series											
30232	CCM 239; S/A 335	OUTFITTING KIT - DRAG-ON CABLES	N/A	1	KT	FLT	N/A	FLT	KSC	05/31/05	COMPLETE ON BHB2647. 06/09/2005. Add line item per Boeing
30656	SSCN 10405 Mod 1496	ARS Rack	N/A	1	EA	FLT	N/A		B-MSFC	03/18/09	COMPLETE ON BHB3166. 03/27/2009. Delivery Date changed
30776	SSCN 859 Mod 1498	IMV Valve	B42630-13	1	EA	FLT	N/A	Carleton	KSC	12/01/00	COMPLETE ON BHB3541. 02/08/2013. Destination changed per
30897	SSCN 8236; SA 1265;	ARIS STOWED ITEMS - MSRR	N/A	1	KT	FLT	N/A	FLT	KSC	02/15/05	COMPLETE ON BHB2569. 02/18/2005.
30898	SSCN 8236; SA 1265;	ARIS STOWED ITEMS - FCF - FIR	N/A	1	KT	FLT	N/A	FLT	KSC	02/15/05	COMPLETE ON BHB2570. 02/15/2005.
31517	SSCN 3314, 04-0188	MODIFICATION KIT, INLET ORU WASHER		1	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31518	SSCN 3314; 01-0616, 04-	MODIFICATION KIT, INLET ORU WASHER		5	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31519	SSCN 3314, 04-0188	MODIFICATION KIT, HEAT EXCHANGER ORU		3	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31520	SSCN 3314, 04-0188	MODIFICATION KIT, HEAT EXCHANGER ORU		3	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31521	SSCN 3314, 04-0188	MODIFICATION KIT, HEAT EXCHANGER LIQUID		4	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31522	SSCN 3314, 04-0191	MODIFICATION KIT, HEAT EXCHANGER LIQUID		3	EA			FLT	HSSI (in place)	04/30/04	COMPLETE BHB2417; NOTE 1
31725	S/A 1275; CCM 7121 -	ITCS NiRA TOOL	N/A	1	EA	FLT	N/A	FLT	B-MSFC	08/15/03	COMPLETE ON BHB2603. 04/26/2006. Delivery date change per
31726	S/A 1275; CCM 7121 -	ITCS NiRA	N/A	1	EA	FLT	N/A	FLT	B-MSFC	08/15/03	COMPLETE ON BHB2627. 05/18/2005. Delivery date change per
31728	SSCN 6647A	VENT RELIEF ASSEMBLY KIT		1	EA			FLT	BMSFC	01/16/04	COMPLETE BHB2311. NOTE 1
31744	SSCN 6647A	IMV VALVE	N/A	1	EA		N/A	FLT	BMSFC	02/23/04	COMPLETE ON BHB2673. 06/29/2005. NOTE 1
31745	SSCN 6647A	IMV VALVE		1	EA			FLT	BMSFC	02/23/04	COMPLETE BHB2405; NOTE 1
31748	SSCN 6647A	IMV FAN SILENCER ASSEMBLY		9	EA			FLT	BMSFC	09/11/04	COMPLETE BHB2133. NOTE 1
31754	SSCN 5547	MCA VENT ASSEMBLY KIT - EXTERNAL	N/A	2	EA		N/A	FLT	BMSFC	06/14/04	COMPLETE ON BHB2450. 07/21/2004. NOTE 1
31758	SSCN 6647A	SHIELD ASSEMBLY KIT-FWD ENDCONE		1	EA			FLT	BMSFC	02/10/04	COMPLETE BHB2398; NOTE 1
31759	SSCN 6647A	PCBM Contamination Cover Kit		1	EA	OPD		FLT	BMSFC	02/17/04	COMPLETE BHB2178. NOTE 2
31760	SSCN 6647A	RADIAL PORT CLOSEOUT SHIELD KIT	N/A	4	EA		N/A	FLT	BMSFC	02/03/04	COMPLETE ON BHB2474. 10/18/2004. NOTE 1
31761	SSCN 6647A	PCBM M/D SHIELD KIT		1	EA			FLT	BMSFC	03/22/04	COMPLETE BHB2182. NOTE 1
31766	SSCN 6647A	MLI INSTALLATION HARDWARE KIT		1	EA			FLT	BMSFC	03/22/04	COMPLETE BHB2322. NOTE 1
31767	SSCN 6647A	THREADED FLUID FITTING		2	EA			FLT	BMSFC	04/09/04	COMPLETED BHB2339. NOTE 1
31768	SSCN 6647A	THREADED FLUID FITTING		11	EA			FLT	BMSFC	04/09/04	COMPLETED BHB2340. NOTE 1
31769	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA		N/A	FLT	BMSFC	05/02/05	COMPLETE ON BHB2759. 01/13/2006. Changed Delivery Date
31770	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA		N/A	FLT	BMSFC	05/02/05	COMPLETE ON BHB2760. 01/13/2006. Changed Delivery Date
31771	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA		N/A	FLT	BMSFC	05/02/05	COMPLETE ON BHB2761. 01/13/2006. Changed Delivery Date
31772	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA		N/A	FLT	BMSFC	05/02/05	COMPLETE ON BHB2762. 01/13/2006.Changed Delivery Date
31773	SSCN 6647A	COAXIAL LOOP BACK ASSEMBLY		1	EA			FLT	BMSFC	04/09/04	COMPLETED BHB2366; NOTE 1
31774	SSCN 6647A	DEAD FACE CONNECTOR ASSEMBLY		2	EA			FLT	BMSFC	03/17/04	COMPLETED BHB2324. NOTE 1
31777	SSCN 6647A	CABLE 1553 TERMINATION ASSEMBLY		2	EA			FLT	BMSFC	04/09/04	COMPLETE BHB2364; NOTE 1
31778	SSCN 6647A	CABLE 1553 TERMINATION ASSEMBLY		2	EA			FLT	BMSFC	04/09/04	COMPLETE BHB2365; NOTE 1
31780	SSCN 6647A	ANTENNA COUPLER		1	EA			FLT	BMSFC	04/13/04	COMPLETE BHB2273. NOTE 1
31781	SSCN 6647A	CABIN AIR LINEAR DIFFUSERS		2	EA			FLT	BMSFC	04/09/04	COMPLETE BHB2112. NOTE 1
31782	SSCN 6647A	CONTROL ASSEMBLY VARIABLE AIR VOLUME		1	EA			FLT	BMSFC	03/17/04	COMPLETE BHB2410; NOTE 1
31785	SSCN 6647A	THREADED FLUID FITTING		2	EA			FLT	BMSFC	02/05/04	COMPLETED BHB2341. NOTE 1

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
31783	SSCN 6647A	AAA MOUNTING BRACKET		2	EA			FLT	BMSFC	01/15/04	COMPLETE BHB2279. NOTE 1
31788	SSCN 6647A	EVA CLAMPS		24	EA			FLT	BMSFC	04/28/04	COMPLETE BHB2319. NOTE 1
31833	SSCN 7792	MODIFICATION KIT, HATCH SEAL		4	EA			FLT	KSC	03/26/04	COMPLETE BHB2252. NOTE 1
31834	SSCN 7792	HATCH SEAL (SPARES)	N/A	8	EA		N/A	FLT	KSC	05/28/04	COMPLETE ON BHB2455. 07/19/2004. Ship short on BHB2437
31836	SSCN 8020; S/A 1235	MODIFICATION KIT, FSS, VAJ LEAK TEST HOSES	N/A	1	KT		N/A	FLT	KSC	10/30/04	COMPLETE ON BHB2723. 09/15/2005. NOTE 1
31844	SSCN 8037; S/A 1310	Modification Kit, Hatch External Window	N/A	3	KT	FLT	N/A	FLT	KSC	04/07/06	COMPLETE ON BHB2830. 04/27/2006. SSCN 8037 definitized per
31845	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	9	KT	FLT	N/A	FLT	KSC	09/30/05	COMPLETE ON BHB2896. 09/28/2006. SSCN 8148 definitized.
31848	SSCN 8218; S/A 1280	MODIFICATION KIT, ON-ORBIT HATCH HANDLE	N/A	10	KT	FLT	N/A	FLT	KSC	10/25/05	COMPLETE ON BHB2849. 09/06/2006. SSCN 8218 definitized per
31851	CCM 3314	MODIFICATION KIT, INLET ORU WASHER		3	EA	FLT			HSSI (in place)	04/03/04	COMPLETE BHB2417; Added per Boeing Ltr 2-1150-04-0188
31853	SSCN 8030; S/A 1265	MODIFICATION KIT, ORCA OUTLET HOSE AND	N/A	1	KT	FLT	N/A	FLT	B-HOU	10/28/05	COMPLETE ON BHB2769. 02/21/2006.
31855	SSCN 8497; S/A 1291	IVA PRESSURE WALL REPAIR KIT	N/A	6	KT	FLT	N/A	FLT	KSC	12/01/05	COMPLETE ON BHB2833. 08/30/2006. SSCN 8497 definitized on
31856	SSCN 8143; S/A 1275	VESTIBULE JUMPER, MIL-STD-1553, NODE 3 TO	N/A	1	EA	FLT	N/A	FLT	B-MSFC	03/02/05	COMPLETE ON BHB2565. 02/24/2005.
31857	SSCN 8143; S/A 1275	VESTIBULE JUMPER, MIL-STD-1553, NODE 3 TO	N/A	1	EA	FLT	N/A	FLT	B-MSFC	03/02/05	COMPLETE ON BHB2566. 02/24/2005.
31858	SSCN 8143; S/A 1275	EVA CLAMP	N/A	6	EA	FLT	N/A	FLT	B-MSFC	02/27/05	COMPLETE ON BHB2540. 01/21/2005.
31859	SSCN 8143; S/A 1275	VALVE, 0.5 INCH SOLENOID	N/A	2	EA	FLT	N/A	FLT	B-MSFC	12/16/04	COMPLETE ON BHB2489. 10/13/2004.
31860	SSCN 8143; S/A 1275	VALVE, 0.5 INCH SOLENOID (SPARE)	N/A	1	EA	FLT	N/A	FLT	B-MSFC	12/16/04	COMPLETE ON BHB2490. 10/13/2004.
31861	2-1150-05-0325; SSCN	HOSE ASSEMBLY - ORCA OUTLET HOSE	N/A	1	EA	FLT	N/A	FLT	B-HOU	01/16/06	COMPLETE ON BHB2796. 08/25/2006. Unit of Issue change per
31862	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, IATCS SAMPLE TOOL, NODE	N/A	2	KT	FLT	N/A	FLT	B-MSFC	02/28/05	COMPLETE ON BHB2576. 05/13/2005. SSCN 8429 definitized;
31864	SSCN 8218; S/A 1280	MODIFICATION KIT, HATCH STOWAGE POSITION	N/A	17	KT	FLT	N/A	FLT	KSC	10/05/05	COMPLETE ON BHB2758. 12/08/2005. SSCN 8218 definitized per
31865	SSCN 8218; S/A 1280	MODIFICATION KIT, ON-ORBIT HATCH HANDLE	N/A	16	KT	FLT	N/A	FLT	KSC	01/16/06	COMPLETE ON BHB2850. 09/06/2006. SSCN 8218 definitized per
31866	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, PPA QD's, NODE 2	N/A	2	KT	FLT	N/A	FLT	PARKER	06/21/04	COMPLETE ON BHB2453. 08/20/2004. SSCN 8429 definitized;
31867	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, PPA QD's, NODE 2	N/A	2	KT	FLT	N/A	FLT	PARKER	06/21/04	COMPLETE ON BHB2454. 8/20/2004. SSCN 8429 definitized;
31868	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, N2 QD's, NODE 2	683-62476-1	1	KT	FLT		FLT	KSC	06/21/04	SSCN 8429 definitized; COMPLETE BHB2444; Added per Boeing
31869	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, O2 QD's, NODE 2	683-62476-2	1	KT	FLT		FLT	KSC	06/21/04	SSCN 8429 definitized; COMPLETE BHB2445; Added per Boeing
31870	06-0159; SSCN 8148; S/A	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	3	KT	FLT	N/A	FLT	KSC	09/30/05	COMPLETE ON BHB2895. 9/28/2006. Qty change per Boeing
31871	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	12	KT	FLT	N/A	FLT	KSC	09/30/05	COMPLETE ON BHB2897. 9/28/2006. SSCN 8148 definitized.
31872	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	4	KT	FLT	N/A	FLT	KSC	09/30/05	COMPLETE ON BHB2902. 9/28/2006. SSCN 8148 definitized.
31889	SSCN 8644; S/A 1306	N3-LAB Loop A Ammonia Hose Kit – Supply	N/A	1	KT	FLT	N/A	FLT	KSC	8/10/2007	COMPLETE ON BHB3010. 08/09/2007. SSCN 8644 definitized on
31890	SSCN 8644; S/A 1306	N3-LAB Loop A Ammonia Hose Kit - Return	N/A	1	KT	FLT	N/A	FLT	KSC	8/10/2007	COMPLETE ON BHB3011. 8/9/2007. SSCN 8644 definitized on
31891	SSCN 8644; S/A 1306	N3-LAB Loop B Ammonia Hose Kit - Supply	N/A	1	KT	FLT	N/A	FLT	KSC	8/10/2007	COMPLETE ON BHB3012. 8/9/2007. SSCN 8644 definitized on
31892	SSCN 8644; S/A 1306	N3-LAB Loop B Ammonia Hose Kit - Return	N/A	1	KT	FLT	N/A	FLT	KSC	8/10/2007	COMPLETE ON BHB3013. 8/9/2007. SSCN 8644 definitized on
31895	SSCN 8644; S/A 1306	Endcone Shield Fastener Kit	N/A	1	KT	FLT	N/A	FLT	KSC	3/6/2006	COMPLETE ON BHB2777. 1/9/2006. SSCN 8644 definitized on
31896	SSCN 8644; S/A 1306	Endcone Shield Fastener Kit	N/A	1	KT	FLT	N/A	FLT	KSC	7/28/2006	COMPLETE ON BHB2776. 1/9/2006. SSCN 8644 definitized on
31897	SSCN 8644; S/A 1306	Air Volume Closeout Kit	N/A	5	KT	FLT	N/A	FLT	KSC	11/30/2006	COMPLETE ON BHB2866. 6/15/2006. SSCN 8644 definitized on
31898	SSCN 8644; S/A 1306	Mod Kit, Node 3 ACBM Hatch-CBCS Camera Fitting	N/A	4	KT	FLT	N/A	FLT	KSC	4/30/2007	COMPLETE ON BHB2964. 3/8/2007. SSCN 8644 definitized on
31899	SSCN 8644; S/A 1306	Mod Kit, Node 3 PCBM Hatch-CBCS Target	N/A	1	KT	FLT	N/A	FLT	KSC	4/30/2007	COMPLETE ON BHB2959. 2/23/2007. SSCN 8644 definitized on
31900	SSCN 8644; S/A 1306	Mod Kit, Node 3 NADIR Hatch Thermal Cover	N/A	1	KT	FLT	N/A	FLT	KSC	4/30/2007	COMPLETE ON BHB2948. 1/3/2007. SSCN 8644 definitized on
31901	SSCN 8644; S/A 1306	Mod Kit, Node 3 Radial Port Center Cover	N/A	4	KT	FLT	N/A	FLT	B-MSFC	4/30/2007	COMPLETE ON BHB2958. 2/23/2007. SSCN 8644 definitized on
31902	SSCN 8825; S/A 1290	MODIFICATION KIT, LAB STARBOARD CCAA	N/A	1	KT	FLT	N/A	FLT	KSC	03/30/05	COMPLETE ON BHB2585. 5/6/2005. SSCN 8825 definitized
31903	SSCN 8825; S/A 1290	MODIFICATION KIT, QUICK DISCONNECT, CCAA	N/A	1	KT	FLT	N/A	FLT	PARKER SEALS	03/30/05	COMPLETE ON BHB2531. 1/6/2005. SSCN 8825 definitized
31904	SSCN 8825; S/A 1290	MODIFICATION KIT, QUICK DISCONNECT, CCAA	N/A	1	KT	FLT	N/A	FLT	PARKER SEALS	03/30/05	COMPLETE ON BHB2532. 1/6/2005. SSCN 8825 definitized
31909	SSCN 8849; S/A 1280	MODIFICATION KIT - IATCS SAMPLE TOOL, NODE	N/A	2	KT	FLT	N/A	FLT	B-MSFC	06/15/05	COMPLETE ON BHB2678. 8/14/2005. Destination change per
31910	SSCN 8849; S/A 1280	MODIFICATION KIT - PPA QD's, NODE 3	N/A	2	KT	FLT	N/A	FLT	PARKER	02/10/05	COMPLETE ON BHB2548. 1/31/2005. Destination change per
31911	SSCN 8849; S/A 1280	MODIFICATION KIT - CDRA QD's, NODE 3	N/A	1	KT	FLT	N/A	FLT	HI	12/20/05	COMPLETE ON BHB2766. 12/19/2005. Destination and delivery
31912	CCM 8859; S/A 1291	ITCS PhosRA	N/A	1	EA	FSE	N/A	FSE	KSC	01/14/06	COMPLETE ON BHB2742. 1/14/2006. SSCN 8859 definitized per
31913	CCM 8859; S/A 1291	ITCS PhosRA TOOL KIT	N/A	1	KT	FLT	N/A	FLT	KSC	01/14/06	COMPLETE ON BHB2747. 12/9/2005. SSCN 8859 definitized per
31915	SSCN 8846 CD R1; S/A	Modification Kit, Hydrogen Vent Installation, US LAB	N/A	1	KT	FLT	N/A	FLT	KSC	10/31/06	COMPLETE ON BHB2952. 2/20/2007. Change DD250 date per
31916	SSCN 8846 CD R1; S/A	Orbital Support Equipment, R-ECLSS	N/A	1	KT	OSE	N/A	FLT	KSC	10/31/06	COMPLETE ON BHB2930. 10/31/2006. Change DD250 date per
31917	SSCN 8846 CD R1; S/A	Modification Kit, CheCS Rack Relocation and R-	N/A	1	KT	FLT	N/A	FLT	KSC	10/31/06	COMPLETE ON BHB2934. 1/2/2007. Change DD250 date per
31918	SSCN 8846; S/A 1328	Modification Kit, R-ECLSS Rack Integration, US LAB	N/A	1	KT	FLT	N/A	FLT	KSC	01/11/07	COMPLETE ON BHB2933. 1/4/2007. SSCN 8846 definitized per
31923	SSCN 6822; S/A 1306	Modification Kit – LAB, Bacteria Filter	N/A	6	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2803. 03/20/2006. SSCN 6822 definitized on
31924	SSCN 6822; S/A 1306	Modification Kit – LAB, IMV Fan	N/A	3	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2804. 03/20/2006. SSCN 6822 definitized on
31925	SSCN 6822; S/A 1306	Modification Kit – LAB, Water Separator	N/A	2	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2805. 03/20/2006. SSCN 6822 definitized on
31926	SSCN 6822; S/A 1306	Modification Kit – LAB, AAA Assy	N/A	16	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2806. 03/20/2006. SSCN 6822 definitized on
31927	SSCN 6822; S/A 1306	Modification Kit – Airlock, Bacteria Filter	N/A	3	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2807. 03/20/2006. SSCN 6822 definitized on
31928	SSCN 6822; S/A 1306	Modification Kit – Airlock, Water Separator	N/A	1	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2808. 03/20/2006. SSCN 6822 definitized on

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
31930	SSCN 6822; S/A 1306	Modification Kit – Node 1, Bacteria Filter	N/A	4	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2809. 03/20/2006. SSCN 6822 definitized on
31931	SSCN 6822; S/A 1306	Modification Kit – Node 1, IMV Fan	N/A	3	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2810. 03/20/2006. SSCN 6822 definitized on
31932	SSCN 8846; S/A 1328	EVA Fluid Fitting Torque Device	N/A	1	EA	FLT	N/A	FLT	KSC	11/30/06	COMPLETE ON BHB2942. 11/28/2006. SSCN 8846 definitized per
31934	SSCN 6822; S/A 1306	Node 2 Modification Kit, Bacteria Filter	N/A	4	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2811. 03/20/2006. SSCN 6822 definitized on
31935	SSCN 6822; S/A 1306	Node 2 Modification Kit, IMV Fan	N/A	1	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2812. 03/20/2006. SSCN 6822 definitized on
31936	SSCN 6822; S/A 1306	Node 2 Modification Kit, Water Separator	N/A	1	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2813. 03/20/2006. SSCN 6822 definitized on
31937	SSCN 6822; S/A 1306	Node 3 Modification Kit, Bacteria Filter	N/A	4	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2818. 03/20/2006. SSCN 6822 definitized on
31938	SSCN 6822; S/A 1306	Node 3 Modification Kit, IMV Fan	N/A	6	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2814. 03/20/2006. SSCN 6822 definitized on
31939	SSCN 6822; S/A 1306	Node 3 Modification Kit, Water Separator	N/A	1	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2815. 03/20/2006. SSCN 6822 definitized on
31940	SSCN 6822; S/A 1306	Node 3 Modification Kit, AAA Fan	N/A	3	KT	FLT	N/A	FLT	KSC	2/28/2006	COMPLETE ON BHB2816. 03/20/2006. SSCN 6822 definitized on
31942	SSCN 9186; S/A 1316	Maintenance Kit, DZUS Fastener	N/A	1	KT	FLT	N/A	FLT	KSC	2/24/2006	COMPLETE ON BHB2787. 01/20/2006. SSCN 9186 definitized on
31943	SSCN 9896; S/A 1367;	ATA FSE ICC Installation Kit	N/A	1	KT	FSE	N/A	FSE	Spacehab	10/26/2006	COMPLETE ON BHB3271. 02/23/2010. SHIP SHORT ON
31944	SSCN 9896; S/A 1367;	ATA FSE LMC Installation Kit	N/A	1	KT	FSE	N/A	FSE	KSC	8/17/2007	COMPLETE ON BHB3027. 11/15/2007. Change DD250 date;
31945	SSCN 8814; S/A 1586	Modification Kit, CCAA Water Separator, Lab MT	683-64418-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	3/31/2010	COMPLETE ON BHB3272. 2/26/2010. Added per SSCN 8814
31946	SSCN 8814; S/A 1586	Modification Kit, CCAA Water Separator, Lab LT	683-64418-2	1	KT	FLT	N/A	B-MSFC	B-MSFC	3/31/2010	COMPLETE ON BHB3273. 2/26/2010. Added per SSCN 8814
31948	SSCN 9279; S/A 1362	ITCS LOW FLOW JUMPER	N/A	3	EA	PRF	N/A	PRF	KSC	12/15/2006	COMPLETE ON BHB2950. 01/19/2007. SSCN 9279 definitized on
31951	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	1	KT	FLT	N/A	FLT	B-MSFC	1/16/2007	COMPLETE ON BHB2951. 01/12/2007. SSCN 9279 definitized on
31952	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	2	KT	FLT	N/A	FLT	B-MSFC	3/19/2007	COMPLETE ON BHB2965. 06/26/2007. SSCN 9279 definitized on
31954	SSCN 8846; S/A 1328	Valve, Hydrogen Vent	N/A	1	EA	FLT	N/A	FLT	KSC	05/23/07	COMPLETE ON BHB2940. 07/11/2005. SSCN 8846 definitized per
31955	SSCN 3140; S/A 1316	IMV Valve	N/A	1	EA	FLT	N/A	FLT	B-MSFC	7/21/2005	COMPLETE ON BHB2679. 07/11/2005. SSCN 3140 definitized on
31956	SSCN 3140; S/A 1316	IMV Valve	N/A	1	EA	FLT	N/A	FLT	B-MSFC	8/2/2005	COMPLETE ON BHB2700. 08/31/2005. SSCN 3140 definitized on
31958	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	1	KT	FLT	N/A	FLT	B-MSFC	1/16/2007	COMPLETE ON BHB2949. 01/12/2007. SSCN 9279 definitized on
31959	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	2	KT	FLT	N/A	FLT	B-MSFC	4/12/2007	COMPLETE ON BHB2966. 06/26/2007. SSCN 9279 definitized on
31960	SSCN 9279; S/A 1362	INSULATION SLEEVE, QD, HHR	N/A	6	EA	FLT	N/A	FLT	KSC	9/8/2006	COMPLETE ON BHB2784. 02/03/2006. SSCN 9279 definitized on
31967	SSCN 8846; S/A 1338	Modification Kit, OGS Rack Integration, U.S. Lab	N/A	1	KT	FLT	N/A	FLT	KSC	02/17/06	COMPLETE ON BHB2891. 08/31/2006. Added for SSCN 8846 on
31984	SSCN 9722; S/A 1363	WASTE WATER, OGS RACK	N/A	1	EA	FLT	N/A	FLT	KSC	11/14/06	COMPLETE ON BHB2918. 10/31/2006. SSCN 9722 definitized on
31985	SSCN 9722; S/A 1363	FEED WATER, OGS RACK	N/A	1	EA	FLT	N/A	FLT	KSC	11/14/06	COMPLETE ON BHB2919. 10/31/2006. SSCN 9722 definitized on
31986	SSCN 9722; S/A 1363	PURGE ADAPTER ASSY, R-ECLSS	N/A	1	EA	FLT	N/A	FLT	KSC	11/14/06	COMPLETE ON BHB2917. 10/31/2006. SSCN 9722 definitized on
31987	SSCN 9896; S/A 1367	ATA FSE ICC RESTRAINT KIT	N/A	1	KT	FSE	N/A	FSE	Spacehab	11/30/2006	COMPLETE ON BHB2947. 12/20/2006. Change destination per
31989	SSCN 8846 CD R1; S/A	OGS MTL SUP JUMPER	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2911. 10/17/2006. Added per SSCN 8846
31990	SSCN 8846 CD R1; S/A	OGS MTL RET JUMPER	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2912. 10/17/2006. Added per SSCN 8846
31991	SSCN 8846 CD R1; S/A	OGS GN2 JUMPER	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2920. 10/25/2006. Added per SSCN 8846
31992	SSCN 8846 CD R1; S/A	H2/N2 VENT JUMPER	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2921. 10/26/2006. Added per SSCN 8846
31993	SSCN 8846 CD R1; S/A	WIRE HARNESS	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2914. 09/29/2006. Added per SSCN 8846
31994	SSCN 8846 CD R1; S/A	WIRE HARNESS	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2915. 09/29/2006. Added per SSCN 8846
31995	SSCN 8846 CD R1; S/A	WIRE HARNESS	N/A	1	EA	FLT	N/A	FLT	B-MSFC	10/31/06	COMPLETE ON BHB2913. 09/29/2006. Added per SSCN 8846
31996	06-0159	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	1	KT	FLT	N/A	FLT	JSC	09/30/05	COMPLETE ON BHB2876. 08/03/2006. Added per Boeing letter 2-
31997	SSCN 9713; S/A 1406	Mod Kit, Node 3 ACBM - AFT	683-64412-1	1	KT	FLT	N/A		B-MSFC	4/6/2007	COMPLETE ON BHB2974. 03/20/2007. Definitized via SSCN
31998	SSCN 9713; S/A 1406	Mod Kit, Node 3 Radial Port M/D Shield Kit	683-63440-9	1	KT	FLT	N/A		B-MSFC	4/6/2007	COMPLETE ON BHB2976. 03/28/2007. Definitized via SSCN
32000	SSCN 10030/ Mod 1488	Waste and Hygiene Rack Assembly	N/A	1	EA	FLT	N/A	B-MSFC	KSC	10/31/08	COMPLETE ON BHB3154. 01/23/2009. Ship short on BHB3089
32001	SSCN 10030/ Mod 1488	Pretreated Urine Jumper, Waste/Hygiene Rack	N/A	1	EA	FLT	N/A		B-MSFC	06/25/08	COMPLETE ON BHB3098. 06/27/2008. Added per SSCN 10030
32002	SSCN 10030/ Mod 1488	Potable Water Jumper, Waste/Hygiene Rack	N/A	1	EA	FLT	N/A		B-MSFC	06/25/08	COMPLETE ON BHB3097. 06/27/2008. Added per SSCN 10030
32003	SSCN 10030/ Mod 1488	Wire Harness Assembly, W9134	N/A	1	EA	FLT	N/A		B-MSFC	04/08/08	COMPLETE ON BHB3078. 03/14/2008. Added per SSCN 10030
32004	SSCN 10030/ Mod 1488	Wire Harness Assembly, W9135	N/A	1	EA	FLT	N/A		B-MSFC	04/08/08	COMPLETE ON BHB3079. 03/14/2008. Added per SSCN 10030
32007	SSCN 10030/ Mod 1488	WHC Power Supply 120 to 28 Converter	N/A	1	EA	FLT	N/A		B-MSFC	04/08/08	COMPLETE ON BHB3085. 04/08/2008. Added per SSCN 10030
32008	SSCN 10030/ Mod 1488	Cabin Assembly, Waste/Hygiene Rack	N/A	1	EA	FLT	N/A	B-MSFC	B-MSFC	05/30/08	COMPLETE ON BHB3086. 05/22/2008. Added per SSCN 10030
32009	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	07/31/09	COMPLETE ON BHB3198. 07/29/2009. Changed destination per
32010	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	08/14/09	COMPLETE ON BHB3199. 07/29/2009. Changed destination per
32011	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	08/21/09	COMPLETE ON BHB3200. 07/23/2009. Changed destination per
32012	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	08/28/09	COMPLETE ON BHB3201. 07/23/2009. Changed destination per
32013	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	09/04/09	COMPLETE ON BHB3202. 08/13/2009. Changed destination per
32014	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	09/18/09	COMPLETE ON BHB3203. 08/13/2009. Changed destination per
32015	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	09/25/09	COMPLETE ON BHB3204. 08/31/2009. Changed destination per
32016	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	10/02/09	COMPLETE ON BHB3205. 08/31/2009. Changed destination per
32017	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	10/09/09	COMPLETE ON BHB3206. 10/01/2009. Changed destination per
32018	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	10/16/09	COMPLETE ON BHB3207. 10/01/2009. Changed destination per

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
32019	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	10/23/09	COMPLETE ON BHB3208. 10/015/2009. Changed destination per
32020	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	N/A		Wildwood	10/30/09	COMPLETE ON BHB3209. 10/15/2009. Changed destination per
32027	SSCN 10030/ Mod 1392	Half Harness Power	683-99142-1	1	EA	FLT	N/A		JSC	03/30/07	COMPLETE ON BHB2977. 05/15/2007. added per definitization of
32028	SSCN 10030/ Mod 1392	Half Harness Power	683-99142-2	1	EA	NON-	N/A		JSC	03/30/07	COMPLETE ON BHB2978. 05/15/2007. added per definitization of
32029	SSCN 10030/ Mod 1392	Half Harness Data	683-99142-3	1	EA	FLT	N/A		JSC	03/30/07	COMPLETE ON BHB2979. 05/15/2007. added per definitization of
32030	SSCN 10030/ Mod 1392	Half Harness Data	683-99142-4	1	EA	NON-	N/A		JSC	03/30/07	COMPLETE ON BHB2980. 05/15/2007. added per definitization of
32068	SSCN 10030/ Mod 1392	Half Harness Power	683-99142-1	2	EA	FLT	N/A		JSC	05/04/07	COMPLETE ON BHB2988. 05/15/2007. added per definitization of
32069	SSCN 10030/ Mod 1392	Half Harness Data	683-99142-3	2	EA	FLT	N/A		JSC	05/04/07	COMPLETE ON BHB2989. 05/15/2007. added per definitization of
32070	SSCN 10318/Mod 1509	Shell Assy, Treadmill Vibration System	N/A	1	EA	FLT	N/A	B-MFSC	JSC	11/30/07	COMPLETE ON BHB3066. 11/29/2007. Added per letter 2-1150-
32074	SSCN 10412; Mod 1425	Modification Kit, Sample Adapter Assy, ITCS, .75	N/A	2	KT	FLT	N/A		B-MSFC	11/01/07	COMPLETE ON BHB3042. 10/17/2007. 32074 added per SSCN
32075	SSCN 10412; Mod 1425	Modification Kit, Sample Adapter Assy, ITCS, .5 inch	N/A	5	KT	FLT	N/A		B-MSFC	08/31/07	COMPLETE ON BHB3025. 08/24/2007. 32075 added per SSCN
32076	SSCN 10412; Mod 1425	Modification Kit, Sample Adapter Assy, ITCS, .75	N/A	1	KT	FLT	N/A		B-MSFC	11/01/07	COMPLETE ON BHB3043. 10/17/2007. 32076 added per SSCN
32077	SSCN 10410; Mod 1431	Hose Assembly, TOCA Nitrogen Supply, US Lab	N/A	1	EA	FLT	N/A		B-MSFC	07/30/08	COMPLETE ON BHB3102. 07/15/2008. 32077 added per SSCN
32078	SSCN 10410; Mod 1431	Hose Assembly, TOCA Nitrogen Supply, Node 3	N/A	1	EA	FLT	N/A		B-MSFC	11/11/08	COMPLETE ON BHB3145. 08/26/2008. 32078 added per SSCN
32079	SSCN 10410; Mod 1431	EDV Attachment Assembly.	N/A	2	EA	FLT	N/A	B-MFSC	B-MSFC	08/08/08	COMPLETE ON BHB3087. 08/28/2008. 32079 added per SSCN
32080	SSCN 10338; Mod 1451	Bracket, PWD QD	N/A	1	EA	FLT	N/A		KSC	08/14/08	COMPLETE ON BHB3114. 08/12/2008. Added per SSCN 10338
32081	SSCN 10338; Mod 1451	Hose, Potable Water, PWD	N/A	1	EA	FLT	N/A		KSC	10/16/08	COMPLETE ON BHB3133. 10/17/2008. Added per SSCN 10338
32082	SSCN 10338; Mod 1451	Hose, Potable Water, PWD	N/A	1	EA	FLT	N/A		KSC	10/16/08	COMPLETE ON BHB3132. 10/17/2008. Added per SSCN 10338
32083	SSCN 9763; Mod 1460	Modification Kit, Node 3 End-cone Shield	N/A	1	KT	FLT	N/A		B-MSFC	01/23/09	COMPLETE ON BHB3150. 01/22/2009. Added per SSCN 9763
32084	SSCN 10507 Mod 1495	Hose Assembly, CO2, AR Rack	N/A	1	EA	FLT	N/A		KSC	05/06/09	COMPLETE ON BHB3174. 05/01/2009. Added per SSCN 10507
32085	SSCN 10507 Mod 1495	Jumper Assy, CO2 Standoff X3	N/A	1	EA	FLT	N/A		KSC	05/06/09	COMPLETE ON BHB3175. 05/01/2009. Added per SSCN 10507
32087	SSCN 10551; Mod 1449	Check Valve Assembly, OGS Waste Water	N/A	1	EA	FLT	N/A		B-MSFC	03/18/08	COMPLETE ON BHB3074. 03/13/2008. Added per SSCN 10551
32088	SSCN 10551; Mod 1449	Quick Disconnect	N/A	1	EA	FLT	N/A		B-MSFC	07/11/08	COMPLETE ON BHB3100. 07/10/2008. Added per SSCN 10551
32089	SSCN 10551; Mod 1449	Quick Disconnect	N/A	1	EA	FLT	N/A		B-MSFC	07/11/08	COMPLETE ON BHB3101. 07/10/2008. Added per SSCN 10551
32092	SSCN 10595; Mod 1550	ATA FSE ELC Installation Kit	N/A	1	KT	FSE	N/A	B-MFSC	KSC	05/07/09	COMPLETE ON BHB3210. 07/10/2009. Ship short on BHB3172
32093	SSCN 10595; Mod 1550	ATA FSE ELC Installation Kit	N/A	1	KT	FSE	N/A	B-MFSC	KSC	07/10/09	COMPLETE ON BHB3173. 07/09/2009. Added per SSCN 10595
32094	SSCN 10318/Mod 1509	Modification Kit, Isolator Interface Brackets	N/A	1	KT	FLT	N/A	B-MFSC	JSC	12/05/07	COMPLETE ON BHB3067. 12/05/2007. Added per letter 2-1150-
32099	SSCN 10664; Mod 1470	Maintenance Kit - IVA Fluid QD	N/A	3	KT	FLT	N/A		B-MSFC	09/23/08	COMPLETE ON BHB3116. 08/29/2008. Added per SSCN 10664
32100	SSCN 10664; Mod 1470	Syringe, Brayco Micronic 815Z Oil Filled	N/A	10	EA	FLT	N/A		B-MSFC	09/23/08	COMPLETE ON BHB3117. 08/21/2008. Added per SSCN 10664
32101	SSCN 10030/ Mod 1488	Launch Configuration Kit, Waste and Hygiene rack	N/A	1	EA	FLT	N/A		B-MSFC	05/30/08	COMPLETE ON BHB3090. 05/30/2008. Added per SSCN 10030
32103	SSCN 10775; Mod 1482	Launch Support Kit, WRS Racks	N/A	1	KT	FLT	N/A		B-MSFC	07/14/08	COMPLETE ON BHB3099. 07/14/2008. Added per SSCN 10775
32104	SSCN 10805; Mod 1485	Kit - CEVIS Attachment Bracket	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	08/22/08	COMPLETE ON BHB3096. 08/29/2008. Added per SSCN 10805
32105	SSCN 10859; Mod 1485	Mod Kit, Node 1	N/A	1	KT	FLT	N/A		B-MSFC	03/28/08	COMPLETE ON BHB3075. 03/24/2008. Added per SSCN 10859
32106	SSCN 10829; Mod 1563	Mod Kit, UHF Radio, US Lab	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	05/26/09	COMPLETE ON BHB3176. 05/22/2009. Added per SSCN 10829
32107	SSCN 10560; Mod 1552	Mod Kit, Node 1, Node 3 Relocation	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	07/21/09	COMPLETE ON BHB3225. 08/19/2009. Ship short on BHB3193
32108	SSCN 10560; Mod 1552	Mod Kit, Node 1 IMV Reconfiguration	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	08/28/09	COMPLETE ON BHB3197. 09/25/2009. Changed delivery date per
32109	SSCN 10560; Mod 1552	Vestibule Outfitting Kit, Node 1 Port to Node 3	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	07/28/09	COMPLETE ON BHB3195. 11/05/2009. Changed nomenclature
32110	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop A Supply	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3263. 02/01/2010. Ship short on BHB3238
32111	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop A Return	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3264. 02/01/2010. Ship short on BHB3239
32112	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop B Supply	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3265. 02/01/2010. Ship short on BHB3240
32113	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop B Return	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3266. 02/01/2010. Ship short on BHB3241
32114	SSCN 10560; Mod 1552	Bracket Assy, Ammonia Jumper, EVA	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	07/07/09	COMPLETE ON BHB3234. 10/26/2009. Ship short on BHB3194
32115	SSCN 10560; Mod 1552	Kit, Axial Endcone Shield, Node 3	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	08/29/09	COMPLETE ON BHB3237. 11/23/2009. Added per SSCN 10560
32116	SSCN 10560; Mod 1552	Mod Kit, Radial Port Augmentation Shield, Node 3	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	08/07/09	COMPLETE ON BHB3229. 10/27/2009. Changed nomenclature
32117	SSCN 10560; Mod 1552	Kit, PCBM Augmentation Shield, PMA 3	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	08/07/09	COMPLETE ON BHB3242. 01/12/2010. Changed nomenclature
32118	SSCN 10560; Mod 1552	Mod Kit, Axial Endcone Shield Provisions, Node 3	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	02/18/09	COMPLETE ON BHB3157. 02/18/2009. Changed delivery date per
32119	SSCN 10560; Mod 1552	Modification Kit, Node 3 Passove CBM	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	01/16/09	COMPLETE ON BHB3125. 09/29/2008. Added per SSCN 10560
32120	SSCN 10560; Mod 1552	Mod Kit, External Window Cover	N/A	5	KT	FLT	N/A	B-MFSC	B-MSFC	01/19/09	COMPLETE ON BHB3148. 11/14/2008. Added per SSCN 10560
32121	SSCN 10560; Mod 1552	Leak Check Kit, Hatch Feedthrough	N/A	3	KT	FLT	N/A	B-MFSC	B-MSFC	07/14/09	COMPLETE ON BHB3196. 09/28/2009. Increased quantity per
32123	SSCN 10829; Mod 1563	Mod Kit, UHF Radio, US Lab	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	11/02/09	COMPLETE ON BHB3227. 10/27/2009. Added per SSCN 10829
32124	SSCN 10030; Mod 1529	Fan Assembly, Waste and Hygiene Rack	N/A	1	EA	FLT	N/A	B-MSFC	B-MSFC	10/29/08	COMPLETE ON BHB3140. 12/16/2008. Added per CD 10030 Rev
32125	SSCN 10030; Mod 1529	Solid Waste Container Relocation Kit	N/A	1	KT	FLT	N/A	B-MSFC	B-MSFC	10/29/08	COMPLETE ON BHB3134. 10/17/2008. Added per CD 10030 Rev
32126	SSCN 10602; Mod 1590	PMA-1 Filter Mod Kit	683-99367-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3274. 03/30/2010. Added per definitization of
32127	SSCN 10602; Mod 1590	PMA-2 Filter Mod Kit	683-99367-2	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3275. 03/30/2010. Added per definitization of
32128	SSCN 10410 Rev 4; Mod	Quick Disconnect (QD)	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	07/30/08	COMPLETE ON BHB3107. 07/31/2008. Added per SSCN 10410
32129	SSCN 10996; Mod 1557	Mod Kit, On-orbit Ethernet Cable Installation for C&C	683-99770-1	1	KT	FLT	N/A	B-MFSC	KSC	10/22/10	COMPLETE ON BHB3309. 09/08/2010. Added per SSCN 10996

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
32130	SSCN 10996; Mod 1557	PRCU EFEU, Ground	683-95172-1	5	KT	GSE	N/A	B-MFSC	B-MSFC	10/22/10	COMPLETE ON BHB3319. 09/17/2010. Added per SSCN 10996
32131	SSCN 10990; Mod 1557	Mod Kit, iAPS ORU, US Lab, On-Orbit	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	05/31/10	COMPLETE ON BHB3280. 05/27/2010. Added per SSCN 10990
32132	SSCN 11069 Rev 1; Mod	PRCU Mod Kit	N/A	1	KT	GSE	N/A	B-MFSC	B-MSFC	02/26/09	COMPLETE ON BHB3163. 03/30/2009. Changed from FLT
32133	SSCN 11069 Rev 1; Mod	PRCU Mod Kit	N/A	3	KT	GSE	N/A	B-MFSC	B-MSFC	03/26/09	COMPLETE ON BHB3164. 03/30/2009. Changed from FLT
32134	SSCN 10595; Mod 1550	Wire Harness Assembly - ELC Interface	N/A	1	EA	FLT	N/A	B-MFSC	JSC	01/15/09	COMPLETE ON BHB3152. 01/23/2009. Added per SSCN 10595
32135	SSCN 10595; Mod 1550	Wire Harness Assembly - ELC Interface	N/A	1	EA	FLT	N/A	B-MFSC	JSC	07/10/09	COMPLETE ON BHB3183. 05/05/2009. Added per SSCN 10595
32136	SSCN 11171; Mod 1548	Modification Kit, Common Cabin Air	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	05/19/09	COMPLETE ON BHB3220. 08/18/2009. Added per SSCN 11171
32137	SSCN 11171; Mod 1548	Modification Kit, Common Cabin Air	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	05/19/09	COMPLETE ON BHB3220. 08/18/2009. Added per SSCN 11171
32138	SSCN 10884; Mod 1621	Canister Kit, ITCS Coolant Maintenance Assembly	683-99753-1	21	KT	OSE	N/A	B-MFSC	B-MSFC	08/15/11	COMPLETE ON BHB3417. 08/09/2011. Added per SSCN 10884
32142	SSCN 10884; Mod 1621	Canister Installation Kit, ITCS Coolant Maintenance	683-99757-1	2	KT	OSE	N/A	B-MFSC	B-MSFC	08/29/11	COMPLETE ON BHB3416. 08/16/2011. Added per SSCN 10884
32145	SSCN 11259; Mod 1556	Modification Kit, Potable Water Jumper,	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	11/30/09	COMPLETE ON BHB3230. 11/05/2009. Added per SSCN 11259
32152	Mod 1578	Mod Kit, Node 3 Axial Active CBM	N/A	1	KT	FLT	N/A	B-MFSC	B-MSFC	04/17/09	COMPLETE ON BHB3178. 04/17/2009. Added per letter 09-336
32153	Mod 1578	Insulating Jacket Ammonia Jumper	N/A	1	EA	FLT	N/A	B-MFSC	B-MSFC	09/25/09	COMPLETE 01/29/2010. Added per letter 09-336 dated
32156	SSCN 10773; Mod 1567	Modification Kit, Atmosphere Revitalization Rack (US	683-99363-1	1	EA	FLT	N/A	B-MFSC	B-MSFC	03/10/09	COMPLETE ON BHB3160. 02/27/2009. Added per SSCN 10773
32157	SSCN 10773; Mod 1567	Modification Kit, Atmosphere Revitalization Rack	683-99363-2	1	EA	FLT	N/A	B-MFSC	B-MSFC	03/10/09	COMPLETE ON BHB3161. 02/27/2009. Added per SSCN 10773
32158	SSCN 11010; Mod 1593	Mod Kit, iPEHG, U.S. LAB	683-99416-1	1	KT	FLT	N/A	B-MFSC	B-MSFC	05/16/11	COMPLETE ON BHB3335. 11/05/2010. Added per SSCN 11010
32163	SSCN 11372; Mod 1595	Mod Kit, ICU Final Install, AV-3	683-99659-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	01/28/11	COMPLETE ON BHB3337. 01/27/2011. Added per SSCN 11372
32164	SSCN 11372; Mod 1595	Mod Kit, ICU , US Lab	683-99660-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	01/28/11	COMPLETE ON BHB3338. 01/21/2011. Added per SSCN 11372
32165	SSCN 11372; Mod 1595	Mod Kit, Edge Router, Node 2	683-99661-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3310. 08/06/2010. Added per SSCN 11372
32166	SSCN 11069 Rev 1; Mod	PRCU Mod Kit	N/A	1	KT	GSE	N/A	B-MFSC	B-MSFC	04/27/09	COMPLETE ON BHB3181. 04/24/2008. Added per directive SSCN
32167	SSCN 10602; Mod 1590	Node-1 Airlock Mod Kit	683-99367-3	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3278. 03/30/2010. Added per definitization of
32168	SSCN 10602; Mod 1590	Airlock Mod Kit	683-99367-4	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3279. 03/30/2010. Added per definitization of
32191	SSCN 11248; Mod 1554	Mod Kit, JEM Accomodation Umbilicals	N/A	1	KT	FLT	N/A	BHOU	KSC	05/21/09	COMPLETE ON BHB3184. 05/19/2009. Changed DIL ID number
32192	SSCN 11625; Mod 1628	Modification Kit, Water Recovery System 2 (WRS2)	683-93440-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3429. 07/14/2011. Ship short on BHB3358
32193	SSCN 11625; Mod 1628	Advanced Recycle Filter Tank Assembly (ARFTA)	683-93450-4	1	EA	FLT	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3427. 07/14/2011. Ship short on BHB3359
32194	SSCN 11625; Mod 1628	Brine Transfer Hose Assy	683-93500-1	2	EA	OSE	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE OB BHB3424. 06/24/2011. Ship short on BHB3357
32195	SSCN 11625; Mod 1628	Compressor Adapter Assy	683-93505-1	2	EA	OSE	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3360. 06/16/2011. Added per SSCN 11625
32196	SSCN 11625; Mod 1628	Brine Filter Assembly (10 micron & 100 micron) (On-	683-93460-4	1	EA	FLT	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3430. 07/11/2011. Ship short on BHB3361
32197	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (On-Orbit	683-93470-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3425. 07/08/2011. Ship short on BHB3355
32198	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (On-Orbit	683-93480-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3428. 07/08/2011. Ship short on BHB3356
32199	SSCN 11625; Mod 1628	Advanced Recycle Filter Tank Assembly (ARFTA)	683-93450-4	1	EA	FLT	N/A	B-MSFC	B-MSFC	07/15/11	COMPLETE ON BHB3422. 07/14/2011. Added per SSCN 11625
32200	SSCN 11625; Mod 1628	Brine Transfer Hose Assy (Ground Spare)	683-93500-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3371. 07/27/2011. Added per SSCN 11625
32201	SSCN 11625; Mod 1628	Brine filter Assembly (10 micron & 100 micron)	683-93460-4	7	EA	FLT	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3426. 07/11/2011. Ship short on BHB3362
32202	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (Ground	683-93470-1	7	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3372. 07/25/2011. Added per SSCN 11625
32203	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (GroundSpare)	683-93480-1	7	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3373. 07/25/2011. Added per SSCN 11625
32204	SSCN 8814	Modification Kit, CCAA Water Separator, Airlock	683-64418-3	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/31/10	COMPLETE ON BHB3277. 02/26/2010. Added on 02/18/2010 per
32209	SSCN 11846; Mod 1594	Modification Kit, O2/N2 Tank ORU Assembly	683-99853-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	08/24/09	COMPLETE ON BHB3223. 08/18/2010. Added per SSCN 11846
32210	SSCN 11625; Mod 1628	Brine filter Assembly (10 micron & 100 micron)	683-93460-4	7	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3444. 11/16/2011. Added per SSCN 11625
32211	SSCN 11625; Mod 1628	Brine filter Assembly (10 micron & 100 micron)	683-93460-4	8	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3441. 01/27/2012. Added per SSCN 11625
32212	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (Ground	683-93470-1	7	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3438. 08/25/2011. Added per SSCN 11625
32213	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (Ground	683-93470-1	8	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3443. 09/14/2011. Added per SSCN 11625
32214	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (GroundSpare)	683-93480-1	7	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3440. 08/31/2011. Added per SSCN 11625
32215	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (GroundSpare)	683-93480-1	8	EA	FLT	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3445. 10/07/2011. Added per SSCN 11625
32216	SSCN 11625; Mod 1628	Rodnik/ATV Tank Adapter Assy	683-93510-1	2	EA	OSE	N/A	B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3423. 06/24/2011. Ship short on BHB3363
32217	SSCN 11625; Mod 1628	Rodnik/ATV Tank Adapter Assy (Ground Spare)	683-93510-1	2	EA	OSE	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3442. 08/18/2011. Added per SSCN 11625
32218	SSCN 11625; Mod 1628	Compressor Adapter Assy (Ground Spare)	683-93505-1	2	EA	OSE	N/A	B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3439. 12/08/2011. Added per SSCN 11625
32219	SSCN 11946; Letter 10-	Mod Kit, AR Rack	683-99860-1	1	KT	NFS	N/A	B-MSFC	B-MSFC	02/01/10	COMPLETE ON BHB3260. 01/28/2010. Added per SSCN 11946
32233	SSCN 11801; CCO 1636	Vestibule Outfitting Kit, Permanent Multipurpose	683-64427-1	1	KT	FLT	\$ 343,083.00	B-MSFC	B-MSFC	09/08/10	COMPLETE ON BHB3311. 08/12/2010. Added per SSCN 11801
32234	SSCN 11801; CCO 1636	Wire Harness Assy, US Lab Internal Power, W8991	683-98991-1	1	EA	FLT	\$ 274,431.00	B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3312. 07/28/2010. Added per SSCN 11801
32235	SSCN 11801; CCO 1636	Wire Harness Assy, Node 1 Internal, 1553 Data Bus	683-98992-1	1	EA	FLT	\$ 274,431.00	B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3313. 07/28/2010. Added per SSCN 11801
32236	SSCN 11801; CCO 1636	Wire Harness Assy, Node 1 Internal, 1553 Data Bus	683-98993-1	1	EA	FLT	\$ 274,431.00	B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3314. 07/28/2010. Added per SSCN 11801
32237	SSCN 11801; CCO 1636	Cover Installation Assembly Kit, Hatch	683-13141-1	1	KT	FLT	\$ 102,911.00	B-MSFC	B-MSFC	08/18/10	COMPLETE ON BHB3315. 07/29/2010. Added per SSCN 11801
32238	SSCN 11801; CCO 1636	Cover Installation Assembly Kit, Hatch	683-13141-2	1	KT	FLT	\$ 102,911.00	B-MSFC	B-MSFC	08/18/10	COMPLETE ON BHB3316. 07/29/2010. Added per SSCN 11801
32239	SSCN 12141; Mod 1629	Gate Resistor and Relay Card Edge Mod Kit, SSPCM	683-98994-1	1	KT	FLT	N/A	In Place	Wildwood	06/01/10	COMPLETE ON BHB3294. 06/02/2010. Added per SSCN 12141
32240	SSCN 12141; Mod 1629	Gate Resistor and Relay Card Edge Mod Kit, SSPCM	683-98994-1	5	KT	FLT	N/A	In Place	Wildwood	06/22/10	COMPLETE ON BHB3295. 06/22/2010. Added per SSCN 12141
32302	SSCN 11946; Mod 1690	Maintenance Kit, CDRA	683-62702-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	12/20/12	COMPLETE ON BHB3522. 12/19/2012. Added per SSCN 11946

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
32313	SSCN 12443; S/A 1771	Mod Kit, ELC Wireless Communications Internal	683-99386-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	03/22/12	COMPLETE ON BHB3474. 03/22/2012. Added per SSCN 12443
32356	SSCN 12803; S/A 1859	Compressor Adapters	683-93505-1	3	EA	FLT	N/A	B-MSFC	B-MSFC	12/14/12	COMPLETE ON BHB3517. 09/17/2012. Added per SSCN 12803
32361	SSCN 12831; S/A 1834	Jumper Assy, Node 2 ITCS	683-99492-1	1	EA	FLT	N/A	B-MSFC	B-MSFC	03/08/13	COMPLETE ON BHB3543. 02/27/2013. Added per SSCN 12831
32362	SSCN 12831; S/A 1834	Jumper Assy, Node 2 ITCS	683-99492-2	1	EA	FLT	N/A	B-MSFC	B-MSFC	03/08/13	COMPLETE ON BHB3544. 02/27/2013. Added per SSCN 12831
32363	SSCN 12831; S/A 1834	Jumper Assy, Node 2 ITCS	683-99492-3	1	EA	FLT	N/A	B-MSFC	B-MSFC	03/08/13	COMPLETE ON BHB3545. 02/27/2013. Added per SSCN 12831
32364	SSCN 12788; S/A 1782	Four Panel Unit Assy Powered - ISIS	683-43650-4	10	EA	FLT	N/A	B-MSFC	B-MSFC	03/20/13	COMPLETE ON BHB3531. 12/14/2012. Partial shi0pment 3-7 of
32408	SSCN 13571; S/A 1927	Mod Kit, Microgravity Science Glovebox (MSG)	683-98904-1	1	KT	FLT	N/A	B-MSFC	B-MSFC	07/29/13	COMPLETE ON BHB3564. 06/07/2013. Added per SSCN 13571
40xxx Series											
40000	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	N/A	FLT	Canoga Park	04/18/06	COMPLETE ON BHB3015. 07/25/2007. Ship short on BHB2957
40001	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	N/A	FLT	Canoga Park	04/18/06	COMPLETE ON BHB3014. 07/25/2007. Ship short on BHB2956
40002	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	N/A	FLT	PW-CP	11/10/06	COMPLETE ON BHB3020. 08/03/2007. Ship short on BHB2987
40003	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	N/A	FLT	PW-CP	11/10/06	COMPLETE ON BHB3021. 08/03/2007. Ship short on BHB2986
40004	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	N/A	FLT	PW-CP	12/01/06	COMPLETE ON BHB3022. 08/03/2007. Ship short on BHB2991
40005	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	N/A	FLT	PW-CP	12/01/06	COMPLETE ON BHB3018. 10/24/2007. SSCN 8554 definitized on
40007	SSCN 8554; S/A 1323	OPCU Output Over-Voltage (OOV) Tester	N/A	2	EA	GSE	N/A	FLT	PW-CP	05/17/06	COMPLETE ON BHB2997. 06/06/2007. Ship short on BHB2992
50xxx Series											
50379	CCM 3072	LINEAR DRIVE UNIT FSE INSTALLATION KIT	N/A	1	EA	FSE	N/A		KSC	07/30/06	COMPLETE ON BHB2929. 10/23/2006. Transferred to J-27 due to
50411	CCM 1576; 04-0354	ACAS SIMULATOR ASSEMBLY, FULL UP	N/A	2	EA	FLT	N/A	FLT	KSC	10/29/04	COMPLETE ON BHB2530. 12/10/2004. Ship short on BHB2509
50656	SSCN 6179	Medium Adapter Plate Assembly	N/A	1	EA	OPD	N/A	FLT	B-HOU	07/27/04	COMPLETE ON BHB3048. 03/13/2008. Ship short on BHB2376
50658	SSCN 6179	Large Adapter Plate Assembly	N/A	1	EA	OPD	N/A	FLT	KSC	07/27/04	COMPLETE ON BHB3047. 03/11/2008. NOTE 2
50670	CCM 3370; 04-0471	MOD KIT, CABLES, ETHERNET - INTERNAL	N/A	1	KT	FLT	N/A		KSC	12/17/04	COMPLETE ON BHB2670. 06/30/2005. DD250 date change per
50671	CCM 3370; 04-0471	MOD KIT, CABLES, ETHERNET - EXTERNAL	N/A	1	KT	FLT	N/A		KSC	12/17/04	COMPLETE ON BHB2670. 06/30/2005. DD250 date change per
50693	SSCN 6647A	COLD PLATE - 6	N/A	3	EA		N/A	FLT	BMSFC	07/11/04	COMPLETE ON BHB2630. 06/22/2005. Ship short on BHB2533
50700	SSCN 6647A	COLD PLATE - 1	N/A	2	EA		N/A	FLT	BMSFC	07/11/04	COMPLETE ON BHB2631. 06/22/2005. Ship short on BHB2496
50702	SSCN 6647A	Internal Self Sealing, Fluid, Quick Disconnect		4	EA	OPD		FLT	BMSFC	01/20/04	COMPLETE ON BHB2287. 01/07/2004. NOTE 2
50703	SSCN 6647A	Internal Self Sealing, Fluid, Quick Disconnect		8	EA	OPD		FLT	BMSFC	01/20/04	COMPLETE ON BHB2287. 01/07/2004. NOTE 2
50704	SSCN 6647A	Non-Propulsive Vent Assembly		1	EA	OPD		FLT	BMSFC	05/14/04	COMPLETE ON BHB2397. 07/14/2004. NOTE 2
50705	SSCN 6647A	Cold Plate - 1	N/A	2	EA	OPD	N/A	FLT	BMSFC	07/01/04	COMPLETE ON BHB2257. 11/16/2004. NOTE 2
50706	SSCN 6647A	OUTLINE, CABLE, SIGNAL MOTOR/ACTUATOR,		1	EA	OPD		FLT	BMSFC	07/30/04	COMPLETE ON BHB2458. 08/16/2004. Nomenclature change
50707	SSCN 6647A	OUTLINE, CABLE, POWER, PRESSURE		1	EA	OPD		FLT	BMSFC	07/30/04	COMPLETE ON BHB2458. 08/16/2004. Nomenclature change
50708	SSCN 6647A	DUCT, NON-AIRLOCK		1	EA			FLT	BMSFC	02/06/04	COMPLETE ON BHB2363. 03/05/2004. NOTE 1
50710	SSCN 6647A	METAL SEALS, SPECIAL (SPARES)		12	EA			FLT	BMSFC	05/14/04	COMPLETE ON BHB2386. 03/15/2004. NOTE 1
50711	SSCN 6952	ARIS UMBILICAL MOD KIT		1	EA			FLT	KSC	01/30/04	COMPLETE ON BHB2369. 02/27/2004. NOTE 1
50712	SSCN 6952	ARIS UMBILICAL MOD KIT		2	EA			FLT	KSC	01/30/04	COMPLETE ON BHB2367. 02/25/2004. NOTE 1
50715	SSCN 6952	ARIS UMBILICAL MOD KIT		1	EA		FLT		KSC	01/30/04	COMPLETE ON BHB2370. 02/27/2004.
50764	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, NITROGEN TANK	N/A	1	KT	FLT	N/A	FLT	BHOU	03/31/05	COMPLETE ON BHB2563. 02/03/2005. Added item per Boeing
50765	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, NITROGEN TANK	N/A	1	KT	FLT	N/A	FLT	BHOU	03/31/05	COMPLETE ON BHB2563. 02/03/2005. Added item per Boeing
50766	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, NITROGEN TANK	N/A	1	KT	FLT	N/A	FLT	BHOU	03/31/05	COMPLETE ON BHB2563. 02/03/2005. Added item per Boeing
50767	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, PUMP MODULE	N/A	1	KT	FLT	N/A	FLT	BHOU	05/25/04	COMPLETE ON BHB2429. 05/25/2004. Added item per Boeing
50768	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, PUMP MODULE	N/A	1	KT	FLT	N/A	FLT	BHOU	03/31/05	COMPLETE ON BHB2594. 04/01/2005. Added item per Boeing
50769	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, PUMP MODULE	N/A	1	KT	FLT	N/A	FLT	BHOU	03/31/05	COMPLETE ON BHB2595. 04/01/2005. Added item per Boeing
50780	06-0043; SSCN 7638	KIT, MODIFICATION, DESICCANT/ADSORBENT	N/A	3	KT	FLT	N/A	FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. Nomenclature, delivery
50781	06-0043; SSCN 7638	KIT, MODIFICATION, DESICCANT/ADSORBENT	N/A	2	KT	FLT	N/A	FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. Nomenclature, delivery
50782	CCM 2632	MOD KIT, WIRE HARNESSES INTERNAL, NODE-1	N/A	1	KT	FLT	N/A	FLT	KSC	11/21/07	COMPLETE ON BHB3055. 11/08/2007. Delivery date changes;
50783	CCM 2632	MOD KIT, CONNECTOR FEEDTHROUGH, NADIR	N/A	1	KT	FLT	N/A	FLT	KSC	11/21/07	COMPLETE ON BHB3056. 11/08/2007. Delivery date changes;
50784	CCM 2632	MOD KIT, VESTIBULE JUMPERS, NODE-1 TO	N/A	1	KT	FLT	N/A	FLT	KSC	11/21/07	COMPLETE ON BHB3057. 11/08/2007. Delivery date changes;
50795	CCM 7594; S/A 1205	MOD KIT, H FIXTURE FOR S6 ELEMENT	N/A	1	EA	FLT	N/A	FLT	KSC	02/24/06	COMPLETE ON BHB2793. 03/31/2006. Nomenclature, delivery
50797	SSCN 7583	PUMP AND FLOW CONTROL SUBASSEMBLY		1	EA			FLT	KSC	01/02/04	COMPLETE ON BHB2267. 12/18/2003. NOTE 1
50803	SSCN 8018	CABLE ASSY, JUMPER, CONTINGENCY - EPS,		1	EA			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50804	SSCN 8018	MOD KIT, JUMPER, CHANNEL 1/4 - EPS,		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50805	SSCN 8018	MOD KIT, JUMPER, CHANNEL 2/3 - EPS,		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50806	SSCN 8018	MOD KIT, JUMPER, CHANNEL 1/4 - EPS, LAB		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
50807	SSCN 8018	MOD KIT, JUMPER, CHANNEL 2/3 - EPS, LAB		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50822	S/A 1275; SSCN 8033;	BACKSHELL (J4)	N/A	2	EA		N/A	FLT	KSC	06/07/04	COMPLETE ON BHB2498. 10/07/2004. Remain on J-27 per
50830	SSCN 7385; S/A 1223	MODIFICATION KIT, US LAB INTEGRATED	N/A	1	KT		N/A	FLT	KSC	02/14/06	COMPLETE ON BHB2872. 07/07/2006. Ship short on BHB2797
50831	SSCN 7385; S/A 1223	MODIFICATION KIT, NODE 1 INTEGRATED	N/A	1	KT		N/A	FLT	KSC	02/14/06	COMPLETE ON BHB2798. 04/28/2006. Delivery date change per
50832	SSCN 7385; S/A 1223	MODIFICATION KIT, NODE 2 INTEGRATED	N/A	1	KT		N/A	FLT	KSC	02/14/06	COMPLETE ON BHB2892. 08/21/2006. Ship short on BHB2799
50833	SSCN 7385; S/A 1223	MODIFICATION KIT, AIRLOCK INTEGRATED	N/A	1	KT		N/A	FLT	KSC	02/14/06	COMPLETE ON BHB2800. 03/29/2006. Delivery date change per
50834	SSCN 7385; S/A 1223	EDGE ROUTER (ER)	N/A	2	EA		N/A	FLT	KSC	02/14/06	COMPLETE ON BHB2802. 03/01/2006. Delivery date change per
50835	SSCN 8083	MDM Assembly, Upper	N/A	1	EA	FLT	N/A	FLT	B-HOU	10/29/04	COMPLETE ON BHB2597. 04/13/2005. Added per Mod S/A 1247
50836	SSCN 8216; S/A 1297	MAPPING LABEL INSTALLATION MODIFICATION	N/A	1	KT	FLT	N/A	FLT	KSC	06/03/05	COMPLETE ON BHB2626. 05/06/2005. SSCN 8216 definitized on
50837	SSCN 8216; S/A 1297	MAPPING LABEL INSTALLATION MODIFICATION	N/A	1	KT	FLT	N/A	FLT	KSC	08/05/05	COMPLETE ON BHB2626. 05/06/2005. SSCN 8216 definitized on
50838	SSCN 8216; S/A 1297	MAPPING LABEL INSTALLATION MODIFICATION	N/A	1	KT	FLT	N/A	FLT	KSC	10/07/05	COMPLETE ON BHB2626. 05/06/2005. SSCN 8216 definitized on
50840	S/A 1275; SSCN 7956	ASSY, PANEL, Y-JUMPER - ETVCG PORTS 3, 9, &	N/A	4	EA	FLT	N/A	FLT	KSC	08/31/04	COMPLETE ON BHB2625. 06/14/2005. Nomenclature changed
50841	S/A 1275; SSCN 7956	ASSY, PANEL, Y-JUMPER - ETVCG PORT 7	N/A	1	EA	FLT	N/A	FLT	KSC	08/31/04	COMPLETE ON BHB2625. 06/14/2005. Nomenclature changed
50842	SSCN 8183; S/A 1235	MODIFICATION KIT, HIGH-LOAD - HEAT	N/A	2	KT		N/A	FLT	B-HOU	09/30/04	COMPLETE ON BHB2497. 11/03/2004. NOTE 1
50843	SSCN 8183; S/A 1235	MODIFICATION KIT, LOW-LOAD - HEAT	N/A	1	KT		N/A	FLT	B-HOU	09/30/04	COMPLETE ON BHB2497. 11/03/2004. NOTE 1
50844	04-0481; SSCN 8183; S/A	MODIFICATION KIT, HIGH-LOAD - HEAT	N/A	9	KT	FSE	N/A	FLT	B-HOU	10/29/04	COMPLETE ON BHB2497. 11/03/2004. Change destination and
50845	04-0481; SSCN 8183; S/A	MODIFICATION KIT, LOW-LOAD - HEAT	N/A	1	KT	FSE	N/A	FLT	B-HOU	10/29/04	COMPLETE ON BHB2497. 11/03/2004. Change destination and
50848	04-0481; SSCN 8194	PVR FSE BOLT MODIFICATION KIT	N/A	1	KT	FSE	N/A	FSE	KSC	04/19/04	COMPLETE ON BHB2477. 01/20/2005. Change destination
50849	SSCN 8215; S/A 1265	MOD KIT, PROTECTIVE CAP, UTILITY TRAY - S0	N/A	1	KT	FLT	N/A	FLT	KSC	09/30/04	COMPLETE ON BHB2725. 09/06/2005.
50850	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - MBSU FSE	N/A	1	EA	FLT	N/A	FLT	KSC	06/18/04	COMPLETE ON BHB2436. 06/18/2004. NOTE 1
50851	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - MBSU FSE	N/A	1	EA	FLT	N/A	FLT	KSC	06/18/04	COMPLETE ON BHB2436. 06/18/2004. NOTE 1
50852	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - BCDU FSE	N/A	1	EA	FLT	N/A	FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50853	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - BCDU FSE	N/A	1	EA	FLT	N/A	FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50854	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - PCU FSE	N/A	1	EA	FLT	N/A	FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50855	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - PCU FSE	N/A	1	EA	FLT	N/A	FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50856	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - BATTERY FSE	N/A	1	EA	FLT	N/A	FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50857	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - BATTERY	N/A	1	EA	FLT	N/A	FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50858	SSCN 8248; S/A 1291	PASSIVE ESPAD MOD KIT		1	KT	FLT		FLT	SPPF	12/10/04	COMPLETE ON BHB2526. 12/10/2004. SSCN 8248 definitized on
50859	SSCN 8248; S/A 1291	MBSU FSE MLI MOD KIT		1	KT	FLT		FLT	KSC	10/29/04	COMPLETE ON BHB2510. 11/02/2004. SSCN 8248 definitized on
50860	SSCN 8275; S/A 1265	MOD KIT, JUMPER - MBSU, EPS, SEGMENT S0	N/A	1	KT	FLT	N/A	FLT	KSC	03/18/05	COMPLETE ON BHB2564. 02/24/2005.
50861	SSCN 8505	GN2 UMBILICAL ASSEMBLY, MODIFICATION KIT -	IF15319	1	KT	FLT		FLT	BHOU	06/25/04	COMPLETE ON BHB2371. 02/24/2004.
50862	SSCN 8277; S/A 1275	KIT, MODIFICATION, ADD PRESSURE CAP TO	N/A	10	KT	FLT	N/A	FLT	HI	03/31/05	COMPLETE ON BHB2838. 05/05/2006. Ship short on BHB2577
50863	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT,	N/A	2	KT	FLT	N/A	FLT	KSC	03/18/05	COMPLETE ON BHB2592. 03/22/2005. SSCN 8387 definitized on
50864	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT,	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/05	COMPLETE ON BHB2604. 06/17/2005. SSCN 8387 definitized on
50865	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT,	N/A	1	KT	FLT	N/A	FLT	KSC	04/29/05	COMPLETE ON BHB2645. 06/17/2005. SSCN 8387 definitized on
50866	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT, P5	N/A	1	KT	FLT	N/A	FLT	KSC	06/24/05	COMPLETE ON BHB2606. 06/17/2005. SSCN 8387 definitized on
50867	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT, S5	N/A	1	KT	FLT	N/A	FLT	KSC	08/26/05	COMPLETE ON BHB2660. 06/17/2005. SSCN 8387 definitized on
50868	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT, S6	N/A	1	KT	FLT	N/A	FLT	KSC	09/30/05	COMPLETE ON BHB2644. 06/17/2005. SSCN 8387 definitized on
50869	SSCN 8285	MODIFICATION KIT, RETEST NITROGEN TANK	N/A	3	KT	FLT	N/A	FLT	BHOU	07/02/04	COMPLETE ON BHB2473. 06/08/2005.
50870	SSCN 8324; S/A 1298	Mod Kit, S4 PVR Installation	N/A	1	KT	FLT	N/A	FLT	KSC	8/2/2005	COMPLETE ON BHB2904. 11/13/2006. Ship short on BHB2731
50871	SSCN 8236; S/A 1265	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	5	KT	FLT	N/A	FLT	KSC	06/27/05	COMPLETE ON BHB2653. 06/03/2005. Date and Qty Change per
50872	SSCN 8236; SA 1265	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	1	KT	FLT	N/A	FLT	GRC	06/27/05	COMPLETE ON BHB2654. 06/03/2005. Date Change per email
50873	SSCN 8236; S/A 1265	MODIFICATION KIT, PaRIS RF GROUND STRAP	N/A	2	KT	FLT	N/A	FLT	KSC	06/27/05	COMPLETE ON BHB2655. 06/03/2005. Date and Dest. Change
50874	SSCN 8236; S/A 1265	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	3	KT	FLT	N/A	FLT	KSC	06/27/05	COMPLETE ON BHB2655. 06/03/2005. Date Change per email
50878	SSCN 8429; S/A 1280	MOD KIT, PUMP PACKAGE ASSEMBLY, QUICK	N/A	2	KT	FLT	N/A	FLT	HI	12/22/04	COMPLETE ON BHB2579. 03/08/2005. SSCN 8429 definitized on
50879	SSCN 8429; S/A 1280	MOD KIT, PUMP PACKAGE ASSEMBLY, QUICK	N/A	2	KT	FLT	N/A	FLT	HI	12/22/04	COMPLETE ON BHB2909 10/04/2006. Ship short BHB2900 dated
50884	SSCN 8143; S/A 1275	NUT, FLANGED HEX, TYPE NATC, SIZE 13	N/A	21	EA	FLT	N/A	FLT	KSC	12/01/04	COMPLETE ON BHB2517. 11/23/2004.
50885	SSCN 8143; S/A 1275	NUT, FLANGED HEX, TYPE NATC, SIZE 25L	N/A	40	EA	FLT	N/A	FLT	KSC	12/01/04	COMPLETE ON BHB2517. 11/23/2004.
50886	SSCN 8143; S/A 1275	NUT, FLANGED NEX, TYPE NATC, SIZE 33	N/A	2	EA	FLT	N/A	FLT	KSC	12/01/04	COMPLETE ON BHB2517. 11/23/2004.
50887	SSCN 8143; S/A 1275	CONNECTOR	N/A	4	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2493. 10/07/2004.
50888	SSCN 8143; S/A 1275	CONNECTOR	N/A	8	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2493. 10/07/2004.
50889	SSCN 8143; S/A 1275	CONNECTOR	N/A	2	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2493. 10/07/2004.
50894	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2516. 11/23/2004. Ship short on BHB2493
50895	SSCN 8143; S/A 1275	BACKSHELL	N/A	8	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2528. 12/10/2004. Ship short on BHB2516
50896	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.
50897	SSCN 8143; S/A 1275	BACKSHELL	N/A	4	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
50898	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT	N/A	FLT	KSC	11/05/04	COMPLETE ON BHB2538. 12/21/2004.
50899	SSCN 8143; S/A 1275	BACKSHELL	N/A	8	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.
50900	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT	N/A	FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.
50901	SSCN 8143; S/A 1275	GORE PANEL FEEDTHROUGH	N/A	2	EA	FLT	N/A	FLT	KSC	11/19/04	COMPLETE ON BHB2518. 11/24/2004.
50902	SSCN 8143; S/A 1275	GAMAH FITTING	N/A	2	EA	FLT	N/A	FLT	KSC	10/15/04	COMPLETE ON BHB2494. 10/03/2004.
50903	SSCN 8143; S/A 1275	PIN	N/A	4	EA	FLT	N/A	FLT	KSC	03/04/05	COMPLETE ON BHB2551. 03/08/2005.
50904	SSCN 8143; S/A 1275	EXTERNAL VENT FLANGE ASSY	N/A	2	EA	FLT	N/A	FLT	KSC	03/04/05	COMPLETE ON BHB2551. 03/08/2005.
50905	SSCN 8503; S/A 1265	MODIFICATION KIT, REWORK OF THERMOFOIL	N/A	1	KT	FLT	N/A	FLT	LMMFC	10/01/04	COMPLETE ON BHB2687. 07/19/2005.
50906	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50907	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50908	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50909	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50910	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50911	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50912	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50913	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50914	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50915	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50916	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50917	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50918	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50919	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50920	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50921	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50922	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50923	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT	N/A	FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50928	SSCN 8248; S/A 1291	ACTIVE ESPAD MOD KIT	N/A	1	KT	FLT	N/A	FLT	SPPF	12/10/04	COMPLETE ON BHB2526. 12/10/2004. SSCN 8248 definitized on
50929	SSCN 8248; S/A 1291	FHRC FSE MOD KIT		1	KT	FLT		FLT	KSC	12/13/04	COMPLETE ON BHB2504.12/10/2004. SSCN 8248 definitized on
50930	SSCN 8554; S/A 1323	Mod Kit, Jumper - SSPTS, EPS, Z1 to LAB	N/A	1	KT	FLT	N/A	FLT	KSC	05/16/05	COMPLETE ON BHB2642. 05/16/2005. SSCN 8554 definitized on
50931	SSCN 8554; S/A 1323	Mod Kit, Jumper - SSPTS, EPS, LAB to PMA2	N/A	1	KT	FLT	N/A	FLT	KSC	05/16/05	COMPLETE ON BHB2640. 05/16/2005. SSCN 8554 definitized on
50932	SSCN 8634; S/A 1290	MOD KIT, S4 WIF LABEL	N/A	1	KT	FLT	N/A	FLT	KSC	01/07/05	COMPLETE ON BHB2584. 03/08/2005. SSCN 8634 definitized.
50933	SSCN 8387; S/A 1297	MODIFICATION KIT, PVR, P4	N/A	1	KT	FLT	N/A	FLT	KSC	03/31/05	COMPLETE ON BHB2605. 06/17/2005. SSCN 8387 definitized on
50934	SSCN 8387; S/A 1297	MODIFICATION KIT, PVR, S4	N/A	1	KT	FLT	N/A	FLT	KSC	08/31/05	COMPLETE ON BHB2661. 06/17/2005. SSCN 8387 definitized on
50935	SSCN 8387; S/A 1297	MODIFICATION KIT, PVR, S6	N/A	1	KT	FLT	N/A	FLT	KSC	09/30/05	COMPLETE ON BHB2659. 06/17/2005. SSCN 8387 definitized on
50936	04-0471	REEL ASSEMBLY, CABLE, EXTERNAL (W0940)	N/A	1	EA	FLT	N/A		MOSCOW	12/31/04	COMPLETE ON BHB2514. 12/10/2004. Added per Boeing Ltr 2-
50937	SSCN 8631; S/A 1339	MOD KIT, P4 EWIS	N/A	1	KT	FLT	N/A		KSC	12/22/05	COMPLETE ON BHB2598. 04/12/2005. Ship short on BHB2556
50938	SSCN 8631; S/A 1339	MOD KIT, P5 EWIS	N/A	1	KT	FLT	N/A		KSC	12/22/05	COMPLETE ON BHB2695. 08/12/2005. Ship short on BHB2680
50939	SSCN 8631; S/A 1339	MOD KIT, S4 EWIS	N/A	1	KT	FLT	N/A		KSC	12/22/05	COMPLETE ON BHB2599. 0412/2005. Ship short on BHB2560
50940	SSCN 8631; S/A 1339	MOD KIT, S6 EWIS	N/A	1	KT	FLT	N/A		KSC	12/22/05	COMPLETE ON BHB2732. 10/14/2005. Ship short on BHB2705
50944	06-0167; SSCN 8631; S/A	MOD KIT, ANTENNA EWIS	N/A	1	KT	FLT	N/A		HOU	07/14/06	COMPLETE ON BHB2875. 07/14/2006. Changed Destination and
50945	06-0167; SSCN 8631; S/A	MOD KIT, IVA EWIS	N/A	1	KT	FLT	N/A		HOU	10/25/06	COMPLETE ON BHB3003. 06/27/2007. Ship short on BHB2985
50946	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - P4	N/A	1	KT	FLT	N/A		KSC	04/01/06	COMPLETE ON BHB2880. 08/01/2006. Ship short on BHB2840
50947	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - P5	N/A	1	KT	FLT	N/A		KSC	04/01/06	COMPLETE ON BHB2881. 08/01/2006. Ship short on BHB2841
50948	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - S4	N/A	1	KT	FLT	N/A		KSC	06/01/06	COMPLETE ON BHB2882. 08/03/2006. SSCN 8631 definitized on
50949	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - S6	N/A	1	KT	FLT	N/A		KSC	06/01/06	COMPLETE ON BHB2884. 08/09/2006. SSCN 8631 definitized on
50950	SSCN 8849; S/A 1280	MOD KIT, PUMP PACKAGE ASSEMBLY, QUICK	N/A	2	KT	FLT	N/A	FLT	HI	11/15/04	COMPLETE ON BHB2580. 04/22/2005. SSCN 8849 definitized.
50951	SSCN 8773; S/A 1290	STUD, CONNECTOR-PASSIVE FRAM	N/A	16	EA	FLT	N/A	FLT	KSC	06/20/05	COMPLETE ON BHB2513. 11/08/2004. SSCN 8773 definitized.
50953	SSCN 8849; S/A 1280	MOD KIT, TWO-STAGE PUMP, QUICK	N/A	1	KT	FLT	N/A	FLT	HI	03/31/05	COMPLETE ON BHB2771. 02/28/2006. SSCN 8849 definitized.
50954	SSCN 8938; S/A 1299	Gas Trap Assembly Modification Kit	N/A	10	KT	FLT	N/A	FLT	HI	12/15/05	COMPLETE ON BHB3008. 08/03/2007. SSCN 8938 definitized.
50955	SSCN 8938; S/A 1299	Membrane Module Modification Kit	N/A	12	KT	FLT	N/A	FLT	HI	12/15/05	COMPLETE ON BHB3008. 08/03/2007. SSCN 8938 definitized.
50956	SSCN 8935; S/A 1290	ADAPTER BRACKET, 45 DEG ECOM	N/A	2	EA	FLT	N/A	FLT	KSC	03/30/05	COMPLETE ON BHB2581. 03/04/2005. SSCN 8935 definitized.
50958	SSCN 8631; S/A 1339	NETWORK CONTROL UNIT (NCU) SPARE	N/A	1	EA	FLT	N/A		KSC	05/05/06	COMPLETE ON BHB3034. 08/24/2007. SSCN 8631 definitized on
50959	SSCN 8631; S/A 1339	EWIS REMOTE SENSOR UNIT (RSU) FIRMWARE	N/A	1	EA	FLT	N/A		JSC	04/01/06	COMPLETE ON BHB2877. 07/27/2006. SSCN 8631 definitized on
50960	SSCN 8631; S/A 1339	EWIS NCU FIRMWARE	N/A	1	EA	FLT	N/A		JSC	05/05/06	COMPLETE ON BHB3035. 12/19/2007. SSCN 8631 definitized on
50961	SSCN 8631; S/A 1339	EWIS GROUND PROCESSING SOFTWARE	N/A	1	EA	GSE	N/A		JSC	05/26/06	COMPLETE ON BHB3036. 12/19/2007. SSCN 8631 definitized on
50962	2-1150-06-0043	KIT, MODIFICATION, CDRA SN D0001 D/A BED	N/A	1	KT	FLT	N/A	FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. DIL Item added per

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
50964	2-1150-06-0043	KIT, MODIFICATION, CDRA SN D0002 D/A BED	N/A	1	KT	FLT	N/A	FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. DIL Item added per
50965	SSCN 8966; S/A 1310	Mod Kit, CDRA Check Valve	N/A	8	KT	FLT	N/A	FLT	HI	12/22/05	COMPLETE ON BHB2772. 02/15/2006. SSCN 8966 definitized per
50967	SSCN 6822; S/A 1306	Cabin Air Modification Kit, Bacteria Filter Assembly	N/A	23	KT	FLT	N/A	FLT	HSSSI	2/28/2006	COMPLETE ON BHB3110. 08/01/2008. SSCN 6822 definitized on
50968	SSCN 6822; S/A 1306	Modification Kit, IMV Fan Assembly Screw Protrusion	N/A	16	KT	FLT	N/A	FLT	HSSSI	2/28/2006	COMPLETE ON BHB3111. 08/01/2008. SSCN 6822 definitized on
50969	SSCN 6822; S/A 1306	Modification Kit, Avionics Air Assembly Screw	N/A	29	KT	FLT	N/A	FLT	HSSSI	2/28/2006	COMPLETE ON BHB3112. 08/01/2008. SSCN 6822 definitized on
50970	SSCN 6822; S/A 1306	Modification Kit, Avionics Air Assembly Screw	N/A	2	KT	FLT	N/A	FLT	HSSSI	2/28/2006	COMPLETE ON BHB3113. 08/01/2008. SSCN 6822 definitized on
50971	SSCN 6822; S/A 1306	Modification Kit, Water Separator ORU Screw	N/A	8	KT	FLT	N/A	FLT	HSSSI	2/28/2006	COMPLETE ON BHB3093. 05/28/2008. SSCN 6822 definitized on
50972	SSCN 9063; S/A 1299	P4 Modification Kit, RTAS Ground Strap	N/A	1	KT	FLT	N/A	FLT	KSC	12/08/05	COMPLETE ON BHB2709. 09/19/2005. SSCN 9063 definitized.
50973	SSCN 9063; S/A 1299	S4 Modification Kit, RTAS Ground Strap	N/A	1	KT	FLT	N/A	FLT	KSC	04/13/06	COMPLETE ON BHB2710. 08/22/2005. SSCN 9063 definitized.
50974	SSCN 9063; S/A 1299	S6 Modification Kit, RTAS Ground Strap	N/A	1	KT	FLT	N/A	FLT	KSC	09/07/07	COMPLETE ON BHB2711. 08/22/2005. SSCN 9063 definitized.
50975	SSCN 9063; S/A 1299	P5 Modification Kit, RTAS Lock Body	N/A	1	KT	FLT	N/A	FLT	KSC	02/09/06	COMPLETE ON BHB2712. 08/22/2005. SSCN 9063 definitized.
50976	SSCN 9063; S/A 1299	S5 Modification Kit, RTAS Lock Body	N/A	1	KT	FLT	N/A	FLT	KSC	07/06/06	COMPLETE ON BHB2713. 08/22/2005. SSCN 9063 definitized.
50977	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Installation, Nitrogen Tank	N/A	1	KT	FLT	N/A	FLT	BHOU	8/22/2005	COMPLETE ON BHB2715. 08/29/2005. SSCN 8922 definitized on
50978	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Verification Inspection,	N/A	1	KT	FLT	N/A	FLT	BHOU	8/22/2005	COMPLETE ON BHB2716. 08/29/2005. SSCN 8922 definitized on
50979	06-0163; SSCN 8883; S/A	MOD KIT, ORBITAL SUPPORT EQUIPMENT-IBA	N/A	1	KT	FLT	N/A	FLT	BHOU	09/20/06	COMPLETE ON BHB2871. 07/28/2006. Nomenclature change per
50980	SSCN 9162; S/A 1299	Modification Kit, S3 Clamp	N/A	1	KT	FLT	N/A	FLT	KSC	06/30/05	COMPLETE ON BHB2676. 07/14/2005. SSCN 9162 definitized.
50981	SSCN 9050; S/A 1310	Kit, Telemetry Matching Unit, Orlan Suit, Russian	684-015088-0001	1	KT	FLT	N/A	FLT	Moscow	01/30/10	COMPLETE ON BHB3257. 01/28/2010. Delivery date changed per
50984	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Installation, Nitrogen Tank	N/A	1	KT	FLT	N/A	FLT	BHOU	8/22/2005	COMPLETE ON BHB2718. 08/31/2005. SSCN 8922 definitized on
50985	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Verification Inspection,	N/A	1	KT	FLT	N/A	FLT	BHOU	8/22/2005	COMPLETE ON BHB2717. 08/31/2005. SSCN 8922 definitized
50986	SSCN 9245; S/A 1299	KIT, MODIFICATION, CDRA	N/A	2	KT	FLT	N/A	FLT	HI	06/15/05	COMPLETE ON BHB2665. 06/10/2005. SSCN 9245 definitized.
50987	SSCN 8324; S/A 1298	Radiator, Deployable, PV – Single Phase Thermal	N/A	1	EA	FLT	N/A	FLT	KSC	8/1/2005	COMPLETE ON BHB2903. 09/20/2006. Ship short on BHB2691
50988	SSCN 9195; S/A 1320	Modification Kit, BGA Bolt -P6 Segment	N/A	1	KT	FLT	N/A	FLT	KSC	1/9/2006	COMPLETE ON BHB2847. 06/23/2006. SSCN 9195 definitized on
50990	SSCN 8911; S/A 1310	Cable Assembly, Adapter, Test DAUI, US Lab	N/A	2	EA	FLT	N/A	FLT	KSC	08/31/05	COMPLETE ON BHB2781. 01/19/2006. SSCN 8911 definitized per
50991	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation (IMV) Valve	N/A	29	KT	FLT	N/A	FLT	HI	9/30/2005	COMPLETE ON BHB2885. 08/15/2006. Ship short on BHB2666
50992	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT	N/A	FLT	HI	10/28/2005	COMPLETE ON BHB2854. 05/25/2006. SSCN 8148 definitized.
50993	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT	N/A	FLT	HI	10/28/2005	COMPLETE ON BHB2854. 05/25/2006. SSCN 8148 definitized.
50994	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT	N/A	FLT	HI	11/30/2005	COMPLETE ON BHB2854. 05/23/2006. SSCN 8148 definitized.
50995	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT	N/A	FLT	HI	11/30/2005	COMPLETE ON BHB2854. 05/23/2006. SSCN 8148 definitized.
50996	SSCN 9163; S/A 1340	FILL PORT MOD KIT	N/A	1	KT	FLT	N/A		BHOU	03/16/06	COMPLETE ON BHB2826. 03/15/2006. SSCN 9163 definitized on
50997	SSCN 9163; S/A 1340	FILL PORT MOD KIT	N/A	1	KT	FLT	N/A		BHOU	04/28/06	COMPLETE ON BHB2831. 04/27/2006. SSCN 9163 definitized on
50998	SSCN 9163; S/A 1340	FILL PORT MOD KIT	N/A	2	KT	FLT	N/A		BHOU	04/28/06	COMPLETE ON BHB2832. 04/27/2006. SSCN 9163 definitized on
50999	SSCN 9344; S/A 1310	Z1 MOD KIT, CMG #1 INSTALLATION AND	N/A	1	KT	FLT	N/A	FLT	KSC	10/13/05	COMPLETE ON BHB2681. 07/12/2005. SSCN 9344 definitized per
51000	05-0128; SSCN 8236; S/A	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	2	KT	FLT	N/A	FLT	B-HOU	06/27/05	COMPLETE ON BHB2657. 06/03/2005. Added per Boeing letter 2-
51005	SSCN 9279; S/A 1362	ANTIMICROBIAL DETECTION STRIPS	N/A	100	EA	FLT	N/A	FLT	JSC	6/29/2007	COMPLETE ON BHB3002. 06/28/2007. SSCN 9279 definitized on
51006	S/A 1368; SSCN 8941;	KIT SHUNTING PLUG, SSU	N/A	1	KT	FLT	N/A	FLT	KSC	06/02/06	COMPLETE ON BHB2861. 06/15/2006. Nomenclature/EDD
51007	S/A 1368; SSCN 8941;	KIT SHUNTING PLUG, SSU	N/A	1	KT	FLT	N/A	FLT	KSC	06/30/06	COMPLETE ON BHB2873. 07/18/2006. Nomenclature/EDD
51010	SSCN 9326; S/A 1334	EVA FLUID JUMPER ASSEMBLY	N/A	1	EA	FLT	N/A	FLT	BHOU	05/24/06	COMPLETE ON BHB2834. 09/28/2006. Change Destination per
51011	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	2	KT	FLT	N/A	FLT	KSC	10/14/05	COMPLETE ON BHB2735. 11/04/2005. SSCN 9457 definitized per
51012	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	2	KT	FLT	N/A	FLT	KSC	11/14/05	COMPLETE ON BHB2736. 11/04/2005. SSCN 9457 definitized per
51013	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	2	KT	FLT	N/A	FLT	KSC	01/13/06	COMPLETE ON BHB2737. 11/04/2005. SSCN 9457 definitized per
51014	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	3	KT	FLT	N/A	FLT	KSC	02/17/06	COMPLETE ON BHB2738. 11/04/2005. SSCN 9457 definitized per
51015	SSCN 9457; S/A 1332	KIT, BMRRM - COVER RETAINER FLIGHT	N/A	3	KT	FLT	N/A	FLT	KSC	03/17/06	COMPLETE ON BHB2768. 01/06/2006. Quantity change; per
51018	SSCN 9145; S/A 1340	DUAL PURPOSE CONTAINER	N/A	1	EA	GSE	N/A		KSC	07/28/06	COMPLETE ON BHB2953. 07/18/2007. SSCN 9145 definitized on
51019	2-1150-05-0318; SSCN	P4 MOD KIT, RTAS GROUND LUG SPACER	N/A	1	KT	FLT	N/A	FLT	KSC	01/13/06	COMPLETE ON BHB2778. 01/06/2006. Added to J-27 per Boeing
51020	2-1150-05-0318; SSCN	S4 MOD KIT, RTAS GROUND LUG SPACER	N/A	1	KT	FLT	N/A	FLT	KSC	02/24/06	COMPLETE ON BHB2779. 01/06/2006. Added to J-27 per Boeing
51021	2-1150-05-0318; SSCN	S6 MOD KIT, RTAS GROUND LUG SPACER	N/A	1	KT	FLT	N/A	FLT	KSC	09/15/06	COMPLETE ON BHB2852. 05/03/2006. Added to J-27 per Boeing
51022	2-1150-06-0061	MOD KIT, CABLE TIES-MBSU JUMPER	N/A	1	KT	FLT	N/A	FLT	KSC	03/03/06	COMPLETE ON BHB2780. 03/15/2006. DIL Item added per
51024	06-0033; SSCN 7385;	ISL ROUTER ASSEMBLY	N/A	2	EA	FLT	N/A	FLT	HI	02/14/06	COMPLETE ON BHB2820. 08/17/2006. Added to J-27 per Boeing
51025	06-0033; SSCN 7385;	ECA, POWER SUPPLY	N/A	1	EA	FLT	N/A	FLT	HI	02/14/06	COMPLETE ON BHB2821. 03/10/2006. Added to J-27 per Boeing
51026	06-0033; SSCN 7385;	CCA, ETHERNET SWITCH-VME, 10/100	N/A	14	EA	FLT	N/A	FLT	HI	02/14/06	COMPLETE ON BHB2822. 03/10/2006. Added to J-27 per Boeing
51027	SSCN 9844; S/A 1355	MODIFICATION KIT, UMBILICAL ASSY,	N/A	1	KT	FLT	N/A	FLT	JSC	04/28/06	COMPLETE ON BHB2856. 05/25/2006. Ship short on BHB2837
51028	SSCN 9844; S/A 1355	MODIFICATION KIT, UMBILICAL ASSY,	N/A	1	KT	FLT	N/A	FLT	JSC	04/28/06	COMPLETE ON BHB2857. 05/25/2006. Ship short on BHB2842
51029	SSCN 9844; S/A 1355	MODIFICATION KIT, UMBILICAL ASSY,	N/A	1	KT	FLT	N/A	FLT	KSC	04/28/06	COMPLETE BHB2859. 05/26/2006. SSCN 9844 definitized on
51030	SSCN 9844; S/A 1355	SPECIAL TOOLS KIT, UMBILICAL ASSY,	N/A	1	KT	OSE	N/A	FLT	JSC	04/28/06	COMPLETE ON BHB2862. 06/06/2006. Ship short on BHB2848
51031	SSCN 9844; S/A 1355	BLOCKER ASSY, BLADE - TUS IUA	N/A	2	EA	FLT	N/A	FLT	JSC	04/28/06	COMPLETE ON BHB2860. 05/25/2006. Ship short in BHB2853
51033	SSCN 9722; S/A 1363	CABLE ASSY, POWER-OGS (W5881)	N/A	1	EA	FLT	N/A	FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change nomenclature and

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51037	SSCN 9722; S/A 1363	CAGE ASSY, OGS FEEDWATER	N/A	1	EA	FLT	N/A	FLT	BHOU	11/14/06	COMPLETE ON BHB2924. 10/08/2006. change nomenclature and
51038	SSCN 9633; S/A 1389	WIRELESS ACCESS POINT ASSY	N/A	4	EA	FLT	N/A	FLT	MOSCOW	09/13/07	COMPLETE ON BHB3058. 11/13/2007. SSCN 9633 definitized on
51039	SSCN 9633; S/A 1389	Repair Kit, Cable, Ethernet	N/A	3	KT	FLT	N/A	FLT	MOSCOW	09/13/07	COMPLETE ON BHB3094. 06/04/2008. SSCN 9633 definitized on
51042	SSCN 9722; S/A 1363	UPPER BEAM ASSEMBLY-OGS FEEDWATER	N/A	1	EA	FLT	N/A	FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change nomenclature and
51043	SSCN 9722; S/A 1363	LOWER BEAM ASSEMBLY-OGS FEEDWATER	N/A	1	EA	FLT	N/A	FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change nomenclature and
51044	SSCN 2632; S/A 1404	Mod Kit, Connector, Address - ATU, Cupola	1F16119-1	1	KT	FLT	N/A		KSC	8/21/2007	COMPLETE ON BHB3028. 08/21/2007. Definitized via SSCN
51045	2-1150-06-0125; S/A 1368	MDM-4 EXTERNAL (100 ohm)	N/A	1	EA	FLT	N/A	FLT	KSC	05/26/06	COMPLETE ON BHB2855. 05/31/2006. Added per Boeing Ltr 2-
51046	06-0160	BGA BOLT RETAINER	N/A	2	EA	FLT	N/A	FLT	KSC	07/28/06	COMPLETE ON BHB2890. 08/02/2006. Added per Boeing letter 2-
51047	2-1150-06-0210; S/A 1388	BRACKET, CONTROLLER - OGS FEEDWATER	N/A	1	EA	FLT	N/A	FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change destination per
51050	SSCN 9918; S/A 1405	Modification Kit, PaRIS - CIR	1J06730-1	1	KT	FLT	N/A	FLT	BHOU	05/11/07	COMPLETE ON BHB2994. 05/11/2007. SSCN 9918 Definitized on
51052	2-1150-06-0238	1/4" Square Drive Insert Bit	N/A	1	EA	FLT	N/A	FLT	BHOU	10/20/06	COMPLETE ON BHB2945. 12/11/2006. Added per Boeing Ltr 2-
51053	SSCN 10359; S/A 1411	Mod Kit 1 Redesign Preload System (as installed)	MK7080105	1	KT	FLT	N/A	ULF3	L3	3/25/2008	COMPLETE ON BHB3109. 07/23/2008. Definitized via SSCN
51054	SSCN 10359; S/A 1411	ModKit 2 Redesign Preload System	MK7080105	1	KT	FLT	N/A	ULF3	L3	3/25/2008	COMPLETE ON BHB3108. 07/23/2008. Ship short on BHB3068
51055	SSCN 10359; S/A 1411	ModKit 3 Redesign Preload System	MK7080105	1	KT	FLT	N/A	ULF3	L3	3/25/2008	COMPLETE ON BHB3143. 10/29/2008. Definitized via SSCN
51056	SSCN 10359; S/A 1411	ModKit 4 Redesign Preload System	MK7080105	1	KT	FLT	N/A	ULF3	L3	3/25/2008	COMPLETE ON BHB3143. 10/29/2008. Definitized via SSCN
51057	SSCN 10359; S/A 1411	ModKit 5 Redesign Preload System	MK7080105	1	KT	FLT	N/A	ULF3	L3	3/25/2008	COMPLETE ON BHB3143. 10/29/2008. Definitized via SSCN
51058	SSCN 10194; S/A1400	Connector Saver, MCA Mass Spectrometer ORU O2	N/A	1	EA	FLT	N/A	FLT	KSC	02/23/07	COMPLETE ON BHB2967. 03/01/2007. SSCN 10194 Definitized
51060	SSCN 10194; S/A1400	Connector Saver, MCA Mass Spectrometer ORU O2	N/A	1	EA	FLT	N/A	FLT	KSC	03/23/07	COMPLETE ON BHB2981. 03/27/2007. SSCN 10194 Definitized
51070	SSCN 9633/ Letter # 2-	Russian Cable, Part Number 17KC.10K08210A-8670	17KC.10K08210A-	2	EA	FLT	N/A		Moscow	02/28/07	COMPLETE ON BHB2969. 03/26/2007. added per letter 2-1150-
51071	SSCN 9633/ Letter # 2-	Russian Cable, Part Number 17KC.10K08210A-8680	17KC.10K08210A-	2	EA	FLT	N/A		Moscow	02/28/07	COMPLETE ON BHB2968. 03/26/2007. added per letter 2-1150-
51072	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 5m	1F15940-1	5	EA	FLT	N/A		Moscow	03/30/07	COMPLETE ON BHB2982. 03/26/2007. added per letter 2-1150-
51073	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 10m	1F15940-501	5	EA	FLT	N/A		Moscow	03/30/07	COMPLETE ON BHB2983. 03/26/2007. added per letter 2-1150-
51074	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 15m	1F15940-503	10	EA	FLT	N/A		Moscow	03/30/07	COMPLETE ON BHB2984. 03/26/2007. added per letter 2-1150-
51075	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 5m	1F15940-1	5	EA	FLT	N/A		Moscow	03/31/08	COMPLETE ON BHB2999. 06/14/2007. added per letter 2-1150-
51076	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 10m	1F15940-501	5	EA	FLT	N/A		Moscow	03/31/08	COMPLETE ON BHB2998. 06/14/2007. added per letter 2-1150-
51077	SSCN 9633/ Letter # 2-	Circuit Card Assy - PCMCIA	1F15983	20	EA	FLT	N/A		Moscow	03/31/08	COMPLETE ON BHB3059. 11/13/2007. added per letter 2-1150-
51078	SSCN 9633/ Letter # 2-	Cable Assy, Power - WAP	1F15984	4	EA	FLT	N/A		Moscow	03/31/08	COMPLETE ON BHB3060. 11/13/2007. added per letter 2-1150-
51079	SSCN 9633/ Letter # 2-	Cable Assy, Power - WAP	1F15985	4	EA	FLT	N/A		Moscow	03/31/08	COMPLETE ON BHB3061. 11/13/2007. added per letter 2-1150-
51080	SSCN 10191; Mod 1416	Mod Kit, S6 BCDU (2)	1F16001-1	1	KT	FLT	N/A	15A	KSC	06/06/08	COMPLETE ON BHB3146. 11/06/2008. Ship short on BHB3050
51081	SSCN 10191; Mod 1416	Mod Kit, Power Cable, Heater - S6	1F15943-1	1	KT	FLT	N/A	15A	KSC	06/06/08	COMPLETE ON BHB3147. 11/06/2008. Ship short on BHB3051
51082	SSCN 10318; Mod 1509	Kit, Stowed Items, Vibration Isolation System (VIS),	N/A	1	EA	FLT	N/A	BHOU	BHOU	06/10/09	COMPLETE ON BHB3192. 06/03/2009. Ship short on BHB3171
51083	SSCN 10316; Mod 1456	Mod Kit; Wire Harness - UMA, ULC	N/A	1	KT	FLT	N/A		KSC	01/15/08	COMPLETE ON BHB3182. 06/22/2009. Added per SSCN 10316
51084	SSCN 10316; Mod 1456	Mod Kit; Wire Harness - UMA, ULC	N/A	1	KT	FLT	N/A		KSC	01/15/08	COMPLETE ON BHB3221. 08/28/2009. Added per SSCN 10316
51086	SSCN 10392; Mod 1443	Mod kit; S6 WIF 16	N/A	1	KT	FLT	N/A		KSC	06/15/07	COMPLETE ON BHB3004. 07/02/2007. Added per SSCN 10392
51087	SSCN 10429; Mod 1420	Mod Kit, SSU Blanket - EVA Upgrade	1F16105-1	1	KT	FLT	N/A	13A.1	KSC	05/11/07	COMPLETE ON BHB2993. 05/25/2007. added per definitization of
51088	SSCN 9279; Letter 2-1150-	Chart, Color-OPA test strip	N/A	10	EA	FLT	N/A		JSC	06/29/07	COMPLETE ON BHB3002. 06/28/2007. 51088 added per letter 2-
51101	SSCN 10470; Mod 1438	Coupler, Inline, Ethernet - Altered Item	N/A	25	EA	FLT	N/A		BHOU	06/20/07	COMPLETE ON BHB3001. 06/18/2007. Added per SSCN 10470
51106	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	1	EA	FLT	N/A	HI	HI	12/31/10	COMPLETE ON BHB3553. 02/08/2013. Added per SSCN 104729
51107	SSCN 10524; Mod 1443	Maintenance Support Equipment Kit Blanket Assy -	N/A	2	KT	FLT	N/A		KSC	09/04/07	COMPLETE ON BHB3040. 09/05/2007. Added per SSCN 10524
51108	SSCN 10524; Mod 1443	Maintenance Support Equipment Kit Blanket Assy -	N/A	2	KT	FLT	N/A		KSC	09/26/07	COMPLETE ON BHB3041. 09/26/2007. Added per SSCN 10524
51110	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, GN&C-1	684-014012-0001	1	KT	FLT	N/A	HI	HI	11/18/10	COMPLETE ON BHB3408. 06/09/2011. Ship short on BHB3380
51111	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, GN&C-2	684-014013-0001	1	KT	FLT	N/A	HI	HI	11/18/10	COMPLETE ON BHB3409. 06/09/2011. Ship short on BHB3385
51112	SSCN 10553, Mod 1504	MDM Card Spare	8275155-901	1	EA	FLT	N/A	BHOU	BHOU	12/16/10	COMPLETE ON BHB3404. 06/13/2011. Ship short on BHB3395
51113	SSCN 10553, Mod 1504	Gold MDM Card	8275155-901	1	EA	FLT	N/A	BHOU	BHOU	01/27/11	COMPLETE ON BHB3461. 11/01/2011. Added per SSCN 10553
51114	SSCN 10560; Mod 1452	Mod Kit, External Cables - S0 to N3	N/A	1	EA	FLT	N/A	B-Hou	KSC	03/03/09	COMPLETE ON BHB3180. 04/22/2009. Added per SSCN 10560
51120	SSCN 10586; Mod 1446	Mod Kit, CETA Light Cover (Beta Cloth)	N/A	1	KT	FLT	N/A		KSC	09/07/07	COMPLETE ON BHB3044. 09/21/2007. Added per SSCN 10586
51121	SSCN 10598; Mod 1444	Cable Assy, Power - Contingency FGB (W5993)	N/A	1	EA	FLT	N/A		KSC	08/01/07	COMPLETE ON BHB3017. 07/24/2007. Added per SSCN 10598
51122	SSCN 10598; Mod 1444	Cable Assy, Power - Contingency FGB (W6146)	N/A	1	EA	FLT	N/A		KSC	08/01/07	COMPLETE ON BHB3017. 07/24/2007. Added per SSCN 10598
51123	SSCN 10234; Mod 1436	Ethernet User Cable Kit	N/A	1	KT	FLT	N/A		MOSCOW	11/15/07	COMPLETE ON BHB3065. 11/13/2007. Added per SSCN 10234
51124	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	2	KT	FLT	N/A		MOSCOW	11/30/07	COMPLETE ON BHB3071. 02/06/2008. Added per SSCN 10234
51125	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	2	KT	FLT	N/A		MOSCOW	12/21/07	COMPLETE ON BHB3072. 02/06/2008. Added per SSCN 10234
51126	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	2	KT	FLT	N/A		MOSCOW	01/31/08	COMPLETE ON BHB3073. 02/06/2008. Added per SSCN 10234
51127	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	7	KT	FLT	N/A		MOSCOW	04/30/08	COMPLETE ON BHB3080. 03/26/2008. Added per SSCN 10234
51132	SSCN 9633; added per	WIRELESS ACCESS POINT ASSY	N/A	1	EA	N/A	N/A	QUAL	MOSCOW	09/13/07	COMPLETE ON BHB3062. 11/13/2007. Added via letter 02-1150-
51133	SSCN 9633; added per	Cable Assy, Power - WAP	1F15984	1	EA	N/A	N/A	QUAL	Moscow	03/31/08	COMPLETE ON BHB3063. 11/13/2007. Added via letter 02-1150-
51134	SSCN 9633; added per	Cable Assy, Power - WAP	1F15985	1	EA	N/A	N/A	QUAL	Moscow	03/31/08	COMPLETE ON BHB3064. 11/13/2007. Added via letter 02-1150-

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51135	SSCN 10628, Mod 1542	Pump Module	N/A	1	EA	FLT	N/A	B-HOU	KSC	05/29/08	COMPLETE ON BHB3185. 05/08/2009. Ship short on BHB3169
51136	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT	N/A		HI	01/30/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51137	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT	N/A		HI	04/08/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51138	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT	N/A		HI	05/29/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51139	SSCN 10711, Mod 1529	Mod Kit, Boom – SGANT, Z1	N/A	1	KT	FLT	N/A	B-Hou	KSC	07/31/09	COMPLETE ON BHB3222. 08/21/2009. Added per SSCN 10711
51140	SSCN 10711, Mod 1529	Mod Kit, Internal, Cables - Lab	N/A	1	KT	FLT	N/A	B-Hou	KSC	07/31/09	COMPLETE ON BHB3165. 03/18/2009. Added per SSCN 10711
51145	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, C&C-1	684-014009-0001	1	KT	FLT	N/A	HI	HI	09/23/10	COMPLETE ON BHB3405. 06/09/2011. Ship short on BHB3374
51146	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, C&C-2	684-014010-0001	1	KT	FLT	N/A	HI	HI	09/23/10	COMPLETE ON BHB3406. 06/09/2011. Ship short on BHB3375
51147	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, C&C-3	684-014011-0001	1	KT	FLT	N/A	HI	HI	09/23/10	COMPLETE ON BHB3407. 06/09/2011. Ship short on BHB3379
51151	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT	N/A		HI	06/30/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51152	SSCN 10832, Mod 1498	Modification Kit for IMV-ESD Circuitry	B47992-1	9	KT	FLT	N/A	Carleton	Carleton	12/04/09	COMPLETE ON BHB3354. 02/24/2011. Added per SSCN 10832
51153	SSCN 10234, Mod 1567	Ethernet User Cable Kit	1F15994-501	1	KT	FLT	N/A	Moscow	Moscow	03/31/08	COMPLETE ON BHB3084. 03/25/2008. Added per SSCN 10234
51154	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	3	EA	FLT	N/A	HI	HI	03/31/11	COMPLETE ON BHB3554. 02/07/2013. Added per SSCN 10472
51155	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	3	EA	FLT	N/A	HI	HI	04/29/11	COMPLETE ON BHB3555. 02/07/2013. Added per SSCN 10472
51156	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	2	EA	FLT	N/A	HI	HI	05/27/11	COMPLETE ON BHB3557. 08/02/2013. Added per SSCN 10472 definitized on Mod 1504
51158	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	11/10/09	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51159	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	12/10/09	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51160	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	01/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51161	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	02/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51162	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51163	SSCN 10625R5, Mod	Secondary Stanchion Post - Battery	N/A	1	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3137. 10/30/2008. Added per SSCN 10625 R
51164	SSCN 10625R5, Mod	Secondary Stanchion Post - Common	N/A	1	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3141. 10/27/2008E. Added per SSCN 10625 R
51165	SSCN 10625R5, Mod	Retainer Plate, Secondary Tiedown - Battery	N/A	1	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3135. 10/15/2008. Added per SSCN 10625 R
51166	SSCN 10625R5, Mod	Retainer Plate, Secondary Tiedown - Common	N/A	1	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3136. 10/15/2008. Added per SSCN 10625 R
51167	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3131. 10/08/2008. Added per SSCN 10625 R
51168	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3121. 09/30/2008. Added per SSCN 10625 R
51169	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3122. 09/30/2008. Added per SSCN 10625 R
51170	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3123. 09/30/2008. Added per SSCN 10625 R
51171	SSCN 10625R5, Mod	Stanchion Post Attachment Nuts	N/A	12	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3124. 09/30/2008. Added per SSCN 10625 R
51173	SSCN 10773, Mod 1544	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT	N/A	HSSSI	HSSSI	08/06/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51174	SSCN 10773, Mod 1544	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT	N/A	HSSSI	HSSSI	08/06/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51175	SSCN 10773, Mod 1544	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT	N/A	HSSSI	HSSSI	09/03/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51177	SSCN 10773, Mod 1544	Connector Saver, Assembly, Type II	360535-001	2	KT	FLT	N/A	HSSSI	HSSSI	09/01/09	COMPLETE ON BHB3291. 05/17/2010. Added per SSCN 10773
51178	SSCN 10773, Mod 1544	Connector Saver, Assembly, Type II	360545-001	2	KT	FLT	N/A	HSSSI	HSSSI	09/01/09	COMPLETE ON BHB3292. 05/17/2010. Added per SSCN 10773
51179	SSCN 10773, Mod 1544	Connector Saver, Assembly, Type II	360555-001	2	KT	FLT	N/A	HSSSI	HSSSI	09/01/09	COMPLETE ON BHB3293. 05/17/2010. Added per SSCN 10773
51181	SSCN 11038R4, Mod	MBS MT Crossover Cables	N/A	1	KT	FLT	N/A	B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51182	SSCN 11038R4, Mod	Mod Kit, Protective Sleeves, Connector Assembly	N/A	1	KT	FLT	N/A	B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51185	SSCN 11038R4, Mod	Mod Kit, Protective Sleeve, Connector Assembly, SO	N/A	1	KT	FLT	N/A	B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51187	SSCN 11038R4, Mod	Node 1 ESP-2	N/A	1	KT	FLT	N/A	B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51189	SSCN 11038R2, Mod	Mod Kit, Protective Sleeve, Connector Assembly,	N/A	1	KT	FLT	N/A	B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51190	SSCN 10625R5, Mod	Secondary Stanchion Post - Common	N/A	1	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3138. 10/30/2008. Added per SSCN 10625 R
51191	SSCN 10625R5, Mod	Secondary Stanchion Post - DDCU-E	N/A	1	EA	FLT	N/A	Vendor	KSC	09/19/08	COMPLETE ON BHB3139. 10/30/2008. Added per SSCN 10625 R
51192	SSCN 9457 Rev 4; Mod	Mod Kit, BMRRM - Cover Retainer Flight	N/A	1	KT	FLT	N/A	KSC	KSC	06/20/08	COMPLETE ON BHB3115. 08/20/2008. SSCN 9457 Rev 4
51193	SSCN 10990; Mod 1557	Mod Kit – Improved Automated Payload Switch	384-014201-0001	1	KT	FLT	N/A	SEAKR	SEAKR	02/24/10	COMPLETE ON BHB3317. 07/21/2010. Added per SSCN 10990
51194	SSCN 10990; Mod 1557	Mod Kit – Improved Automated Payload Switch	684-014201-0501	1	KT	FLT	N/A	SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3323. 08/18/2010. Added per SSCN 10990
51195	SSCN 10990; Mod 1557	Control Card Assembly	960540-009	1	EA	FLT	N/A	SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3325. 11/02/2010. Added per SSCN 10990
51196	SSCN 10990; Mod 155x	Switch Card Assembly	960660-009	1	EA	FLT	N/A	SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3326. 11/02/2010. Added per SSCN 10990
51197	SSCN 11072; Mod 1512	Mod Kit, ULC Passive UMA, Fastner Replacement	N/A	3	KT	FLT	N/A	KSC	KSC	07/09/08	COMPLETE ON BHB3103. 07/11/2008. SSCN 11072 definitized
51198	SSCN 11072; Mod 1512	Mod Kit, ULC Passive UMA, Fastner Replacement	N/A	1	KT	FLT	N/A	KSC	KSC	07/09/08	COMPLETE ON BHB3104. 07/11/2008. SSCN 11072 definitized
51199	SSCN 11072; Mod 1512	Mod Kit, ULC Passive UMA, Fastner Replacement	N/A	1	KT	FLT	N/A	KSC	KSC	07/09/08	COMPLETE ON BHB3105. 07/11/2008. SSCN 11072 definitized
51200	SSCN 11123, Mod 1512	Mod Kit, RJMC	N/A	1	KT	FLT	N/A	HI	KSC	08/11/08	COMPLETE ON BHB3106. 08/01/2008. Added per SSCN 11123
51201	SSCN 10996, Mod 1557	Flight CCA	8275155-901	2	EA	FLT	N/A	HI	HI	04/25/11	COMPLETE ON BHB3447. 08/09/2011. Partial shipment on
51202	SSCN 10996, Mod 1557	Flight CCA (Spare)	8275155-901	1	EA	FLT	N/A	HI	HI	05/05/11	COMPLETE ON BHB3454. 08/30/2011. Added per SSCN 10996
51203	SSCN 10996, Mod 1557	Front Cover (Spare)	8275222-901	1	EA	FLT	N/A	HI	HI	05/05/11	COMPLETE ON BHB3455. 08/30/2011. Added per SSCN 10996
51207	SSCN 10996, Mod 1557	Front Cover	8275222-901	2	EA	FLT	N/A	HI	HI	04/25/11	COMPLETE ON BHB3446. 08/09/2011.Partial shipment on

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51208	SSCN 8814; Mod 1586	Water Separator ORU Design Improvement Mod Kit	SVK1007191-1	2	KT	FLT	N/A	HSSSI	HSSSI	09/24/09	COMPLETE ON BHB3297. 05/06/2010. Ship short on BHB3247.
51209	SSCN 8814; Mod 1586	Water Separator ORU Design Improvement Mod Kit	SVK1016815-1	5	KT	FLT	N/A	HSSSI	HSSSI	12/17/09	COMPLETE ON BHB3400. 11/02/2012. Partial shipment on
51221	SSCN 11010; Mod 1593	Improved Payload Ethernet Hub/Gateway (iPEHG)	AN64561-001-01	6	EA	FLT	N/A	BHOU	BHOU	05/16/11	COMPLETE ON BHB3527. 10/26/2012. Ship short on BHB3512
51224	SSCN 11214; Mod 1548	RPCM Type III Mod Kit (External)	N/A	1	KT	FLT	N/A	NSSD	KSC	11/07/08	COMPLETE ON BHB3127. 01/30/2009. Added per SSCN 11214
51225	SSCN 11214; Mod 1548	RPCM Type V Mod Kit (External)	N/A	2	KT	FLT	N/A	NSSD	KSC	11/07/08	COMPLETE ON BHB3127. 01/30/2009. Added per SSCN 11214
51226	SSCN 11214; Mod 1548	RPCM Type VI Mod Kit (External)	N/A	1	KT	FLT	N/A	NSSD	KSC	11/07/08	COMPLETE ON BHB3127. 01/30/2009. Added per SSCN 11214
51229	SSCN 11083; Mod 1554	Mod Kit, S1/P1 Fluid System EVA Label	N/A	4	KT	FLT	N/A	BHOU	BHOU	04/27/09	COMPLETE ON BHB3212. 07/13/2009. Ship short on BHB3188
51230	SSCN 11083; Mod 1554	Mod Kit, NTA Fluid Blanket Assembly Label	N/A	4	KT	FLT	N/A	BHOU	BHOU	04/27/09	COMPLETE ON BHB3187. 05/19/2009. Changed nomenclature
51231	SSCN 11214; Mod 1548	RPCM Type V Mod Kit (External)	N/A	4	KT	FLT	N/A	NSSD	HSR	11/07/08	COMPLETE ON BHB3128. 01/30/2009. Added per SSCN 11214
51232	Mod 1578	Bag Assy Cable, Channel 1/4 - SO to N3	N/A	1	EA	FLT	N/A	BHOU	BHOU	04/30/09	COMPLETE ON BHB3179. 04/15/2009. Added per letter 09-336
51233	Mod 1578	Bag Assy Cable, Channel 2/3 - SO to N3	N/A	1	EA	FLT	N/A	BHOU	BHOU	04/30/09	COMPLETE ON BHB3179. 04/15/2009. Added per letter 09-336
51234	SSCN 11372; Mod 1595	Integrated Communication Unit (ICU)	8080001-117	4	EA	FLT	N/A	BHOU	KSC	09/29/11	COMPLETE ON BHB3515. 09/07/2012. Partial and ship short on
51237	SSCN 10759; Mod 1567	Mod Kit, On-Orbit, S0 Rate Gyro Enclosure	684-014517-0001	1	KT	FLT	N/A	BHOU	BHOU	02/27/09	COMPLETE ON BHB3167. 03/13/2009. Added per SSCN 10759
51238	SSCN 10759; Mod 1567	Mod Kit, On-Orbit, S0 Rate Gyro Enclosure	684-014517-0001	1	KT	FLT	N/A	BHOU	BHOU	02/27/09	COMPLETE ON BHB3167. 03/13/2009. Added per SSCN 10759
51239	SSCN 10759; Mod 1567	Mod Kit, Rate Gyro Enclosure Assembly (RGEA)	684-014516-0001	1	KT	FLT	N/A	BHOU	BHOU	02/20/09	COMPLETE ON BHB3162. 02/24/2009. Added per SSCN 10759
51240	SSCN 10759; Mod 1567	Mod Kit, Rate Gyro Enclosure Assembly (RGEA)	684-014516-0001	1	KT	FLT	N/A	BHOU	BHOU	02/20/09	COMPLETE ON BHB3162. 02/24/2009. Added per SSCN 10759
51241	SSCN 10759; Mod 1567	Mod Kit, Rate Gyro Enclosure Assembly (RGEA)	684-014516-001	1	KT	FLT	N/A	BHOU	BHOU	02/20/09	COMPLETE ON BHB3162. 02/24/2009. Added per SSCN 10759
51249	SSCN 11372; Mod 1595	ICU CSCI	684-13301-02	1	EA	FLT	N/A	BHOU	JSC	05/31/11	COMPLETE ON BHB3540. 03/25/2013. Ship short on BHB3525
51252	SSCN 10773; Mod 1567	Modification Kit, Firmware Upgrade, ORU01	360405-001	3	KT	FLT	N/A	HSSSI	HSSSI	08/01/09	COMPLETE ON BHB3226. 10/29/2009. Added per SSCN 10773
51253	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51254	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51255	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51256	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT	N/A	HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51257	SSCN 10773; Mod 1567	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT	N/A	HSSSI	HSSSI	08/01/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51258	SSCN 10773; Mod 1567	Modification Kit, Gas Cylinder, ORU8	630407-001	1	KT	FLT	N/A	HSSSI	HSSSI	08/01/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51260	Mod 1578	Bag Assy Ammonia Lines - Node 3 to US Lab	N/A	1	EA	FLT	N/A	BHOU	BHOU	10/30/09	COMPLETE ON BHB3235. 10/28/2009. Changed delivery date per
51261	SSCN 11145; Mod 1586	Mod Kit, On-Orbit - T2 VIS	684-014673-0001	1	KT	FLT	N/A	BHOU	BHOU	11/06/09	COMPLETE ON BHB3232. 10/31/2009. Added per SSCN 11145
51262	SSCN 10359	Mod Kit, On-Orbit, Z1, CMG	684-014680-0001	4	KT	FLT	N/A	BHOU	BHOU	11/06/09	COMPLETE ON BHB3231. 10/24/2009. Added per letter 09-0369
51263	SSCN 11561; Mod 1583	Kit, Cable - N2 to HTV	684-014785-0001	1	KT	FLT	N/A	BHOU	BHOU	07/13/09	COMPLETE ON BHB3211. 07/13/2009. Added per SSCN 11561
51264	SSCN 10966; Mod 1590	Mod Kit, On-Orbit, S0, GPS Antenna Upgrade	N/A	4	KT	FLT	N/A	BHOU	BHOU	08/05/09	COMPLETE ON BHB3218. 08/04/2009. Added per SSCN 106966
51267	SSCN 11553; Mod 1625	Mod Kit 1, SARJ Full Redundancy Outboard Ops	684-014855-0001	1	KT	FLT	N/A	BHOU	BHOU	11/30/11	COMPLETE ON BHB3463. 10/26/2011. Added per SSCN 11553
51268	SSCN 11553; Mod 1625	Mod Kit 2, SARJ Full Redundancy Outboard Ops	684-014854-0001	1	KT	FLT	N/A	BHOU	BHOU	09/19/11	COMPLETE ON BHB3456. 09/02/2011. Added per SSCN 11553
51269	SSCN 11553; Mod 1625	RJMC Interface Unit (RIU) Assy	684-014900-0001	1	EA	FLT	N/A	BHOU	BHOU	10/19/11	COMPLETE ON BHB3460. 09/28/2011. Added per SSCN 11553
51272	SSCN 11670; Mod 1577	RPCM Type V Mod Kit (External)	N/A	4	KT	FLT	N/A	HOU	HSR	07/31/09	COMPLETE ON BHB3189. 05/27/2009. Added per SSCN 11670
51273	SSCN 11670; Mod 1577	RPCM Type V Mod Kit (External)	N/A	3	KT	FLT	N/A	HOU	HSR	07/31/09	COMPLETE ON BHB3189. 05/27/2009. Added per SSCN 11670
51274	SSCN 11670; Mod 1577	RPCM Type V Mod Kit (External)	N/A	1	KT	FLT	N/A	HOU	HSR	07/31/09	COMPLETE ON BHB3189. 05/27/2009. Added per SSCN 11670
51280	SSCN 11145; Mod 1586	Ground Strap Assy - T2-VIS	1F16208-1	1	EA	FLT	N/A	BHOU	BHOU	07/31/09	COMPLETE ON BHB3213. 07/16/2009. Added per SSCN 11145
51281	SSCN 11145; Mod 1586	Back Cup	080416J	20	EA	FLT	N/A	BHOU	BHOU	07/31/09	COMPLETE ON BHB3213. 07/16/2009. Added per SSCN 11145
51282	SSCN 11145; Mod 1586	Front Cup	080416F	40	EA	FLT	N/A	BHOU	BHOU	07/31/09	COMPLETE ON BHB3213. 07/16/2009. Added per SSCN 11145
51283	SSCN 11145; Mod 1586	Isolator Assy, X-Axis - T2-VIS	1F16152-1	2	EA	FLT	N/A	BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51284	SSCN 11145; Mod 1586	Isolator Assy, Y-Axis - T2-VIS	1F16153-1	2	EA	FLT	N/A	BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51285	SSCN 11145; Mod 1586	Isolator Assy, Z-Axis - T2-VIS	1F16154-1	2	EA	FLT	N/A	BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51286	SSCN 11145; Mod 1586	Isolator Assy, Upper - T2-VIS	1F16155-1	2	EA	FLT	N/A	BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51287	SSCN 11145; Mod 1586	Panel Assy, Umbilical - T2-VIS	1F16177-1	1	EA	FLT	N/A	BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51288	SSCN 11348; Mod 1589	Mod Kit, Cable, 1553 Bus - FGB PDGF, Node 1	684-014523-0001	1	KT	FLT	N/A	BHOU	Moscow	12/18/09	COMPLETE ON BHB3254. 12/16/2009. Added per SSCN 11348
51296	SSCN 11809; Mod 1598	Mod Kit, Switchgear Control Assembly (SCA)	2R124312-10	2	KT	FLT	N/A	BHOU	BEP	10/30/09	COMPLETE ON BHB3228. 10/13/2009. Added per SSCN 11809
51297	SSCN 11908; Mod 1609	Mod Kit, Micro Handle	2R124521-10	2	KT	FLT	N/A	BHOU	PWR	12/23/09	COMPLETE ON BHB3250. 12/10/2009. Added per SSCN 11908
51298	SSCN 11812; Mod 1610	Mod Kit, Cable, Data/Power - Node 2	D684-95074-0001	2	KT	FLT	N/A	BHOU	BHOU	04/30/10	COMPLETE ON BHB3286. 03/26/2010. Added per SSCN 11812
51299	SSCN 11846	Mod Kit, Airlock Installation of O2/N2 Tank, On-Orbit	684-015019-0001	1	KT	FLT	N/A	BHOU	BHOU	11/23/09	COMPLETE ON BHB2333. 11/24/2009. Added per SSCN 11846
51302	SSCN 11947; CO e-mail	Mod Kit, Cable - Node 3	684-015072-0001	1	KT	FLT	N/A	BHOU	BHOU	04/09/10	COMPLETE ON BHB3282. 03/11/2010. Added per SSCN 11947
51303	SSCN 11947; S/A 1658	Mod Kit, Network Device - Node 3	684-015071-0001	1	KT	FLT	N/A	BHOU	BHOU	04/06/11	COMPLETE ON BHB3390. 05/03/2011. Added per SSCN 11947
51304	SSCN 11947; S/A 1658	Network Device	684-015068-0001	9	EA	FLT	N/A	BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Added per SSCN 11947
51305	SSCN 11947; S/A 1658	Cable Assy, Power, Network Device - Node 3	684-015073-0001	9	EA	FLT	N/A	BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Added per SSCN 11947
51306	SSCN 11947; S/A 1658	Adapter - M12 to RJ45	684-015069-0501	60	EA	FLT	N/A	BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Ship short on
51308	SSCN 11946; Mod 1690	Modification Kit, CDRA Bed (-4)	TBD	2	KT	FLT	N/A	HI	HI	07/10/12	COMPLETE ON BHB3534. 12/14/2012. Added per SSCN 11946
51332	SSCN 12062; Mod 1618	Mod Kit, Adapter Assy, Video Stanchion	684-015100-0001	1	KT	FLT	N/A	BHOU	BHOU	06/15/10	COMPLETE ON BHB3298. 06/07/2010. Added per SSCN 12062

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51333	SSCN 12088; CO e-mail	WPA External Filter Assembly, On-Orbit Non-	684-015084-0001	1	KT	FLT	N/A	KSC	KSC	03/05/10	COMPLETE ON BHB3261. 01/29/2010. Added per SSCN 12088
51335	SSCN 11947; S/A 1658	RJ45 Ethernet Couplers	684-015363-0001	60	EA	FLT	N/A	BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Added per SSCN 11947
51339	SSCN 12088; Mod 1634	EFA Filters (Spare)	SV1018042-1	4	EA	FLT	N/A	HSSSI	HSSSI	04/15/10	COMPLETE ON BHB3285. 03/31/2010. Added per SSCN 12088
51340	SSCN 12140; Letter 10-	Adapter Assy, FSS-402-1	684-015090-001	1	EA	OSE	N/A	KSC	KSC	02/05/10	COMPLETE ON BHB3262. 02/01/2010. Added per SSCN 12140
51341	PIO 85; Letter 10-0270	SASA Blanket Kit	1F98549-1	1	KT	FLT	N/A	NSSD	NSSD	03/15/10	COMPLETE ON BHB3283. 03/16/2010. Added per PIO 85 on
51342	PIO 85; Letter 10-0270	SASA Blanket Kit	1F98549-1	1	KT	FLT	N/A	NSSD	NSSD	03/15/10	COMPLETE ON BHB3284. 03/18/2010. Added per PIO 85 on
51343	SSCN 12161; Letter 10-	Kit, Hydrogen Done Assy-ORU, Launch Cover	PLSV28789	1	KT	FLT	N/A	HSSSI	HSSSI	02/09/10	COMPLETE ON BHB3267. 02/03/2010. Added per SSCN 12161
51344	SSCN 12085; Mod 1633	MDM, PVCU	8260525-909	1	EA	FLT	N/A	HI	KSC	04/23/10	COMPLETE ON BHB3307. 06/07/2010. Added per SSCN 12085
51345	SSCN 12085; Mod 1633	MDM Assembly, Upper	R071818-41	1	EA	FLT	N/A	KSC	KSC	06/04/10	COMPLETE ON BHB3306. 07/21/2010. Added per SSCN 12085
51346	SSCN 12085; Mod 1633	MDM Assembly, Lower	R071826-1	1	EA	FLT	N/A	KSC	KSC	06/28/10	COMPLETE ON BHB3366. 03/07/2011. Added per SSCN 12085
51348	SSCN 11801; CCO 1636	Mod Kit, Cable, Power, Heater - Airlock	684-015108-0001	1	KT	FLT	\$ 27,808.00	BHOU	BHOU	07/16/10	COMPLETE ON BHB3299. 06/04/2010. Added per SSCN 11801
51352	SSCN 11947; S/A 1658	Mod Kit, Cable, Ethernet - Node 3	684-015146-0001	1	KT	FLT	N/A	BHOU	BHOU	11/01/10	COMPLETE ON BHB3339. 12/01/2010. Added per SSCN 11947
51353	SSCN 11947; S/A 1658	Mod Kit, Cable, Ethernet - Cupola	684-015147-0001	1	KT	FLT	N/A	BHOU	BHOU	11/01/10	COMPLETE ON BHB3340. 12/01/2010. Added per SSCN 11947
51354	SSCN 12216; S/A 1656	Mod Kit, Grapple Bar Assembly, FRGF Re-Clock	684-015151-0001	1	KT	FLT	N/A	KSC	KSC	01/31/12	COMPLETE ON BHB3465. 12/15/2011. Added per SSCN 12216
51357	SSCN 12270; CO Email	Cable Assy, Power - Contingency, Node 1 (W5161)	684-015161-0001	1	EA	FLT	N/A	KSC	KSC	05/28/10	COMPLETE ON BHB3288. 05/04/2010. Added per SSCN 12270
51366	SSCN 10990; Letter 10-	(iAPS), On-Orbit	384-014201-0001	1	KT	FLT	N/A	SEAKR	SEAKR	02/24/10	COMPLETE ON BHB3318. 007/21/2010. Added per DIL 51193
51367	SSCN 10990; Letter 10-	Mod Kit – Improved Automated Payload Switch	684-014201-0501	1	KT	FLT	N/A	SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3324. 09/17/2010. Added per DIL 51194 split
51368	SSCN 12398; Mod 1651	Modification Kit, Catalytic Reactor (as Installed)	SVK1019033-1	1	KT	FLT	N/A	HSSSI	HSSSI	10/15/10	COMPLETE ON BHB3331. 10/12/2010. Added per SSCN 12398
51369	SSCN 12398; Mod 1651	Modification Kit, Catalytic Reactor	SVK1019033-1	1	KT	FLT	N/A	HSSSI	HSSSI	10/15/10	COMPLETE ON BHB3345. 12/15/2010. Added per SSCN 12398
51371	SSCN 12465; Mod 1685	LMC Mechanical Installation Kit	683-93070-1	1	KT	FLT	N/A	BHOU	BHOU	03/03/11	COMPLETE ON BHB3367. 03/11/2011. Added per SSCN 12465
51372	SSCN 12455; S/A 1701	Mod Kit, Cable, Power, External - FGB	684-015330-0001	1	KT	FLT	N/A	BHOU	BHOU	03/16/11	COMPLETE ON BHB3351. 02/11/2011. Added per SSCN 12455
51375	SSCN 12446; S/A 1742	Mod Kit, Treadmill Two – Vibration Isolation System	684-015962-0001	1	KT	FLT	N/A	BHOU	BHOU	07/15/11	COMPLETE ON BHB3435. 07/29/2011. Added per SSCN 12446
51466	SSCN 12644; S/A 1713	Mod Kit, Cable, 1553 Bus – Node 2 Vestibule	684-TBD	1	KT	FLT	N/A	BHOU	BHOU	09/29/11	COMPLETE ON BHB3437. 07/27/2011. Added per SSCN 12644
51467	SSCN 10395; S/A 1769	Cable Assy, Power – MLM, Channel 1/4 Russian	684-015630-0001	1	EA	FLT	N/A	BHOU	BHOU	12/20/11	COMPLETE ON BHB3467. 12/20/2011. Added per SSCN 10395
51468	SSCN 10395; S/A 1769	Cable Assy, Power – MLM, Channel 2/3 Russian	684-015631-0001	1	EA	FLT	N/A	BHOU	BHOU	12/20/11	COMPLETE ON BHB3470. 12/20/2011. Added per SSCN 10395
51469	SSCN 10395; S/A 1769	Mod Kit, Cable, Power, External - MLM	684-015627-0001	1	KT	FLT	N/A	BHOU	BHOU	03/22/12	COMPLETE ON BHB3471. 01/17/2012. Added per SSCN 10395
51470	SSCN 12721; S/A 1717	Contingency Maintenance Kit, 1553/Memory, CCA	684-015601-0001	1	KT	FLT	N/A	BHOU	BHOU	04/01/11	COMPLETE ON BHB3370. 04/01/2011. Added per SSCN 12721
51471	SSCN 12721; S/A 1717	Contingency Maintenance Kit, EDP CCA	684-015602-0001	1	KT	FLT	N/A	BHOU	BHOU	04/01/11	COMPLETE ON BHB3370. 04/01/2011. Added per SSCN 12721
51472	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA), 1553	684-015830-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3561. 03/29/2013. Changed delivery date per
51473	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015832-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3558. 04/03/2013. Changed delivery date per
51474	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015831-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3559. 03/29/2013. Changed delivery date per
51475	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Changed quantity per
51476	SSCN 12443; S/A 1771	Mod Kit, ELC Wireless Communications, WAP - US	684-015641-0001	1	KT	FLT	N/A	BHOU	BHOU	03/26/12	COMPLETE ON BHB3484. 03/26/2012. Added per SSCN 12443
51477	SSCN 12443; S/A 1771	Access Point Assy, Wireless - EWC	684-015639-0001	11	EA	FLT	N/A	BHOU	BHOU	05/25/12	COMPLETE ON BHB3495. 05/25/2012. Partial shipment 2 of 11
51478	SSCN 12443; S/A 1771	EVA Handrail/Antenna Assy - External Wireless	684-015274-0001	1	EA	FLT	N/A	BHOU	BHOU	03/26/12	COMPLETE ON BHB3485. 03/26/2012. Added per SSCN 12443
51479	SSCN 12443; S/A 1771	EVA Handrail/Antenna Assy - External Wireless	684-015274-0501	1	EA	FLT	N/A	BHOU	BHOU	03/26/12	COMPLETE ON BHB3485. 03/26/2012. Added per SSCN 12443
51480	SSCN 12443; S/A 1771	Antenna Assy - External Wireless System	684-015275-0001	2	EA	FLT	N/A	BHOU	BHOU	03/26/12	COMPLETE ON BHB3485. 03/26/2012. Added per SSCN 12443
51481	SSCN 12443; S/A 1771	Cable Assy, Power, WAP - EWC	684-015642-0001	6	EA	FLT	N/A	BHOU	BHOU	05/25/12	COMPLETE ON BHB3498. 05/25/2012. Partial shipment 2 of 6 on
51482	SSCN 12443; S/A 1771	Cable Assy, Coax, Antenna - Payload	684-015637-0001	10	EA	FLT	N/A	BHOU	BHOU	05/25/12	COMPLETE ON BHB3500. 05/25/2012. Added per SSCN 12443
51483	SSCN 12443; S/A 1771	Antenna, Payload - EWC	684-015636-0001	10	EA	FLT	N/A	BHOU	BHOU	05/25/12	COMPLETE ON BHB3499. 02/08/2013. Added per SSCN 12443
51484	SSCN 12443; S/A 1771	Interface Card, Network - EWC	684-015644-0001	12	EA	FLT	N/A	BHOU	BHOU	05/25/12	COMPLETE ON BHB3496. 05/25/2012. Added per SSCN 12443
51487	SSCN 12693; S/A 1736	Protective Cap	NATC-RPC-N-13-	12	EA	FLT	N/A	KSC	KSC	10/24/11	COMPLETE ON BHB3492. 06/18/2012. Added per SSCN 12693
51488	SSCN 12753; S/A 1720	Cover Assembly, Recycle Tank - ARFTA	683-99713-1	2	EA	FLT	N/A	BHOU	BHOU	06/10/11	COMPLETE ON BHB3402. 05/26/2011. Added per SSCN 12753
51489	SSCN 12753; S/A 1720	Cover Assembly, Recycle Tank - ARFTA	683-99713-1	1	EA	FLT	N/A	BHOU	BHOU	07/15/11	COMPLETE ON BHB3420. 06/23/2011. Added per SSCN 12753
51497	SSCN 12358; Letter 11-	Contingency Kit, PMA 3 Cover	684-015697-0001	1	KT	FLT	N/A	BHOU	BHOU	05/27/11	COMPLETE ON BHB3401. 05/27/2011. Added per letter 11-
51502	SSCN 12673; S/A 1733	Kit, Drive Lock Assembly Cover	684-015797-0001	2	KT	FLT	N/A	BHOU	BHOU	03/08/12	COMPLETE ON BHB3477. 03/02/2012. Added per SSCN 12673
51504	SSCN 12648; S/A 1738	MDM, EPIC, EXT	684-015894-0001	1	KT	FLT	N/A	HI	HI	10/15/12	COMPLETE ON BHB3524. 10/11/2012. Added per SSCN 12648
51505	SSCN 12648; S/A 1738	MDM, EPIC, EXT	684-015895-0001	1	KT	FLT	N/A	HI	HI	11/15/12	COMPLETE ON BHB3529. 11/08/2012. Added per SSCN 12648
51506	SSCN 12648; S/A 1738	MDM, EPIC, EXT (Spare Card)	8275155-901	1	EA	FLT	N/A	HI	HI	12/14/12	COMPLETE ON BHB3533. 12/05/2012. Added per SSCN 12648
51509	SSCN 10553; Letter 11-	Front Cover	8275222-901	2	EA	FLT	N/A	HI	HI	12/16/10	COMPLETE ON BHB3432. 06/27/2011. Ship short on BHB3393
51510	SSCN 10553, Letter 11-	MDM Card Spare	8275155-901	1	EA	FLT	N/A	HI	HI	12/16/10	COMPLETE ON BHB3431. 06/27/2011. Added per DIL 51112 split
51511	SSCN 12810; S/A 1743	Insulation Kit - SPCU HX	684-016801-0001	4	KT	FLT	N/A	BHOU	BHOU	04/30/12	COMPLETE ON BHB3481. 03/09/2012. Added per SSCN 12810
51611	SSCN 12443; S/A 1771	Antenna, Internal - EWC	684-017259-0001	20	EA	FLT	N/A	BHOU	BHOU	05/25/12	COMPLETE ON BHB3497. 05/25/2012. Added per SSCN 12443
51582	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA), 1553	684-015833-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3561. 03/29/2013. Changed delivery date per
51583	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015827-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3558. 04/03/2013. Changed delivery date per
51576	SSCN 12831; S/A 1834	Wire Harness Assy, EPS Y-Jumper, W5211	683-95211-1	1	EA	FLT	N/A	BHOU	BHOU	07/02/12	COMPLETE ON BHB3509. 07/02/2012. Added per SSCN 12831

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51577	SSCN 12831; S/A 1834	Wire Harness Assy, OGS Converter Jumpers,	683-95212-1	1	EA	FLT	N/A	BHOU	BHOU	09/06/12	COMPLETE ON BHB3518. 08/27/2012. Added per SSCN 12831
51578	SSCN 12831; S/A 1834	Wire Harness Assy, OGS Converter Jumpers,	683-95212-2	1	EA	FLT	N/A	BHOU	BHOU	09/06/12	COMPLETE ON BHB3518. 08/27/2012. Added per SSCN 12831
51579	SSCN 12831; S/A 1834	Wire Harness Assy, EPS H-Jumper, W5213	683-95213-1	1	EA	FLT	N/A	BHOU	BHOU	11/09/12	COMPLETE ON BHB3526. 10/29/2012. Added per SSCN 12831
51580	SSCN 12831; S/A 1834	Wire Harness Assy, Node 3 EPS XOVER Jumper,	683-95214-1	1	EA	FLT	N/A	BHOU	BHOU	01/30/13	COMPLETE ON BHB3535. 12/07/2012. Added per SSCN 12831
51584	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015834-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3559. 03/29/2013. Changed delivery date per
51585	SSCN 12816; S/A 1754	Mod Kit, Cable, Ethernet, External – MLM	684-015947-0001	1	KT	FLT	N/A	MOSCOW	MOSCOW	05/21/12	COMPLETE ON BHB3519. 09/26/2012. Changed destination per
51597	SSCN 12637; S/A 1777	Kit, Waste and Hygiene Compartment	684-017251	1	KT	FLT	N/A	BHOU	BHOU	08/31/12	COMPLETE ON BHB3514. 08/15/2012. Added per SSCN 12637
51618	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3570. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51619	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3570. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51620	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT	N/A	BHOU	BHOU	06/29/13	COMPLETE ON BHB3571. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51621	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT	N/A	BHOU	BHOU	06/29/13	COMPLETE ON BHB3571. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51622	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT	N/A	BHOU	BHOU	08/29/13	COMPLETE ON BHB3581. 08/28/2013. Added per SSCN 12441 definitized on S/A 1802.
51623	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT	N/A	BHOU	BHOU	08/29/13	COMPLETE ON BHB3581. 08/28/2013. Added per SSCN 12441 definitized on S/A 1802.
51625	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT	N/A	BHOU	BHOU	10/28/13	COMPLETE ON BHB3606. 10/23/2013. Added per SSCN 12441 definitized on S/A 1802.
51630	SSCN 12441; S/A 1802	Thermal Blanket, Assy, Aft	684-015303-0001	1	EA	FLT	N/A	BHOU	BHOU	06/15/13	COMPLETE ON BHB3568. 06/10/2013. Added per SSCN 12441
51631	SSCN 12441; S/A 1802	Thermal Blanket, Forward	684-015305-0001	1	EA	FLT	N/A	BHOU	BHOU	06/29/13	COMPLETE ON BHB3568. 06/10/2013. Added per SSCN 12441
51632	SSCN 13005; S/A 1778	Spacer Bar Assembly – T2 VIS	1F16169-1	1	EA	FLT	N/A	BHOU	BHOU	09/12/11	COMPLETE ON BHB3458. 09/12/2011. Added per SSCN 13005
51633	SSCN 10553; S/A 1782	Front Cover	8275222-901	1	EA	FLT	N/A	HI	HI	11/11/11	COMPLETE ON BHB3464. 11/08/2011. Added per SSCN 10553
51634	SSCN 12803; S/A 1859	ARFTA Protective Cap	683-99713-1	3	EA	FLT	N/A	BHOU	BHOU	09/04/12	COMPLETE ON BHB3511. 08/02/2012. Added per SSCN 12803
51635	SSCN 10773; S/A 1809	Modification Kit, Gas Cyclinder, ORU8	360407-002	3	KT	FLT	N/A	HSSSI	HSSSI	06/15/12	COMPLETE ON BHB3542. 03/08/2013. Added per SSCN
51675	SSCN 12202; S/A 1792	Assembly, Tie-down, Rear	684-017037-0001	3	EA	FLT	N/A	BHOU	KSC	08/15/19	COMPLETE ON BHB3488. 04/20/2012. Added per SSCN 12202
51677	SSCN 13070; S/A 1786	EPIC On-Orbit Tester	TBD	2	EA	FLT	N/A	BHOU	BHOU	12/13/11	COMPLETE ON BHB3469. 01/25/2012. Partial on BHB3468 dated
51679	SSCN 12283; S/A 1820	Power Distribution Unit	11M156M/FGB2	1	EA	FLT	N/A	MOSCOW	MOSCOW	10/15/12	COMPLETE ON BHB3520. 09/20/2012. Added per SSCN 12283
51680	SSCN 12283; S/A 1820	Main Bus Assembly	БСШ-2/FGB2	1	EA	FLT	N/A	MOSCOW	MOSCOW	10/15/12	COMPLETE ON BHB3520. 09/20/2012. Added per SSCN 12283
51681	SSCN 12283; S/A 1820	Filter Unit	БФ-2/FGB2	1	EA	FLT	N/A	MOSCOW	MOSCOW	10/15/12	COMPLETE ON BHB3520. 09/20/2012. Added per SSCN 12283
51682	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT	N/A	HI	HI	02/15/13	COMPLETE ON BHB3546. 01/10/2013. Added per SSCN 13062
51683	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT	N/A	HI	HI	04/15/13	COMPLETE ON BHB3549. 02/14/2013. Added per SSCN 13062
51684	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT	N/A	HI	HI	06/14/13	COMPLETE ON BHB3563. 04/23/2013. Added per SSCN 13062
51685	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT	N/A	HI	HI	08/15/13	COMPLETE ON BHB3567. 06/07/2013. Added per SSCN 13062
51686	SSCN 13047; S/A xxxx	PMA-2 Thermal/MMOD Cover	684-TBD-0001	1	EA	FLT	N/A	BHOU	BHOU	05/11/12	COMPLETE ON BHB3491. 05/04/2012. Added per SSCN 13047
51687	SSCN 13123; S/A 1809	Mod Kit, LwAPA	684-TBD-0001	1	KT	FLT	N/A	KSC	KSC	04/18/12	COMPLETE ON BHB3487. 04/17/2012. Added per SSCN 13123
51688	SSCN 13096; S/A 1839	Modification Kit, WPA Waste Water ORU	TBD	1	KT	FLT	N/A	HSSSI	HSSSI	03/20/13	COMPLETE ON BHB3547. 01/16/2013. Added per SSCN 13096
51690	SSCN 13184; S/A 1824	Modification Kit, Heater Mat MLI and Handrail	684-017454-0001	1	EA	FLT	N/A	KSC	KSC	07/10/12	COMPLETE ON BHB3507. 06/22/2012. Added per SSCN 13184
51704	SSCN 13243; S/A 1842	Mod Kit, Cable-Data-Node 2 Vestibule	684-017966-0001	1	KT	FLT	N/A	BHOU	BHOU	06/15/12	COMPLETE ON BHB3502. 05/24/2012. Added per SSCN 13243
51705	SSCN 13245; S/A 1841	ELC Jumper Cables, On-Orbit Non-Standard Repair	684-017986-0001	1	KT	FLT	N/A	KSC	KSC	05/22/12	COMPLETE ON BHB3501. 05/22/2012. Added per SSCN 13245
51708	SSCN 13204; S/A 1887	Mod Kit, Cable - SpaceX	684-018022-0001	1	KT	FLT	N/A	BHOU	BHOU	01/30/13	COMPLETE ON BHB3548. 01/30/2013. Added per SSCN 13204
51716	SSCN 13276S/A 1852	Passive FRAM Modification	684-018072	1	EA	FLT	N/A	BHOU	BHOU	06/29/12	COMPLETE ON BHB3508. 06/27/2012. Changed destination per
51718	SSCN 13300; S/A 1874	Assy- Stanchion Panel	TBD	1	EA	FLT	N/A	BHOU	BHOU	02/20/13	COMPLETE ON BHB3550. 02/05/2013. Added per SSCN 13300
51719	SSCN 13300; S/A 1874	Assy- Connector Cover Panel	TBD	1	EA	FLT	N/A	BHOU	BHOU	02/20/13	COMPLETE ON BHB3550. 02/05/2013. Added per SSCN 13300
51738	SSCN 13312; S/A 1900	TBD – Maintenance Kit, MBSU, I-Level Repair	684-TBD-0001	1	EA	FLT	N/A	BHOU	BHOU	07/21/13	COMPLETE ON BHB3572. 07/15/2013. Added per SSCN 13312 definitized on S/A 1900.
51828	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0501	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51829	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0503	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51830	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0505	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51831	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0507	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51832	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0509	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51833	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0511	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51834	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0513	1	EA	FLT	N/A	BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51820	SSCN 13544; S/A 1915	Cable Assy, Power, WAP- EWC (W5642)	684-015642-0501	4	EA	FLT	N/A	BHOU	BHOU	11/30/12	COMPLETE ON BHB3532. 11/30/2012. Ship short on BHB3530.
51845	SSCN 13773; S/A 1994	CCAA FSE Modification Kit	TBD	1	Kt	FLT	N/A	KSC	KSC	10/07/13	COMPLETE ON BHB3598. 09/25/2013. Added per SSCN 13773 definitized on S/A 1994.

J-27 DIL - COMPLETED LINE ITEMS							
---------------------------------	--	--	--	--	--	--	--

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51865	SSCN 13859; S/A 2008	Passive FRAM - Modification	684-TBD	1	EA	FLT	N/A	BHOU	BHOU	08/15/13	COMPLETE ON BHB3576. 07/22/2013. Added per SSCN 13859 definitized on S/A 2008.
100xxx Series											
100800	05-0057; S/A 1306; CCM	MODIFICATION KIT, RADIATOR ASSY, MDM -	N/A	1	KT	FLT	N/A	FLT	KSC	03/24/05	COMPLETE ON BHB2829. 05/09/2006. Ship short on BHB1960
100801	05-0057; S/A 1306; CCM	MODIFICATION KIT, RADIATOR ASSY, MDM -	N/A	1	KT	FLT	N/A	FLT	KSC	03/24/05	COMPLETE ON BHB2835. 05/09/2006. Ship short on BHB2587
101427	S/A 1275; SSCN 5778	MOD KIT, ACBSP, VOICE OVER LOW DATA RATE	N/A	1	KT	FLT	N/A	FLT	GDC4S	12/15/05	COMPLETE ON BHB2751. 12/15/2005. Nomenclature,
101428	S/A 1275; SSCN 5778	MOD KIT, ACBSP, VOICE OVER LOW DATA RATE	N/A	1	KT	FLT	N/A	FLT	GDC4S	12/15/05	COMPLETE ON BHB2752. 12/15/2005. Destination and delivery
101429	S/A 1275; SSCN 5778	MOD KIT, ACBSP, VOICE OVER LOW DATA RATE	N/A	1	KT	FLT	N/A	FLT	GDC4S	12/15/05	COMPLETE ON BHB2753. 12/15/2005. Destination and delivery
101430	S/A 1275; SSCN 5778	MOD KIT, TRANSPONDER, VOICE OVER LOW	N/A	1	KT	FLT	N/A	FLT	GDDS	09/22/04	COMPLETE ON BHB2483. 09/22/2004. Added per Boeing Ltr 2-
101431	S/A 1275; SSCN 5778	MOD KIT, TRANSPONDER, VOICE OVER LOW	N/A	1	KT	FLT	N/A	FLT	GDDS	09/22/04	COMPLETE ON BHB2484. 09/22/2004. Added per Boeing Ltr 2-
101432	S/A 1275; SSCN 5778	MOD KIT, TRANSPONDER, VOICE OVER LOW	N/A	1	KT	FLT	N/A	FLT	GDDS	09/22/04	COMPLETE ON BHB2485. 09/22/2004. Added per Boeing Ltr 2-
End of List											

J-27 DIL - DELETED LINE ITEMS										
CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
Pxx Series PIOs										
	Fitting Assembly - PVR (Accumulator Attachment Fitting)	83-42132-105	5	EA		48209		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fitting Assembly - PVR (Accumulator Attachment Fitting)	83-42132-107	5	EA		49100		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Support, HEAtEr Controller - PVR	83-48373-101	5	EA		23272		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fixed Pulley Assembly, Torque Panel/Arm - PVR	83-42103-101	15	EA		87384		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fixed Pulley Assembly, Torque Panel/Arm - PVR	83-42103-105	5	EA		56558		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Mast Assembly - PVR	83-42064-101	10	EA		61249		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Cover Hinge Assembly - PVR (Outboard Hinge, Radiator Panel #1 - Torque Panel Side)	83-42026-101	5	EA		22157		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Cover Hinge Assembly - PVR (Outboard Hinge, Radiator Panel #1 - Torque Panel Side)	83-42026-102	5	EA		22157		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fitting, Compression ShEAr -PVR	83-42192-101	20	EA		29139		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Lug Hinge Assembly, Radiator Panel - PVR (Inboard Hinge, Panel 1 Side)	83-42035-101	10	EA		24993		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge, Inboard Torque Panel - PVR (Inboard Hinge, Torque Panel Side)	83-42108-101	10	EA		128852		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge, Outboard Torque Panel - PVR (Outboard Hinge, Torque Panel Side)	83-42107-101	5	EA		94809		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge, Outboard Torque Panel - PVR (Outboard Hinge, Torque Panel Side)	83-42107-102	5	EA		89856		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Hinge Assy - HRS RDTR	83-39383-111	21	EA		140814		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Hinge Assy - HRS RDTR	83-39383-112	21	EA		140814		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Cinch Fitting Assembly - HRS RDTR (Cinch ShEAr/Compression Fitting)	83-45553-101	28	EA		544375		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Pivot Pin, Panel Assy - HRS RDTR	83-39791-101	14	EA		117891		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Panel/Arm Hinge - HRS RDTR	83-39705-103	7	EA		64880		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Panel/Arm Hinge - HRS RDTR	83-39705-104	7	EA		57827		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-101	7	EA		73776		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-102	7	EA		74027		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-103	7	EA		60196		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-104	7	EA		57505		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Deploy Support Bracket, Base Structure - HRS RDTR (Base Structure Deploy Support Fitting)	83-39365-101	7	EA		129179		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Deploy Support Bracket, Base Structure - HRS RDTR (Base Structure Deploy Support Fitting)	83-39365-107	7	EA		28713		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-109	7	EA		69234		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-110	7	EA		62542		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-111	7	EA		151318		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-112	7	EA		149020		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-101	14	EA		133447		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-102	14	EA		142563		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Pin - HRS RDTR	83-39444-101	14	EA		8441		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Pin - HRS RDTR	83-39444-103	28	EA		14875		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Pin - HRS RDTR	83-39444-115	14	EA		253306		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Arm/Panel Hinge - HRS RDTR	83-39705-101	7	EA		73392		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Arm/Panel Hinge - HRS RDTR	83-39705-102	7	EA		79417		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Clevis Assy, Scissor BEAm - HRS RDTR	83-39515-107	7	EA		137864		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Clevis Assy, Scissor BEAm - HRS RDTR	83-39515-108	7	EA		132050		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
MOD 1084; MOD 938; CCO 848; R812; P342	CONTROLLER ASSY.	TBD	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04; SHIPPED SHORT 2 EA. DD250 BHB1253 (1 EA) SHIPPED ADP ONLY; DD250 BHB1105 (1 EA) SHIPPED SHORT IPL AND ADP
MOD 1084; MOD 938; CCO 848; R812; P342	CPU PWA	683-61565-1	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	DAC PWA	683-61696-1	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-1	5	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 4 EA.DD250 BHB1191 (1 EA) ADP ONLY; DD250 BHB1121 (1 EA) SHIPPED SHORT IPL AND ADP

CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-2	5	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;DD250 BHB1537 1 EA; SHIPPED SHORT 3 EA.DD250 BHB1187 (1 EA) ADP ONLY; DD250 BHB1125 (1 EA) SHIPPED SHORT IPL AND ADP; DD250 BHB1538 ADP
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-3	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 1 EA.DD250 BHB1188 (1 EA) ADP ONLY; DD250 BHB1124 (1 EA) SHIPPED SHORT IPL AND ADP
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-4	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 1 EA. DD250 BHB1189 (1 EA) ADP ONLY; DD250 BHB1123 (1 EA) SHIPPED SHORT IPL AND ADP
MOD 1084; MOD 938; CCO 848; R812; P342	ACCELEROMETER BOARD PWA	683-61622-1	2	EA		N/A		KSC/PPS	7/31/05	STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	ACCELEROMETER ASSY.	683-61720-1	4	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 14 EA. DD250 BHB1192 (1 EA) ADP ONLY; DD250 BHB1102 (1 EA) SHIPPED SHORT IPL & ADP. ORU
MOD 1084; MOD 938; CCO 848; R812; P342	AMPLIFIER INTERFACE PWA	683-61560-1	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	POWER SECTION PWA	683-61609-1	2	EA		N/A		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
S/A 1338	DPM1250	CAP,DUST	2	EA	270	N/A		KSC/PPS	11/1/04	Deleted per Boeing Credit proposal letter 2-1150-05-0249 dated 9/30/05 to NASA, definitized on S/A 1338.
20xxx Series PIOs										
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	01/29/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	03/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	05/31/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	07/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	09/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	11/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	01/31/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	03/30/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	05/30/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	07/29/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	\$ 953,674	HSSSI	KSC	09/30/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Inlet Deionizing Bed	SV825569-1	1	EA	FLT	#####	HSSSI	KSC	03/29/13	Deleted per PIO 92 credit definitized on S/A 2024. Delivery date changed per letter 12-010848 concurrence dated 08/02/12. Added per PIO 92/SSCN 10622 on Mod 1552
PIO 92/SSCN 10622; Mod 1552 (H.57)	Microbial Valve Check	SV825499-1	1	EA	FLT	#####	HSSSI	KSC	03/29/13	Deleted per PIO 92 credit definitized on S/A 2024. Added per PIO 92/SSCN 10622 on Mod 1552
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827939-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827940-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827940-2	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827940-3	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-2	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-3	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-4	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.

CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828011-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828011-2	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828012-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828012-2	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828012-3	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-2	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-3	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-4	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828021-1	1	EA	FLT	tbd	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
4xxx Series										
01-670	MT CETA RAILS (STARBOARD)	N/A	1	EA		N/A	FLT	KSC	5/7/04	Deleted per definitization of credit for MT CETA Rails on Mod 1431
10xxx Series										
30xxx Series										
SSCN 6647A; BG-04-102	DEAD FACE CONNECTOR ASSEMBLY	N/A	5	EA		N/A	FLT	BMSFC	3/17/04	Deleted per NASA Ltr BG-04-102 on 3/22/04. NOTE 1;
SSCN 6647A; BG-04-102	DEAD FACE CONNECTOR ASSEMBLY	N/A	1	EA		N/A	FLT	BMSFC	4/9/04	Deleted per NASA Ltr BG-04-102 on 3/22/04. NOTE 1;
SSCN 6647A; BG-04-102	CABLE 1553 TERMINATION ASSEMBLY	N/A	2	EA		N/A	FLT	BMSFC	7/19/04	Deleted per NASA Ltr BG-04-102 on 3/22/04. NOTE 1;
SSCN 6647A: SA1236	WIRE HARNESS ASSY. W7002	N/A	2	EA		N/A	FLT	BMSFC	3/17/04	Deleted per SA 1236. NOTE 1
SSCN 6647A: SA1236	WIRE HARNESS ASSY. W7001	N/A	2	EA		N/A	FLT	BMSFC	3/17/04	Deleted per SA 1236. NOTE 1

(b) (4) NAS15-10000

Section J
Attachment J-27
Deliverable Items List

Contract End Items with delivery dates after 31 December 2003

Revision 78
Modification 2054

NOTE: See Attachments J-5 and J-9 for Contract End Items with delivery dates through 31 December 2003

J-27 DIL - Legend & User Notes

This is Contract NAS15-10000 Attachment J-27 Deliverable Items List (DIL) for hardware and software deliverables added to this contract beginning 01 January 2004. See Contract NAS15-10000 Attachment J-5 DIL for DDT&E and OPD or Attachment J-9 DIL for Spare orders placed prior to 31 December 2003 and not transferred to this attachment.

Table Column Header Titles	Table Column Header Title Description
CHANGE NUMBER	SSCN or letter reference
DIL ID NO. (DIL UNIQUE)	Identification number unique to this DIL (indicates: 1) Boeing site responsible for acquisition of OPD items; AND 2) 2XXXX series for spare items (Exception: PO83-01)) (ID numbers begin with 1, 2, 3, 4, 5, or 6, and as many following digits needed to support that series. NOTE: Transfers from Attachment J-5. DDT&E and OPD CEIs, and Attachment J-9, PIO Spares CEIs, those with negotiated DD-250 dates after 01JAN04, retain their unique DIL numbers.
1XXXX series	Series when the responsible site is Boeing Huntington Beach CA
2XXXX series	Series for spares items (SPR) - independent of responsible site (Exception: PO83-01)
3XXXX series	Series when the responsible site is Boeing Marshall Space Flight Center, Huntsville AL
4XXXX series	Series when the responsible site is Boeing Canoga Park CA
5XXXX series	Series when the responsible site is Boeing Houston TX
6XXXX series	Series when the responsible site is Boeing Kennedy Space Center FL
PART NUMBER	Part number of deliverable from engineering drawing
NOMENCLATURE	Full name of deliverable from engineering drawing
QTY	Quantity (total of that line) to be delivered
UNIT OF ISSUE	Unit of issue or measure (i.e., EA for each, KT for kit, LB for pound, FT or feet, etc.) of deliverable
HWD TYPE	"Hardware Type" or deliverable category
OPD	Other Product Development
SPR	Spares
TOTAL COST	Total cost of this line item (as negotiated)
DESTINATION	Final destination of deliverable
DELIVERY DATE	Negotiated delivery date of entire quantity of deliverables (can be more than one and early delivery is ok). This is the date of the provisional DD-250 and NOT physical shipment for site of manufacture or acquisition.
DD 250 Point	Contact Clause E.4 INSPECTION AND ACCEPTANCE classification to determine point of inspection and acceptance.
D&D	Data and Documentation
FLT	Flight
GSE	Ground Support Equipment
NFSW	Non-Flight Software
ODH	Other Deliverable Hardware
ORU-SE	On-orbit ORU Support Equipment
REMARKS	As set forth in the negotiated change or as agreed to by the parties. Includes each related DD-250 number and the date thereof. Also includes notes. NOTE 1 - on DIL Rev 80 - Due after Jan 1 2004 (trans to new J-X) NOTE 2 - Transferred from Clause H.72, Deliverables after Contract Period of Performance on DIL Rev 80, but NOT listed as due after Jan 1 2004

J-27 DIL - ACTIVE LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
Pxx Series PIOs											
None.											
20xxx Series PIOs											
20020	PIO 87; Mod 1508 (H.57)	Flexible Hose Rotary Coupler, Spare Assembly	5849811-503	1	EA	NFS	(b) (4)	LMMS	KSC	11/01/11	Added per PIO 87 on Mod 1508. Part number corrected per letter 09-0478 dated 12/01/2009.
20053	PIO 89/SSCN 10695; Mod 1552	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT		HSSSI	KSC	12/30/12	Added per PIO 89/SSCN 10695 on Mod 1552. Changed part number per letter 10-0420 concurrence dated 07/29/2010. Updated delivery date per S/A 2013.
20054	PIO 89/SSCN 10695; Mod 1552	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT		HSSSI	KSC	04/30/13	Added per PIO 89/SSCN 10695 on Mod 1552. Changed part number per letter 10-0420 concurrence dated 07/29/2010. Updated delivery date per S/A 2013.
20055	PIO 89/SSCN 10695; Mod 1552	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT		HSSSI	KSC	08/30/13	Added per PIO 89/SSCN 10695 on Mod 1552. Changed part number per letter 10-0420 concurrence dated 07/29/2010. Updated delivery date per S/A 2013.
20120	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT		HI	KSC	07/30/12	Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.
20121	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT		HI	KSC	11/30/12	Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.
20134	PIO 84B; Mod 1519 (H.57)	Fluids Control and Pump ORU	683-17117-1	1	EA	FLT		B-MFSC	KSC	12/31/12	Added per PIO 84B on Mod 1519
20144	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT		Harris	KSC	01/01/12	Added per PIO 94 on Mod 1560
20145	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT		Harris	KSC	04/01/12	Added per PIO 94 on Mod 1560
20190	PIO 98; S/A 1790	Pan and Tilt Unit (PTU)	10033212	1	EA	FLT		L3	KSC	04/23/14	Added per PIO 98 definitized on S/A 1790.
20191	PIO 98; S/A 1790	Pan and Tilt Unit (PTU)	10033212	1	EA	FLT		L3	KSC	09/18/14	Added per PIO 98 definitized on S/A 1790.
20192	PIO 98; S/A 1790	Pan and Tilt Unit (PTU)	10033212	1	EA	FLT		L3	KSC	02/17/15	Added per PIO 98 definitized on S/A 1790.
20234	PIO 101; S/A 1816 (H.57)	Kit, Control Moment Gyro (CMG), Mechanical Assembly (Spare)	TBD	1	KT	FLT		L3	KSC	03/31/16	Added per PIO 101 definitized on S/A 1816.
20235	PIO 103; S/A 1952 (H.57)	Ammonia Tank Assembly (ATA) - ORU	1F28801-501	1	EA	FLT		BHOU	KSC	07/28/16	Added per PIO 103 definitized on S/A 1952.
20236	PIO 103; S/A 1952 (H.57)	Ammonia Tank Assembly (ATA) - ORU	1F28801-501	1	EA	FLT		BHOU	KSC	10/11/16	Added per PIO 103 definitized on S/A 1952. Updated delivery date per letter 13-014591 concurrence dated 09/25/2013.
20237	PIO 103; S/A 1952	Transducer, Pressure, Absolute	1F08004-1	4	EA	FLT		KSC	KSC	12/01/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20238	PIO 103; S/A 1952	Transducer, Pressure, Differential	1F08008-1	4	EA	FLT		Tavis	KSC	08/11/14	Added per PIO 103 definitized on S/A 1952.
20239	PIO 103; S/A 1952 (H.57)	Isolation Valve	1F39991-507	7	EA	FLT		Marotta	KSC	09/22/16	Added per PIO 103 definitized on S/A 1952.
20240	PIO 103; S/A 1952 (H.57)	Ammonia Tank	1F40057-503	4	EA	FLT		Honeywell	KSC	08/29/16	Added per PIO 103 definitized on S/A 1952.
20241	PIO 103; S/A 1952	Quick Disconnect (QD)	1F45540-513	4	EA	FLT		Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20242	PIO 103; S/A 1952	Cap, Pressure	1F45580-1	3	EA	FLT		Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20243	PIO 103; S/A 1952	Quick Disconnect, Cap	1F45580-501	4	EA	FLT		Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20244	PIO 103; S/A 1952	Quick Disconnect, Cap	1F45581-501	4	EA	FLT		Parker	KSC	04/25/14	Added per PIO 103 definitized on S/A 1952.
20245	PIO 103; S/A 1952	Shear Pin	1F96384-1	6	EA	FLT		KSC	KSC	06/27/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
20246	PIO 103; S/A 1952	Housing, Bolt	1F96385-1	6	EA	FLT	(b) (4)	KSC	KSC	06/27/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20247	PIO 103; S/A 1952	Blanket Assembly, Left	1F96391-1	2	EA	FLT		Boeing-KSC	KSC	04/07/14	Added per PIO 103 definitized on S/A 1952.
20248	PIO 103; S/A 1952	Blanket Assembly, Right	1F96392-1	2	EA	FLT		Boeing-KSC	KSC	04/07/14	Added per PIO 103 definitized on S/A 1952.
20249	PIO 103; S/A 1952	Blanket Assembly, End Shield	1F96393-1	4	EA	FLT		Boeing-KSC	KSC	04/07/14	Added per PIO 103 definitized on S/A 1952.
20250	PIO 103; S/A 1952 (H.57)	Electronic Control Unit (ECU)	1F98802-501	6	EA	FLT		Marotta	KSC	10/26/15	Added per PIO 103 definitized on S/A 1952.
20253	PIO 103; S/A 1952	Fitting, Tee	684-020073-0001	4	EA	FLT		KSC	KSC	11/24/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20255	PIO 103; S/A 1952	Fitting Elbow	684-020074-0001	4	EA	FLT		KSC	KSC	11/24/14	Added per PIO 103 definitized on S/A 1952. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20256	PIO 103; S/A 1952	Connector	NATC06G11N35 SA	2	EA	FLT		KSC	KSC	02/26/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20257	PIO 103; S/A 1952	Backshell	NZGA-JG-11-N-16	6	EA	FLT		KSC	KSC	02/26/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20258	PIO 103; S/A 1952	Connector	NZGL07T2119N3 2PN	2	EA	FLT		KSC	KSC	02/26/14	Added per PIO 103 definitized on S/A 1952. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.
20261	PIO 102; S/A 1826	Water Delivery - ORU	SV825449-2/PLSV28744	1	EA	FLT		HSSSI	KSC	02/20/14	Added per PIO 102 definitized on S/A 1826.
20262	PIO 106; S/A 1922	Isolator Assy, X-Axis	1F16152-1	6	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20263	PIO 106; S/A 1922	Isolator Assy, Y-Axis	1F16153-1	6	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20264	PIO 106; S/A 1922	Isolator Assy, Z-Axis	1F16154-1	6	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20265	PIO 106; S/A 1922	Isolator Assy, Upper Axis	1F16155-1	6	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20267	PIO 106; S/A 1922	Stabilizer	1F16225-1	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20268	PIO 106; S/A 1922	Stabilizer	1F16225-2	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20271	PIO 106; S/A 1922	Snubber Cup Assy, Lower Right	684-0140672-0001	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20272	PIO 106; S/A 1922	Snubber Cup Assy, Lower Left	684-0140672-0002	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20273	PIO 106; S/A 1922	Snubber Cup Assy, Upper Right	684-0140672-0003	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20274	PIO 106; S/A 1922	Snubber Cup Assy, Upper Left	684-0140672-0004	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20275	PIO 106; S/A 1922	Attachment Assy, Upper	1F16179-1	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20276	PIO 106; S/A 1922	Snubber Assy, Lower	1F16183-501	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20277	PIO 106; S/A 1922	Snubber Assy, Lower	1F16183-502	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20278	PIO 106; S/A 1922	Snubber Assy, Upper	1F16190-501	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20279	PIO 106; S/A 1922	Snubber Assy, Upper	1F16190-502	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20283	PIO 106; S/A 1922	Center Frame Mounting Assy	1F16215-1	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20284	PIO 106; S/A 1922	Standoff Arm Attachment Assy	1F16223-1	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20285	PIO 106; S/A 1922	Standoff Arm Attachment Assy	1F16223-2	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20286	PIO 106; S/A 1922	Standoff Arm Assy	1F16172-1	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20289	PIO 106; S/A 1922	Standoff Arm Assy	1F16199-2	1	EA	FLT		BHOU	BHOU	03/07/14	Added per PIO 106 definitized on S/A 1922.
20290	PIO 105; S/A 1961 (H.57)	SPCU Heat Exchanger	2351350-2-2	1	EA	FLT		Vender	KSC	04/25/16	Added per PIO 105 definitized on S/A 1961.
20291	PIO 105; S/A 1961	CDRA Housing Assembly, Matched Set	2351939-1	1	EA	FLT		Vendor	Vendor	07/23/15	Added per PIO 105 definitized on S/A 1961.
20292	PIO 105; S/A 1961	CDRA Housing Assembly, Matched Set	2351939-1	1	EA	FLT		Vendor	Vendor	07/23/15	Added per PIO 105 definitized on S/A 1961.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
20293	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT	(b) (4)	Vendor	KSC	01/16/15	Added per definitization of PIO 107 on S/A 2026.
20294	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT		Vendor	KSC	01/30/15	Added per definitization of PIO 107 on S/A 2026.
20295	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT		Vendor	KSC	02/12/15	Added per definitization of PIO 107 on S/A 2026.
20296	PIO 107; S/A 2026	S752-00 Network Card	200-0117-01	1	EA	FLT		Vendor	KSC	02/23/15	Added per definitization of PIO 107 on S/A 2026.
20297	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT		Vendor	KSC	02/01/16	Added per definitization of PIO 107 on S/A 2026.
20298	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT		Vendor	KSC	04/26/16	Added per definitization of PIO 107 on S/A 2026.
20310	PIO 104; S/A 1936	Pump Manifold Assy	96M12317-1	1	EA	FLT		B-MSFC	KSC	01/09/15	Added per PIO 104 definitized on S/A 1936.
20311	PIO 104; S/A 1936	Station Pump Assembly	96M12316-3	1	EA	FLT		B-MSFC	KSC	05/05/14	Added per PIO 104 definitized on S/A 1936.
20312	PIO 104; S/A 1936	Shoulder, Screw	96M35071-1	4	EA	FLT		B-MSFC	KSC	04/16/14	Added per PIO 104 definitized on S/A 1936.
20314	PIO 104; S/A 1936	Wire Harness Assy, Russian Compressor Power, Node 3 WRS	96M23056-1	2	EA	FLT		B-MSFC	JSC	06/23/14	Added per PIO 104 definitized on S/A 1936. Changed destination per S/A 1985.
20315	PIO 104; S/A 1936	Wire Harness Assy, Condensate Transfer Pump Power, WRS	96M23055-3	1	EA	FLT		B-MSFC	KSC	06/13/14	Added per PIO 104 definitized on S/A 1936.
20316	PIO 104; S/A 1936	Shutoff Valve Assy, Product Tee	96M35035-1	1	EA	FLT		B-MSFC	KSC	08/20/14	Added per PIO 104 definitized on S/A 1936.
20317	PIO 104; S/A 1936	Cooling Jacket Purge Assembly	96M12559-1	1	EA	FLT		B-MSFC	KSC	09/19/14	Added per PIO 104 definitized on S/A 1936.
20318	PIO 104; S/A 1936	Cooling Jacket Purge Assembly	96M12559-3	1	EA	FLT		B-MSFC	KSC	05/01/14	Added per PIO 104 definitized on S/A 1936.
20319	PIO 104; S/A 1936	WPA Purge Assembly	96M35027-1	1	EA	FLT		B-MSFC	KSC	04/04/14	Added per PIO 104 definitized on S/A 1936.
20320	PIO 104; S/A 1936	WPA Purge Assembly	96M35027-3	1	EA	FLT		B-MSFC	KSC	03/31/14	Added per PIO 104 definitized on S/A 1936.
20321	PIO 104; S/A 1936	WPA OGA Controller Purge Assembly	96M35028-1	1	EA	FLT		B-MSFC	KSC	06/17/14	Added per PIO 104 definitized on S/A 1936.
20322	PIO 104; S/A 1936	WPA OGA Controller Purge Assembly	96M35028-3	1	EA	FLT		B-MSFC	KSC	08/15/14	Added per PIO 104 definitized on S/A 1936.
20323	PIO 104; S/A 1936	WRS High/Low Speed Pump Fuse	FM09A-3A	4	EA	FLT		Bussman	KSC	05/01/14	Added per PIO 104 definitized on S/A 1936.
20324	PIO 104; S/A 1936	Pump Tubing	96M12588-1	4	EA	FLT		B-MSFC	KSC	04/17/14	Added per PIO 104 definitized on S/A 1936.
20325	PIO 104; S/A 1936	Exit Filter, RFTA	96M12564-1	4	EA	FLT		B-MSFC	KSC	09/10/14	Added per PIO 104 definitized on S/A 1936.
20326	PIO 104; S/A 1936	WRS Condensate Manifold Tube Clamp	9579K65	4	EA	FLT		Academic Products	KSC	05/01/14	Added per PIO 104 definitized on S/A 1936.
20327	PIO 104; S/A 1936	Purge Adapter, Hydrogen Sensor ORU	SV1013102-1	1	EA	FLT	(b) (4)	HSSSI	KSC	01/27/15	Added per PIO 104 definitized on S/A 1936.
20328	PIO 104; S/A 1936	Union and Fitting, Purge Adapter	SV1013141-1	1	EA	FLT		HSSSI	KSC	01/27/15	Added per PIO 104 definitized on S/A 1936.
20329	PIO 104; S/A 1936	Coupling and Nut, Purge Adapter	SV1013145-1	1	EA	FLT		HSSSI	KSC	01/27/15	Added per PIO 104 definitized on S/A 1936.
20330	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-1	1	EA	FLT		B-MSFC	KSC	10/02/14	Added per PIO 104 definitized on S/A 1936.
20331	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-3	1	EA	FLT		B-MSFC	KSC	08/08/14	Added per PIO 104 definitized on S/A 1936.
20332	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-5	1	EA	FLT		B-MSFC	KSC	08/25/14	Added per PIO 104 definitized on S/A 1936.
20333	PIO 104; S/A 1936	OGA Thermal Expansion Line Assembly	96M12549-7	1	EA	FLT		B-MSFC	KSC	09/08/14	Added per PIO 104 definitized on S/A 1936.
20334	PIO 104; S/A 1936	Thermal Expansion Device-OGA	SV1012789-1	2	EA	FLT		HSSSI	KSC	01/20/15	Added per PIO 104 definitized on S/A 1936.
20335	PIO 104; S/A 1936	Thermal Expansion Assy, Hydrogen ORU	96M35019-1	1	EA	FLT		B-MSFC	KSC	06/13/14	Added per PIO 104 definitized on S/A 1936.
20336	PIO 104; S/A 1936	Female QD	502060-3102U	4	EA	FLT		Parker Hanifan	KSC	09/25/14	Added per PIO 104 definitized on S/A 1936.
20337	PIO 104; S/A 1936	Male QD	502060-1191	2	EA	FLT		Parker Hanifan	KSC	09/25/14	Added per PIO 104 definitized on S/A 1936.
20338	PIO 104; S/A 1936	Check/Relief Valve	96M12040-11	2	EA	FLT		MSFC	KSC	09/25/14	Added per PIO 104 definitized on S/A 1936.
20339	PIO 104; S/A 1936	Motor	379072	2	EA	FLT		Maxon Precision Motors	KSC	05/30/14	Added per PIO 104 definitized on S/A 1936.
20340	PIO 104; S/A 1936	Valve, Shutoff	9232T-6BB	1	EA	FLT		Circor Aerospace	KSC	10/09/14	Added per PIO 104 definitized on S/A 1936. Updated part number per letter 13-003686 concurrence dated 03/06/2013.
20341	PIO 104; S/A 1936	QD Male	2001-A12C-T05U	3	EA	FLT		Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20342	PIO 104; S/A 1936	Quick Disconnect	TA505009-423	4	EA	FLT		Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20343	PIO 104; S/A 1936	Quick Disconnect, Female	2000-A0BC-T06U	9	EA	FLT		Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20344	PIO 104; S/A 1936	Coupling, Thread-LOK	2000-A08C-G12U	3	EA	FLT		Parker Hanifan	KSC	10/23/14	Added per PIO 104 definitized on S/A 1936.
20345	PIO 104; S/A 1936	Flex Line Assy	201H-96M-001	2	EA	FLT		Parker Hanifan	KSC	09/25/15	Added per PIO 104 definitized on S/A 1936.
20346	PIO 104; S/A 1936	Fitting, Plug Modified	96M12559-5	1	EA	FLT	(b) (4)	B-MSFC	KSC	09/10/15	Added per PIO 104 definitized on S/A 1936.
20347	PIO 104; S/A 1936	Syringe	309661	1	EA	FLT		Becton Dickinson Acute Care	KSC	04/30/15	Added per PIO 104 definitized on S/A 1936.
20348	PIO 104; S/A 1936	Hose Assembly	171001-4CR-0060	2	EA	FLT		Parker Hanifan	KSC	09/10/15	Added per PIO 104 definitized on S/A 1936.
20349	PIO 104; S/A 1936	O-Ring	3-908 V0747-75	2	EA	FLT		Parker Hanifan	KSC	10/16/15	Added per PIO 104 definitized on S/A 1936.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO	
20350	PIO 104; S/A 1936	Ring, Seal	KC103-4	2	EA	FLT	(b) (4)	KSC	KSC	09/24/15	Added per PIO 104 definitized on S/A 1936.	
20351	PIO 104; S/A 1936	Fitting, Adapter	KC115K8-4	2	EA	FLT		KSC	KSC	09/24/15	Added per PIO 104 definitized on S/A 1936.	
20352	PIO 104; S/A 1936	Fitting, Plug	KC130K4	1	EA	FLT		KSC	KSC	09/24/15	Added per PIO 104 definitized on S/A 1936.	
20353	PIO 104; S/A 1936	Distillate to QD-33M Hose	683-93490-1	1	EA	FLT		B-MSFC	KSC	10/19/15	Added per PIO 104 definitized on S/A 1936.	
20354	PIO 104; S/A 1936	Gas Separator Purge Hose	683-93490-2	1	EA	FLT		B-MSFC	KSC	10/19/15	Added per PIO 104 definitized on S/A 1936.	
20355	PIO 104; S/A 1936	Recycle Tank Feed Hose	683-93490-3	2	EA	FLT		B-MSFC	KSC	10/19/15	Added per PIO 104 definitized on S/A 1936.	
20382	PIO 114; S/A 1957	Valve, Manual, 0.125 inch	683-19393-1	1	EA	FLT		Carleton	KSC	01/30/15	Added per PIO 114 definitized on S/A 1957.	
20383	PIO 114; S/A 1957	Valve, Manual, 0.125 inch	683-19393-1	1	EA	FLT		Carleton	KSC	01/30/15	Added per PIO 114 definitized on S/A 1957.	
20384	PIO 114; S/A 1957	Valve, Three-Way, 1.75 inch	683-19401-1	1	EA	FLT		Valve Tech	KSC	01/30/15	Added per PIO 114 definitized on S/A 1957.	
20402	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT		Vendor	KSC	07/23/15	Added per definitization of PIO 116 on S/A 2012.	
20403	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT		Vendor	KSC	07/30/15	Added per definitization of PIO 116 on S/A 2012.	
20404	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT		Vendor	KSC	09/11/15	Added per definitization of PIO 116 on S/A 2012.	
20405	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT		Vendor	KSC	09/18/15	Added per definitization of PIO 116 on S/A 2012.	
20406	PIO 116; S/A 2012	Selector Valve Assembly, CDRA	2352720-1-1	1	EA	FLT		Vendor	KSC	09/30/15	Added per definitization of PIO 116 on S/A 2012.	
20407	PIO 109; S/A 1981	IAPS Power Supply Module	960530-009	1	EA	HIG		SEAKR	KSC	09/25/14	Added per PIO 109 definitized on S/A 1981.	
20408	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT		Vendor	KSC	05/05/16	Added per definitization of PIO 107 on S/A 2026.	
20409	PIO 107; S/A 2026 (H.57)	Audio/Video Interface Card (AVIC) Assy	K10053726-501	1	EA	FLT		Vendor	KSC	05/20/16	Added per definitization of PIO 107 on S/A 2026.	
20510	Letter 13-004578	Beta Gimbal Roll Ring Subsystem (BGRRS) S/N 96120102 (as-is condition)	8261601-901	1	EA	HIG		HIG	HIG	12/20/13	Added per letter 13-004578 concurrence dated 03/25/2013.	
20511	PIO 103; Letter 13-006139	Fitting	684-020072-0001	4	EA	FLT		KSC	KSC	11/24/14	Added per letter 13-006139 concurrence dated 04/23/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013.	
4xxx Series												
None.												
10xxx Series												
10022	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power Transfer System 095 SAIL	N/A	1	KT	FEU	(b) (4)	FEU	JSC	11/04/05	SSCN 8554 definitized on Mod 1323.	
10023	SSCN 8554; S/A 1323	SSPTS Displays & Controls Panel; 095 - Mod Kit	N/A	1	KT	FEU		FEU	JSC	11/04/05	SSCN 8554 definitized on Mod 1323.	
10024	SSCN 8554; S/A 1323	Mod Kit - SSPTS - Model C70-1140 for SAIL	N/A	1	KT	GSE		GSE	JSC	11/04/05	SSCN 8554 definitized on Mod 1323.	
10026	SSCN 9425; S/A 1334	AFT COMPARTMENT MOD KIT - IMPLEMENTATION OF STATION/SHUTTLE POWER TRANSFER SYSTEM OV-103	N/A	1	KT	FLT		FLT	KSC	11/30/05	SSCN 9425 definitized per S/A 1334.	
30xxx Series												
32257	SSCN 12441; S/A 1802	Installation Kit, NORS - Airlock	683-98100-1	1	KT	FLT	(b) (4)	B-MSFC	B-MSFC	10/28/13	Added per SSCN 12441 definitized on S/A 1802.	
32259	SSCN 12441; S/A 1802	Internal Fill Assembly, N2	683-98124-1	1	EA	FLT		B-MSFC	B-MSFC	10/15/13	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.	
32260	SSCN 12441; S/A 1802	Internal Fill Assembly, O2	683-98123-1	1	EA	FLT		B-MSFC	B-MSFC	10/08/13	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.	
32262	SSCN 12441; S/A 1802	External Fill Assembly, NORS	683-98101-1	1	EA	FLT		B-MSFC	B-MSFC	10/01/13	Added per SSCN 12441 definitized on S/A 1802.	
32264	SSCN 12441; S/A 1802	Internal Fill Assembly, N2 (Spare)	683-98124-1	1	EA	FLT		B-MSFC	B-MSFC	02/13/15	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.	
32266	SSCN 12441; S/A 1802	External Fill Assembly, NORS (Spare)	683-98101-1	1	EA	FLT		B-MSFC	B-MSFC	10/13/14	Added per SSCN 12441 definitized on S/A 1802.	
32268	SSCN 12441; S/A 1802	Internal Fill Assembly, O2 (Spare)	683-98123-1	1	EA	FLT		B-MSFC	B-MSFC	01/15/15	Added per SSCN 12441 definitized on S/A 1802. Changed unit per letter 13-015084 concurrence dated 10/17/2013.	
32271	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	2	EA	FLT		B-MSFC	B-MSFC	10/31/13	Added per SSCN 12441 definitized on S/A 1802.	
32272	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	5	EA	FLT		B-MSFC	B-MSFC	12/20/13	Added per SSCN 12441 definitized on S/A 1802.	
32273	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT		B-MSFC	B-MSFC	01/20/14	Added per SSCN 12441 definitized on S/A 1802.	
32274	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT		B-MSFC	B-MSFC	04/21/14	Added per SSCN 12441 definitized on S/A 1802.	
32275	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT		B-MSFC	B-MSFC	06/18/14	Added per SSCN 12441 definitized on S/A 1802.	

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
32276	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	5	EA	FLT	(b) (4)	B-MSFC	B-MSFC	07/22/14	Added per SSCN 12441 definitized on S/A 1802.
32277	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT		B-MSFC	B-MSFC	09/19/14	Added per SSCN 12441 definitized on S/A 1802.
32278	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	4	EA	FLT		B-MSFC	B-MSFC	06/26/15	Added per SSCN 12441 definitized on S/A 1802.
32279	SSCN 12441; S/A 1802	Recharge Tank Assembly, NORS	683-98102-1	3	EA	FLT		B-MSFC	B-MSFC	08/28/15	Added per SSCN 12441 definitized on S/A 1802.
32281	SSCN 12378; S/A 1803	Mod Kit, iPEHB, WOLF Rack	683-99856-1	1	KT	FLT		B-MSFC	B-MSFC	04/04/14	Added per SSCN 12378 definitized on S/A 1803.
32282	SSCN 12378; S/A 1803	Mod Kit, iPEHB, Express Rack (with ARIS)	683-99855-1	4	KT	FLT		B-MSFC	B-MSFC	06/19/14	Added per SSCN 12378 definitized on S/A 1803.
32288	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	12/06/13	Added per SSCN 12378 definitized on S/A 1803.
32289	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	12/13/13	Added per SSCN 12378 definitized on S/A 1803.
32290	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	01/27/14	Added per SSCN 12378 definitized on S/A 1803.
32291	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	01/30/14	Added per SSCN 12378 definitized on S/A 1803.
32292	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	03/03/14	Added per SSCN 12378 definitized on S/A 1803.
32293	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	03/10/14	Added per SSCN 12378 definitized on S/A 1803.
32294	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	03/18/14	Added per SSCN 12378 definitized on S/A 1803.
32295	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	04/21/14	Added per SSCN 12378 definitized on S/A 1803.
32314	SSCN 12441; S/A 1802	Hose Assembly, N2 IFA, NORS	683-98127-1	1	EA	FLT		B-MSFC	B-MSFC	10/18/13	Added per SSCN 12441 definitized on S/A 1802.
32315	SSCN 12441; S/A 1802	Hose Assembly, N2 IFA, NORS (Spare)	683-98127-1	1	EA	FLT		B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32316	SSCN 12441; S/A 1802	Hose Assembly, O2 IFA, NORS	683-98127-2	1	EA	FLT		B-MSFC	B-MSFC	10/11/13	Added per SSCN 12441 definitized on S/A 1802.
32317	SSCN 12441; S/A 1802	Hose Assembly, O2 IFA, NORS (Spare)	683-98127-2	1	EA	FLT		B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32320	SSCN 12441; S/A 1802	NORS Manifold Assembly (Spare)	683-98135-1	1	EA	FLT		B-MSFC	B-MSFC	12/19/14	Added per SSCN 12441 definitized on S/A 1802.
32321	SSCN 12441; S/A 1802	HOSE ASSEMBLY - N2	683-98163-1	1	EA	FLT		B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32322	SSCN 12441; S/A 1802	HOSE ASSEMBLY - N2	683-98163-2	1	EA	FLT		B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32323	SSCN 12441; S/A 1802	HOSE ASSEMBLY - O2	683-98163-3	1	EA	FLT		B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802. Changed part number per letter 12-005284 concurrence dated 08/03/12.
32324	SSCN 12441; S/A 1802	EXTERNAL N2 REG COVER 1	683-98171-1	1	EA	FLT		B-MSFC	B-MSFC	10/04/13	Added per SSCN 12441 definitized on S/A 1802.
32325	SSCN 12441; S/A 1802	EXTERNAL N2 REG COVER 2	683-98171-2	1	EA	FLT		B-MSFC	B-MSFC	10/04/13	Added per SSCN 12441 definitized on S/A 1802.
32326	SSCN 12441; S/A 1802	EXTERNAL HOSE ASSEMBLY, NORS	683-98176-1	1	EA	FLT		B-MSFC	B-MSFC	10/04/13	Added per SSCN 12441 definitized on S/A 1802.
32327	SSCN 12441; S/A 1802	EXTERNAL HOSE ASSEMBLY, NORS (Spare)	683-98176-1	1	EA	FLT		B-MSFC	B-MSFC	10/06/14	Added per SSCN 12441 definitized on S/A 1802.
32328	SSCN 12441; S/A 1802	KIT, RTA QD KEYING	683-98180-1	1	KT	FLT		B-MSFC	B-MSFC	10/31/13	Added per SSCN 12441 definitized on S/A 1802. Updated qty per letter 13-011836 concurrence dated 08/07/2013.
32332	SSCN 12378; S/A 1803	Mod Kit, iPEHG, Express Rack (without ARIS)	683-99855-2	3	EA	FLT		B-MSFC	B-MSFC	10/16/14	Added per SSCN 12378 definitized on S/A 1803.
32333	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	05/02/14	Added per SSCN 12378 definitized on S/A 1803. Delivery date changed per MOD 1832.
32334	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	05/09/14	Added per SSCN 12378 definitized on S/A 1803. Delivery date changed per MOD 1832.
32335	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	06/17/14	Added per SSCN 12378 definitized on S/A 1803. Delivery date changed per MOD 1832.
32336	SSCN 12378; S/A 1803	Mod Kit, iPEHG, HRF Rack	683-99857-1	2	KT	FLT		B-MSFC	B-MSFC	11/27/14	Added per SSCN 12378 definitized on S/A 1803.
32337	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	06/24/14	Added per SSCN 12378 definitized on S/A 1803.
32338	SSCN 12378; S/A 1803	iPEHG Flight Unit	AN64561-001-01	1	EA	FLT		GISR	GISR	07/31/14	Added per SSCN 12378 definitized on S/A 1803.
32355	SSCN 12803; S/A 1859	Advanced Recycle Filter Tank Assemblies (ARFTA) Tank Assembly	683-93450-4	1	EA	FLT		B-MSFC	B-MSFC	04/04/14	Added per SSCN 12803 definitized on S/A 1859
32371	SSCN 12916; S/A 1947	Remote Advanced Payload Test Rig (RAPTR) Command and Data Handling (C&DH) Module	HVP-02005	24	EA	GSE		B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32372	SSCN 12916; S/A 1947	RAPTR Analog and Discrete (A&D) Module	HVP-02015	7	EA	GSE		B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32373	SSCN 12916; S/A 1947	EXPRESS Logistics Carrier (ELC) Interface Cable	683-85752-1	7	EA	GSE		B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32374	SSCN 12916; S/A 1947	Columbus Interface Cable	683-85753-1	2	EA	GSE		B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32375	SSCN 12916; S/A 1947	Japanese Experiment Module (JEM) Exposed Facility (EF) Interface Cable	683-85754-1	2	EA	GSE		B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32377	SSCN 12916; S/A 1947	Payload Rack Checkout Unit (PRCU) Interface Cable	683-98320-1	7	EA	GSE		B-MSFC	B-MSFC	06/04/14	Added per SSCN 12916 definitized on S/A 1947.
32379	SSCN 12639; S/A 1860	Mod Kit, Rack (includes Coldplate w/ CTPA), C2V2	683-98360-1	1	KT	FLT		B-MSFC	B-MSFC	08/13/14	Added per SSCN 12639 definitized on S/A 1860.
32380	SSCN 12639; S/A 1860	Mod Kit, U.S. Lab, C2V2	683-98359-1	1	KT	FLT		B-MSFC	B-MSFC	08/13/14	Added per SSCN 12639 definitized on S/A 1860.
32397	SSCN 13197; S/A 2000	TBD - Mod Kit, WRS2 Fill/Drain	683-TBD-1	1	KT	FLT		B-MSFC	B-MSFC	03/02/15	Added per SSCN 13197 definitized on S/A 2000.
32398	SSCN 12803; S/A 1859	Advanced Recycle Filter Tank Assemblies (ARFTA) Tank Assembly	683-93450-4	1	EA	FLT		B-MSFC	B-MSFC	08/03/14	Added per SSCN 12803 definitized on S/A 1859
32399	SSCN 12803; S/A 1859	Advanced Recycle Filter Tank Assemblies (ARFTA) Tank Assembly	683-93450-4	1	EA	FLT		B-MSFC	B-MSFC	09/04/14	Added per SSCN 12803 definitized on S/A 1859
32404	SSCN 13324; S/A 1960	Modification Kit, WOLF Shutter Actuator System (SAS)	683-98456-1	1	KT	FLT		B-MSFC	B-MSFC	06/16/14	Added per SSCN 13324 definitized on S/A 1960.
32405	SSCN 13383; S/A 1905	Adapter, QD Depress, N2/O2	683-98110-17	2	EA	FLT		B-MSFC	B-MSFC	11/18/13	Added per SSCN 13383 definitized on S/A 1905. Updated nomenclature and part number per letter 13-010844 concurrence dated 07/24/2013.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
32426	SSCN 13501; S/A 1989	Mod Kit, Shell Heaters, Airlock	683-98330-0001	1	EA	FLT	(b) (4)	B-MSFC	B-MSFC	06/20/14	Added per SSCN 13501 definitized on S/A 1989. Updated nomenclature and part number per letter 13-013329 concurrence dated 08/29/2013.
32427	SSCN 13501; S/A 1989	Wire Harness Assy - Crew Lock Heater	683-101892-0001	8	EA	FLT		B-MSFC	B-MSFC	06/20/14	Added per SSCN 13501 definitized on S/A 1989. Updated nomenclature, part number and qty per letter 13-013329 concurrence dated 08/29/2013.
32429	SSCN 13684; S/A 2041	Recharge Tank Assembly, NORS	683-98102-1	2	EA	FLT		B-MSFC	B-MSFC	08/28/15	Added per SSCN 13684 definitized on S/A 2041.
32449	SSCN 13781; S/A 2005	Cable, Data	683-44267-4	2	EA	FLT		B-MSFC	B-MSFC	02/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32450	SSCN 13781; S/A 2005	Cable, Power	683-44024-4	2	EA	FLT		B-MSFC	B-MSFC	02/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32451	SSCN 13758; S/A 2006	Flexhose Assembly	683-TBD-1	2	EA	FLT		B-MSFC	B-MSFC	01/30/15	Added per definitization of SSCN 13758 on S/A 2006.
32452	SSCN 13758; S/A 2006	Flexhose Assembly	683-TBD-1	2	EA	FLT		B-MSFC	B-MSFC	01/30/15	Added per definitization of SSCN 13758 on S/A 2006.
32458	SSCN 13781; S/A 2005	Cable, Data	683-44267-4	4	EA	FLT		B-MSFC	B-MSFC	03/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32459	SSCN 13781; S/A 2005	Cable, Power	683-44024-4	4	EA	FLT		B-MSFC	B-MSFC	03/17/14	Added per definitization of SSCN 13781 on S/A 2005.
32465	SSCN 13822; S/A 2035	Jumper, Avionics Restart	683-TBD-1	1	EA	FLT		B-MSFC	B-MSFC	10/13/14	Added per definitization of SSCN 13822 on S/A 2035.
32466	SSCN 13822; S/A 2035	Jumper, NCS Restart	683-TBD-1	1	EA	FLT		B-MSFC	B-MSFC	10/13/14	Added per definitization of SSCN 13822 on S/A 2035.
32468	SSCN 13501; S/A 1989	Wire Harness Assy - Crew Lock Heater	683-101892-0002	4	EA	FLT		B-MSFC	B-MSFC	06/20/14	Added per letter 13-013329 concurrence dated 08/29/2013.
32470	SSCN 13121; S/A 1959	Mod Kit, Node 3 Aft IMV	684-99503-0001	1	EA	FLT	B-MSFC	B-MSFC	11/13/14	Added per SSCN 13121 definitized on S/A 1959. Updated DIL ID, nomenclature, part number and destination per letter 13-013413 concurrence dated 09/06/2013.	
40xxx Series											
None.											
50xxx Series											
51358	SSCN 12198; S/A 1795	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT	(b) (4)	Vendor	KSC	02/04/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51359	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT		Vendor	KSC	06/13/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51360	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT		Vendor	KSC	06/13/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51361	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT		Vendor	KSC	08/22/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51362	SSCN 12198; S/A 1795 (H.57)	Solid State Lighting Assembly (SSLA)	M026-000000	20	EA	FLT		Vendor	KSC	08/22/16	Added per SSCN 12198 definitized on S/A 1795. Changed delivery date and part number per SSCN 13763 definitized on S/A 1995.
51370	SSCN 12443; CCO 1666; S/A 1771	Mod Kit, External Wireless System	684-015273-0001	1	KT	FLT		BHOU	BHOU	05/03/11	Added per SSCN 12443 authorized on CCO 1666.
51394	SSCN 12443; CCO 1666; S/A 1771	Mod Kit, USL External EWC Coax Cable	684-015289-0001	1	KT	FLT		BHOU	BHOU	02/15/11	Added per SSCN 12443 authorized on CCO 1666.
51476	SSCN 12443; S/A 1854	Mod Kit, ELC Wireless Communications, WAP – US Lab	684-015641-0001	1	KT	FLT		BHOU	BHOU	03/26/12	Added per SSCN 12443 definitized on S/A 1854.
51490	SSCN 12719; S/A 1728	Mod Kit, Grapple Bar Assembly, FRGF Re-Clock	684-015840-0001	1	KT	FLT		KSC	KSC	01/31/12	Added per SSCN 12719 definitized on S/A 1728. Changed nomenclature per letter 11-011362 concurrence dated 09/01/2011.
51494	SSCN 12283; S/A 1794	Power Distribution Unit	11M156M	1	EA	FLT		Moscow	Moscow	11/12/13	Added per SSCN 12283 definitized on S/A 1794.
51495	SSCN 12283; S/A 1794	Main Bus Assembly	BCU-2	1	EA	FLT		Moscow	Moscow	01/21/14	Added per SSCN 12283 definitized on S/A 1794.
51496	SSCN 12283; S/A 1794	Filter Unit	Φ-2	1	EA	FLT		Moscow	Moscow	01/21/14	Added per SSCN 12283 definitized on S/A 1794.
51512	SSCN 12202; S/A 1792	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	HSR	KSC	08/14/15	Added per SSCN 12202 definitized on S/A 1792.	

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51513	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	(b) (4)	HSR	KSC	10/15/15	Added per SSCN 12202 definitized on S/A 1792.
51514	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	12/15/15	Added per SSCN 12202 definitized on S/A 1792.
51515	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	02/15/16	Added per SSCN 12202 definitized on S/A 1792.
51516	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	04/15/16	Added per SSCN 12202 definitized on S/A 1792.
51517	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	06/15/16	Added per SSCN 12202 definitized on S/A 1792.
51518	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	08/15/16	Added per SSCN 12202 definitized on S/A 1792.
51519	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	10/14/16	Added per SSCN 12202 definitized on S/A 1792.
51520	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	12/15/16	Added per SSCN 12202 definitized on S/A 1792.
51521	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	02/15/17	Added per SSCN 12202 definitized on S/A 1792.
51522	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	04/14/17	Added per SSCN 12202 definitized on S/A 1792.
51523	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	06/15/17	Added per SSCN 12202 definitized on S/A 1792.
51524	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	08/15/17	Added per SSCN 12202 definitized on S/A 1792.
51525	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	10/16/17	Added per SSCN 12202 definitized on S/A 1792.
51526	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	12/15/17	Added per SSCN 12202 definitized on S/A 1792.
51527	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	02/15/18	Added per SSCN 12202 definitized on S/A 1792.
51528	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	04/16/18	Added per SSCN 12202 definitized on S/A 1792.
51529	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	06/15/18	Added per SSCN 12202 definitized on S/A 1792.
51530	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	08/14/15	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51531	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	10/15/15	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51532	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	12/15/15	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51533	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	02/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51534	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	04/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51535	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	06/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51536	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	08/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51537	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	10/14/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51538	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	12/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51539	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	02/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51540	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT	(b) (4)	BHOU	KSC	04/14/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51541	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	06/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51542	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	08/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51543	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	10/16/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51544	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	12/15/17	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51545	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	02/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51546	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	04/16/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51547	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	06/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51548	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017101-0001	1	KT	FLT		BHOU	BHOU	09/14/15	Added per SSCN 12202 definitized on S/A 1792.
51549	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017102-0001	1	KT	FLT		BHOU	BHOU	11/15/15	Added per SSCN 12202 definitized on S/A 1792.
51550	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017103-0001	1	KT	FLT		BHOU	BHOU	01/15/16	Added per SSCN 12202 definitized on S/A 1792.
51551	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017104-0001	1	KT	FLT		BHOU	BHOU	03/15/16	Added per SSCN 12202 definitized on S/A 1792.
51552	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017105-0001	1	KT	FLT		BHOU	BHOU	05/15/16	Added per SSCN 12202 definitized on S/A 1792.
51553	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017106-0001	1	KT	FLT		BHOU	BHOU	07/15/16	Added per SSCN 12202 definitized on S/A 1792.
51554	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017107-0001	1	KT	FLT		BHOU	BHOU	09/15/16	Added per SSCN 12202 definitized on S/A 1792.
51555	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017108-0001	1	KT	FLT		BHOU	BHOU	11/14/16	Added per SSCN 12202 definitized on S/A 1792.
51556	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017109-0001	1	KT	FLT		BHOU	BHOU	01/15/17	Added per SSCN 12202 definitized on S/A 1792.
51557	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017110-0001	1	KT	FLT		BHOU	BHOU	03/15/17	Added per SSCN 12202 definitized on S/A 1792.
51558	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017111-0001	1	KT	FLT		BHOU	BHOU	05/14/17	Added per SSCN 12202 definitized on S/A 1792.
51559	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017112-0001	1	KT	FLT		BHOU	BHOU	07/15/17	Added per SSCN 12202 definitized on S/A 1792.
51560	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017113-0001	1	KT	FLT		BHOU	BHOU	09/15/17	Added per SSCN 12202 definitized on S/A 1792.
51561	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017114-0001	1	KT	FLT		BHOU	BHOU	11/16/17	Added per SSCN 12202 definitized on S/A 1792.
51562	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017115-0001	1	KT	FLT		BHOU	BHOU	01/15/18	Added per SSCN 12202 definitized on S/A 1792.
51563	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017116-0001	1	KT	FLT		BHOU	BHOU	03/15/18	Added per SSCN 12202 definitized on S/A 1792.
51564	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017117-0001	1	KT	FLT		BHOU	BHOU	05/16/18	Added per SSCN 12202 definitized on S/A 1792.
51565	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017118-0001	1	KT	FLT		BHOU	BHOU	07/15/18	Added per SSCN 12202 definitized on S/A 1792.
51566	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	18	EA	FLT		BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51567	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	18	EA	FLT		BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51568	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	18	EA	FLT	(b) (4)	BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51569	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	18	EA	FLT		BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51570	SSCN 12202; S/A 1792 (H.57)	Tie-down, Rear	684-017037-0001	18	EA	FLT		BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51571	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	72	EA	FLT		BHOU	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792.
51574	SSCN 12202; S/A 1792 (H.57)	Status/Charging Unit, Lithium-Ion Battery (STE)	684-017045-0001	3	EA	STE		Vendor	KSC	07/15/16	Added per SSCN 12202 definitized on S/A 1792.
51575	SSCN 12831; S/A 1834	Mod Kit, Node 1, Isolation Jumpers	683-99494-1	1	KT	FLT		BHOU	BHOU	04/26/12	Added per SSCN 12831 definitized on S/A 1834.
51611	SSCN 12443; S/A 1854	Antenna, Internal – EWC	684-017259-0001	20	EA	FLT		BHOU	BHOU	05/25/12	Added per SSCN 12443 definitized on S/A 1854.
51616	SSCN 12639; S/A 1860	Mod Kit, CAA External Cable (w/ CAA), C2V2	684-017333-0001	1	KT	FLT		BHOU	BHOU	08/13/14	Added per SSCN 12639 definitized on S/A 1860.
51624	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT		BHOU	BHOU	10/28/13	Added per SSCN 12441 definitized on S/A 1802.
51626	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT		BHOU	BHOU	01/27/14	Added per SSCN 12441 definitized on S/A 1802.
51627	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT		BHOU	BHOU	01/27/14	Added per SSCN 12441 definitized on S/A 1802.
51628	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	6	EA	FLT		BHOU	BHOU	04/28/14	Added per SSCN 12441 definitized on S/A 1802.
51629	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT		BHOU	BHOU	07/28/14	Added per SSCN 12441 definitized on S/A 1802.
51637	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792.
51638	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	10/15/18	Added per SSCN 12202 definitized on S/A 1792.
51639	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	12/15/18	Added per SSCN 12202 definitized on S/A 1792.
51640	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51641	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	10/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51642	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	12/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51643	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017119-0001	1	KT	FLT		BHOU	BHOU	09/15/18	Added per SSCN 12202 definitized on S/A 1792.
51644	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017120-0001	1	KT	FLT		BHOU	BHOU	11/15/18	Added per SSCN 12202 definitized on S/A 1792.
51645	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017121-0001	1	KT	FLT		BHOU	BHOU	01/15/19	Added per SSCN 12202 definitized on S/A 1792.
51646	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	3	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51647	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	3	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51648	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	3	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51649	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	3	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51650	SSCN 12202; S/A 1792 (H.57)	Tie-down, Rear	684-017037-0001	3	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51651	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	12	EA	FLT		BHOU	KSC	08/15/18	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51652	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792.
51653	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	04/15/19	Added per SSCN 12202 definitized on S/A 1792.

INTERNATIONAL SPACE STATION PROGRAM
J-27 DELIVERABLE ITEMS LIST (DIL) LIST - REVISION 78

NAS15-10000
MOD 2054 (S/A)

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO
51654	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT	(b) (4)	HSR	KSC	06/15/19	Added per SSCN 12202 definitized on S/A 1792.
51655	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51656	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	04/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51657	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	06/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51658	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017122-0001	1	KT	FLT		BHOU	BHOU	03/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51659	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017123-0001	1	KT	FLT		BHOU	BHOU	05/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51660	SSCN 12202; S/A 1792 (H.57)	Mod Kit, On-Orbit, Lithium-Ion Battery	684-017124-0001	1	KT	FLT		BHOU	BHOU	07/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51661	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	3	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated part number per letter 13-000346 concurrence dated 01/17/13.
51662	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	3	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51663	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	3	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51664	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	3	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51665	SSCN 12202; S/A 1792 (H.57)	Kit, Tie-down, Rear	684-017037-0001	3	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51666	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	12	EA	FLT		BHOU	KSC	02/15/19	Added per SSCN 12202 definitized on S/A 1792.
51667	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792.
51668	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	10/15/19	Added per SSCN 12202 definitized on S/A 1792.
51669	SSCN 12202; S/A 1792 (H.57)	Lithium-Ion Battery ORU	684-017000-0001	1	EA	FLT		HSR	KSC	12/15/19	Added per SSCN 12202 definitized on S/A 1792.
51670	SSCN 12202; S/A 1792 (H.57)	Adapter Plate, Lithium-Ion Battery	684-017050-0001	1	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51671	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Left	684-017031-0001	3	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51672	SSCN 12202; S/A 1792 (H.57)	Pressure Pad, Right	684-017031-0002	3	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature and part number per letter 13-000346 concurrence dated 01/17/13.
51673	SSCN 12202; S/A 1792 (H.57)	Kit, Connector Bracket	684-017033-0001	3	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51674	SSCN 12202; S/A 1792 (H.57)	Tie-down, Front	684-017034-0001	3	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51675	SSCN 12202; S/A 1792 (H.57)	Kit, Tie-down, Rear	684-017037-0001	3	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51676	SSCN 12202; S/A 1792 (H.57)	Rail, Guide, Battery ORU	684-017056-0001	12	EA	FLT		BHOU	KSC	08/15/19	Added per SSCN 12202 definitized on S/A 1792. Updated nomenclature per letter 13-000346 concurrence dated 01/17/13.
51710	SSCN 13241; S/A 1974	Adapter Plate Assembly	TBD	1	KT	FLT		BHOU	BHOU	12/11/14	Added per SSCN 13241 definitized on S/A 1974.

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS DELIVERY INFO	
51720	SSCN 13209; S/A 1878	Condition Diagnostics Instrumentation Device (CDID)	TBD	1	EA	FLT	(b) (4)	Moscow	Moscow	09/30/13	Added per SSCN 13209 definitized on S/A 1878.	
51722	SSCN 13231; S/A 2016	International Docking Adapter #1	684-022499-0001	1	EA	FLT		BHOU	BHOU	01/19/15	Added per SSCN 13231 definitized on S/A 2016.	
51723	SSCN 13231; S/A 2016	International Docking Adapter #2	684-022499-0501	1	EA	FLT		BHOU	BHOU	07/24/15	Added per SSCN 13231 definitized on S/A 2016.	
51728	SSCN 13231; S/A 2016	IDA Control Panel (ICP)	482001-1	2	EA	FLT		BHOU	BHOU	09/30/14	Added per SSCN 13231 definitized on S/A 2016.	
51729	SSCN 13231; S/A 2016	PMA-IDA On-Orbit Kit	684-022309-0001	1	EA	FLT		BHOU	BHOU	05/30/14	Added per SSCN 13231 definitized on S/A 2016.	
51737	SSCN 13209; S/A 1878	Cables, Power	TBD	1	SET	FLT		Moscow	Moscow	09/30/13	Added per SSCN 13209 definitized on S/A 1878.	
51739	SSCN 13149; S/A 1984	Cable, External, EHDV	684-TBD-0001	5	EA	FLT		BHOU	BHOU	02/28/14	Added per SSCN 13149 definitized on S/A 1984.	
51812	SSCN 13477; S/A 1966	TBD – PPA ORU, FSE	684-TBD-0001	2	EA	FSE		BHOU	BHOU	02/25/14	Added per SSCN 13477 definitized on S/A 1966.	
51813	SSCN 13477; S/A 1966	TBD – Water Assembly ORU, FSE	684-TBD-0001	1	EA	FSE		BHOU	BHOU	02/25/14	Added per SSCN 13477 definitized on S/A 1966.	
51823	SSCN 13231; S/A 2016	PMA-IDA On-Orbit Kit	684-022309-0001	1	KT	FLT		BHOU	BHOU	08/29/14	Added per SSCN 13231 definitized on S/A 2016.	
51824	SSCN 13231; S/A 2016	Mod Kit, High Speed IMV Fan	SVK1023474	2	KT	FLT		UTAS	UTAS	10/31/13	Added per SSCN 13231 definitized on S/A 2016. Changed destination per letter 13-015791 concurrence dated 10/17/2013.	
51825	SSCN 13231; S/A 2016	Mod Kit, High Speed IMV Fan	SVK1023474	1	KT	FLT		UTAS	UTAS	02/28/14	Added per SSCN 13231 definitized on S/A 2016. Changed destination per letter 13-015791 concurrence dated 10/17/2013.	
51826	SSCN 13231; S/A 2016	IDA Control Panel (Flight Spare)	482001-1	1	EA	FLT		BHOU	BHOU	12/19/14	Added per SSCN 13231 definitized on S/A 2016.	
51827	SSCN 13641; S/A 1975	MDM EXT	8259065-911	1	EA	FLT		HI	HI	01/15/14	Added per SSCN 13641 definitized on S/A 1975.	
51836	SSCN 13305; S/A 2047	Cover ESSMDM, EPIC	TBD	1	EA	FLT		AERO	BHOU	04/28/14	Added per SSCN 13305 definitized on S/A 2047.	
51837	SSCN 13305; S/A 2047	Cover ESSMDM, EPIC	TBD	1	EA	FLT		AERO	BHOU	05/22/14	Added per SSCN 13305 definitized on S/A 2047.	
51838	SSCN 13305; S/A 2047	Cover ESSMDM, EPIC (Spare)	TBD	1	EA	FLT		AERO	BHOU	05/12/14	Added per SSCN 13305 definitized on S/A 2047.	
51839	SSCN 13305; S/A 2047	W0087 EXT MDM Ethernet Cable Kit (Including 3 spare Ethernet and 2 spare 1553 lines)	TBD	1	KT	FLT		BHOU	BHOU	02/16/14	Added per SSCN 13305 definitized on S/A 2047.	
51841	SSCN 13209; Letter 13-003410	Load Simulator IN-50	TBD	1	EA	FLT		Moscow	Moscow	09/30/13	Added per letter 13-003410 concurrence dated 03/06/2013.	
51842	SSCN 13641; S/A 1975	0.015” Chootherm	TBD	2	EA	FLT		HI	HI	11/15/13	Added per SSCN 13641 definitized on S/A 1975.	
51864	SSCN 13825; S/A 2048	Common Cabin Air Assembly (CCAA) Heat Exchanger (HX) FSE	684-TBD-0001	1	EA	FSE		BHOU	BHOU	10/02/14	Added per SSCN 13825 definitized on S/A 2048.	
51866	SSCN 13805; S/A 2045	Jumper	684-TBD-0001	40	EA	FLT		BHOU	BHOU	06/06/14	Added per SSCN 13805 definitized on S/A 2045.	
51867	SSCN 13805; S/A 2045	Installation/Removal Tool	684-TBD-0001	6	EA	FLT		BHOU	BHOU	06/06/14	Added per SSCN 13805 definitized on S/A 2045.	
100xxx Series												
None.												
End of List												

- 1) (COMPLETED TAB) Moved completed DILs from ACTIVE TAB to COMPLETED TAB.
- 2) (ACTIVE) Changed part number of DIL 20052-20057 per letter 10-0420 concurrence dated 07/29/2010.
- 3) (ACTIVE) Added DIL 51497 per letter 11-006800 concurrence dated 05/24/2011.
- 4) (ACTIVE) Changed part number of DILs 51306 and 51335 per letter 11-006901 concurrence dated 05/26/2011.
- 5) (ACTIVE) Changed nomenclature and unit of DIL 32138 per letter 11-008041 concurrence dated 07/14/2011.
- 6) (ACTIVE) Changed nomenclature of DIL 32142 per letter 11-008041 concurrence dated 07/14/2011.
- 7) (ACTIVE) Changed part number of DIL 20186 per letter 11-008647 concurrence dated 07/05/2011.
- 8) (ACTIVE) Changed delivery date of DILs 20157-20159 per letter 11-009898 concurrence dated 08/05/2011.
- 9) (ACTIVE) Changed delivery destination of DILs 20084-20087 per letter 11-010283 concurrence received 08/24/2011.
- 10) (ACTIVE) Changed delivery destination of DIL 20159 per letter 11-010642 concurrence dated 08/17/2011.
- 11) (ACTIVE) Added DIL 51632 per CO E-mail dated 09/07/2011.
- 12) (ACTIVE) Added DIL 51487 per definitization of SSCN 12693 on S/A 1736.
- 13) (ACTIVE) Added DILs 51504-51506 per definitization of SSCN 12648 on S/A 1738.
- 14) (ACTIVE) Added DIL 51375 per definitization of SSCN 12446 on S/A 1742.
- 15) (ACTIVE) Added DIL 51511 per definitization of SSCN 12810 on S/A 1743.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
Pxx Series PIOs											
P014B-01	SSCN 5265 (PIO 14B);	JOURNAL BEARING, ASSY-SET	818772-1	10	SE		(b) (4)		HAMSUND/CT	01/29/04	COMPLETE ON BHB2378. 03/09/2004.
P014B-02	SSCN 5265 (PIO 14B);	BEARING, THRUST SET-FAN INLET END	818776-2	2	EA				HAMSUND/CT	01/29/04	COMPLETE ON BHB2347. 02/18/2004.
P014B-03	SSCN 5265 (PIO 14B);	BEARING, THRUST SET-FAN OUTLET END	818777-2	2	EA				HAMSUND/CT	01/29/04	COMPLETE ON BHB2347. 02/18/2004.
P014B-30	SSCN 5265 (PIO 14B);	FAN, CIRCULATING - AVIONICS AIR	SV812743-3	3	EA				HAMSUND/CT	04/26/04	COMPLETE ON BHB2447. 06/18/2004.
P014B-34	SSCN 5265 (PIO 14B);	CIRCUIT CARD ASSY, CONTROLLER	SV817609-5	10	EA				HAMSUND/CT	09/01/04	COMPLETE ON BHB2525. 12/10/2004.
P014B-35	SSCN 5265 (PIO 14B);	CIRCUIT CARD ASSY, FILTER	SV817637-1	10	EA				HAMSUND/CT	09/01/04	COMPLETE ON BHB2525. 12/10/2004.
P23A-087	SSCN 1926 (PIO 23A);	Controller, Embedded	2354532-1-1	1	EA				HW/TOR	03/23/04	COMPLETE ON BHB2416. 05/04/2004.
P23A-089	SSCN 1926 (PIO 23A);	CCA, Snr, Cbn Pres A7	2355132-1-1	1	EA				HW/TOR	02/15/04	COMPLETE ON BHB2416. 05/04/2004.
P023B-28	SSCN 5121 (PIO 23B);	CONTROLLER, EMBEDDED	2354532-1-1	1	EA				HW/TOR	05/30/04	COMPLETE ON BHB2457. 07/14/2004.
P31A-034	SSCN 1669 (PIO 31A);	CIRCUIT CARD ASSY, FILTER	SV812762-1	2	EA				HAMSD/CT	03/09/04	COMPLETE ON BHB2384. 03/23/2004.
P31A-036	SSCN 1669 (PIO 31A);	HEAT EXCHANGER, CABIN AIR	SV813900-2	1	EA				KSC/PPS	05/12/04	COMPLETE ON BHB2472. 11/15/2004.
P31A-065	SSCN 1669 (PIO 31A);	CIRCUIT CARD ASSY, CONTROLLER	SV812756-4	3	EA				HAMSD/CT	01/20/04	COMPLETE ON BHB2395. 04/06/2004.
P055-10	SSCN 1874 (PIO 55); S/A	ACTUATOR ASSEMBLY	683-61592-5	1	EA				KSC/PPS	07/31/05	COMPLETE ON BHB1190. 03/02/2001.
P055-11	SSCN 1874 (PIO 55); S/A	ACTUATOR ASSEMBLY	683-61592-6	1	EA				KSC/PPS	07/31/05	COMPLETE ON BHB1195. 03/02/2001.
P055-16	SSCN 1874 (PIO 55); S/A	REM ELECT ASSY	683-61623-3	1	EA				KSC/PPS	07/31/05	COMPLETE ON BHB1194. 03/29/2001.
P055-20	SSCN 1874 (PIO 55); S/A	ACTUATOR DRIVER	683-61760-1	1	EA				KSC/PPS	07/31/05	COMPLETE ON BHB1193. 03/14/2001.
P058-02	SSCN 2922 (PIO 58); S/A	BATTERY ASSEMBLY	RE1804-12	7	EA				LORAL	12/12/04	COMPLETE ON BHB2557. 02/18/2005.
P058-03	SSCN 2922 (PIO 58); S/A	BATTERY ASSEMBLY	RE1804-12	7	EA				LORAL	12/12/05	COMPLETE ON BHB2756. 12/08/2005.
P061-05	SSCN 4766 (PIO 61); S/A	KU-BAND SSPA	K10048978-501	2	EA				KSC/PPS	03/15/04	COMPLETE ON BHB2534. 01/06/2005.
P064A-04	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA				KSC	01/30/04	COMPLETE ON BHB2360. 02/18/2004.
P064A-05	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA				KSC	02/28/04	COMPLETE ON BHB2375. 03/04/2004.
P064A-06	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA				KSC	03/30/04	COMPLETE ON BHB2390. 03/19/2004.
P064A-07	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	10	EA				KSC	04/30/04	COMPLETE ON BHB2415. 05/04/2004.
P064A-08	PIO 64A; S/A 1189	LAMP HOUSING ASSEMBLY	219010	4	EA				KSC	05/30/04	COMPLETE ON BHB2421. 05/18/2004.
P065-01	PIO 65; S/A 1171	TOP WINDOW, DEBRIS ASSEMBLY-CUPOLA	683-11583-1	1	EA				BMSFC	03/31/04	COMPLETE ON BHB2470. 09/10/2004.
P065-02	PIO 65; S/A 1171	TOP WINDOW, SCRATCH ASSEMBLY-CUPOLA	683-11576-1	1	EA				BMSFC	03/31/04	COMPLETE ON BHB2411. 06/28/2004.
P065-03	PIO 65; S/A 1171	PANE , PRESSURE-TOP WINDOW, CUPOLA	683-11591-2	1	EA				BMSFC	03/31/04	COMPLETE ON BHB2412. 06/21/2004.
P065-04	PIO 65; S/A 1171	PANE, PRESSURE-TOP WINDOW, CUPOLA	683-11591-2	1	EA				KSC/PPS	03/31/04	COMPLETE PER LETTER 06-0206 CONCURRENCE DATED
P065-05	PIO 65; S/A 1171	SIDE WINDOW, DEBRIS ASSEMBLY-CUPOLA	683-11584-1	1	EA				BMSFC	03/31/04	COMPLETE ON BHB2409. 05/19/2004.
P065-06	PIO 65; S/A 1171	SIDE WINDOW, SCRATCH ASSEMBLY-CUPOLA	683-11577-1	1	EA				BMSFC	03/31/04	COMPLETE ON BHB2374. 04/12/2004.
P065-07	PIO 65; S/A 1171	PANE, PRESSURE-SIDE WINDOW - CUPOLA	683-11592-2	2	EA				BMSFC	03/31/04	COMPLETE PER LETTER 06-0206 CONCURRENCE DATED
P065-08	PIO 65; S/A 1171	PANE, PRESSURE-SIDE WINDOW - CUPOLA	683-11592-2	1	EA				KSC/PPS	03/31/04	COMPLETE ON BHB2391. 04/16/2004.
P065-09	PIO 65; S/A 1171	WINDOW ASSY (LAB-ORU)	683-11401-6	1	EA				KSC/PPS	06/15/07	COMPLETE ON BHB2996. 06/15/2007.
P065-10	PIO 65; S/A 1171	PANE ASSEMBLY-DEBRIS (LAB-ORU)	683-11446-3	1	EA				KSC/PPS	03/31/04	COMPLETE ON BHB2851. 05/17/2006.
P74A-001	04-0084	BALL, 440 CRES	1/4 DIA. BALL4	724	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-002	04-0084	BALL, 316C	1/8 DIA. BALL	380	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-003		BALL, 1/8" DIA.	1/8 DIA. BALL4	6241	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-004		SEAL, BOSS	10061-05-0-0	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-005		SLEEVE, ACT./QQ-A-225/8	145569-02-270	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-006		SLEEVE, ACT/QQ-A-225	145569-04-105	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-007		SLEEVE, ACT/QQ-A-225	145569-04-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-008		SLEEVE, ACT/QQ-A-225	145569-04-155	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-009		SLEEVE, ACT/QQ-A-225	145569-04-180	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-010		SLEEVE, ACT/QQ-A-225/8	145569-04-45	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-011		SLEEVE, ACT/QQ-A-225	145569-04-75	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-012		SLEEVE, ACT./QQ-A-225/8	145569-04-U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-013		FERRULE	1511	171	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-014	04-0084	FERRULE	1512	117	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-015	04-0084	HOOK, 302/316	1515	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-016	04-0084	1/32 7X7 CABLE (23.25)	1517-22	28	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-017		1/32 7X7 CABLE (9.25 IN.)	1517-8	80	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-018	04-0084	1/32 7X7 CABLE (10.25 IN.)	1517-9	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-019	04-0084	3/64 7X7 CABLE (13.00 INCHES)	1518-11	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-020	04-0084	3/64 7X7(14.0) IN LONG	1518-12	40	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-021	04-0084	3/64 7X7 CABLE (15.00 IN.)	1518-13	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-022	04-0084	3/64 7X7 CABLE (16.00 IN.)	1518-14	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-023	04-0084	3/64 7X7 CABLE (17.0 IN)	1518-15	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-024	04-0084	B/RING, 316	1520-07	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-025	04-0084	B/RING, 316	1520-08	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-026	04-0084	RING, CRES 302/316	1521-6	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-027	04-0084	1/32 3X7 5.25 LONG CABLE	1524-4	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-028	04-0084	1/32 3X7 7.25 LONG CABLE	1524-6	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-029	04-0084	1/32 3X7 8.25 LONG CABLE	1524-7	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-030	04-0084	RING, 316	1526-3	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-031		LUG	1529-1	84	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-032	04-0084	I.D. PLATE	1532	27	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-033	04-0084	SLEEVE, TEFLON TUBING	1540	165	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-034		HOUSING	155551-04A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-035		HOUSING	155556-04G	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-036		SPACER/AMS 5659	155567-02	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-037		SPACER	155567-04	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-038		SPACER	155567-06	49	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-039		SPACER	155567-06-1	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-040		SPACER	155567-10	155	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-041		SPACER	155567-12	31	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-042		SPACER	155567-16	79	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-043	04-0084	SPRING/AMS 5678	155568-02	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-044	04-0084	SPRING	155568-04-1	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-045		SPRING	155568-06	49	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-046	04-0084	SPRING	155568-06-1	26	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-047		SPRING	155568-10	155	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-048		SPRING	155568-12	31	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-049		SPRING	155568-16	79	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-050		SLEEVE, ACT.	155569-04	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-051		SLEEVE, ACT.	155569-06-105	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-052		SLEEVE, ACT.	155569-06-130	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-053		SLEEVE, ACT.	155569-06-155	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-054		SLEEVE, ACT.	155569-06-180	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-055		ACT.SLEEVE	155569-06-230	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-056		SLEEVE, ACT.	155569-06-255	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-057		SLEEVE ACT.	155569-06-280	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-058		ACTUATING SLEEVE	155569-06-75	21	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-059		SLEEVE, ACT.	155569-06-U	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-060		SLEEVE, ACT.	155569-08-105	38	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-061		SLEEVE, ACT.	155569-08-135	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-062		SLEEVE, ACT.	155569-08-165	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-063		SLEEVE, ACT.	155569-08-195	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-064		SLEEVE, ACT.	155569-08-225	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-065		SLEEVE, ACT	155569-08-315	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-066		SLEEVE, ACT	155569-08-45	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-067		SLEEVE, ACT	155569-08-75	46	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-068		SLEEVE, ACT.	155569-08-U	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-069		SLEEVE, ACT	155569-116-120	16	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-070		ACT. SLEEVE	155569-116-60	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-071		SLEEVE, ACT.	155569-12-120	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-072		SLEEVE, ACT	155569-12-240	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-073		SLEEVE, ACT	155569-12-U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-074		SLEEVE, ACT.	155569-16-180	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-075		SLEEVE, ACT.	155569-16-240	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-076		SLEEVE, ACT.	155569-16-300	3	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-077		SLEEVE, ACT.	155569-16-U	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-078	04-0084	RETAINER .035/ASTM A 313	155570-202	10	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-079	04-0084	RETAINER_.051	155570-204	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-080		RETAINER .051	155570-206	49	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-081		RETAINER,.062	155570-210	112	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-082	04-0084	RETAINER .062	155570-212	220	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-083		RETAINER,.062	155570-216	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-084	04-0084	SPRING	155572	120	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-085	04-0084	O-RING, TEFLON	155583-632	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-087	04-0084	O-RING, SILICONE	155585-009	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-088	04-0084	O-RING, SILICONE	155585-011	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-089	04-0084	O-RING, SILICONE	155585-012	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-090	04-0084	O-RING, SILICONE	155585-903	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-091	04-0084	O-RING, FLUOROCARBON, V747-75	155586-009	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-092	04-0084	O-RING, FLUOROCARBON, V747-75	155586-011	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-093	04-0084	O-RING, FLUOROCARBON, V747-75	155586-012	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-094	04-0084	O-RING, FLUOROCARBON, V747-75	155586-903	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-095	04-0084	SPRING/AMS 5834 .032	155772	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-096		HOUSING/AMS 5662	157751-02A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-097		HOUSING	159551-0408P	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-098		HOUSING/AMS5659	159556-904J124	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-099		HOUSING/AMS5662	159751-0408P	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-100		HOUSING/AMS5662	159756-903J124	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-101		HOUSING/AMS5662	159756-904J124	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-102		HOUSING/AMS 5657	159951-04A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-103		HOUSING/AMS 5659	159951-04BT	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-104	04-0084	O-RING (PARKER,S383-70)	2-031-S-1	100	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-105	04-0084	O-RING (PARKER,S383-70)	2-033-S-1	100	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-106	04-0084	O-RING,ZZ-R-765,GR70,CL1B	2-035-S-1	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-107	04-0084	O-RING,ZZ-R-765,GR70,CL1B	2-037-S-1	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-108	04-0084	O-RING (ZZ-R-765,GR70,CL 1B	2-038-S-1	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-109	04-0084	O-RING (ZZ-R-765,,GR70,CL 1B	2-040-S-1	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-110		PLUG,LOCK	20989-5	207	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-111		8X8X4 CUDDLEPAK	287110	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-112	04-0084	BALL, CRES 440	3/16 DIA. BALL4	340	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-113	04-0084	BALL, CRES 440	3/32 DIA. BALL4	1285	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-114	04-0084	BACK FERRULE	4BF4-316	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-115	04-0084	FRONT FERRULE	4FF4-316	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-116	04-0084	NUT	4NU4-316	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-117	04-0084	B/AS568-008 E-515-80	502009	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-118	04-0084	O-RING	502009-1	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-119		O-RING,FLUOROCARBON,V747-75	502009-2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-120		SLEEVE ACT	502017-2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-121		SLEEVE ACT	502017-3	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-122		SLEEVE ACT	502017-4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-123		WASHER	502019	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-124		HOUSING	502021-51	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-125	04-0084	WASHER	502022	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-126		SPRING	502023	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-127		HOUSING, AFT	502024-04A-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-128		HOUSING AFT	502024-06G	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-129		POPPET	502025	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-130		SPRING	502027	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-131		WASHER	502033	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-132		SPACER	502034	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-133		HOUSING	502038-2	2	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-134		HSG	502038-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-135		HSG	502038-4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-136		HOUSING	502038-5	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-137		HOUSING FLANGE	502041-04A-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-138		HOUSING FLANGE	502041-04M-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-139		HOUSING FLANGE	502041-06G	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-140	04-0084	BACK-UP RING	502049	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-141		HOUSING FWD	502056	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-142		SLEEVE	502078	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-143		STOP	502079-2	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-144		CAP	502082-1	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-145		PLUG	502082-2	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-146		SPRING, 17-7	502223-1	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-147		CUP	502230	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-148		LOCK	502314	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-149		SUPPORT	502315	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-150		SUPPORT	502315-10	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-151		SUPPORT	502315-10-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-152		SUPPORT	502315-8	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-153		SUPPORT	502315-8-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-154		RETAINER	502316	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-155		CAP BUTTON	502323-2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-156		WASHER	502327	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-157		RETAINER	502328	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-158		SLEEVE	502337-10	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-159		SLEEVE	502337-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-160		SLEEVE	502337-8-1	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-161		RETAINER	502338-3	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-162		PIN	502339	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-163		SPRING	502344	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-164		RING, RELEASE	502346	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-165		RING	502347	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-166		SPRING	502348	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-167		PIN	502349	17	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-168		PIN	502349-1	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-169		SLIDE	502350	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-170		CUP, SPRING	502351	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-171		RING,SPLIT	502353-10	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-172		BUTTON ASSY	502370	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-173		BUTTON ASSY	502370-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-181		STOP ASSY	5050-08E	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-182		HOUSING FWD.	505011-04-2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-183		HOUSING, FORWARD	505011-06-1	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-184		HOUSING, FWD/AMS 5659	505011-08-1	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-185		HOUSING, FWD	505011-08-2	99	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-186		HOUSING, FWD	505011-08-3	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-187		HOUSING, FWD	505011-08-5	26	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-188		HOUSING FWD	505011-106-2	29	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-189		HOUSING FWD.	505011-106-20	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-190		HOUSING FWD.	505011-108-2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-191		HOUSING, FORWARD	505011-116-21	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-192		HOUSING, FWD	505011-12-1	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-193		HOUSING, FWD	505011-12-2	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-194		HOUSING, FWD	505011-12-3	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-195		HOUSING, FWD	505011-16-11	42	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-196		HOUSING, FORWARD	505011-16-21	14	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-197		HOUSING, FORWARD	505011-16-31	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-198		SPRING	505013-06	42	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-199		SPRING/.051 AMS5678	505013-08	161	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-200		SPRING	505013-12	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-201		SPRING	505013-16	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-202		SPRING	505013-16-1	55	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-203	04-0084	SPRING/ELGILOY, AMS5834	505013-706-1	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-204	04-0084	SPRING/ELGILOY, AMS5834	505013-708-1	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-205		SLEEVE, SPRING	505014-06	42	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-206		SLEEVE, SPRING	505014-08	149	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-207		SLEEVE, SPRING	505014-08-1	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-208		SLEEVE, SPRING	505014-12	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-209		SLEEVE, SPRING	505014-16	85	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-210		HOUSING AFT	505015-03A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-211		HOUSING AFT	505015-04S	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-212		HOUSING, AFT	505015-04WA-2	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-213		HOUSING, AFT	505015-0604A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-214		HOUSING, AFT	505015-0604J2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-215		HOUSING AFT.	505015-0608C	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-216		HOUSING, AFT	505015-0612V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-217		HOUSING, AFT	505015-06-245	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-218		HOUSING, AFT	505015-06A	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-219		HOUSING, INNER	505015-06CV	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-220		HOUSING, AFT	505015-06FL-5	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-221		HOUSING AFT	505015-06G	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-222		HOUSING, AFT	505015-06P	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-223		HOUSING, AFT	505015-0804J2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-224		HOUSING, AFT	505015-0812J3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-225		HOUSING, AFT	505015-0812V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-226		HOUSING	505015-08-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-227		HOUSING/AMS 5659	505015-08-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-228		HOUSING, AFT	505015-08A	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-229		HOUSING, AFT	505015-08A-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-230		HOUSING, AFT	505015-08HF	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-231		HOUSING AFT	505015-08P	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-232		HOUSING, AFT	505015-08Q	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-233		HOUSING, AFT/AMS 5659	505015-08S	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-234		HOUSING, AFT	505015-08X	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-235		HOUSING AFT	505015-112A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-236		HOUSING, AFT	505015-1208A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-237		HOUSING, AFT	505015-1208A-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-238		HOUSING, AFT	505015-12-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-239		HOUSING, AFT	505015-12A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-240		HOUSING, AFT	505015-12P	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-241		HOUSING, AFT	505015-12U	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-242		HOUSING, AFT	505015-12V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-243		HOUSING, AFT	505015-1606A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-244		HOUSING, AFT	505015-1612HF	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-245		HOUSING, AFT	505015-1612V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-246		HOUSING, AFT	505015-16-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-247		HOUSING, AFT	505015-16A	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-248		HOUSING, AFT	505015-16G	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-249		HOUSING, AFT	505015-16HF	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-250		HOUSING, AFT	505015-16N100	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-251		HOUSING, AFT	505015-204	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-252		HOUSING, AFT	505015-206	6	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-253		HOUSING, AFT	505015-208-1	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-254		HOUSING, AFT	505015-208-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-255		HOUSING, AFT	505015-216	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-256		HOUSING, AFT	505015-216-1	26	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-257		HOUSING, AFT	505015-908A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-258		INDEX RING/AMS 5659	505016-02-270	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-259		INDEX RING/AMS 5659	505016-04-105	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-260		INDEX RING/AMS 5659	505016-04-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-261		INDEX RING/AMS 5659	505016-04-155	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-262		INDEX RING/AMS 5659	505016-04-180	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-263		INDEX RING/5659	505016-04-45	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-264		INDEX RING/AMS 5659	505016-04-75	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-265		INDEX RING	505016-06-180	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-266		INDEX RING	505016-06-75	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-267		RING, INDEX	505016-08-105	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-268		RING, INDEX	505016-08-75	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-269		RING,INDEX	505016-12-120	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-270		RING,INDEX	505016-12-240	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-271		INDEX, RING	505016-16-180	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-272		RING, INDEX	505016-16-240	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-273		RETAINER .050/AMS 5678	505017-02	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-274		RETAINER .062	505017-04	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-275		RETAINER .062	505017-06	44	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-276		RETAINER .062	505017-08	163	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-277		RETAINER	505017-12	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-278		RETAINER	505017-16	84	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-279		HOUSING	505021-0408A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-280		HOUSING	505021-04-245	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-281		HOUSING	505021-04-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-282		HOUSING	505021-04A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-283		HOUSING	505021-04M	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-284		HOUSING	505021-0608C	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-285		HOUSING	505021-0612V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-286		HOUSING	505021-06-245	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-287		HOUSING	505021-06-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-288		HOUSING	505021-06A	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-289		HOUSING	505021-06G	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-290		HOUSING	505021-0804A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-291		HOUSING	505021-0810M	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-292		HOUSING	505021-0812A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-293		HOUSING	505021-0812V	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-294		HOUSING	505021-08-130	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-295		HOUSING	505021-08-245	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-296		HOUSING/AMS 5659	505021-08-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-297		HOUSING	505021-08A	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-298		HOUSING/AMS 5659	505021-08S	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-299		HOUSING	505021-12A	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-300		HOUSING	505021-12V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-301		HOUSING/15-5, AMS 5659	505021-1606A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-302		HOUSING	505021-1608U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-303		HOUSING	505021-1612A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-304		HOUSING	505021-1612V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-305		HOUSING	505021-16A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-306		HOUSING	505021-16EG	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-307		HOUSING	505021-16N100	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-308		HOUSING	505021-204	2	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-309		HOUSING	505021-206	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-310		HOUSING	505021-208	17	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-311		HOUSING	505021-20804U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-312		HOUSING	505021-20812U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-313		HOUSING	505021-212	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-314		HOUSING	505021-216	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-315		HOUSING/AMS 5659	505021-904J6	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-316		HOUSING/AMS 5659	505021-912J7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-317		HOUSING/QQ-S-763	505021-9208U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-318		STOP	505022-06	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-319		STOP	505022-08	111	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-320		STOP	505022-12	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-321		STOP	505022-16	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-322		SLEEVE	505025-06	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-323		SLEEVE	505025-08	111	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-324		SLEEVE	505025-12	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-325		SLEEVE	505025-16	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-326		SLEEVE	505025-706	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-327		SPRING	505026-06	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-328		SPRING	505026-08	111	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-329		SPRING	505026-12	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005
P74A-330		SPRING	505026-16	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-331		SPRING/ELGILOY, AMS5834	505026-706-1	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-332		COVER/MIL-T-6845	505027-02	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-333		COVER	505027-04	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-334		COVER	505027-06	49	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-335		COVER	505027-08	112	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-336		COVER	505027-12	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-337		COVER/304,MIL-T-6845	505027-16	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-338		SUPPORT/AMS 5659	505028-02	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-339		SUPPORT	505028-04	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-340		SUPPORT	505028-06	49	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-341		SUPPORT	505028-08	112	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-342		SUPPORT	505028-116	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-343		SUPPORT	505028-12	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-344		HOUSING	505087-06-245	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-345		HOUSING, AFT	505087-06A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-346		FILTER_(EJAY,90409)	505090-08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-347		JAM NUT	505160-122-18	33	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-348		NUT, JAM	505160-126-18	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-349		JAM NUT	505160-138-16	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-350		JAM NUT	505160-14-14	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-351		NUT,JAM	505160-20-18	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-352		JAM NUT	505160-22-18	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-353		NUT, JAM	505160-26-18	104	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-354		NUT,JAM	505160-31-16	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-355		NUT, JAM	505160-38-16	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-356		THERMAL ISOLATOR	505185-04	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-357		THERMAL ISOLATOR	505185-06	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-358		THERMAL ISOLATOR	505185-08	204	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-359		THRM ISOLATOR	505185-12	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-360		THERMAL ISOLATOR	505185-16	28	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-361		THRM ISOLATOR	505186-08	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-362		THRM ISOLATOR	505186-12	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-363		THERMAL ISOLATOR	505186-16	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-364		FITTING,SWIVEL	505187	3	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-365	04-0084	RETAINER,SWIVEL .051	505188	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-366		SHIPPING CAP 1"	505905-16	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-370		HOUSING,CUP	505921-04	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-371		HOUSING,CUP	505921-06	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-372		HOUSING,CUP	505921-08	43	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-373		HOUSING,CUP	505921-12	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-374		HOUSING,CUP	505921-16	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-375		SUPPORT	505922-04	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-376		SUPPORT	505922-06	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-377		SUPPORT	505922-08	43	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-378		SUPPORT	505922-12	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-379		SUPPORT	505922-16	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-380		ACT.SLEEVE	505923-06	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-381		ACT. SLEEVE	505923-08	43	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-382		ACT.SLEEVE	505923-12	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-383		ACT.SLEEVE	505923-16	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-384	04-0084	RETAINER .062	505924-06	28	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-385		RETAINER	505924-08	43	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-386		RETAINER	505924-12	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-387		RETAINER .088	505924-16	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-388		PLUG	505925-04-5	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-389		PLUG	505925-06	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-390		PLUG	505925-06-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-391		PRESSURE PLUG	505925-08	28	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-392		PLUG	505925-08-1	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-393		PLUG	505925-12	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-394		PLUG	505925-12-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-395		PLUG	505925-16	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-396		PLUG	505925-16-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-397		PIN	505926	86	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-398		PIN	505928	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-399		RETAINER/AMS 5678	505929-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-400		HOUSING,FORWARD	507011-06-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-401		HOUSING, FWD	507011-08-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-402		HOUSING FWD	507011-106-2	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-403		HOUSING, FWD/AMS 5737	509011-08-1	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-404		HOUSING FWD/AMS5737	509011-108-2	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-405		SPRING/.052 ASTM A313	509013-08	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-406		SLEEVE, SPRING/AMS5737	509014-08	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-407		HOUSING, AFT	509015-08AK	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-408		HOUSING, AFT/AMS5737	509015-08FL	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-409		HOUSING, AFT/AMS5737	509015-08FLM	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-410		STOP	509022-08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-411		SLEEVE	509025-08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-412		SPRING/.059 ASTM A313	509026-08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-413		HSG/HOSE ASSY	514011-110	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-414		HOSE ASSY	514011-160	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-415		JAM NUT	514012	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-416		SLEEVE, ACT.	514013	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-417		HOUSING,CUP	514014	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-418		HOUSING	514016-0604V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-419		HSG/HOSE ASSY	514016-120	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-420		HSG/HOSE ASSY	514016-150	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-421		BACK UP RING	515067-017	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-422	04-0084	BACK UP RING	515067-125	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-423	04-0084	SPRING	515117-10-3	26	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-424		SPRING	515117-10-4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-425		BACK UP RING	515153-023-3	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-426		PLUG, STOP	515154-212	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-427		RETAINER,.020	515157-04	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-428	04-0084	RETAINER,.031	515157-12	347	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-429	04-0084	RETAINER,.047	515157-16	144	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-430		RETAINER,.020	515157-704	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-431	04-0084	SPRING .025/AMS 5834	5153-702	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-432	04-0084	BACK-UP RING, TEFLON	5155-019-1	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-433	04-0084	B/BACK-UP RING, TEFLON	5155-02	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-434	04-0084	BACK-UP RING, TEFLON	5155-021-1	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-435	S/A 1275	BACK-UP RING, TEFLON	5155-05	130	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-436	S/A 1275	BACK-UP RING, TEFLON	5155-06	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-437	04-0084	BACK-UP RING, TEFLON	5155-10	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-438		POPPET/AMS 5662	5156-702	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-439		RETAINER/AMS 5662	5157-702	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-440		SPACER/AMS 5662	5158-702	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-441		CAP,DUST	516001-DC-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-442		PLUG,DUST	516001-DP-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-443		HOUSING,FLANGE	516011-10-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-444		POPPET ASSY	516012-10C1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-445		POPPET ASSY	516012-10E	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-446		HOUSING INNER	516014-10	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-447		HOUSING, AFT	516015-10C	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-448		HOUSING AFT	516015-10M	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-449		SPACER	516016-10	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-450		PIN	516017-10	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-451	04-0084	RETAINER, HOUSING	516018-10	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-452		SPRING	516019-10	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-453		WIPER	516020-10	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-454		HOUSING,FLANGE	516022-10-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-455		STOP ASSY	516023-10C1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-456		STOP ASSY	516023-10E	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-457		SLEEVE	516025-10-N	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-458		HOUSING, AFT	516026-10C	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-459		HOUSING, AFT	516026-10M	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-460		SPRING	516027-10	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-461	04-0084	RETAINER, HOUSING	516028-10	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-462		RETAINER, STOP	516029-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-463		POPPET ASSY	516102-12E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-464		SLEEVE, SPRING	516103-12	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-465		HOSE ASSY	516104-12J	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2794. 02/02/2006.
P74A-466		HOUSING, AFT	516105-12U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-467		HOUSING, AFT	516106-12U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-468		STOP	516107-12	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-469		SLEEVE ASSY	516109-12E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-470		SPRING	516111-12-2	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-471		SPRING	516112-12-4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-472		RING, DETENT	516116-12	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-473		HOSE ASSEMBLY	516117-12J	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2794. 02/02/2006.
P74A-474	04-0084	RETAINER,.031/ASTM A313	519157-12	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-475		HOUSING, OUTER	525051-12	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-476		HOUSING, OUTER	525051-1204	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-477		HOUSING, OUTER	525051-1204-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-478		HOUSING ASSY	525052-1204E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-479		HOUSING ASSY	525052-12E	2	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-480		HOUSING ASSY	525052-12E7	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-481		HOUSING ASSY	525052-12V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-482		POPPET ASSY	525053-1204E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-483		POPPET ASSY	525053-12E	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-484		POPPET ASSY	525053-12E7	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-485		POPPET ASSY	525053-12V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-486		SLEEVE	525055-12	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-487		SLEEVE, SPRING	525055-1204	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-488	04-0084	RETAINER, .066	525056-12	16	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-489		HOUSING, OUTER	525061-12	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-490		HOUSING, OUTER	525061-1204	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-491		HOUSING, OUTER	525061-1206-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-492		HOUSING, OUTER	525061-1208-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-493		HOUSING, OUTER	525061-1216-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-494		HOUSING, INNER	525062-11-1	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-495		HOUSING, INNER	525062-12-1	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-496		STOP ASSY	525063-1204E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-497		STOP ASSY	525063-12E	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-498		STOP ASSY	525063-12E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-499		STOP ASSY	525063-12V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-500		SLEEVE ASSY	525065-11E7	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-501		SLEEVE ASSY	525065-12E-5	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-502		SLEEVE ASSY	525065-12V-5	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-503		SPACER, HALF	525068-12	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-504		HOUSING	525151-1206A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-505		HOUSING	525151-1208A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-506		HOUSING	525151-1216CH	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-507	04-0084	RETAINER	5259-04	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-508		BACK-UP RING	545067-012	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-509	04-0084	SPACER	55158-04	36	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-510		SPACER	55178-04	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-511	04-0084	SPRING, SLEEVE	55254-04	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-512		STOP ASSY	5555-702E-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-513	04-0084	SPRING, COMP/AMS 5384 .040	55754-04	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-514	04-0084	O-RING, TEFLON	5-632-1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-515	04-0084	SPRING	5654-08	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-516		SPRING	565514-12	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-517		RETAINER, WIRE	565515-11	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-518		RETAINER, WIRE	565515-12	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-519		RETAINER, WIRE	565515-13	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-520		RETAINER, SWAGE	565516-212	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-521		SPRING	565524-12	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-522		HOUSING	565611-A08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-523		HOUSING	565611-T06	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-524		HOUSING	565612-A08	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-525		RETAINER, SWAGE	565613-212	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-526		RETAINER, SWAGE	565613-213	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-527		SPACER	565615-08	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-528		SPACER	565615-13	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-529		SPACER	565615-16	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-530		SPACER	565615-17	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-531	04-0084	SPACER GUIDE	565615-18	10	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-532		HOUSING	565616-T04	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-533		HOUSING	565616-T08	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-534	04-0084	RETAINER .050	565618-04	26	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-535	04-0084	RETAINER .050	565618-08	26	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-536		NUT	565619-04	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-537		NUT	565619-08	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-538		HOUSING	565621-081	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-539		SLEEVE	565622-08	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-540		COVER, SLEEVE	565625-08	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-541		COVER, SLEEVE	565625-13	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-542		HOUSING	565631-04	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-543		HOUSING	565632-04	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-544		RETAINER	565633-04	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-545		RETAINER	58117	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-546		RETAINER	58120	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-547		RETAINER	58157-04	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-548		RETAINER	58177-04	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-549		RETAINER	58413	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-550		RING, SPLIT	58414	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-551	04-0084	SPRING	58418	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-552		RETAINER	58419	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-553	04-0084	SPRING AMS 5834	590021-702	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-554		SLEEVE/AMS 5662	590052-702	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-555		STOP ASSY	591221-E	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-556		POPPET	593112	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-557		POPPET	593112-3	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-558		RETAINER	593113	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005
P74A-559		SPACER	593114	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-560	04-0084	SPRING	593116	28	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-561		HOUSING	593120-041	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-562		HOUSING	593120-041-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-563		STOP ASSY	593121-E	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-564		STOP ASSY	593121-V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-565		SLEEVE	593122-5	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-566		SLEEVE	593122-6	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-567	04-0084	SPRING	593123	23	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-568		SLEEVE	593124-1	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-569		WASHER	593126-5	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-570	04-0084	CAP	593127	24	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-571		HOUSING	593130-1	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-572		HOUSING	593130-T04	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-573		HOUSING	593131-T04	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-574		POPPET/AMS 5662	593172-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-575		STOP ASSY	59353-04E-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-576		STOP ASSY	59393-04E-1	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-577		SLEEVE	59753-04-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-578		STOP ASSY	59793-04E-1	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-579		SLEEVE	59953-04-1	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-580	S/A 1275	ROD SEAL	62350-XX017-02	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-581	04-0084	BALL	7/32 DIA. BALL4	849	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-582		SPRING	80293-08	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-583		RETAINER	80295-08-1	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-584	04-0084	RETAINER	85157-08	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-585	04-0084	FERRULE, BACK	8BF8-316	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-586	04-0084	FERRULE, BACK	8FF8-316	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-587	04-0084	NUT (STAINLESS STEEL)	8NU8-316	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-588		POPPET	9156-08	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-589		POPPET ASSY	A505012-06-E	39	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-590		POPPET ASSY.	A505012-06-V	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-591		POPPET ASSY	A505012-08-E	3	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-592		POPPET ASSY	A505012-12-E	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-593		POPPET ASSY	A505012-T06-E	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-594		POPPET ASSY	A505012-T08-E	160	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-595		POPPET ASSY	A505012-T12-E	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-596		POPPET ASSY	A505012-T16-E	85	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-597		STOP PLUG ASSY	A505024-06-E	36	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-598		STOP PUUG ASSY	A505024-06-V	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-599		STOP PLUG ASSY	A505024-08-E	111	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-600		STOP PLUG ASSY	A505024-12-E	22	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-601		STOP PLUG ASSY	A505024-16-E	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-602		STOP PLUG ASSY	A505024-T06-E	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-603		POPPET ASSY	A509012-08-V	5	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-604		STOP PLUG ASSY	A509024-08-V	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-605		HOUSING ASSY	A516101-12-2E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-606		HOUSING ASSY	A516101-12-E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-607		STOP PLUG ASSY	A516108-12-E7	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2588. 03/31/2005.
P74A-608		POPPET ASSY	A80292-T08-E	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-609	04-0084	NUT	AN924-6K	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-610	04-0084	WIRE RETAINER	AS1791-04	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-611	04-0084	WIRE,RETAINER (PURCHASE PART)	AS1791-12	42	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-612		NUT,SWIVEL (PURCHASED PART)	AS4370J12-N	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-613	S/A 1275	NUT,SWIVEL	AS4370K04-N	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-614	04-0084	NUT,SWIVEL (PURCHASED PART)	AS4370R12-N	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-615	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-008-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-616	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-009-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-617	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-011-E	210	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-618	04-0084	O-RING, FLUOROCARBON	AS568-011-V	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-619	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-012-E	250	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2734. 11/03/2005.
P74A-620	04-0084	O-RING, FLOUROCARBON	AS568-012-V	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-621	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-013-E	80	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-622	04-0084	O-RING, EPR(E515-80)	AS568-014-E	182	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-623	04-0084	O-RING, FLUOROCARBON	AS568-014-V	50	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-624	04-0084	O-RING, EPR, PARKER E515-80	AS568-015-E	570	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-625	04-0084	O-RING, FLUOROCARBON	AS568-015-V	90	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-626	04-0084	O-RING, NEOPRENE	AS568-016-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-627	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-016-E	1529	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-628	04-0084	O-RING, FLUOROCARBON	AS568-016-V	90	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-629	04-0084	O-RING, NEOPRENE PARKER	AS568-017-C1	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-630	S/A 1275	O-RING, ETHYLENE PROPYLENE	AS568-017-E	1146	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-631	S/A 1275	O-RING	AS568-017-V	50	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-632	04-0084	O-RING, NEOPRENE_PARKER	AS568-018-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004.
P74A-633	04-0084	O-RING, EPR(E515-80)	AS568-018-E	1230	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-634	04-0084	O-RING, FLUOROCARBON	AS568-018-V	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-635	04-0084	O-RING, NEOPRENE_PARKER	AS568-019-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-636		O-RING, EPR(E515-80)	AS568-019-E	174	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-637	04-0084	O-RING, FLUOROCARBON	AS568-019-V	50	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-638	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-020-E	230	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-639	04-0084	O-RING, NEOPRENE_PARKER	AS568-021-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-640	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-021-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-641	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-022-E	118	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-642	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-022-E7	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-643	04-0084	O-RING, TEFLON	AS568-023-1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-644	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-023-E	114	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-645	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-023-E7	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-646	04-0084	O-RING, FLUOROCARBON	AS568-023-V	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-647	04-0084	O-RING,ETHYLENE PROPYLENE	AS568-024-E7	60	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-648	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-025-E	422	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-649	S/A 1275; 04-0084	O-RING, ETHYLENE PROPYLENE	AS568-026-E	182	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-650	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-027-E	422	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-651	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-028-E	422	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-652	04-0084	O-RING,SILICONE,PARKER,S383-70	AS568-030-S1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-653	04-0084	O-RING,SILICONE,PARKER S383-70	AS568-032-S1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-654	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-112-E	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-655	04-0084	O-RING, NEOPRENE PARKER	AS568-116-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-656	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-116-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-657	S/A 1275	O-RING, NEOPRENE PARKER	AS568-117-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-658	S/A 1275	O-RING, ETHYLENE PROPYLENE	AS568-117-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-659	04-0084	O-RING, NEOPRENE PARKER	AS568-118-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-660	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-118-E	80	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-661	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-118-E60	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-662	04-0084	O-RING, NEOPRENE PARKER	AS568-120-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-663	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-120-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-664	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-121-E	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-665	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-121-E7	160	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-666	04-0084	O-RING, FLUOROCARBON	AS568-121-V	80	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-667	S/A 1275	O-RING, NEOPRENE PARKER	AS568-122-C1	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-668	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-122-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-669	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-125-E	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-670	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-125-E7	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-671	04-0084	O-RING PARKER V747-75	AS568-125-V	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-672	04-0084	O-RING, ETHYLENE PROPYLENE	AS568-128-E	227	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-674	04-0084	CAP,DUST	EC-25	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-675	04-0084	BACK-UP RING, TEFLON	F5155-08	100	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-676	04-0084	SPACER	F5158-08	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-685	04-0084	I.D. BAND	I113-32CR	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-686	S/A 1275	I.D. BAND	I113-40CR	70	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-687	04-0084	I.D. BAND	I113-67CR	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-688	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-016	120	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-689	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-017	120	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-690	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-022	150	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2794. 02/02/2006.
P74A-691	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-117	120	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-692	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-120	150	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-693	04-0084	O-RING,ETHYLENE,PROPYLENE	M83285/1-122	150	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-694	04-0084	O-RING,ETHYLENE PROPYLENE	M83285/1-125	157	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-695	04-0084	RETAINING RING	MS16624-4025	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-696	04-0084	1/8 DIA. BALL4 (CRES 440C)	MS19060-4808	1030	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-697	04-0084	BALL, 7/32 DIA.	MS19060-4813	110	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-699	04-0084	BACK-UP RING	MS27595-009	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-700	04-0084	BACK-UP RING, TEFLON	MS27595-011	670	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-701	04-0084	BACK-UP RING, TEFLON	MS27595-012	70	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-702	04-0084	BACK UP RING, TEFLON	MS27595-015	440	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-703	04-0084	BACK UP RING, TEFLON	MS27595-017	728	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-704	04-0084	BACK UP RING, TEFLON	MS27595-022	220	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-705	04-0084	BACK UP RING	MS27595-024	60	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-706	04-0084	BACK UP RING	MS27595-027	201	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-707	04-0084	BACK-UP RING, TEFLON	MS27595-112	80	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-708	04-0084	BACK-UP RING, TEFLON	MS27595-117	230	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-709	04-0084	BACK UP RING	MS27595-120	127	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-710	04-0084	BACK-UP RING, TEFLON	MS27595-125	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-711	04-0084	BACK UP RING	MS28774-022	40	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-712	04-0084	NUT	NAS1423C12	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-713	04-0084	O-RING, ETHYLENE PROPYLENE	NAS1611-011	450	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-714	04-0084	O-RING, ETHYLENE PROPYLENE	NAS1611-211	150	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-715	04-0084	O-RING, ETHYLENE PROPYLENE	NAS1612-3	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-717		CAPTIVE FASTENER	PLDA7900-10-B-	18	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-718		GAMAH RETAINING RING	R14104C	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-719		GAMAH RETAINING RING	R14105C	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-720		GAMAH RETAINING RING	R14110C	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-721	04-0084	BACK-UP RING, TEFLON	R5155-02	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-722		GAMAH SEAL RING	S14704C	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-723		GAMAH SEAL RING	S14705C	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-724		GAMAH SEAL RING	S14710C	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-732	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735D6D6E011	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-733	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735D6F6F064	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-734	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735E8D8E011	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-735	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735E8F8F024	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-736	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1735E8F8F060	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-737	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1738H16B16C0	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-738	S/A 1275	FLEXIBLE METAL HOSE ASSEMBLY	M1738H16C16C0	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-739		HOUSING	T155556-04A5	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-740	04-0084	BACK-UP RING	T502049-1	33	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-741		SLEEVE, SPRING	T505014-06	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-742		SLEEVE, SPRING/AMS4928	T505014-08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-743		HOUSING, AFT	T505015-04AK	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-744		HOUSING, AFT	T505015-04FLM	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-745		HOUSING, AFT	T505015-04J4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-746		HOUSING, AFT	T505015-06P	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-747		HOUSING, AFT	T505015-0806A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-748		HOUSING	T505015-08-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-749		HOUSING	T505015-08-410	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-750		HOUSING	T505015-08-510	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-751		HOUSING, AFT	T505015-08A	57	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-752		HOUSING, AFT	T505015-08BF	13	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-753		HOUSING	T505015-08FLM	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-754		HOUSING, AFT	T505015-08G	14	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-755		HOUSING, AFT	T505015-08P	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-756		HOUSING, AFT	T505015-08U	6	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-757		HOUSING, AFT	T505015-108G	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-758		HOUSING, AFT	T505015-112G	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-759		HOUSING, AFT	T505015-12-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2503. 10/25/2004
P74A-760		HOUSING	T505015-128-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-761		HOUSING, AFT	T505015-12A	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-762		HOUSING, AFT	T505015-12G	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-763		HOUSING, AFT	T505015-16-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-764		HOUSING	T505015-16-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-765		HOUSING, AFT	T505015-16BF	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-766		HOUSING, AFT	T505015-16G	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-767		HOUSING, AFT	T505015-16G-3	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-768		HOUSING, AFT	T505015-16GF	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2546. 02/14/2005.
P74A-769		HOUSING, AFT	T505015-16U	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2512. 12/13/2004.
P74A-770		HOUSING	T505015-904J4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-771		RING, INDEX	T505016-06-105	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-772		RING, INDEX	T505016-06-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-773		RING, INDEX	T505016-06-155	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-774		RING, INDEX	T505016-06-180	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-775		RING, INDEX	T505016-06-205	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-776		RING, INDEX	T505016-06-230	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P74A-777		RING,INDEX	T505016-06-255	2	EA		(b) (4)		KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-778		INDEX RING	T505016-06-280	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-779		INDEX RING	T505016-06-315	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-780		RING,INDEX	T505016-06-45	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-781		RING,INDEX	T505016-06-75	29	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-782		RING,INDEX	T505016-08-105	79	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-783		RING,INDEX/MIL-T-9047	T505016-08-135	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-784		RING,INDEX	T505016-08-165	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-785		RING,INDEX	T505016-08-195	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2545. 02/09/2005.
P74A-786		RING,INDEX	T505016-08-225	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-787		RING,INDEX/MIL-T-9047	T505016-08-255	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-788		RING,INDEX/MIL-T-9047	T505016-08-285	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-789		RING,INDEX	T505016-08-315	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-790		RING, INDEX	T505016-08-45	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-791		RING,INDEX	T505016-08-75	71	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-792		RING,INDEX	T505016-116-120	18	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-793		INDEX RING	T505016-116-60	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-794		RING,INDEX	T505016-12-120	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2568. 03/02/2005.
P74A-795		RING,INDEX	T505016-12-240	9	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-796		RING,INDEX	T505016-16-180	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2542. 01/19/2005.
P74A-797		RING,INDEX	T505016-16-240	8	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-798		RING,INDEX	T505016-16-300	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-799		HOUSING	T505021-04A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-800		HOUSING	T505021-04J4	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-801		HOUSING	T505021-08	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-802		HOUSING	T505021-0806A	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-803		HOUSING	T505021-08-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-804		HOUSING	T505021-08-410	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-805		HOUSING	T505021-08-510	20	EA				KSC/PPS	11/01/04	COMPLETE ON BHB 2588. 03/31/2005.
P74A-806		HOUSING	T505021-08A	19	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-807		HOUSING	T505021-08G	26	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-808		HOUSING	T505021-08J4	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-809		HOUSING	T505021-12-510	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-810		HOUSING	T505021-128-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-811		HOUSING	T505021-1608G	7	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-812		HOUSING	T505021-16-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2529. 01/06/2005.
P74A-813		HOUSING	T505021-16-410	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-814		HOUSING	T505021-16-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-815		HOUSING	T505021-168-130	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-816		HOUSING	T505021-16A	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-817		HOUSING	T505021-16G	11	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-818		HOUSING/MIL-T-9047	T505021-912EL-	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-819		HOUSING	T505021-916EA	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-820		HOUSING	T505021-916EL-	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-821		HOUSING	T505021-F08-510	2	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-822		STOP	T505022-06	4	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-823		STOP	T505022-16	58	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-824		HOUSING,CUP	T505921-06	3	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-825	04-0084	BACK-UP RING, TEFLON	T5155-02-1	30	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2527. 12/22/2004.
P74A-826		HOUSING OUTER TITANIUM	T565511-12	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-827		HOUSING,INNER	T565512-12-1	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2663. 06/10/2005.
P74A-828		POPPET (TITANIUM)	T565513-12	15	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-829		HOUSING (TITANIUM)	T565521-12	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-830		STOP (TITANIUM)	T565522-12	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P74A-831		SLEEVE (TITANIUM)	T565523-12	12	EA				KSC/PPS	11/01/04	COMPLETE ON BHB2602. 05/05/2005.
P079-001		Hatch Window Inner Replacment Kit	683-61498-1	1	KT				KSC/PPS	12/31/04	COMPLETE ON BHB2501. 11/17/2004

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
P079-002		SEAL, Window Pane	683-13032-1	6	EA		(b) (4)		KSC/PPS	12/31/04	COMPLETE ON BHB2421. 05/18/2004.
P079-004		WINDOW ASSY, DEBRIS, SIDE PANEL CUPOLA	683-11584-1	1	EA				KSC/PPS	12/31/04	COMPLETE: This item was delivered via DD1149 as a special
P083-01	PIO 83; S/A 1372	CDRA Pre cooler	2352530-1-2	2	EA				In Place	08/01/07	COMPLETE ON BHB3053. 10/29/2007.
20xxx Series PIOs											
20000	SSCN 8474; S/A 1306	Condensing Heat Exchanger - Weldment	SV811602-1	1	EA	FLT	(b) (4)	FLT	HSSSI	05/26/06	COMPLETE ON BHB2846. 05/03/2006.
20001	PIO 80; S/A 1396 (H.57)	Battery Charge Discharge Unit (BCDU)	RE1807-03	1	EA	FLT		FLT	at Vendor	03/31/09	COMPLETE ON BHB3155. 01/28/2009.
20007	SSCN 9191; S/A 1340	SPACE STATION BUFFER AMPLIFIER (SSBA)	51612-0411-3	1	EA	FLT			KSC	02/15/07	COMPLETE ON BHB2944. 03/21/2007.
20008	SSCN 8756; S/A 1349	Local Data Interface Assy	R072491-151	3	EA	FLT	(b) (4)	FLT	KSC	09/30/06	COMPLETE ON BHB3120. 03/26/2008.
20009	SSCN 8756; S/A 1349	Local Data Interface Assy	R072491-101	1	EA	FLT		FLT	KSC	09/30/06	COMPLETE ON BHB3158. 02/06/2009.
20010	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA				KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20011	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		(b) (4)		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20012	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA				KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20013	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA				KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20014	PIO 84; Mod 1460 (H.57)	Filter Assembly	2353561-1-1	1	EA		(b) (4)		KSC	07/16/09	COMPLETE ON BHB3186. 06/22/2009.
20015	PIO 84; Mod 1460 (H.57)	Desiccant/Adsorbent Bed	2352540-1-1	1	EA				KSC	06/07/09	COMPLETE ON BHB3259. 01/28/2010.
20017	PIO 85; Mod 1472 (H.57)	S-Band Support Assembly with Assembly	1F80536-1	1	EA	FLT			KSC	12/04/09	COMPLETE ON BHB3258. 02/12/2010.
20018	PIO 85; Mod 1472 (H.57)	S-Band Support Assembly with Assembly	1F80536-1	1	EA	FLT	(b) (4)		KSC	04/19/10	COMPLETE ON BHB3270. 03/04/2010.
20019	PIO 87; Mod 1508 (H.57)	Flexible Hose Rotary Coupler, Spare Assembly	5849811-503	1	EA	NFS		LMMS	KSC	11/01/09	COMPLETE ON BHB3256. 02/25/2010.
20021	PIO 87; Mod 1508 (H.57)	Rotary Joint Motor Controller	5842400-507	1	EA	FLT		LMMS	KSC	09/01/11	COMPLETE ON BHB3562. 05/03/2013.
20022	PIO 87; Mod 1508 (H.57)	Rotary Joint Motor Controller	5842400-507	1	EA	FLT		LMMS	KSC	07/01/12	COMPLETE ON BHB3574. 09/05/2013. Added per PIO 87 on Mod 1508. Changed part number per letter 11-014158 concurrence dated 11/01/2011.
20023	PIO 87; Mod 1508 (H.57)	Utility Transfer Assembly	1F81164-1	1	EA	FLT	(b) (4)	LMMS	KSC	07/12/12	COMPLETE ON BHB3504. 07/09/2012. Added per PIO 87 on Mod
20024	PIO 87; Mod 1508 (H.57)	Charcoal Bed Assembly	5823608-501	1	EA	FLT		KSC	KSC	10/14/10	COMPLETE ON BHB3412. 06/13/2011. Ship short on BHB3386
20025	PIO 87; Mod 1508 (H.57)	Charcoal Bed Assembly	5823608-501	1	EA	FLT		KSC	KSC	03/01/11	COMPLETE ON BHB3413. 06/13/2011. Ship short on BHB3387
20026	PIO 87; Mod 1508 (H.57)	Sorbent Bed Assembly	5823623-503	1	EA	FLT	(b) (4)	KSC	KSC	04/01/11	COMPLETE ON BHB3414. 06/13/2011. Ship short on BHB3377
20027	PIO 87; Mod 1508 (H.57)	Sorbent Bed Assembly	5823623-503	1	EA	FLT		KSC	KSC	04/01/11	COMPLETE ON BHB3388. 06/17/2011. Added per PIO 87 on Mod
20028	PIO 87; Mod 1508 (H.57)	Sorbent Bed Assembly	5823623-503	1	EA	FLT		KSC	KSC	04/01/11	COMPLETE ON BHB3389. 06/13/2011. Added per PIO 87 on Mod
20029	PIO 87; Mod 1508 (H.57)	Catalytic Oxidizer Assembly	5823630-503	1	EA	FLT	(b) (4)	KSC	KSC	12/23/10	COMPLETE ON BHB3392. 06/23/2011. Added per PIO 87 on Mod
20030	PIO 87; Mod 1508 (H.57)	Catalytic Oxidizer Assembly	5823630-503	1	EA	FLT		KSC	KSC	03/01/11	COMPLETE ON BHB3415. 06/13/2011. Ship short on BHB3364
20031	PIO 87; Mod 1508 (H.57)	Blower Assembly	5844815-501	1	EA	FLT		LMMS	KSC	12/01/11	COMPLETE ON BHB3573. 08/22/2013. Added per PIO 87 on Mod 1508
20032	PIO 87; Mod 1508 (H.57)	Blower Assembly	5844815-501	1	EA	FLT	(b) (4)	LMMS	KSC	09/01/12	COMPLETE ON BHB3493. 07/24/2012. Added per PIO 87 on Mod
20033	PIO 86; Mod 1481 (H.57)	HRDL-Input/Output	8265999-901	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3216. 07/29/2009. Added per PIO 86 on Mod
20034	PIO 86; Mod 1481 (H.57)	HRDL-Input/Output	8265999-901	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20035	PIO 86; Mod 1481 (H.57)	HRDL-Input/Output	8265999-901	1	EA	FLT	(b) (4)		HI	08/28/09	COMPLETE ON BHB3217. 08/05/2009. Added per PIO 86 on Mod
20036	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20037	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20038	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT	(b) (4)		HI	08/28/09	COMPLETE ON BHB3214. 07/23/2009. Added per PIO 86 on Mod
20039	PIO 86; Mod 1481 (H.57)	SSMMU Memory CCA	8269132-902	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3214. 07/23/2009. Added per PIO 86 on Mod
20040	PIO 86; Mod 1481 (H.57)	SSMMU Controller CCA	8269130-902	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20041	PIO 86; Mod 1481 (H.57)	SSMMU Controller CCA	8269130-902	1	EA	FLT	(b) (4)		HI	08/28/09	COMPLETE ON BHB3217. 08/05/2009. Added per PIO 86 on Mod
20042	PIO 86; Mod 1481 (H.57)	SSMMU Daughterboard	8269128-901	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3214. 07/23/2009. Added per PIO 86 on Mod
20043	PIO 86; Mod 1481 (H.57)	SSMMU Daughterboard	8269128-901	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20044	PIO 86; Mod 1481 (H.57)	HRDL Processor CCA	8264898-901	1	EA	FLT	(b) (4)		HI	08/28/09	COMPLETE ON BHB3215. 07/29/2009. Added per PIO 86 on Mod
20045	PIO 86; Mod 1481 (H.57)	HRDL Processor CCA	8264898-901	1	EA	FLT			HI	08/28/09	COMPLETE ON BHB3217. 08/05/2009. Added per PIO 86 on Mod
20046	PIO 88/SSCN 11221; Mod	Main Bus Switching Unit (MBSU)	R072591-41	1	EA	FLT		HSR	KSC	09/09/11	COMPLETE ON BHB3450. 09/09/2011. Added per PIO 88/SSCN
20047	PIO 88/SSCN 11221; Mod	Main Bus Switching Unit (MBSU)	R072591-41	1	EA	FLT	(b) (4)	HSR	KSC	05/04/12	COMPLETE ON BHB3475. 02/22/2012. Added per PIO 88/SSCN
20048	PIO 88/SSCN 11221; Mod	Electronic Control Unit (ECU)	R072341-61	1	EA	FLT		HSR	KSC	10/31/11	COMPLETE ON BHB3396. 08/24/2011. Added per PIO 88/SSCN
20049	PIO 88/SSCN 11221; Mod	Electronic Control Unit (ECU)	R072341-61	1	EA	FLT		HSR	KSC	03/15/12	COMPLETE ON BHB3459. 02/01/2012. Added per PIO 88/SSCN
20050	PIO 88/SSCN 11221; Mod	Direct Current Switching Unit (DCSU)	R072610-71	1	EA	FLT	(b) (4)	HSR	KSC	07/25/12	COMPLETE ON BHB3503. 06/26/2012. Added per PIO 88/SSCN
20051	PIO 88/SSCN 11221; Mod	Direct Current Switching Unit (DCSU)	R072610-71	1	EA	FLT		HSR	KSC	10/06/12	COMPLETE ON BHB3516. 09/25/2012. Added per PIO 88/SSCN
20052	PIO 89/SSCN 10695; Mod	Major Constituent Analyzer (MCA) Assembly	359675-006	1	EA	FLT		HSSSI	KSC	12/30/11	COMPLETE ON BHB3421. 06/22/2011. Added per PIO 89/SSCN
20056	PIO 89/SSCN 10695; Mod	Verification Gas Assembly (VGA)	359850-006	1	EA	FLT		HSSSI	KSC	03/30/12	COMPLETE ON BHB3489. 04/23/2012. Added per PIO 89/SSCN

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
20057	PIO 89/SSCN 10695; Mod	Verification Gas Assembly (VGA)	359850-006	1	EA	FLT	(b) (4)	HSSSI	KSC	07/30/12	COMPLETE ON BHB3510. 12/12/2012. Added per PIO 89/SSCN
20058	PIO 89/SSCN 10695; Mod	Sample Pump Assembly, Series	359425-005	1	EA	FLT		HSSSI	KSC	06/30/12	COMPLETE ON BHB3479. 04/23/2012. Added per PIO 89/SSCN
20059	PIO 90; Mod 1486 (H.57)	Television Camera Interface Controller	10033211-501	1	EA	FLT			KSC	11/09/09	COMPLETE ON BHB3236. 11/09/2009. Added per PIO 90 on Mod
20060	PIO 90; Mod 1486 (H.57)	Television Camera Interface Controller	10033211-501	1	EA	FLT			KSC	04/08/10	COMPLETE ON BHB3281. 03/24/2010. Added per PIO 90 on Mod
20063	PIO 91 Mod 1503 (H.57)	Motor Controller	2354164-2-1	1	EA	FLT			KSC	07/19/10	COMPLETE ON BHB3448. 08/10/2011. Added per PIO 91 on Mod
20064	PIO 91 Mod 1503 (H.57)	Two Stage Pump	2352730-1-5	1	EA	FLT			KSC	06/21/10	COMPLETE ON BHB3308. 08/27/2010. Added per PIO 91 on Mod
20065	PIO 91 Mod 1503 (H.57)	Blower/Precooler	2352550-1-2	1	EA	FLT			KSC	04/23/10	COMPLETE ON BHB3336. 12/03/2010. Added per PIO 91 on Mod
20066	PIO 91 Mod 1503 (H.57)	Heater Controller	2354222-2-1	1	EA	FLT			KSC	07/19/10	COMPLETE ON BHB3378. 06/06/2011. Added per PIO 91 on Mod
20067	PIO 92/SSCN 10622; Mod	WPA Process Controller	SV826000-1	1	EA	FLT		HSSSI	KSC	11/30/10	COMPLETE ON BHB3333. 11/15/2010. Added per PIO 92/SSCN
20068	PIO 92/SSCN 10622; Mod	WPA Process Controller	SV826000-1	1	EA	FLT		HSSSI	KSC	08/30/11	COMPLETE ON BHB3452. 08/30/2011. Added per PIO 92/SSCN
20069	PIO 92/SSCN 10622; Mod	Catalytic Reactor	SV825455-3	1	EA	FLT		HSSSI	KSC	02/28/12	COMPLETE ON BHB3478. 02/28/2012. Added per PIO 92/SSCN
20074	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	06/30/10	COMPLETE ON BHB3302. 06/29/2010. Added per PIO 92/SSCN
20075	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	08/30/10	COMPLETE ON BHB3303. 08/27/2010. Added per PIO 92/SSCN
20076	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	10/29/10	COMPLETE ON BHB3327. 08/27/2010. Added per PIO 92/SSCN
20077	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	12/30/10	COMPLETE ON BHB3334. 10/29/2010. Added per PIO 92/SSCN
20078	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	02/28/11	COMPLETE ON BHB3348. 01/20/2011. Added per PIO 92/SSCN
20079	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	04/29/11	COMPLETE ON BHB3353. 02/18/2011. Added per PIO 92/SSCN
20080	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3353. 02/18/2011. Added per PIO 92/SSCN
20081	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	08/30/11	COMPLETE ON BHB3383. 04/21/2011. Added per PIO 92/SSCN
20082	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	10/31/11	COMPLETE ON BHB3418. 06/29/2011. Added per PIO 92/SSCN
20083	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	KSC	12/30/11	COMPLETE BHB3418. 06/29/2011. Added per PIO 92/SSCN
20084	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	HSSSI	02/28/12	COMPLETE ON BHB3453. 09/01/2011. Added per PIO 92/SSCN
20085	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	HSSSI	04/30/12	COMPLETE ON BHB3453. 09/01/2011. Added per PIO 92/SSCN
20086	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	HSSSI	06/30/12	COMPLETE ON BHB3473. 01/25/2012. Added per PIO 92/SSCN
20087	PIO 92/SSCN 10622; Mod	Hydrogen Sensor	SV826167-1	1	EA	FLT		HSSSI	HSSSI	08/30/12	COMPLETE ON BHB3505. 06/18/2012. Added per PIO 92/SSCN
20088	PIO 92/SSCN 10622; Mod	Hydrogen ORU	SV827305-1	1	EA	FLT		HSSSI	KSC	02/11/11	COMPLETE ON BHB3350. 02/08/2011. Added per PIO 92/SSCN
20089	PIO 92/SSCN 10622; Mod	Sensor ORU	SV825447-1	1	EA	FLT		HSSSI	HSSSI	05/30/12	COMPLETE ON BHB3384. 04/28/2011. Added per PIO 92/SSCN
20090	PIO 92/SSCN 10622; Mod	OGA Process Controller	SV826025-2	1	EA	FLT		HSSSI	KSC	02/28/11	COMPLETE ON BHB3394. 05/05/2011. Added per PIO 92/SSCN
20102	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT		HSSSI	KSC	09/30/11	COMPLETE ON BHB3248. 12/15/2009. Added per PIO 92/SSCN
20103	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT		HSSSI	KSC	11/30/11	COMPLETE ON BHB3251. 12/15/2009. Added per PIO 92/SSCN
20104	PIO 92/SSCN 10622; Mod	Gas Separator	SV1006464-2	1	EA	FLT		HSSSI	KSC	12/30/12	COMPLETE ON BHB3537. 12/19/2012. Change delivery date per
20105	PIO 92/SSCN 10622; Mod	Inlet Deionizing Bed	SV825569-1	1	EA	FLT		HSSSI	KSC	05/30/12	COMPLETE ON BHB3301. 06/09/2010. Added per PIO 92/SSCN
20107	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT		HSSSI	KSC	01/29/10	COMPLETE ON BHB3249. 12/15/2009. Added per PIO 92/SSCN
20108	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT		HSSSI	KSC	03/30/10	COMPLETE ON BHB3253. 12/15/2009. Added per PIO 92/SSCN
20109	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT		HSSSI	KSC	05/31/10	COMPLETE ON BHB3276. 02/19/2010. Added per PIO 92/SSCN
20110	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT		HSSSI	KSC	07/30/10	COMPLETE ON BHB3329. 09/01/2010. Added per PIO 92/SSCN
20111	PIO 92/SSCN 10622; Mod	Particulate Filter	SV825442-1	1	EA	FLT		HSSSI	KSC	09/30/10	COMPLETE ON BHB3291A. 06/09/2010. Added per PIO 92/SSCN
20115	PIO 93; Mod 1481 (H.57)	Sequential Shunt Unit (SSU)	RE1806-04	1	EA	FLT			SS/L	03/30/11	COMPLETE ON BHB3320. 08/26/2010. Added per PIO 93 on Mod
20116	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap	2353170-2-4	1	EA	FLT		HI	KSC	03/30/11	COMPLETE ON BHB3552. 03/29/2013. Updated nomenclature
20117	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT		HI	KSC	07/29/11	COMPLETE ON BHB3577. 08/07/2013. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578.
20118	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT		HI	KSC	11/30/11	COMPLETE ON BHB3583. 09/10/2013. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578.
20119	PIO 84A; Mod 1519 (H.57)	Pump Package Assembly (Minus Gas Trap Assembly)	2353170-2-4	1	EA	FLT		HI	KSC	03/30/12	COMPLETE ON BHB3602. 10/07/2013. Added per PIO 84A on Mod 1519. Corrected part number on Mod 1578. Updated nomenclature per letter 12-015009 concurrence dated 01/18/13.
20124	PIO 84A; Mod 1519	3-Way Mix Valve	683-56185-1	1	EA	FLT		HI	KSC	04/29/11	COMPLETE ON BHB3472. 01/26/2012. Added per PIO 84A on
20125	PIO 84A; Mod 1519	3-Way Mix Valve	683-56185-1	1	EA	FLT		HI	KSC	08/30/11	COMPLETE ON BHB3482. 03/22/2012. Added per PIO 84A on
20128	PIO 84A; Mod 1519	System Flow Control Assembly	683-56187-2	1	EA	FLT		HI	KSC	07/29/11	COMPLETE ON BHB3528. 10/31/2012. Changed part number per
20129	PIO 84A; Mod 1519	System Flow Control Assembly	683-56187-2	1	EA	FLT		HI	KSC	11/30/11	COMPLETE ON BHB3538. 12/18/2012. Changed part number per
20132	PIO 84A; Mod 1519	Loop Crossover Assembly	683-56188-1	1	EA	FLT		HI	KSC	07/29/11	COMPLETE ON BHB3552. 01/30/2013. Added per PIO 84A on

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
20133	SSCN 10736; Mod 1516	Pump Control Valve Package (PCVP)	SV819421-7	1	EA	FLT	(b) (4)	HSSSI	BHOU	08/20/08	COMPLETE ON BHB3153. 12/06/2009. Added per SSCN 10736
20135	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT		HSSSI	KSC	01/30/12	COMPLETE ON BHB3252. 12/15/2009. Added per PIO 92/SSCN
20136	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT		HSSSI	KSC	03/30/12	COMPLETE ON BHB3290. 06/09/2010. Added per PIO 92/SSCN
20137	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT		HSSSI	KSC	05/30/12	COMPLETE ON BHB3290. 06/09/2010. Added per PIO 92/SSCN
20138	PIO 92/SSCN 10622; Mod	Separator Filter	SV825438-1	1	EA	FLT		HSSSI	KSC	07/30/12	COMPLETE ON BHB3290. 06/09/2010. Added per PIO 92/SSCN
20139	PIO 92/SSCN 10622; Mod	Gas Separator	SV1006464-2	1	EA	FLT		HSSSI	KSC	02/28/13	COMPLETE ON BHB3556. 02/21/2013. Changed delivery date per
20140	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT		Harris	KSC	01/01/11	COMPLETE ON BHB3255. 12/14/2009. Added per PIO 94 on Mod
20141	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT		Harris	KSC	04/01/11	COMPLETE ON BHB3332. 10/27/2010. Added per PIO 94 on Mod
20142	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT		Harris	KSC	07/01/11	COMPLETE ON BHB3352. 02/10/2011. Added per PIO 94 on Mod
20143	PIO 94; Mod 1560 (H.57)	Audio Terminal Unit (ATU)	3000001-301	1	EA	FLT		Harris	KSC	10/01/11	COMPLETE ON BHB3368. 03/15/2011. Added per PIO 94 on Mod
20146	PIO 94; Mod 1560 (H.57)	Internal Audio Controller (IAC)	3000016-301	1	EA	FLT		Harris	KSC	07/01/11	COMPLETE ON BHB3243. 12/02/2009. Added per PIO 94 on Mod
20147	PIO 94; Mod 1560 (H.57)	Internal Audio Controller (IAC)	3000016-301	1	EA	FLT		Harris	KSC	10/01/11	COMPLETE ON BHB3342. 10/27/2010. Added per PIO 94 on Mod
20148	PIO 94; Mod 1560	Audio Bus Coupler (ABC)	3000005-301	1	EA	FLT		Harris	KSC	01/01/10	COMPLETE ON BHB3224. 09/30/2009. Added per PIO 94 on Mod
20149	PIO 94; Mod 1560	Audio Bus Coupler (ABC)	3000005-301	1	EA	FLT		Harris	KSC	07/28/10	COMPLETE ON BHB3268. 02/06/2010. Added per PIO 94 on Mod
20150	PIO 94; Mod 1560	Audio Bus Coupler (ABC)	3000005-301	1	EA	FLT		Harris	KSC	09/30/10	COMPLETE ON BHB3322. 08/31/2010. Added per PIO 94 on Mod
20151	PIO 94; Mod 1560	ACS/UCS Audio I/F Unit (AU/AI)	3000022-301	1	EA	FLT		Harris	KSC	05/01/10	COMPLETE ON BHB3224. 09/30/2009. Added per PIO 94 on Mod
20152	PIO 95; Mod 1557 (H.57)	Oxygen Generator Assembly Pump ORU	SV825565-2	1	EA	FLT		HSSSI	HSSSI	10/01/10	COMPLETE ON BHB3330. 10/08/2010. Added per PIO 95 on Mod
20153	PIO 95; Mod 1557 (H.57)	Oxygen Generator Assembly Pump ORU	SV825565-2	1	EA	FLT		HSSSI	HSSSI	04/14/11	COMPLETE ON BHB3382. 04/13/2011. Added per PIO 95 on Mod
20154	PIO 95; Mod 1557 (H.57)	Oxygen Generator Assembly Pump ORU	SV825565-2	1	EA	FLT		HSSSI	HSSSI	07/01/11	COMPLETE BHB3419. 07/01/2011. Added per PIO 95 on Mod
20155	PIO 95; Mod 1557 (H.57)	Start-up Filter ORU	SV825425-1	1	EA	FLT		HSSSI	KSC	05/01/10	COMPLETE ON BHB3287. 04/30/2010. Added per PIO 95 on Mod
20156	PIO 95; Mod 1557 (H.57)	Oxygen Filter ORU	SV828118-1	1	EA	FLT		HSSSI	KSC	06/01/10	COMPLETE ON BHB3296. 05/27/2010. Added per PIO 95 on Mod
20157	PIO 95; Mod 1557 (H.57)	Water ORU	SV827690-3	1	EA	FLT		HSSSI	KSC	09/13/11	COMPLETE ON BHB3457. 09/13/2011. Added per PIO 95 on Mod
20158	PIO 95; Mod 1557 (H.57)	Pump Separator	SV825426-1	1	EA	FLT		HSSSI	HSSSI	10/29/10	COMPLETE ON BHB3321. 07/26/2010. Added per PIO 95 on Mod
20159	PIO 95; Mod 1557 (H.57)	Pump Separator	SV825426-2	1	EA	FLT		HSSSI	HSSSI	08/19/11	COMPLETE ON BHB3490. 04/23/2012. Ship short on BHB3451
20185	PIO 95; Mod 1557 (H.57)	OGA Heat Exchanger	SV828200-1	1	EA	FLT		HSSSI	KSC	10/28/11	COMPLETE ON BHB3462. 10/26/2011. Added per PIO 95 on Mod
20186	PIO 95; Mod 1557 (H.57)	WPA Heat Exchanger	SV1017926-1	1	EA	FLT		HSSSI	KSC	07/29/11	COMPLETE ON BHB3436. 07/25/2011. Added per PIO 95 on Mod
20187	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828406-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20189	PIO 97; Mod 1570 (H.57)	Video Switch	10033180-501	1	EA	FLT		Vendor	KSC	10/31/11	COMPLETE ON BHB3494. 06/07/2012. Added per PIO 97 on Mod
20193	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828406-2	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20194	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828409-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3369. 03/28/2011. Added per PIO 95 on Mod
20195	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828412-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20196	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828413-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20197	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828414-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20198	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828415-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20199	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828416-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3369. 03/28/2011. Added per PIO 95 on Mod
20200	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828417-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20201	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828418-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20202	PIO 95; Mod 1557 (H.57)	OGA System Hose	SV828425-1	1	EA	FLT		HSSSI	KSC	03/31/11	COMPLETE ON BHB3369. 03/28/2011. Added per PIO 95 on Mod
20210	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827959-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20211	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828009-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20212	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828009-2	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3347. 01/20/2011. Added per PIO 95 on Mod
20213	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828010-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20219	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828013-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20220	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828014-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20221	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828015-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20222	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828016-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20223	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828017-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20224	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828018-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3346. 01/20/2011. Added per PIO 95 on Mod
20230	PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828073-1	1	EA	FLT		HSSSI	KSC	06/30/11	COMPLETE ON BHB3397. 05/27/2011. Added per PIO 95 on Mod
20231	PIO 99; S/A 1698	Synchronization Control Unit (SCU) Assembly	1360AE7010-302	1	EA	FLT		Vendor	KSC	06/17/13	COMPLETE ON BHB3566. 05/22/2013. Added per PIO 99
20232	PIO 99; S/A 1698	Synchronization Control Unit (SCU) Assembly	1360AE7010-302	1	EA	FLT		Vendor	KSC	10/17/13	COMPLETE ON BHB3579. 08/16/2013. Added per PIO 99 definitized on MOD 1698.

J-27 DIL - COMPLETED LINE ITEMS											
DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
20251	PIO 103; S/A 1952	Reducer	684-014106-0001	4	EA	FLT	(b) (4)	KSC	KSC	11/24/14	COMPLETE ON BHB3575. 07/22/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
20252	PIO 103; S/A 1952	Fitting	684-014103-0001	4	EA	FLT		KSC	KSC	11/24/14	COMPLETE ON BHB3575. 07/22/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
20254	PIO 103; S/A 1952	Fitting	684-014102-0001	4	EA	FLT		KSC	KSC	11/24/14	COMPLETE ON BHB3575. 07/22/2013. Updated DD250 point per letter 13-010631 concurrence dated 07/11/2013. Updated DD250 point per letter 13-009685 concurrence dated 06/20/2013. Added DD250 point and updated part number per letter 13-006139 concurrence dated 04/23/2013. Added per PIO 103 definitized on S/A 1952.
20259	PIO 102; S/A 1826	Pump I Separator - ORU	SV825426-2/	1	EA	FLT		HSSSI	KSC	01/30/13	COMPLETE ON BHB3536. 12/19/2012. Changed delivery date per
20260	PIO 102; S/A 1826	Hydrogen Dome Assembly - ORU	SV827305-1/	1	EA	FLT		HSSSI	HSSSI	07/15/13	COMPLETE ON BHB3565. 05/15/2013. Changed destination per
20266	PIO 106; S/A 1922	Sorbothane Cup, Front	090715B	32	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20269	PIO 106; S/A 1922	Spacer Bar	1F16169-1	3	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20270	PIO 106; S/A 1922	Isolator Adjustment Tool	1F16227-1	1	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20280	PIO 106; S/A 1922	Bridge Bracket Assy	1F16204-1	1	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20281	PIO 106; S/A 1922	Heave Attachment Assy	1F16206-1	1	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20282	PIO 106; S/A 1922	Heave Attachment Assy	1F16206-2	1	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20287	PIO 106; S/A 1922	Standoff Arm Assy	1F16172-2	1	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20288	PIO 106; S/A 1922	Standoff Arm Assy	1F16199-1	1	EA	FLT		BHOU	BHOU	03/07/14	COMPLETE ON BHB3582. 08/12/2013. Added per PIO 106 definitized on S/A 1922.
20313	PIO 104; S/A 1936	Roller, Resin	96M35073-1	4	EA	FLT		B-MSFC	KSC	04/17/14	COMPLETE ON BHB3587. 09/17/2013. Added per PIO 104 definitized on S/A 1936.
4xxx Series											
4072	CCM 843	OFFSET TOOL	N/A	2	EA	OSE			CSAP	01/31/07	COMPLETE ON BHB3026. 08/28/2007. DD250 date change per
4468	SSCN 6647A	RPCM Type II Internal		1	EA	OPD		FLT	BMSFC	07/30/04	COMPLETE ON BHB2443. 07/01/2004. NOTE 1
4475	SSCN 7786, 03-0380, 04-	DDCU-I SPECIAL PURPOSE CONNECTOR MOD	N/A	1	KT			FLT	KSC	01/30/04	COMPLETE ON BHB2552. 01/31/2005. NOTE 1
4476	SSCN 7786; 03-0380; 04-	DDCU-I SPECIAL PURPOSE CONNECTOR MOD	N/A	1	KT			FLT	KSC	01/30/04	COMPLETE ON BHB2553. 03/31/2005. NOTE 1
4477	SSCN 7786 03-0380; 03-	DDCU-I SPECIAL PURPOSE CONNECTOR MOD	N/A	1	KT			FLT	B-MSFC	01/30/04	COMPLETE ON BHB2554. 01/31/2005. NOTE 1; Changed per
4478	SSCN 7786 03-0380; 04-	DDCU-I SPECIAL PURPOSE CONNECTOR	N/A	2	EA			FLT	KSC	01/30/04	COMPLETE ON BHB2555. 01/31/2005. NOTE 1
4481	SSCN 7828; S/A 1230	FET CONTROLLER HYBRID	N/A	700	EA			FLT	B-CP	10/11/05	COMPLETE ON BHB3005. 07/05/2007. NOTE 1
4482	SSCN 7828; S/A 1230	FET CONTROLLER HYBRID	N/A	50	EA			FLT	B-CP	10/11/05	COMPLETE ON BHB3046. 09/28/2007. NOTE 1
10xxx Series											
10000	SSCN 9425; SSCN 8554;	SSPTS Display & Control Panel OV103 Mod Kit	N/A	1	KT	FLT		FLT	KSC	02/27/06	COMPLETE 09/25/2005. Delivery date change per sscn 9425
10001	SSCN 9425; SSCN 8554;	SSPTS Mod Avionic Subsystem OV103 Mod Kit	N/A	1	KT	FLT		FLT	KSC	05/01/06	COMPLETE 11/15/2005. Delivery date change per sscn 9425
10002	SSCN 9425; SSCN 8554;	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT		FLT	KSC	05/01/06	COMPLETE ON BHB2971. 07/01/2005. Delivery date change per
10003	SSCN 9425; SSCN 8554;	Kit, Mid Fuselage SSPTS Mod; OV-103	N/A	1	KT	FLT		FLT	KSC	05/01/06	COMPLETE ON BHB2971. 07/01/2005. Delivery date change per
10004	SSCN 8554; S/A 1323	Kit TCS SSPTS Upgrade, OV103	N/A	1	KT	FLT		FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10005	SSCN 8554; S/A 1323	Mod Kit - Implementation of Station/Shuttle Power	N/A	1	KT	FLT		FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10006	SSCN 8554; S/A 1323	Support-Harness Routing; ISSA/ODS - Mod Kit	N/A	1	KT	FLT		FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10007	SSCN 8554; S/A 1323	Kit - APCU Support Brackets, Mod Kit	N/A	1	KT	FLT		FLT	KSC	01/27/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10008	SSCN 8554; S/A 1323	SSPTS Display & Control Panel OV104 Mod Kit	N/A	1	KT	FLT		FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
10009	SSCN 8554; S/A 1323	SSPTS Mod Avionic Subsystem OV104 Mod Kit	N/A	1	KT	FLT	(b) (4)	FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10010	SSCN 8554; S/A 1323	Mod Kit - Vehicle Wiring OV104	N/A	1	KT	FLT		FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10011	SSCN 8554; S/A 1323	Kit, Mid Fuselage SSPTS Mod; OV-104	N/A	1	KT	FLT		FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10012	SSCN 8554; S/A 1323	Kit, TCS SSPTS Upgrade, OV-104	N/A	1	KT	FLT		FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10013	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT		FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10014	SSCN 8554; S/A 1323	Support-Harness Routing; ISSA/ODS - Mod Kit	N/A	1	KT	FLT		FLT	KSC	03/31/06	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10015	SSCN 8554; S/A 1323	SSPTS Display & Control Panel OV105 Mod Kit	N/A	1	KT	FLT		FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10016	SSCN 8554; S/A 1323	SSPTS Mods; Avionic Subsystem OB105-Kit	N/A	1	KT	FLT		FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10017	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT		FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10018	SSCN 8554; S/A 1323	Kit, Mid Fuselage SSPTS Mod; OV-105	N/A	1	KT	FLT		FLT	KSC	07/15/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10019	SSCN 8554; S/A 1323	Kit, TCS SSPTS Upgrade, OV-105	N/A	1	KT	FLT		FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10020	SSCN 8554; S/A 1323	Mod Kit Implementation of Station/Shuttle Power	N/A	1	KT	FLT		FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10021	SSCN 8554; S/A 1323	Support-Harness Routing; ISSA/ODS - Mod Kit	N/A	1	KT	FLT		FLT	KSC	08/01/05	COMPLETE ON BHB2971. 07/01/2005. SSCN 8554 definitized on
10025	SSCN 9425; S/A 1334	CREW MODULE MOD KIT - IMPLEMENTATION OF STATION/SHUTTLE POWER TRANSFER SYSTEM OV-103	N/A	1	KT	FLT		FLT	KSC	02/27/06	COMPLETE 12/14/2005. SSCN 9425 definitized per S/A 1334.
30xxx Series											
30232	CCM 239; S/A 335	OUTFITTING KIT - DRAG-ON CABLES	N/A	1	KT	FLT	(b) (4)	FLT	KSC	05/31/05	COMPLETE ON BHB2647. 06/09/2005. Add line item per Boeing
30656	SSCN 10405 Mod 1496	ARS Rack	N/A	1	EA	FLT			B-MSFC	03/18/09	COMPLETE ON BHB3166. 03/27/2009. Delivery Date changed
30776	SSCN 859 Mod 1498	IMV Valve	B42630-13	1	EA	FLT		Carleton	KSC	12/01/00	COMPLETE ON BHB3541. 02/08/2013. Destination changed per
30897	SSCN 8236; SA 1265;	ARIS STOWED ITEMS - MSRR	N/A	1	KT	FLT		FLT	KSC	02/15/05	COMPLETE ON BHB2569. 02/18/2005.
30898	SSCN 8236; SA 1265;	ARIS STOWED ITEMS - FCF - FIR	N/A	1	KT	FLT		FLT	KSC	02/15/05	COMPLETE ON BHB2570. 02/15/2005.
31517	SSCN 3314, 04-0188	MODIFICATION KIT, INLET ORU WASHER		1	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31518	SSCN 3314; 01-0616, 04-	MODIFICATION KIT, INLET ORU WASHER		5	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31519	SSCN 3314, 04-0188	MODIFICATION KIT, HEAT EXCHANGER ORU		3	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31520	SSCN 3314, 04-0188	MODIFICATION KIT, HEAT EXCHANGER ORU		3	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31521	SSCN 3314, 04-0188	MODIFICATION KIT, HEAT EXCHANGER LIQUID		4	EA			FLT	HSSI (in place)	12/12/05	COMPLETE BHB2417; NOTE 1
31522	SSCN 3314, 04-0191	MODIFICATION KIT, HEAT EXCHANGER LIQUID		3	EA			FLT	HSSI (in place)	04/30/04	COMPLETE BHB2417; NOTE 1
31725	S/A 1275; CCM 7121 -	ITCS NiRA TOOL	N/A	1	EA	FLT		FLT	B-MSFC	08/15/03	COMPLETE ON BHB2603. 04/26/2006. Delivery date change per
31726	S/A 1275; CCM 7121 -	ITCS NiRA	N/A	1	EA	FLT		FLT	B-MSFC	08/15/03	COMPLETE ON BHB2627. 05/18/2005. Delivery date change per
31728	SSCN 6647A	VENT RELIEF ASSEMBLY KIT		1	EA			FLT	BMSFC	01/16/04	COMPLETE BHB2311. NOTE 1
31744	SSCN 6647A	IMV VALVE	N/A	1	EA			FLT	BMSFC	02/23/04	COMPLETE ON BHB2673. 06/29/2005. NOTE 1
31745	SSCN 6647A	IMV VALVE		1	EA			FLT	BMSFC	02/23/04	COMPLETE BHB2405; NOTE 1
31748	SSCN 6647A	IMV FAN SILENCER ASSEMBLY		9	EA			FLT	BMSFC	09/11/04	COMPLETE BHB2133. NOTE 1
31754	SSCN 5547	MCA VENT ASSEMBLY KIT - EXTERNAL	N/A	2	EA			FLT	BMSFC	06/14/04	COMPLETE ON BHB2450. 07/21/2004. NOTE 1
31758	SSCN 6647A	SHIELD ASSEMBLY KIT-FWD ENDCONE		1	EA			FLT	BMSFC	02/10/04	COMPLETE BHB2398; NOTE 1
31759	SSCN 6647A	PCBM Contamination Cover Kit		1	EA	OPD		FLT	BMSFC	02/17/04	COMPLETE BHB2178. NOTE 2
31760	SSCN 6647A	RADIAL PORT CLOSEOUT SHIELD KIT	N/A	4	EA			FLT	BMSFC	02/03/04	COMPLETE ON BHB2474. 10/18/2004. NOTE 1
31761	SSCN 6647A	PCBM M/D SHIELD KIT		1	EA			FLT	BMSFC	03/22/04	COMPLETE BHB2182. NOTE 1
31766	SSCN 6647A	MLI INSTALLATION HARDWARE KIT		1	EA			FLT	BMSFC	03/22/04	COMPLETE BHB2322. NOTE 1
31767	SSCN 6647A	THREADED FLUID FITTING		2	EA			FLT	BMSFC	04/09/04	COMPLETED BHB2339. NOTE 1
31768	SSCN 6647A	THREADED FLUID FITTING		11	EA			FLT	BMSFC	04/09/04	COMPLETED BHB2340. NOTE 1
31769	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA			FLT	BMSFC	05/02/05	COMPLETE ON BHB2759. 01/13/2006. Changed Delivery Date
31770	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA			FLT	BMSFC	05/02/05	COMPLETE ON BHB2760. 01/13/2006. Changed Delivery Date
31771	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA			FLT	BMSFC	05/02/05	COMPLETE ON BHB2761. 01/13/2006. Changed Delivery Date
31772	04-0264; SSCN 6647A	NH3/H2O HX HEATER/TEMP SENSOR ASSEMBLY	N/A	1	EA			FLT	BMSFC	05/02/05	COMPLETE ON BHB2762. 01/13/2006.Changed Delivery Date
31773	SSCN 6647A	COAXIAL LOOP BACK ASSEMBLY		1	EA			FLT	BMSFC	04/09/04	COMPLETED BHB2366; NOTE 1
31774	SSCN 6647A	DEAD FACE CONNECTOR ASSEMBLY		2	EA			FLT	BMSFC	03/17/04	COMPLETED BHB2324. NOTE 1
31777	SSCN 6647A	CABLE 1553 TERMINATION ASSEMBLY		2	EA			FLT	BMSFC	04/09/04	COMPLETE BHB2364; NOTE 1
31778	SSCN 6647A	CABLE 1553 TERMINATION ASSEMBLY		2	EA			FLT	BMSFC	04/09/04	COMPLETE BHB2365; NOTE 1
31780	SSCN 6647A	ANTENNA COUPLER		1	EA			FLT	BMSFC	04/13/04	COMPLETE BHB2273. NOTE 1
31781	SSCN 6647A	CABIN AIR LINEAR DIFFUSERS		2	EA			FLT	BMSFC	04/09/04	COMPLETE BHB2112. NOTE 1
31782	SSCN 6647A	CONTROL ASSEMBLY VARIABLE AIR VOLUME		1	EA			FLT	BMSFC	03/17/04	COMPLETE BHB2410; NOTE 1
31785	SSCN 6647A	THREADED FLUID FITTING		2	EA			FLT	BMSFC	02/05/04	COMPLETED BHB2341. NOTE 1

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
31783	SSCN 6647A	AAA MOUNTING BRACKET		2	EA		(b) (4)	FLT	BMSFC	01/15/04	COMPLETE BHB2279. NOTE 1
31788	SSCN 6647A	EVA CLAMPS		24	EA			FLT	BMSFC	04/28/04	COMPLETE BHB2319. NOTE 1
31833	SSCN 7792	MODIFICATION KIT, HATCH SEAL		4	EA			FLT	KSC	03/26/04	COMPLETE BHB2252. NOTE 1
31834	SSCN 7792	HATCH SEAL (SPARES)	N/A	8	EA			FLT	KSC	05/28/04	COMPLETE ON BHB2455. 07/19/2004. Ship short on BHB2437
31836	SSCN 8020; S/A 1235	MODIFICATION KIT, FSS, VAJ LEAK TEST HOSES	N/A	1	KT			FLT	KSC	10/30/04	COMPLETE ON BHB2723. 09/15/2005. NOTE 1
31844	SSCN 8037; S/A 1310	Modification Kit, Hatch External Window	N/A	3	KT	FLT		FLT	KSC	04/07/06	COMPLETE ON BHB2830. 04/27/2006. SSCN 8037 definitized per
31845	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	9	KT	FLT		FLT	KSC	09/30/05	COMPLETE ON BHB2896. 09/28/2006. SSCN 8148 definitized.
31848	SSCN 8218; S/A 1280	MODIFICATION KIT, ON-ORBIT HATCH HANDLE	N/A	10	KT	FLT		FLT	KSC	10/25/05	COMPLETE ON BHB2849. 09/06/2006. SSCN 8218 definitized per
31851	CCM 3314	MODIFICATION KIT, INLET ORU WASHER		3	EA	FLT			HSSI (in place)	04/03/04	COMPLETE BHB2417; Added per Boeing Ltr 2-1150-04-0188
31853	SSCN 8030; S/A 1265	MODIFICATION KIT, ORCA OUTLET HOSE AND	N/A	1	KT	FLT		FLT	B-HOU	10/28/05	COMPLETE ON BHB2769. 02/21/2006.
31855	SSCN 8497; S/A 1291	IVA PRESSURE WALL REPAIR KIT	N/A	6	KT	FLT		FLT	KSC	12/01/05	COMPLETE ON BHB2833. 08/30/2006. SSCN 8497 definitized on
31856	SSCN 8143; S/A 1275	VESTIBULE JUMPER, MIL-STD-1553, NODE 3 TO	N/A	1	EA	FLT		FLT	B-MSFC	03/02/05	COMPLETE ON BHB2565. 02/24/2005.
31857	SSCN 8143; S/A 1275	VESTIBULE JUMPER, MIL-STD-1553, NODE 3 TO	N/A	1	EA	FLT		FLT	B-MSFC	03/02/05	COMPLETE ON BHB2566. 02/24/2005.
31858	SSCN 8143; S/A 1275	EVA CLAMP	N/A	6	EA	FLT		FLT	B-MSFC	02/27/05	COMPLETE ON BHB2540. 01/21/2005.
31859	SSCN 8143; S/A 1275	VALVE, 0.5 INCH SOLENOID	N/A	2	EA	FLT		FLT	B-MSFC	12/16/04	COMPLETE ON BHB2489. 10/13/2004.
31860	SSCN 8143; S/A 1275	VALVE, 0.5 INCH SOLENOID (SPARE)	N/A	1	EA	FLT		FLT	B-MSFC	12/16/04	COMPLETE ON BHB2490. 10/13/2004.
31861	2-1150-05-0325; SSCN	HOSE ASSEMBLY - ORCA OUTLET HOSE	N/A	1	EA	FLT		FLT	B-HOU	01/16/06	COMPLETE ON BHB2796. 08/25/2006. Unit of Issue change per
31862	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, IATCS SAMPLE TOOL, NODE	N/A	2	KT	FLT		FLT	B-MSFC	02/28/05	COMPLETE ON BHB2576. 05/13/2005. SSCN 8429 definitized;
31864	SSCN 8218; S/A 1280	MODIFICATION KIT, HATCH STOWAGE POSITION	N/A	17	KT	FLT		FLT	KSC	10/05/05	COMPLETE ON BHB2758. 12/08/2005. SSCN 8218 definitized per
31865	SSCN 8218; S/A 1280	MODIFICATION KIT, ON-ORBIT HATCH HANDLE	N/A	16	KT	FLT		FLT	KSC	01/16/06	COMPLETE ON BHB2850. 09/06/2006. SSCN 8218 definitized per
31866	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, PPA QD's, NODE 2	N/A	2	KT	FLT		FLT	PARKER	06/21/04	COMPLETE ON BHB2453. 08/20/2004. SSCN 8429 definitized;
31867	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, PPA QD's, NODE 2	N/A	2	KT	FLT		FLT	PARKER	06/21/04	COMPLETE ON BHB2454. 8/20/2004. SSCN 8429 definitized;
31868	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, N2 QD's, NODE 2	683-62476-1	1	KT	FLT		FLT	KSC	06/21/04	SSCN 8429 definitized; COMPLETE BHB2444; Added per Boeing
31869	SSCN 8429; S/A 1280; 04-	MODIFICATION KIT, O2 QD's, NODE 2	683-62476-2	1	KT	FLT		FLT	KSC	06/21/04	SSCN 8429 definitized; COMPLETE BHB2445; Added per Boeing
31870	06-0159; SSCN 8148; S/A	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	3	KT	FLT		FLT	KSC	09/30/05	COMPLETE ON BHB2895. 9/28/2006. Qty change per Boeing
31871	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	12	KT	FLT		FLT	KSC	09/30/05	COMPLETE ON BHB2897. 9/28/2006. SSCN 8148 definitized.
31872	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	4	KT	FLT		FLT	KSC	09/30/05	COMPLETE ON BHB2902. 9/28/2006. SSCN 8148 definitized.
31889	SSCN 8644; S/A 1306	N3-LAB Loop A Ammonia Hose Kit - Supply	N/A	1	KT	FLT		FLT	KSC	8/10/2007	COMPLETE ON BHB3010. 08/09/2007. SSCN 8644 definitized on
31890	SSCN 8644; S/A 1306	N3-LAB Loop A Ammonia Hose Kit - Return	N/A	1	KT	FLT		FLT	KSC	8/10/2007	COMPLETE ON BHB3011. 8/9/2007. SSCN 8644 definitized on
31891	SSCN 8644; S/A 1306	N3-LAB Loop B Ammonia Hose Kit - Supply	N/A	1	KT	FLT		FLT	KSC	8/10/2007	COMPLETE ON BHB3012. 8/9/2007. SSCN 8644 definitized on
31892	SSCN 8644; S/A 1306	N3-LAB Loop B Ammonia Hose Kit - Return	N/A	1	KT	FLT		FLT	KSC	8/10/2007	COMPLETE ON BHB3013. 8/9/2007. SSCN 8644 definitized on
31895	SSCN 8644; S/A 1306	Endcone Shield Fastener Kit	N/A	1	KT	FLT		FLT	KSC	3/6/2006	COMPLETE ON BHB2777. 1/9/2006. SSCN 8644 definitized on
31896	SSCN 8644; S/A 1306	Endcone Shield Fastener Kit	N/A	1	KT	FLT		FLT	KSC	7/28/2006	COMPLETE ON BHB2776. 1/9/2006. SSCN 8644 definitized on
31897	SSCN 8644; S/A 1306	Air Volume Closeout Kit	N/A	5	KT	FLT		FLT	KSC	11/30/2006	COMPLETE ON BHB2866. 6/15/2006. SSCN 8644 definitized on
31898	SSCN 8644; S/A 1306	Mod Kit, Node 3 ACBM Hatch-CBCS Camera Fitting	N/A	4	KT	FLT		FLT	KSC	4/30/2007	COMPLETE ON BHB2964. 3/8/2007. SSCN 8644 definitized on
31899	SSCN 8644; S/A 1306	Mod Kit, Node 3 PCBM Hatch-CBCS Target	N/A	1	KT	FLT		FLT	KSC	4/30/2007	COMPLETE ON BHB2959. 2/23/2007. SSCN 8644 definitized on
31900	SSCN 8644; S/A 1306	Mod Kit, Node 3 NADIR Hatch Thermal Cover	N/A	1	KT	FLT		FLT	KSC	4/30/2007	COMPLETE ON BHB2948. 1/3/2007. SSCN 8644 definitized on
31901	SSCN 8644; S/A 1306	Mod Kit, Node 3 Radial Port Center Cover	N/A	4	KT	FLT		FLT	B-MSFC	4/30/2007	COMPLETE ON BHB2958. 2/23/2007. SSCN 8644 definitized on
31902	SSCN 8825; S/A 1290	MODIFICATION KIT, LAB STARBOARD CCAA	N/A	1	KT	FLT		FLT	KSC	03/30/05	COMPLETE ON BHB2585. 5/6/2005. SSCN 8825 definitized
31903	SSCN 8825; S/A 1290	MODIFICATION KIT, QUICK DISCONNECT, CCAA	N/A	1	KT	FLT		FLT	PARKER SEALS	03/30/05	COMPLETE ON BHB2531. 1/6/2005. SSCN 8825 definitized
31904	SSCN 8825; S/A 1290	MODIFICATION KIT, QUICK DISCONNECT, CCAA	N/A	1	KT	FLT		FLT	PARKER SEALS	03/30/05	COMPLETE ON BHB2532. 1/6/2005. SSCN 8825 definitized
31909	SSCN 8849; S/A 1280	MODIFICATION KIT - IATCS SAMPLE TOOL, NODE	N/A	2	KT	FLT		FLT	B-MSFC	06/15/05	COMPLETE ON BHB2678. 8/14/2005. Destination change per
31910	SSCN 8849; S/A 1280	MODIFICATION KIT - PPA QD's, NODE 3	N/A	2	KT	FLT		FLT	PARKER	02/10/05	COMPLETE ON BHB2548. 1/31/2005. Destination change per
31911	SSCN 8849; S/A 1280	MODIFICATION KIT - CDRA QD's, NODE 3	N/A	1	KT	FLT		FLT	HI	12/20/05	COMPLETE ON BHB2766. 12/19/2005. Destination and delivery
31912	CCM 8859; S/A 1291	ITCS PhosRA	N/A	1	EA	FSE		FSE	KSC	01/14/06	COMPLETE ON BHB2742. 1/14/2006. SSCN 8859 definitized per
31913	CCM 8859; S/A 1291	ITCS PhosRA TOOL KIT	N/A	1	KT	FLT		FLT	KSC	01/14/06	COMPLETE ON BHB2747. 12/9/2005. SSCN 8859 definitized per
31915	SSCN 8846 CD R1; S/A	Modification Kit, Hydrogen Vent Installation, US LAB	N/A	1	KT	FLT		FLT	KSC	10/31/06	COMPLETE ON BHB2952. 2/20/2007. Change DD250 date per
31916	SSCN 8846 CD R1; S/A	Orbital Support Equipment, R-ECLSS	N/A	1	KT	OSE		FLT	KSC	10/31/06	COMPLETE ON BHB2930. 10/31/2006. Change DD250 date per
31917	SSCN 8846 CD R1; S/A	Modification Kit, CheCS Rack Relocation and R-	N/A	1	KT	FLT		FLT	KSC	10/31/06	COMPLETE ON BHB2934. 1/2/2007. Change DD250 date per
31918	SSCN 8846; S/A 1328	Modification Kit, R-ECLSS Rack Integration, US LAB	N/A	1	KT	FLT		FLT	KSC	01/11/07	COMPLETE ON BHB2933. 1/4/2007. SSCN 8846 definitized per
31923	SSCN 6822; S/A 1306	Modification Kit - LAB, Bacteria Filter	N/A	6	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2803. 03/20/2006. SSCN 6822 definitized on
31924	SSCN 6822; S/A 1306	Modification Kit - LAB, IMV Fan	N/A	3	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2804. 03/20/2006. SSCN 6822 definitized on
31925	SSCN 6822; S/A 1306	Modification Kit - LAB, Water Separator	N/A	2	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2805. 03/20/2006. SSCN 6822 definitized on
31926	SSCN 6822; S/A 1306	Modification Kit - LAB, AAA Assy	N/A	16	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2806. 03/20/2006. SSCN 6822 definitized on
31927	SSCN 6822; S/A 1306	Modification Kit - Airlock, Bacteria Filter	N/A	3	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2807. 03/20/2006. SSCN 6822 definitized on
31928	SSCN 6822; S/A 1306	Modification Kit - Airlock, Water Separator	N/A	1	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2808. 03/20/2006. SSCN 6822 definitized on

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
31930	SSCN 6822; S/A 1306	Modification Kit – Node 1, Bacteria Filter	N/A	4	KT	FLT	(b) (4)	FLT	KSC	2/28/2006	COMPLETE ON BHB2809. 03/20/2006. SSCN 6822 definitized on
31931	SSCN 6822; S/A 1306	Modification Kit – Node 1, IMV Fan	N/A	3	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2810. 03/20/2006. SSCN 6822 definitized on
31932	SSCN 8846; S/A 1328	EVA Fluid Fitting Torque Device	N/A	1	EA	FLT		FLT	KSC	11/30/06	COMPLETE ON BHB2942. 11/28/2006. SSCN 8846 definitized per
31934	SSCN 6822; S/A 1306	Node 2 Modification Kit, Bacteria Filter	N/A	4	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2811. 03/20/2006. SSCN 6822 definitized on
31935	SSCN 6822; S/A 1306	Node 2 Modification Kit, IMV Fan	N/A	1	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2812. 03/20/2006. SSCN 6822 definitized on
31936	SSCN 6822; S/A 1306	Node 2 Modification Kit, Water Separator	N/A	1	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2813. 03/20/2006. SSCN 6822 definitized on
31937	SSCN 6822; S/A 1306	Node 3 Modification Kit, Bacteria Filter	N/A	4	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2818. 03/20/2006. SSCN 6822 definitized on
31938	SSCN 6822; S/A 1306	Node 3 Modification Kit, IMV Fan	N/A	6	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2814. 03/20/2006. SSCN 6822 definitized on
31939	SSCN 6822; S/A 1306	Node 3 Modification Kit, Water Separator	N/A	1	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2815. 03/20/2006. SSCN 6822 definitized on
31940	SSCN 6822; S/A 1306	Node 3 Modification Kit, AAA Fan	N/A	3	KT	FLT		FLT	KSC	2/28/2006	COMPLETE ON BHB2816. 03/20/2006. SSCN 6822 definitized on
31942	SSCN 9186; S/A 1316	Maintenance Kit, DZUS Fastener	N/A	1	KT	FLT		FLT	KSC	2/24/2006	COMPLETE ON BHB2787. 01/20/2006. SSCN 9186 definitized on
31943	SSCN 9896; S/A 1367;	ATA FSE ICC Installation Kit	N/A	1	KT	FSE		FSE	Spacehab	10/26/2006	COMPLETE ON BHB3271. 02/23/2010. SHIP SHORT ON
31944	SSCN 9896; S/A 1367;	ATA FSE LMC Installation Kit	N/A	1	KT	FSE		FSE	KSC	8/17/2007	COMPLETE ON BHB3027. 11/15/2007. Change DD250 date;
31945	SSCN 8814; S/A 1586	Modification Kit, CCAA Water Separator, Lab MT	683-64418-1	1	KT	FLT		B-MSFC	B-MSFC	3/31/2010	COMPLETE ON BHB3272. 2/26/2010. Added per SSCN 8814
31946	SSCN 8814; S/A 1586	Modification Kit, CCAA Water Separator, Lab LT	683-64418-2	1	KT	FLT		B-MSFC	B-MSFC	3/31/2010	COMPLETE ON BHB3273. 2/26/2010. Added per SSCN 8814
31948	SSCN 9279; S/A 1362	ITCS LOW FLOW JUMPER	N/A	3	EA	PRF		PRF	KSC	12/15/2006	COMPLETE ON BHB2950. 01/19/2007. SSCN 9279 definitized on
31951	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	1	KT	FLT		FLT	B-MSFC	1/16/2007	COMPLETE ON BHB2951. 01/12/2007. SSCN 9279 definitized on
31952	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	2	KT	FLT		FLT	B-MSFC	3/19/2007	COMPLETE ON BHB2965. 06/26/2007. SSCN 9279 definitized on
31954	SSCN 8846; S/A 1328	Valve, Hydrogen Vent	N/A	1	EA	FLT		FLT	KSC	05/23/07	COMPLETE ON BHB2940. 07/11/2005. SSCN 8846 definitized per
31955	SSCN 3140; S/A 1316	IMV Valve	N/A	1	EA	FLT		FLT	B-MSFC	7/21/2005	COMPLETE ON BHB2679. 07/11/2005. SSCN 3140 definitized on
31956	SSCN 3140; S/A 1316	IMV Valve	N/A	1	EA	FLT		FLT	B-MSFC	8/2/2005	COMPLETE ON BHB2700. 08/31/2005. SSCN 3140 definitized on
31958	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	1	KT	FLT		FLT	B-MSFC	1/16/2007	COMPLETE ON BHB2949. 01/12/2007. SSCN 9279 definitized on
31959	SSCN 9279; S/A 1362	MODIFICATION KIT-ITCS COOLANT	N/A	2	KT	FLT		FLT	B-MSFC	4/12/2007	COMPLETE ON BHB2966. 06/26/2007. SSCN 9279 definitized on
31960	SSCN 9279; S/A 1362	INSULATION SLEEVE, QD, HHR	N/A	6	EA	FLT		FLT	KSC	9/8/2006	COMPLETE ON BHB2784. 02/03/2006. SSCN 9279 definitized on
31967	SSCN 8846; S/A 1338	Modification Kit, OGS Rack Integration, U.S. Lab	N/A	1	KT	FLT		FLT	KSC	02/17/06	COMPLETE ON BHB2891. 08/31/2006. Added for SSCN 8846 on
31984	SSCN 9722; S/A 1363	WASTE WATER, OGS RACK	N/A	1	EA	FLT		FLT	KSC	11/14/06	COMPLETE ON BHB2918. 10/31/2006. SSCN 9722 definitized on
31985	SSCN 9722; S/A 1363	FEED WATER, OGS RACK	N/A	1	EA	FLT		FLT	KSC	11/14/06	COMPLETE ON BHB2919. 10/31/2006. SSCN 9722 definitized on
31986	SSCN 9722; S/A 1363	PURGE ADAPTER ASSY, R-ECLSS	N/A	1	EA	FLT		FLT	KSC	11/14/06	COMPLETE ON BHB2917. 10/31/2006. SSCN 9722 definitized on
31987	SSCN 9896; S/A 1367	ATA FSE ICC RESTRAINT KIT	N/A	1	KT	FSE		FSE	Spacehab	11/30/2006	COMPLETE ON BHB2947. 12/20/2006. Change destination per
31989	SSCN 8846 CD R1; S/A	OGS MTL SUP JUMPER	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2911. 10/17/2006. Added per SSCN 8846
31990	SSCN 8846 CD R1; S/A	OGS MTL RET JUMPER	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2912. 10/17/2006. Added per SSCN 8846
31991	SSCN 8846 CD R1; S/A	OGS GN2 JUMPER	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2920. 10/25/2006. Added per SSCN 8846
31992	SSCN 8846 CD R1; S/A	H2/N2 VENT JUMPER	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2921. 10/26/2006. Added per SSCN 8846
31993	SSCN 8846 CD R1; S/A	WIRE HARNESS	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2914. 09/29/2006. Added per SSCN 8846
31994	SSCN 8846 CD R1; S/A	WIRE HARNESS	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2915. 09/29/2006. Added per SSCN 8846
31995	SSCN 8846 CD R1; S/A	WIRE HARNESS	N/A	1	EA	FLT		FLT	B-MSFC	10/31/06	COMPLETE ON BHB2913. 09/29/2006. Added per SSCN 8846
31996	06-0159	Modification Kit, Intermodule Ventilation Valve (IMV)	N/A	1	KT	FLT		FLT	JSC	09/30/05	COMPLETE ON BHB2876. 08/03/2006. Added per Boeing letter 2-
31997	SSCN 9713; S/A 1406	Mod Kit, Node 3 ACBM - AFT	683-64412-1	1	KT	FLT			B-MSFC	4/6/2007	COMPLETE ON BHB2974. 03/20/2007. Definitized via SSCN
31998	SSCN 9713; S/A 1406	Mod Kit, Node 3 Radial Port M/D Shield Kit	683-63440-9	1	KT	FLT			B-MSFC	4/6/2007	COMPLETE ON BHB2976. 03/28/2007. Definitized via SSCN
32000	SSCN 10030/ Mod 1488	Waste and Hygiene Rack Assembly	N/A	1	EA	FLT		B-MSFC	KSC	10/31/08	COMPLETE ON BHB3154. 01/23/2009. Ship short on BHB3089
32001	SSCN 10030/ Mod 1488	Pretreated Urine Jumper, Waste/Hygiene Rack	N/A	1	EA	FLT			B-MSFC	06/25/08	COMPLETE ON BHB3098. 06/27/2008. Added per SSCN 10030
32002	SSCN 10030/ Mod 1488	Potable Water Jumper, Waste/Hygiene Rack	N/A	1	EA	FLT			B-MSFC	06/25/08	COMPLETE ON BHB3097. 06/27/2008. Added per SSCN 10030
32003	SSCN 10030/ Mod 1488	Wire Harness Assembly, W9134	N/A	1	EA	FLT			B-MSFC	04/08/08	COMPLETE ON BHB3078. 03/14/2008. Added per SSCN 10030
32004	SSCN 10030/ Mod 1488	Wire Harness Assembly, W9135	N/A	1	EA	FLT			B-MSFC	04/08/08	COMPLETE ON BHB3079. 03/14/2008. Added per SSCN 10030
32007	SSCN 10030/ Mod 1488	WHC Power Supply 120 to 28 Converter	N/A	1	EA	FLT			B-MSFC	04/08/08	COMPLETE ON BHB3085. 04/08/2008. Added per SSCN 10030
32008	SSCN 10030/ Mod 1488	Cabin Assembly, Waste/Hygiene Rack	N/A	1	EA	FLT		B-MSFC	B-MSFC	05/30/08	COMPLETE ON BHB3086. 05/22/2008. Added per SSCN 10030
32009	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	07/31/09	COMPLETE ON BHB3198. 07/29/2009. Changed destination per
32010	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	08/14/09	COMPLETE ON BHB3199. 07/29/2009. Changed destination per
32011	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	08/21/09	COMPLETE ON BHB3200. 07/23/2009. Changed destination per
32012	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	08/28/09	COMPLETE ON BHB3201. 07/23/2009. Changed destination per
32013	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	09/04/09	COMPLETE ON BHB3202. 08/13/2009. Changed destination per
32014	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	09/18/09	COMPLETE ON BHB3203. 08/13/2009. Changed destination per
32015	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	09/25/09	COMPLETE ON BHB3204. 08/31/2009. Changed destination per
32016	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	10/02/09	COMPLETE ON BHB3205. 08/31/2009. Changed destination per
32017	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	10/09/09	COMPLETE ON BHB3206. 10/01/2009. Changed destination per
32018	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	10/16/09	COMPLETE ON BHB3207. 10/01/2009. Changed destination per

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
32019	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT	(b) (4)		Wildwood	10/23/09	COMPLETE ON BHB3208. 10/015/2009. Changed destination per
32020	SSCN 9831; Mod 1464	Mod Kit, BSSPCM Motherboard	N/A	1	KT	FLT			Wildwood	10/30/09	COMPLETE ON BHB3209. 10/15/2009. Changed destination per
32027	SSCN 10030/ Mod 1392	Half Harness Power	683-99142-1	1	EA	FLT			JSC	03/30/07	COMPLETE ON BHB2977. 05/15/2007. added per definitization of
32028	SSCN 10030/ Mod 1392	Half Harness Power	683-99142-2	1	EA	NON-			JSC	03/30/07	COMPLETE ON BHB2978. 05/15/2007. added per definitization of
32029	SSCN 10030/ Mod 1392	Half Harness Data	683-99142-3	1	EA	FLT			JSC	03/30/07	COMPLETE ON BHB2979. 05/15/2007. added per definitization of
32030	SSCN 10030/ Mod 1392	Half Harness Data	683-99142-4	1	EA	NON-			JSC	03/30/07	COMPLETE ON BHB2980. 05/15/2007. added per definitization of
32068	SSCN 10030/ Mod 1392	Half Harness Power	683-99142-1	2	EA	FLT			JSC	05/04/07	COMPLETE ON BHB2988. 05/15/2007. added per definitization of
32069	SSCN 10030/ Mod 1392	Half Harness Data	683-99142-3	2	EA	FLT			JSC	05/04/07	COMPLETE ON BHB2989. 05/15/2007. added per definitization of
32070	SSCN 10318/Mod 1509	Shell Assy, Treadmill Vibration System	N/A	1	EA	FLT		B-MFSC	JSC	11/30/07	COMPLETE ON BHB3066. 11/29/2007. Added per letter 2-1150-
32074	SSCN 10412; Mod 1425	Modification Kit, Sample Adapter Assy, ITCS, .75	N/A	2	KT	FLT			B-MSFC	11/01/07	COMPLETE ON BHB3042. 10/17/2007. 32074 added per SSCN
32075	SSCN 10412; Mod 1425	Modification Kit, Sample Adapter Assy, ITCS, .5 inch	N/A	5	KT	FLT			B-MSFC	08/31/07	COMPLETE ON BHB3025. 08/24/2007. 32075 added per SSCN
32076	SSCN 10412; Mod 1425	Modification Kit, Sample Adapter Assy, ITCS, .75	N/A	1	KT	FLT			B-MSFC	11/01/07	COMPLETE ON BHB3043. 10/17/2007. 32076 added per SSCN
32077	SSCN 10410; Mod 1431	Hose Assembly, TOCA Nitrogen Supply, US Lab	N/A	1	EA	FLT			B-MSFC	07/30/08	COMPLETE ON BHB3102. 07/18/2008. 32077 added per SSCN
32078	SSCN 10410; Mod 1431	Hose Assembly, TOCA Nitrogen Supply, Node 3	N/A	1	EA	FLT			B-MSFC	11/11/08	COMPLETE ON BHB3145. 08/26/2008. 32078 added per SSCN
32079	SSCN 10410; Mod 1431	EDV Attachment Assembly.	N/A	2	EA	FLT		B-MFSC	B-MSFC	08/08/08	COMPLETE ON BHB3087. 08/28/2008. 32079 added per SSCN
32080	SSCN 10338; Mod 1451	Bracket, PWD QD	N/A	1	EA	FLT			KSC	08/14/08	COMPLETE ON BHB3114. 08/12/2008. Added per SSCN 10338
32081	SSCN 10338; Mod 1451	Hose, Potable Water, PWD	N/A	1	EA	FLT			KSC	10/16/08	COMPLETE ON BHB3133. 10/17/2008. Added per SSCN 10338
32082	SSCN 10338; Mod 1451	Hose, Potable Water, PWD	N/A	1	EA	FLT			KSC	10/16/08	COMPLETE ON BHB3132. 10/17/2008. Added per SSCN 10338
32083	SSCN 9763; Mod 1460	Modification Kit, Node 3 End-cone Shield	N/A	1	KT	FLT			B-MSFC	01/23/09	COMPLETE ON BHB3150. 01/22/2009. Added per SSCN 9763
32084	SSCN 10507 Mod 1495	Hose Assembly, CO2, AR Rack	N/A	1	EA	FLT			KSC	05/06/09	COMPLETE ON BHB3174. 05/01/2009. Added per SSCN 10507
32085	SSCN 10507 Mod 1495	Jumper Assy, CO2 Standoff X3	N/A	1	EA	FLT			KSC	05/06/09	COMPLETE ON BHB3175. 05/01/2009. Added per SSCN 10507
32087	SSCN 10551; Mod 1449	Check Valve Assembly, OGS Waste Water	N/A	1	EA	FLT			B-MSFC	03/18/08	COMPLETE ON BHB3074. 03/13/2008. Added per SSCN 10551
32088	SSCN 10551; Mod 1449	Quick Disconnect	N/A	1	EA	FLT			B-MSFC	07/11/08	COMPLETE ON BHB3100. 07/10/2008. Added per SSCN 10551
32089	SSCN 10551; Mod 1449	Quick Disconnect	N/A	1	EA	FLT			B-MSFC	07/11/08	COMPLETE ON BHB3101. 07/10/2008. Added per SSCN 10551
32092	SSCN 10595; Mod 1550	ATA FSE ELC Installation Kit	N/A	1	KT	FSE		B-MFSC	KSC	05/07/09	COMPLETE ON BHB3210. 07/10/2009. Ship short on BHB3172
32093	SSCN 10595; Mod 1550	ATA FSE ELC Installation Kit	N/A	1	KT	FSE		B-MFSC	KSC	07/10/09	COMPLETE ON BHB3173. 07/09/2009. Added per SSCN 10595
32094	SSCN 10318/Mod 1509	Modification Kit, Isolator Interface Brackets	N/A	1	KT	FLT		B-MFSC	JSC	12/05/07	COMPLETE ON BHB3067. 12/05/2007. Added per letter 2-1150-
32099	SSCN 10664; Mod 1470	Maintenance Kit - IVA Fluid QD	N/A	3	KT	FLT			B-MSFC	09/23/08	COMPLETE ON BHB3116. 08/29/2008. Added per SSCN 10664
32100	SSCN 10664; Mod 1470	Syringe, Brayco Micronic 815Z Oil Filled	N/A	10	EA	FLT			B-MSFC	09/23/08	COMPLETE ON BHB3117. 08/21/2008. Added per SSCN 10664
32101	SSCN 10030/ Mod 1488	Launch Configuration Kit, Waste and Hygiene rack	N/A	1	EA	FLT			B-MSFC	05/30/08	COMPLETE ON BHB3090. 05/30/2008. Added per SSCN 10030
32103	SSCN 10775; Mod 1482	Launch Support Kit, WRS Racks	N/A	1	KT	FLT			B-MSFC	07/14/08	COMPLETE ON BHB3099. 07/14/2008. Added per SSCN 10775
32104	SSCN 10805; Mod 1485	Kit - CEVIS Attachment Bracket	N/A	1	KT	FLT		B-MFSC	B-MSFC	08/22/08	COMPLETE ON BHB3096. 08/29/2008. Added per SSCN 10805
32105	SSCN 10859; Mod 1485	Mod Kit, Node 1	N/A	1	KT	FLT			B-MSFC	03/28/08	COMPLETE ON BHB3075. 03/24/2008. Added per SSCN 10859
32106	SSCN 10829; Mod 1563	Mod Kit, UHF Radio, US Lab	N/A	1	KT	FLT		B-MFSC	B-MSFC	05/26/09	COMPLETE ON BHB3176. 05/22/2009. Added per SSCN 10829
32107	SSCN 10560; Mod 1552	Mod Kit, Node 1, Node 3 Relocation	N/A	1	KT	FLT		B-MFSC	B-MSFC	07/21/09	COMPLETE ON BHB3225. 08/19/2009. Ship short on BHB3193
32108	SSCN 10560; Mod 1552	Mod Kit, Node 1 IMV Reconfiguration	N/A	1	KT	FLT		B-MFSC	B-MSFC	08/28/09	COMPLETE ON BHB3197. 09/25/2009. Changed delivery date per
32109	SSCN 10560; Mod 1552	Vestibule Outfitting Kit, Node 1 Port to Node 3	N/A	1	KT	FLT		B-MFSC	B-MSFC	07/28/09	COMPLETE ON BHB3195. 11/05/2009. Changed nomenclature
32110	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop A Supply	N/A	1	EA	FLT		B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3263. 02/01/2010. Ship short on BHB3238
32111	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop A Return	N/A	1	EA	FLT		B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3264. 02/01/2010. Ship short on BHB3239
32112	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop B Supply	N/A	1	EA	FLT		B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3265. 02/01/2010. Ship short on BHB3240
32113	SSCN 10560; Mod 1552	Ammonia Jumper Assy, Loop B Return	N/A	1	EA	FLT		B-MFSC	B-MSFC	09/25/09	COMPLETE ON BHB3266. 02/01/2010. Ship short on BHB3241
32114	SSCN 10560; Mod 1552	Bracket Assy, Ammonia Jumper, EVA	N/A	1	EA	FLT		B-MFSC	B-MSFC	07/07/09	COMPLETE ON BHB3234. 10/26/2009. Ship short on BHB3194
32115	SSCN 10560; Mod 1552	Kit, Axial Endcone Shield, Node 3	N/A	1	KT	FLT		B-MFSC	B-MSFC	08/29/09	COMPLETE ON BHB3237. 11/23/2009. Added per SSCN 10560
32116	SSCN 10560; Mod 1552	Mod Kit, Radial Port Augmentation Shield, Node 3	N/A	1	KT	FLT		B-MFSC	B-MSFC	08/07/09	COMPLETE ON BHB3229. 10/27/2009. Changed nomenclature
32117	SSCN 10560; Mod 1552	Kit, PCBM Augmentation Shield, PMA 3	N/A	1	KT	FLT		B-MFSC	B-MSFC	08/07/09	COMPLETE ON BHB3242. 01/12/2010. Changed nomenclature
32118	SSCN 10560; Mod 1552	Mod Kit, Axial Endcone Shield Provisions, Node 3	N/A	1	KT	FLT		B-MFSC	B-MSFC	02/18/09	COMPLETE ON BHB3157. 02/18/2009. Changed delivery date per
32119	SSCN 10560; Mod 1552	Modification Kit, Node 3 Passove CBM	N/A	1	KT	FLT		B-MFSC	B-MSFC	01/16/09	COMPLETE ON BHB3125. 09/29/2008. Added per SSCN 10560
32120	SSCN 10560; Mod 1552	Mod Kit, External Window Cover	N/A	5	KT	FLT		B-MFSC	B-MSFC	01/19/09	COMPLETE ON BHB3148. 11/14/2008. Added per SSCN 10560
32121	SSCN 10560; Mod 1552	Leak Check Kit, Hatch Feedthrough	N/A	3	KT	FLT		B-MFSC	B-MSFC	07/14/09	COMPLETE ON BHB3196. 09/28/2009. Increased quantity per
32123	SSCN 10829; Mod 1563	Mod Kit, UHF Radio, US Lab	N/A	1	KT	FLT		B-MFSC	B-MSFC	11/02/09	COMPLETE ON BHB3227. 10/27/2009. Added per SSCN 10829
32124	SSCN 10030; Mod 1529	Fan Assembly, Waste and Hygiene Rack	N/A	1	EA	FLT		B-MSFC	B-MSFC	10/29/08	COMPLETE ON BHB3140. 12/16/2008. Added per CD 10030 Rev
32125	SSCN 10030; Mod 1529	Solid Waste Container Relocation Kit	N/A	1	KT	FLT		B-MSFC	B-MSFC	10/29/08	COMPLETE ON BHB3134. 10/17/2008. Added per CD 10030 Rev
32126	SSCN 10602; Mod 1590	PMA-1 Filter Mod Kit	683-99367-1	1	KT	FLT		B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3274. 03/30/2010. Added per definitization of
32127	SSCN 10602; Mod 1590	PMA-2 Filter Mod Kit	683-99367-2	1	KT	FLT		B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3275. 03/30/2010. Added per definitization of
32128	SSCN 10410 Rev 4; Mod	Quick Disconnect (QD)	N/A	1	EA	FLT		B-MFSC	B-MSFC	07/30/08	COMPLETE ON BHB3107. 07/31/2008. Added per SSCN 10410
32129	SSCN 10996; Mod 1557	Mod Kit, On-orbit Ethernet Cable Installation for C&C	683-99770-1	1	KT	FLT		B-MFSC	KSC	10/22/10	COMPLETE ON BHB3309. 09/08/2010. Added per SSCN 10996

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
32130	SSCN 10996; Mod 1557	PRCU EFEU, Ground	683-95172-1	5	KT	GSE	(b) (4)	B-MFSC	B-MSFC	10/22/10	COMPLETE ON BHB3319. 09/17/2010. Added per SSCN 10996
32131	SSCN 10990; Mod 1557	Mod Kit, IAPS ORU, US Lab, On-Orbit	N/A	1	KT	FLT		B-MFSC	B-MSFC	05/31/10	COMPLETE ON BHB3280. 05/27/2010. Added per SSCN 10990
32132	SSCN 11069 Rev 1; Mod	PRCU Mod Kit	N/A	1	KT	GSE		B-MFSC	B-MSFC	02/26/09	COMPLETE ON BHB3163. 03/30/2009. Changed from FLT
32133	SSCN 11069 Rev 1; Mod	PRCU Mod Kit	N/A	3	KT	GSE		B-MFSC	B-MSFC	03/26/09	COMPLETE ON BHB3164. 03/30/2009. Changed from FLT
32134	SSCN 10595; Mod 1550	Wire Harness Assembly - ELC Interface	N/A	1	EA	FLT		B-MFSC	JSC	01/15/09	COMPLETE ON BHB3152. 01/23/2009. Added per SSCN 10595
32135	SSCN 10595; Mod 1550	Wire Harness Assembly - ELC Interface	N/A	1	EA	FLT		B-MFSC	JSC	07/10/09	COMPLETE ON BHB3183. 05/05/2009. Added per SSCN 10595
32136	SSCN 11171; Mod 1548	Modification Kit, Common Cabin Air	N/A	1	KT	FLT		B-MFSC	B-MSFC	05/19/09	COMPLETE ON BHB3220. 08/18/2009. Added per SSCN 11171
32137	SSCN 11171; Mod 1548	Modification Kit, Common Cabin Air	N/A	1	KT	FLT		B-MFSC	B-MSFC	05/19/09	COMPLETE ON BHB3220. 08/18/2009. Added per SSCN 11171
32138	SSCN 10884; Mod 1621	Canister Kit, ITCS Coolant Maintenance Assembly	683-99753-1	21	KT	OSE		B-MFSC	B-MSFC	08/15/11	COMPLETE ON BHB3417. 08/09/2011. Added per SSCN 10884
32142	SSCN 10884; Mod 1621	Canister Installation Kit, ITCS Coolant Maintenance	683-99757-1	2	KT	OSE		B-MFSC	B-MSFC	08/29/11	COMPLETE ON BHB3416. 08/16/2011. Added per SSCN 10884
32145	SSCN 11259; Mod 1556	Modification Kit, Potable Water Jumper,	N/A	1	EA	FLT		B-MFSC	B-MSFC	11/30/09	COMPLETE ON BHB3230. 11/05/2009. Added per SSCN 11259
32152	Mod 1578	Mod Kit, Node 3 Axial Active CBM	N/A	1	KT	FLT		B-MFSC	B-MSFC	04/17/09	COMPLETE ON BHB3178. 04/17/2009. Added per letter 09-336
32153	Mod 1578	Insulating Jacket Ammonia Jumper	N/A	1	EA	FLT		B-MFSC	B-MSFC	09/25/09	COMPLETE 01/29/2010. Added per letter 09-336 dated
32156	SSCN 10773; Mod 1567	Modification Kit, Atmosphere Revitalization Rack (US	683-99363-1	1	EA	FLT		B-MFSC	B-MSFC	03/10/09	COMPLETE ON BHB3160. 02/27/2009. Added per SSCN 10773
32157	SSCN 10773; Mod 1567	Modification Kit, Atmosphere Revitalization Rack	683-99363-2	1	EA	FLT		B-MFSC	B-MSFC	03/10/09	COMPLETE ON BHB3161. 02/27/2009. Added per SSCN 10773
32158	SSCN 11010; Mod 1593	Mod Kit, iPEHG, U.S. LAB	683-99416-1	1	KT	FLT		B-MFSC	B-MSFC	05/16/11	COMPLETE ON BHB3335. 11/05/2010. Added per SSCN 11010
32163	SSCN 11372; Mod 1595	Mod Kit, ICU Final Install, AV-3	683-99659-1	1	KT	FLT		B-MSFC	B-MSFC	01/28/11	COMPLETE ON BHB3337. 01/27/2011. Added per SSCN 11372
32164	SSCN 11372; Mod 1595	Mod Kit, ICU , US Lab	683-99660-1	1	KT	FLT		B-MSFC	B-MSFC	01/28/11	COMPLETE ON BHB3338. 01/21/2011. Added per SSCN 11372
32165	SSCN 11372; Mod 1595	Mod Kit, Edge Router, Node 2	683-99661-1	1	KT	FLT		B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3310. 08/06/2010. Added per SSCN 11372
32166	SSCN 11069 Rev 1; Mod	PRCU Mod Kit	N/A	1	KT	GSE		B-MFSC	B-MSFC	04/27/09	COMPLETE ON BHB3181. 04/24/2008. Added per directive SSCN
32167	SSCN 10602; Mod 1590	Node-1 Airlock Mod Kit	683-99367-3	1	KT	FLT		B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3278. 03/30/2010. Added per definitization of
32168	SSCN 10602; Mod 1590	Airlock Mod Kit	683-99367-4	1	KT	FLT		B-MSFC	B-MSFC	03/30/10	COMPLETE ON BHB3279. 03/30/2010. Added per definitization of
32191	SSCN 11248; Mod 1554	Mod Kit, JEM Accomodation Umbilicals	N/A	1	KT	FLT		BHOU	KSC	05/21/09	COMPLETE ON BHB3184. 05/19/2009. Changed DIL ID number
32192	SSCN 11625; Mod 1628	Modification Kit, Water Recovery System 2 (WRS2)	683-93440-1	1	KT	FLT		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3429. 07/14/2011. Ship short on BHB3358
32193	SSCN 11625; Mod 1628	Advanced Recycle Filter Tank Assembly (ARFTA)	683-93450-4	1	EA	FLT		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3427. 07/14/2011. Ship short on BHB3359
32194	SSCN 11625; Mod 1628	Brine Transfer Hose Assy	683-93500-1	2	EA	OSE		B-MSFC	B-MSFC	05/31/11	COMPLETE OB BHB3424. 06/24/2011. Ship short on BHB3357
32195	SSCN 11625; Mod 1628	Compressor Adapter Assy	683-93505-1	2	EA	OSE		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3360. 06/16/2011. Added per SSCN 11625
32196	SSCN 11625; Mod 1628	Brine Filter Assembly (10 micron & 100 micron) (On-	683-93460-4	1	EA	FLT		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3430. 07/11/2011. Ship short on BHB3361
32197	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (On-Orbit	683-93470-1	1	EA	FLT		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3425. 07/08/2011. Ship short on BHB3355
32198	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (On-Orbit	683-93480-1	1	EA	FLT		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3428. 07/08/2011. Ship short on BHB3356
32199	SSCN 11625; Mod 1628	Advanced Recycle Filter Tank Assembly (ARFTA)	683-93450-4	1	EA	FLT		B-MSFC	B-MSFC	07/15/11	COMPLETE ON BHB3422. 07/14/2011. Added per SSCN 11625
32200	SSCN 11625; Mod 1628	Brine Transfer Hose Assy (Ground Spare)	683-93500-1	1	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3371. 07/27/2011. Added per SSCN 11625
32201	SSCN 11625; Mod 1628	Brine filter Assembly (10 micron & 100 micron)	683-93460-4	7	EA	FLT		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3426. 07/11/2011. Ship short on BHB3362
32202	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (Ground	683-93470-1	7	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3372. 07/25/2011. Added per SSCN 11625
32203	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (GroundSpare)	683-93480-1	7	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3373. 07/25/2011. Added per SSCN 11625
32204	SSCN 8814	Modification Kit, CCAA Water Separator, Airlock	683-64418-3	1	KT	FLT		B-MSFC	B-MSFC	03/31/10	COMPLETE ON BHB3277. 02/26/2010. Added on 02/18/2010 per
32209	SSCN 11846; Mod 1594	Modification Kit, O2/N2 Tank ORU Assembly	683-99853-1	1	KT	FLT		B-MSFC	B-MSFC	08/24/09	COMPLETE ON BHB3223. 08/18/2010. Added per SSCN 11846
32210	SSCN 11625; Mod 1628	Brine filter Assembly (10 micron & 100 micron)	683-93460-4	7	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3444. 11/16/2011. Added per SSCN 11625
32211	SSCN 11625; Mod 1628	Brine filter Assembly (10 micron & 100 micron)	683-93460-4	8	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3441. 01/27/2012. Added per SSCN 11625
32212	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (Ground	683-93470-1	7	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3438. 08/25/2011. Added per SSCN 11625
32213	SSCN 11625; Mod 1628	100 micron Product Water Filter Assy (Ground	683-93470-1	8	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3443. 09/14/2011. Added per SSCN 11625
32214	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (GroundSpare)	683-93480-1	7	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3440. 08/31/2011. Added per SSCN 11625
32215	SSCN 11625; Mod 1628	20 micron Product Water Filter Assy (GroundSpare)	683-93480-1	8	EA	FLT		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3445. 10/07/2011. Added per SSCN 11625
32216	SSCN 11625; Mod 1628	Rodnik/ATV Tank Adapter Assy	683-93510-1	2	EA	OSE		B-MSFC	B-MSFC	05/31/11	COMPLETE ON BHB3423. 06/24/2011. Ship short on BHB3363
32217	SSCN 11625; Mod 1628	Rodnik/ATV Tank Adapter Assy (Ground Spare)	683-93510-1	2	EA	OSE		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3442. 08/18/2011. Added per SSCN 11625
32218	SSCN 11625; Mod 1628	Compressor Adapter Assy (Ground Spare)	683-93505-1	2	EA	OSE		B-MSFC	B-MSFC	01/31/12	COMPLETE ON BHB3439. 12/08/2011. Added per SSCN 11625
32219	SSCN 11946; Letter 10-	Mod Kit, AR Rack	683-99860-1	1	KT	NFS		B-MSFC	B-MSFC	02/01/10	COMPLETE ON BHB3260. 01/28/2010. Added per SSCN 11946
32233	SSCN 11801; CCO 1636	Vestibule Outfitting Kit, Permanent Multipurpose	683-64427-1	1	KT	FLT		B-MSFC	B-MSFC	09/08/10	COMPLETE ON BHB3311. 08/12/2010. Added per SSCN 11801
32234	SSCN 11801; CCO 1636	Wire Harness Assy, US Lab Internal Power, W8991	683-98991-1	1	EA	FLT		B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3312. 07/28/2010. Added per SSCN 11801
32235	SSCN 11801; CCO 1636	Wire Harness Assy, Node 1 Internal, 1553 Data Bus	683-98992-1	1	EA	FLT		B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3313. 07/28/2010. Added per SSCN 11801
32236	SSCN 11801; CCO 1636	Wire Harness Assy, Node 1 Internal, 1553 Data Bus	683-98993-1	1	EA	FLT		B-MSFC	B-MSFC	08/27/10	COMPLETE ON BHB3314. 07/28/2010. Added per SSCN 11801
32237	SSCN 11801; CCO 1636	Cover Installation Assembly Kit, Hatch	683-13141-1	1	KT	FLT		B-MSFC	B-MSFC	08/18/10	COMPLETE ON BHB3315. 07/29/2010. Added per SSCN 11801
32238	SSCN 11801; CCO 1636	Cover Installation Assembly Kit, Hatch	683-13141-2	1	KT	FLT		B-MSFC	B-MSFC	08/18/10	COMPLETE ON BHB3316. 07/29/2010. Added per SSCN 11801
32239	SSCN 12141; Mod 1629	Gate Resistor and Relay Card Edge Mod Kit, SSPCM	683-98994-1	1	KT	FLT		In Place	Wildwood	06/01/10	COMPLETE ON BHB3294. 06/02/2010. Added per SSCN 12141
32240	SSCN 12141; Mod 1629	Gate Resistor and Relay Card Edge Mod Kit, SSPCM	683-98994-1	5	KT	FLT		In Place	Wildwood	06/22/10	COMPLETE ON BHB3295. 06/22/2010. Added per SSCN 12141
32302	SSCN 11946; Mod 1690	Maintenance Kit, CDRA	683-62702-1	1	KT	FLT		B-MSFC	B-MSFC	12/20/12	COMPLETE ON BHB3522. 12/19/2012. Added per SSCN 11946

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
32313	SSCN 12443; S/A 1771	Mod Kit, ELC Wireless Communications Internal	683-99386-1	1	KT	FLT	(b) (4)	B-MSFC	B-MSFC	03/22/12	COMPLETE ON BHB3474. 03/22/2012. Added per SSCN 12443
32356	SSCN 12803; S/A 1859	Compressor Adapters	683-93505-1	3	EA	FLT		B-MSFC	B-MSFC	12/14/12	COMPLETE ON BHB3517. 09/17/2012. Added per SSCN 12803
32361	SSCN 12831; S/A 1834	Jumper Assy, Node 2 ITCS	683-99492-1	1	EA	FLT		B-MSFC	B-MSFC	03/08/13	COMPLETE ON BHB3543. 02/27/2013. Added per SSCN 12831
32362	SSCN 12831; S/A 1834	Jumper Assy, Node 2 ITCS	683-99492-2	1	EA	FLT		B-MSFC	B-MSFC	03/08/13	COMPLETE ON BHB3544. 02/27/2013. Added per SSCN 12831
32363	SSCN 12831; S/A 1834	Jumper Assy, Node 2 ITCS	683-99492-3	1	EA	FLT		B-MSFC	B-MSFC	03/08/13	COMPLETE ON BHB3545. 02/27/2013. Added per SSCN 12831
32364	SSCN 12788; S/A 1782	Four Panel Unit Assy Powered - ISIS	683-43650-4	10	EA	FLT		B-MSFC	B-MSFC	03/20/13	COMPLETE ON BHB3531. 12/14/2012. Partial shipment 3-7 of
32408	SSCN 13571; S/A 1927	Mod Kit, Microgravity Science Glovebox (MSG)	683-98904-1	1	KT	FLT		B-MSFC	B-MSFC	07/29/13	COMPLETE ON BHB3564. 06/07/2013. Added per SSCN 13571
40xxx Series											
40000	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT	(b) (4)	FLT	Canoga Park	04/18/06	COMPLETE ON BHB3015. 07/25/2007. Ship short on BHB2957
40001	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT		FLT	Canoga Park	04/18/06	COMPLETE ON BHB3014. 07/25/2007. Ship short on BHB2956
40002	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT		FLT	PW-CP	11/10/06	COMPLETE ON BHB3020. 08/03/2007. Ship short on BHB2987
40003	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT		FLT	PW-CP	11/10/06	COMPLETE ON BHB3021. 08/03/2007. Ship short on BHB2986
40004	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT		FLT	PW-CP	12/01/06	COMPLETE ON BHB3022. 08/03/2007. Ship short on BHB2991
40005	SSCN 8554; S/A 1323	Power Transfer Unit	N/A	1	EA	FLT		FLT	PW-CP	12/01/06	COMPLETE ON BHB3018. 10/24/2007. SSCN 8554 definitized on
40007	SSCN 8554; S/A 1323	OPCU Output Over-Voltage (OOV) Tester	N/A	2	EA	GSE		FLT	PW-CP	05/17/06	COMPLETE ON BHB2997. 06/06/2007. Ship short on BHB2992
50xxx Series											
50379	CCM 3072	LINEAR DRIVE UNIT FSE INSTALLATION KIT	N/A	1	EA	FSE	(b) (4)		KSC	07/30/06	COMPLETE ON BHB2929. 10/23/2006. Transferred to J-27 due to
50411	CCM 1576; 04-0354	ACAS SIMULATOR ASSEMBLY, FULL UP	N/A	2	EA	FLT		FLT	KSC	10/29/04	COMPLETE ON BHB2530. 12/10/2004. Ship short on BHB2509
50656	SSCN 6179	Medium Adapter Plate Assembly	N/A	1	EA	OPD		FLT	B-HOU	07/27/04	COMPLETE ON BHB3048. 03/13/2008. Ship short on BHB2376
50658	SSCN 6179	Large Adapter Plate Assembly	N/A	1	EA	OPD		FLT	KSC	07/27/04	COMPLETE ON BHB3047. 03/11/2008. NOTE 2
50670	CCM 3370; 04-0471	MOD KIT, CABLES, ETHERNET - INTERNAL	N/A	1	KT	FLT			KSC	12/17/04	COMPLETE ON BHB2670. 06/30/2005. DD250 date change per
50671	CCM 3370; 04-0471	MOD KIT, CABLES, ETHERNET - EXTERNAL	N/A	1	KT	FLT			KSC	12/17/04	COMPLETE ON BHB2670. 06/30/2005. DD250 date change per
50693	SSCN 6647A	COLD PLATE - 6	N/A	3	EA			FLT	BMSFC	07/11/04	COMPLETE ON BHB2630. 06/22/2005. Ship short on BHB2533
50700	SSCN 6647A	COLD PLATE - 1	N/A	2	EA			FLT	BMSFC	07/11/04	COMPLETE ON BHB2631. 06/22/2005. Ship short on BHB2496
50702	SSCN 6647A	Internal Self Sealing, Fluid, Quick Disconnect		4	EA	OPD		FLT	BMSFC	01/20/04	COMPLETE ON BHB2287. 01/07/2004. NOTE 2
50703	SSCN 6647A	Internal Self Sealing, Fluid, Quick Disconnect		8	EA	OPD		FLT	BMSFC	01/20/04	COMPLETE ON BHB2287. 01/07/2004. NOTE 2
50704	SSCN 6647A	Non-Propulsive Vent Assembly		1	EA	OPD		FLT	BMSFC	05/14/04	COMPLETE ON BHB2397. 07/14/2004. NOTE 2
50705	SSCN 6647A	Cold Plate - 1	N/A	2	EA	OPD		FLT	BMSFC	07/01/04	COMPLETE ON BHB2257. 11/16/2004. NOTE 2
50706	SSCN 6647A	OUTLINE, CABLE, SIGNAL MOTOR/ACTUATOR,		1	EA	OPD		FLT	BMSFC	07/30/04	COMPLETE ON BHB2458. 08/16/2004. Nomenclature change
50707	SSCN 6647A	OUTLINE, CABLE, POWER, PRESSURE		1	EA	OPD		FLT	BMSFC	07/30/04	COMPLETE ON BHB2458. 08/16/2004. Nomenclature change
50708	SSCN 6647A	DUCT, NON-AIRLOCK		1	EA			FLT	BMSFC	02/06/04	COMPLETE ON BHB2363. 03/05/2004. NOTE 1
50710	SSCN 6647A	METAL SEALS, SPECIAL (SPARES)		12	EA			FLT	BMSFC	05/14/04	COMPLETE ON BHB2386. 03/15/2004. NOTE 1
50711	SSCN 6952	ARIS UMBILICAL MOD KIT		1	EA			FLT	KSC	01/30/04	COMPLETE ON BHB2369. 02/27/2004. NOTE 1
50712	SSCN 6952	ARIS UMBILICAL MOD KIT		2	EA			FLT	KSC	01/30/04	COMPLETE ON BHB2367. 02/25/2004. NOTE 1
50715	SSCN 6952	ARIS UMBILICAL MOD KIT		1	EA				KSC	01/30/04	COMPLETE ON BHB2370. 02/27/2004.
50764	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, NITROGEN TANK	N/A	1	KT	FLT		FLT	BHOU	03/31/05	COMPLETE ON BHB2563. 02/03/2005. Added item per Boeing
50765	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, NITROGEN TANK	N/A	1	KT	FLT		FLT	BHOU	03/31/05	COMPLETE ON BHB2563. 02/03/2005. Added item per Boeing
50766	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, NITROGEN TANK	N/A	1	KT	FLT		FLT	BHOU	03/31/05	COMPLETE ON BHB2563. 02/03/2005. Added item per Boeing
50767	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, PUMP MODULE	N/A	1	KT	FLT		FLT	BHOU	05/25/04	COMPLETE ON BHB2429. 05/25/2004. Added item per Boeing
50768	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, PUMP MODULE	N/A	1	KT	FLT		FLT	BHOU	03/31/05	COMPLETE ON BHB2594. 04/01/2005. Added item per Boeing
50769	SSCN 7651; S/A 1191	MOD KIT, SURVIVAL HEATERS, PUMP MODULE	N/A	1	KT	FLT		FLT	BHOU	03/31/05	COMPLETE ON BHB2595. 04/01/2005. Added item per Boeing
50780	06-0043; SSCN 7638	KIT, MODIFICATION, DESICCANT/ADSORBENT	N/A	3	KT	FLT		FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. Nomenclature, delivery
50781	06-0043; SSCN 7638	KIT, MODIFICATION, DESICCANT/ADSORBENT	N/A	2	KT	FLT		FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. Nomenclature, delivery
50782	CCM 2632	MOD KIT, WIRE HARNESSES INTERNAL, NODE-1	N/A	1	KT	FLT		FLT	KSC	11/21/07	COMPLETE ON BHB3055. 11/08/2007. Delivery date changes;
50783	CCM 2632	MOD KIT, CONNECTOR FEEDTHROUGH, NADIR	N/A	1	KT	FLT		FLT	KSC	11/21/07	COMPLETE ON BHB3056. 11/08/2007. Delivery date changes;
50784	CCM 2632	MOD KIT, VESTIBULE JUMPERS, NODE-1 TO	N/A	1	KT	FLT		FLT	KSC	11/21/07	COMPLETE ON BHB3057. 11/08/2007. Delivery date changes;
50795	CCM 7594; S/A 1205	MOD KIT, H FIXTURE FOR S6 ELEMENT	N/A	1	EA	FLT		FLT	KSC	02/24/06	COMPLETE ON BHB2793. 03/31/2006. Nomenclature, delivery
50797	SSCN 7583	PUMP AND FLOW CONTROL SUBASSEMBLY		1	EA			FLT	KSC	01/02/04	COMPLETE ON BHB2267. 12/18/2003. NOTE 1
50803	SSCN 8018	CABLE ASSY, JUMPER, CONTINGENCY - EPS,		1	EA			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50804	SSCN 8018	MOD KIT, JUMPER, CHANNEL 1/4 - EPS,		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50805	SSCN 8018	MOD KIT, JUMPER, CHANNEL 2/3 - EPS,		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50806	SSCN 8018	MOD KIT, JUMPER, CHANNEL 1/4 - EPS, LAB		1	KT			FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
50807	SSCN 8018	MOD KIT, JUMPER, CHANNEL 2/3 - EPS, LAB		1	KT		(b) (4)	FLT	KSC	02/06/04	COMPLETE ON BHB2403. 04/15/2004. NOTE 1
50822	S/A 1275; SSCN 8033;	BACKSHELL (J4)	N/A	2	EA			FLT	KSC	06/07/04	COMPLETE ON BHB2498. 10/07/2004. Remain on J-27 per
50830	SSCN 7385; S/A 1223	MODIFICATION KIT, US LAB INTEGRATED	N/A	1	KT			FLT	KSC	02/14/06	COMPLETE ON BHB2872. 07/07/2006. Ship short on BHB2797
50831	SSCN 7385; S/A 1223	MODIFICATION KIT, NODE 1 INTEGRATED	N/A	1	KT			FLT	KSC	02/14/06	COMPLETE ON BHB2798. 04/28/2006. Delivery date change per
50832	SSCN 7385; S/A 1223	MODIFICATION KIT, NODE 2 INTEGRATED	N/A	1	KT			FLT	KSC	02/14/06	COMPLETE ON BHB2892. 08/21/2006. Ship short on BHB2799
50833	SSCN 7385; S/A 1223	MODIFICATION KIT, AIRLOCK INTEGRATED	N/A	1	KT			FLT	KSC	02/14/06	COMPLETE ON BHB2800. 03/29/2006. Delivery date change per
50834	SSCN 7385; S/A 1223	EDGE ROUTER (ER)	N/A	2	EA			FLT	KSC	02/14/06	COMPLETE ON BHB2802. 03/01/2006. Delivery date change per
50835	SSCN 8083	MDM Assembly, Upper	N/A	1	EA	FLT		FLT	B-HOU	10/29/04	COMPLETE ON BHB2597. 04/13/2005. Added per Mod S/A 1247
50836	SSCN 8216; S/A 1297	MAPPING LABEL INSTALLATION MODIFICATION	N/A	1	KT	FLT		FLT	KSC	06/03/05	COMPLETE ON BHB2626. 05/06/2005. SSCN 8216 definitized on
50837	SSCN 8216; S/A 1297	MAPPING LABEL INSTALLATION MODIFICATION	N/A	1	KT	FLT		FLT	KSC	08/05/05	COMPLETE ON BHB2626. 05/06/2005. SSCN 8216 definitized on
50838	SSCN 8216; S/A 1297	MAPPING LABEL INSTALLATION MODIFICATION	N/A	1	KT	FLT		FLT	KSC	10/07/05	COMPLETE ON BHB2626. 05/06/2005. SSCN 8216 definitized on
50840	S/A 1275; SSCN 7956	ASSY, PANEL, Y-JUMPER - ETVCG PORTS 3, 9, &	N/A	4	EA	FLT		FLT	KSC	08/31/04	COMPLETE ON BHB2625. 06/14/2005. Nomenclature changed
50841	S/A 1275; SSCN 7956	ASSY, PANEL, Y-JUMPER - ETVCG PORT 7	N/A	1	EA	FLT		FLT	KSC	08/31/04	COMPLETE ON BHB2625. 06/14/2005. Nomenclature changed
50842	SSCN 8183; S/A 1235	MODIFICATION KIT, HIGH-LOAD - HEAT	N/A	2	KT			FLT	B-HOU	09/30/04	COMPLETE ON BHB2497. 11/03/2004. NOTE 1
50843	SSCN 8183; S/A 1235	MODIFICATION KIT, LOW-LOAD - HEAT	N/A	1	KT			FLT	B-HOU	09/30/04	COMPLETE ON BHB2497. 11/03/2004. NOTE 1
50844	04-0481; SSCN 8183; S/A	MODIFICATION KIT, HIGH-LOAD - HEAT	N/A	9	KT	FSE		FLT	B-HOU	10/29/04	COMPLETE ON BHB2497. 11/03/2004. Change destination and
50845	04-0481; SSCN 8183; S/A	MODIFICATION KIT, LOW-LOAD - HEAT	N/A	1	KT	FSE		FLT	B-HOU	10/29/04	COMPLETE ON BHB2497. 11/03/2004. Change destination and
50848	04-0481; SSCN 8194	PVR FSE BOLT MODIFICATION KIT	N/A	1	KT	FSE		FSE	KSC	04/19/04	COMPLETE ON BHB2477. 01/20/2005. Change destination
50849	SSCN 8215; S/A 1265	MOD KIT, PROTECTIVE CAP, UTILITY TRAY - S0	N/A	1	KT	FLT		FLT	KSC	09/30/04	COMPLETE ON BHB2725. 09/06/2005.
50850	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - MBSU FSE	N/A	1	EA	FLT		FLT	KSC	06/18/04	COMPLETE ON BHB2436. 06/18/2004. NOTE 1
50851	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - MBSU FSE	N/A	1	EA	FLT		FLT	KSC	06/18/04	COMPLETE ON BHB2436. 06/18/2004. NOTE 1
50852	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - BCDU FSE	N/A	1	EA	FLT		FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50853	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - BCDU FSE	N/A	1	EA	FLT		FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50854	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - PCU FSE	N/A	1	EA	FLT		FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50855	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - PCU FSE	N/A	1	EA	FLT		FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50856	SSCN 8432; S/A 1239	MLI - HEATER MAT ASSEMBLY - BATTERY FSE	N/A	1	EA	FLT		FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50857	SSCN 8432; S/A 1239	MLI - ORU ENCLOSURE ASSEMBLY - BATTERY	N/A	1	EA	FLT		FLT	KSC	09/24/04	COMPLETE ON BHB2486. 09/17/2004.NOTE 1
50858	SSCN 8248; S/A 1291	PASSIVE ESPAD MOD KIT		1	KT	FLT		FLT	SPPF	12/10/04	COMPLETE ON BHB2526. 12/10/2004. SSCN 8248 definitized on
50859	SSCN 8248; S/A 1291	MBSU FSE MLI MOD KIT		1	KT	FLT		FLT	KSC	10/29/04	COMPLETE ON BHB2510. 11/02/2004. SSCN 8248 definitized on
50860	SSCN 8275; S/A 1265	MOD KIT, JUMPER - MBSU, EPS, SEGMENT S0	N/A	1	KT	FLT		FLT	KSC	03/18/05	COMPLETE ON BHB2564. 02/24/2005.
50861	SSCN 8505	GN2 UMBILICAL ASSEMBLY, MODIFICATION KIT -	IF15319	1	KT	FLT		FLT	BHOU	06/25/04	COMPLETE ON BHB2371. 02/24/2004.
50862	SSCN 8277; S/A 1275	KIT, MODIFICATION, ADD PRESSURE CAP TO	N/A	10	KT	FLT		FLT	HI	03/31/05	COMPLETE ON BHB2838. 05/05/2006. Ship short on BHB2577
50863	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT,	N/A	2	KT	FLT		FLT	KSC	03/18/05	COMPLETE ON BHB2592. 03/22/2005. SSCN 8387 definitized on
50864	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT,	N/A	1	KT	FLT		FLT	KSC	03/31/05	COMPLETE ON BHB2604. 06/17/2005. SSCN 8387 definitized on
50865	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT,	N/A	1	KT	FLT		FLT	KSC	04/29/05	COMPLETE ON BHB2645. 06/17/2005. SSCN 8387 definitized on
50866	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT, P5	N/A	1	KT	FLT		FLT	KSC	06/24/05	COMPLETE ON BHB2606. 06/17/2005. SSCN 8387 definitized on
50867	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT, S5	N/A	1	KT	FLT		FLT	KSC	08/26/05	COMPLETE ON BHB2660. 06/17/2005. SSCN 8387 definitized on
50868	SSCN 8387; S/A 1297	MODIFICATION KIT, PIP PIN REPLACEMENT, S6	N/A	1	KT	FLT		FLT	KSC	09/30/05	COMPLETE ON BHB2644. 06/17/2005. SSCN 8387 definitized on
50869	SSCN 8285	MODIFICATION KIT, RETEST NITROGEN TANK	N/A	3	KT	FLT		FLT	BHOU	07/02/04	COMPLETE ON BHB2473. 06/08/2005.
50870	SSCN 8324; S/A 1298	Mod Kit, S4 PVR Installation	N/A	1	KT	FLT		FLT	KSC	8/2/2005	COMPLETE ON BHB2904. 11/13/2006. Ship short on BHB2731
50871	SSCN 8236; S/A 1265	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	5	KT	FLT		FLT	KSC	06/27/05	COMPLETE ON BHB2653. 06/03/2005. Date and Qty Change per
50872	SSCN 8236; SA 1265	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	1	KT	FLT		FLT	GRC	06/27/05	COMPLETE ON BHB2654. 06/03/2005. Date Change per email
50873	SSCN 8236; S/A 1265	MODIFICATION KIT, PaRIS RF GROUND STRAP	N/A	2	KT	FLT		FLT	KSC	06/27/05	COMPLETE ON BHB2655. 06/03/2005. Date and Dest. Change
50874	SSCN 8236; S/A 1265	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	3	KT	FLT		FLT	KSC	06/27/05	COMPLETE ON BHB2655. 06/03/2005. Date Change per email
50878	SSCN 8429; S/A 1280	MOD KIT, PUMP PACKAGE ASSEMBLY, QUICK	N/A	2	KT	FLT		FLT	HI	12/22/04	COMPLETE ON BHB2579. 03/08/2005. SSCN 8429 definitized on
50879	SSCN 8429; S/A 1280	MOD KIT, PUMP PACKAGE ASSEMBLY, QUICK	N/A	2	KT	FLT		FLT	HI	12/22/04	COMPLETE ON BHB2909 10/04/2006. Ship short BHB2900 dated
50884	SSCN 8143; S/A 1275	NUT, FLANGED HEX, TYPE NATC, SIZE 13	N/A	21	EA	FLT		FLT	KSC	12/01/04	COMPLETE ON BHB2517. 11/23/2004.
50885	SSCN 8143; S/A 1275	NUT, FLANGED HEX, TYPE NATC, SIZE 25L	N/A	40	EA	FLT		FLT	KSC	12/01/04	COMPLETE ON BHB2517. 11/23/2004.
50886	SSCN 8143; S/A 1275	NUT, FLANGED NEX, TYPE NATC, SIZE 33	N/A	2	EA	FLT		FLT	KSC	12/01/04	COMPLETE ON BHB2517. 11/23/2004.
50887	SSCN 8143; S/A 1275	CONNECTOR	N/A	4	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2493. 10/07/2004.
50888	SSCN 8143; S/A 1275	CONNECTOR	N/A	8	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2493. 10/07/2004.
50889	SSCN 8143; S/A 1275	CONNECTOR	N/A	2	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2493. 10/07/2004.
50894	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2516. 11/23/2004. Ship short on BHB2493
50895	SSCN 8143; S/A 1275	BACKSHELL	N/A	8	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2528. 12/10/2004. Ship short on BHB2516
50896	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.
50897	SSCN 8143; S/A 1275	BACKSHELL	N/A	4	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
50898	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT	(b) (4)	FLT	KSC	11/05/04	COMPLETE ON BHB2538. 12/21/2004.
50899	SSCN 8143; S/A 1275	BACKSHELL	N/A	8	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.
50900	SSCN 8143; S/A 1275	BACKSHELL	N/A	2	EA	FLT		FLT	KSC	10/22/04	COMPLETE ON BHB2538. 12/21/2004.
50901	SSCN 8143; S/A 1275	GORE PANEL FEEDTHROUGH	N/A	2	EA	FLT		FLT	KSC	11/19/04	COMPLETE ON BHB2518. 11/24/2004.
50902	SSCN 8143; S/A 1275	GAMAH FITTING	N/A	2	EA	FLT		FLT	KSC	10/15/04	COMPLETE ON BHB2494. 10/03/2004.
50903	SSCN 8143; S/A 1275	PIN	N/A	4	EA	FLT		FLT	KSC	03/04/05	COMPLETE ON BHB2551. 03/08/2005.
50904	SSCN 8143; S/A 1275	EXTERNAL VENT FLANGE ASSY	N/A	2	EA	FLT		FLT	KSC	03/04/05	COMPLETE ON BHB2551. 03/08/2005.
50905	SSCN 8503; S/A 1265	MODIFICATION KIT, REWORK OF THERMOFOIL	N/A	1	KT	FLT		FLT	LMMFC	10/01/04	COMPLETE ON BHB2687. 07/19/2005.
50906	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50907	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50908	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50909	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50910	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50911	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50912	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50913	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50914	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50915	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50916	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50917	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50918	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50919	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50920	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50921	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50922	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50923	SSCN 8536; S/A 1289	FGB STOWAGE ENCLOSURE	N/A	1	EA	FLT		FLT	KSC	08/02/05	COMPLETE ON BHB2706. 08/26/2005. Date Change per email
50928	SSCN 8248; S/A 1291	ACTIVE ESPAD MOD KIT	N/A	1	KT	FLT		FLT	SPPF	12/10/04	COMPLETE ON BHB2526. 12/10/2004. SSCN 8248 definitized on
50929	SSCN 8248; S/A 1291	FHRC FSE MOD KIT		1	KT	FLT		FLT	KSC	12/13/04	COMPLETE ON BHB2504.12/10/2004. SSCN 8248 definitized on
50930	SSCN 8554; S/A 1323	Mod Kit, Jumper - SSPTS, EPS, Z1 to LAB	N/A	1	KT	FLT		FLT	KSC	05/16/05	COMPLETE ON BHB2642. 05/16/2005. SSCN 8554 definitized on
50931	SSCN 8554; S/A 1323	Mod Kit, Jumper - SSPTS, EPS, LAB to PMA2	N/A	1	KT	FLT		FLT	KSC	05/16/05	COMPLETE ON BHB2640. 05/16/2005. SSCN 8554 definitized on
50932	SSCN 8634; S/A 1290	MOD KIT, S4 WIF LABEL	N/A	1	KT	FLT		FLT	KSC	01/07/05	COMPLETE ON BHB2584. 03/08/2005. SSCN 8634 definitized.
50933	SSCN 8387; S/A 1297	MODIFICATION KIT, PVR, P4	N/A	1	KT	FLT		FLT	KSC	03/31/05	COMPLETE ON BHB2605. 06/17/2005. SSCN 8387 definitized on
50934	SSCN 8387; S/A 1297	MODIFICATION KIT, PVR, S4	N/A	1	KT	FLT		FLT	KSC	08/31/05	COMPLETE ON BHB2661. 06/17/2005. SSCN 8387 definitized on
50935	SSCN 8387; S/A 1297	MODIFICATION KIT, PVR, S6	N/A	1	KT	FLT		FLT	KSC	09/30/05	COMPLETE ON BHB2659. 06/17/2005. SSCN 8387 definitized on
50936	04-0471	REEL ASSEMBLY, CABLE, EXTERNAL (W0940)	N/A	1	EA	FLT			MOSCOW	12/31/04	COMPLETE ON BHB2514. 12/10/2004. Added per Boeing Ltr 2-
50937	SSCN 8631; S/A 1339	MOD KIT, P4 EWIS	N/A	1	KT	FLT			KSC	12/22/05	COMPLETE ON BHB2598. 04/12/2005. Ship short on BHB2556
50938	SSCN 8631; S/A 1339	MOD KIT, P5 EWIS	N/A	1	KT	FLT			KSC	12/22/05	COMPLETE ON BHB2695. 08/12/2005. Ship short on BHB2680
50939	SSCN 8631; S/A 1339	MOD KIT, S4 EWIS	N/A	1	KT	FLT			KSC	12/22/05	COMPLETE ON BHB2599. 04/12/2005. Ship short on BHB2560
50940	SSCN 8631; S/A 1339	MOD KIT, S6 EWIS	N/A	1	KT	FLT			KSC	12/22/05	COMPLETE ON BHB2732. 10/14/2005. Ship short on BHB2705
50944	06-0167; SSCN 8631; S/A	MOD KIT, ANTENNA EWIS	N/A	1	KT	FLT			HOU	07/14/06	COMPLETE ON BHB2875. 07/14/2006. Changed Destination and
50945	06-0167; SSCN 8631; S/A	MOD KIT, IVA EWIS	N/A	1	KT	FLT			HOU	10/25/06	COMPLETE ON BHB3003. 06/27/2007. Ship short on BHB2985
50946	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - P4	N/A	1	KT	FLT			KSC	04/01/06	COMPLETE ON BHB2880. 08/01/2006. Ship short on BHB2840
50947	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - P5	N/A	1	KT	FLT			KSC	04/01/06	COMPLETE ON BHB2881. 08/01/2006. Ship short on BHB2841
50948	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - S4	N/A	1	KT	FLT			KSC	06/01/06	COMPLETE ON BHB2882. 08/03/2006. SSCN 8631 definitized on
50949	SSCN 8631; S/A 1339	MOD KIT, ELECTRONICS INSTALL - S6	N/A	1	KT	FLT			KSC	06/01/06	COMPLETE ON BHB2884. 08/09/2006. SSCN 8631 definitized on
50950	SSCN 8849; S/A 1280	MOD KIT, PUMP PACKAGE ASSEMBLY, QUICK	N/A	2	KT	FLT		FLT	HI	11/15/04	COMPLETE ON BHB2580. 04/22/2005. SSCN 8849 definitized.
50951	SSCN 8773; S/A 1290	STUD, CONNECTOR-PASSIVE FRAM	N/A	16	EA	FLT		FLT	KSC	06/20/05	COMPLETE ON BHB2513. 11/08/2004. SSCN 8773 definitized.
50953	SSCN 8849; S/A 1280	MOD KIT, TWO-STAGE PUMP, QUICK	N/A	1	KT	FLT		FLT	HI	03/31/05	COMPLETE ON BHB2771. 02/28/2006. SSCN 8849 definitized.
50954	SSCN 8938; S/A 1299	Gas Trap Assembly Modification Kit	N/A	10	KT	FLT		FLT	HI	12/15/05	COMPLETE ON BHB3008. 08/03/2007. SSCN 8938 definitized.
50955	SSCN 8938; S/A 1299	Membrane Module Modification Kit	N/A	12	KT	FLT		FLT	HI	12/15/05	COMPLETE ON BHB3008. 08/03/2007. SSCN 8938 definitized.
50956	SSCN 8935; S/A 1290	ADAPTER BRACKET, 45 DEG ECOM	N/A	2	EA	FLT		FLT	KSC	03/30/05	COMPLETE ON BHB2581. 03/04/2005. SSCN 8935 definitized.
50958	SSCN 8631; S/A 1339	NETWORK CONTROL UNIT (NCU) SPARE	N/A	1	EA	FLT			KSC	05/05/06	COMPLETE ON BHB3034. 08/24/2007. SSCN 8631 definitized on
50959	SSCN 8631; S/A 1339	EWIS REMOTE SENSOR UNIT (RSU) FIRMWARE	N/A	1	EA	FLT			JSC	04/01/06	COMPLETE ON BHB2877. 07/27/2006. SSCN 8631 definitized on
50960	SSCN 8631; S/A 1339	EWIS NCU FIRMWARE	N/A	1	EA	FLT			JSC	05/05/06	COMPLETE ON BHB3035. 12/19/2007. SSCN 8631 definitized on
50961	SSCN 8631; S/A 1339	EWIS GROUND PROCESSING SOFTWARE	N/A	1	EA	GSE			JSC	05/26/06	COMPLETE ON BHB3036. 12/19/2007. SSCN 8631 definitized on
50962	2-1150-06-0043	KIT, MODIFICATION, CDRA SN D0001 D/A BED	N/A	1	KT	FLT		FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. DIL Item added per

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
50964	2-1150-06-0043	KIT, MODIFICATION, CDRA SN D0002 D/A BED	N/A	1	KT	FLT	(b) (4)	FLT	HI	10/21/05	COMPLETE ON BHB2916. 10/19/2006. DIL Item added per
50965	SSCN 8966; S/A 1310	Mod Kit, CDRA Check Valve	N/A	8	KT	FLT		FLT	HI	12/22/05	COMPLETE ON BHB2772. 02/15/2006. SSCN 8966 definitized per
50967	SSCN 6822; S/A 1306	Cabin Air Modification Kit, Bacteria Filter Assembly	N/A	23	KT	FLT		FLT	HSSSI	2/28/2006	COMPLETE ON BHB3110. 08/01/2008. SSCN 6822 definitized on
50968	SSCN 6822; S/A 1306	Modification Kit, IMV Fan Assembly Screw Protrusion	N/A	16	KT	FLT		FLT	HSSSI	2/28/2006	COMPLETE ON BHB3111. 08/01/2008. SSCN 6822 definitized on
50969	SSCN 6822; S/A 1306	Modification Kit, Avionics Air Assembly Screw	N/A	29	KT	FLT		FLT	HSSSI	2/28/2006	COMPLETE ON BHB3112. 08/01/2008. SSCN 6822 definitized on
50970	SSCN 6822; S/A 1306	Modification Kit, Avionics Air Assembly Screw	N/A	2	KT	FLT		FLT	HSSSI	2/28/2006	COMPLETE ON BHB3113. 08/01/2008. SSCN 6822 definitized on
50971	SSCN 6822; S/A 1306	Modification Kit, Water Separator ORU Screw	N/A	8	KT	FLT		FLT	HSSSI	2/28/2006	COMPLETE ON BHB3093. 05/28/2008. SSCN 6822 definitized on
50972	SSCN 9063; S/A 1299	P4 Modification Kit, RTAS Ground Strap	N/A	1	KT	FLT		FLT	KSC	12/08/05	COMPLETE ON BHB2709. 09/19/2005. SSCN 9063 definitized.
50973	SSCN 9063; S/A 1299	S4 Modification Kit, RTAS Ground Strap	N/A	1	KT	FLT		FLT	KSC	04/13/06	COMPLETE ON BHB2710. 08/22/2005. SSCN 9063 definitized.
50974	SSCN 9063; S/A 1299	S6 Modification Kit, RTAS Ground Strap	N/A	1	KT	FLT		FLT	KSC	09/07/07	COMPLETE ON BHB2711. 08/22/2005. SSCN 9063 definitized.
50975	SSCN 9063; S/A 1299	P5 Modification Kit, RTAS Lock Body	N/A	1	KT	FLT		FLT	KSC	02/09/06	COMPLETE ON BHB2712. 08/22/2005. SSCN 9063 definitized.
50976	SSCN 9063; S/A 1299	S5 Modification Kit, RTAS Lock Body	N/A	1	KT	FLT		FLT	KSC	07/06/06	COMPLETE ON BHB2713. 08/22/2005. SSCN 9063 definitized.
50977	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Installation, Nitrogen Tank	N/A	1	KT	FLT		FLT	BHOU	8/22/2005	COMPLETE ON BHB2715. 08/29/2005. SSCN 8922 definitized on
50978	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Verification Inspection,	N/A	1	KT	FLT		FLT	BHOU	8/22/2005	COMPLETE ON BHB2716. 08/29/2005. SSCN 8922 definitized on
50979	06-0163; SSCN 8883; S/A	MOD KIT, ORBITAL SUPPORT EQUIPMENT-IBA	N/A	1	KT	FLT		FLT	BHOU	09/20/06	COMPLETE ON BHB2871. 07/28/2006. Nomenclature change per
50980	SSCN 9162; S/A 1299	Modification Kit, S3 Clamp	N/A	1	KT	FLT		FLT	KSC	06/30/05	COMPLETE ON BHB2676. 07/14/2005. SSCN 9162 definitized.
50981	SSCN 9050; S/A 1310	Kit, Telemetry Matching Unit, Orlan Suit, Russian	684-015088-0001	1	KT	FLT		FLT	Moscow	01/30/10	COMPLETE ON BHB3257. 01/28/2010. Delivery date changed per
50984	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Installation, Nitrogen Tank	N/A	1	KT	FLT		FLT	BHOU	8/22/2005	COMPLETE ON BHB2718. 08/31/2005. SSCN 8922 definitized on
50985	SSCN 8992; S/A 1306	Mod Kit, Cable Clamp Verification Inspection,	N/A	1	KT	FLT		FLT	BHOU	8/22/2005	COMPLETE ON BHB2717. 08/31/2005. SSCN 8922 definitized
50986	SSCN 9245; S/A 1299	KIT, MODIFICATION, CDRA	N/A	2	KT	FLT		FLT	HI	06/15/05	COMPLETE ON BHB2665. 06/10/2005. SSCN 9245 definitized.
50987	SSCN 8324; S/A 1298	Radiator, Deployable, PV – Single Phase Thermal	N/A	1	EA	FLT		FLT	KSC	8/1/2005	COMPLETE ON BHB2903. 09/20/2006. Ship short on BHB2691
50988	SSCN 9195; S/A 1320	Modification Kit, BGA Bolt -P6 Segment	N/A	1	KT	FLT		FLT	KSC	1/9/2006	COMPLETE ON BHB2847. 06/23/2006. SSCN 9195 definitized on
50990	SSCN 8911; S/A 1310	Cable Assembly, Adapter, Test DAUI, US Lab	N/A	2	EA	FLT		FLT	KSC	08/31/05	COMPLETE ON BHB2781. 01/19/2006. SSCN 8911 definitized per
50991	SSCN 8148; S/A 1299	Modification Kit, Intermodule Ventilation (IMV) Valve	N/A	29	KT	FLT		FLT	HI	9/30/2005	COMPLETE ON BHB2885. 08/15/2006. Ship short on BHB2666
50992	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT		FLT	HI	10/28/2005	COMPLETE ON BHB2854. 05/25/2006. SSCN 8148 definitized.
50993	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT		FLT	HI	10/28/2005	COMPLETE ON BHB2854. 05/25/2006. SSCN 8148 definitized.
50994	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT		FLT	HI	11/30/2005	COMPLETE ON BHB2854. 05/23/2006. SSCN 8148 definitized.
50995	SSCN 8148; S/A 1299	Shaft, Upper	N/A	15	EA	FLT		FLT	HI	11/30/2005	COMPLETE ON BHB2854. 05/23/2006. SSCN 8148 definitized.
50996	SSCN 9163; S/A 1340	FILL PORT MOD KIT	N/A	1	KT	FLT			BHOU	03/16/06	COMPLETE ON BHB2826. 03/15/2006. SSCN 9163 definitized on
50997	SSCN 9163; S/A 1340	FILL PORT MOD KIT	N/A	1	KT	FLT			BHOU	04/28/06	COMPLETE ON BHB2831. 04/27/2006. SSCN 9163 definitized on
50998	SSCN 9163; S/A 1340	FILL PORT MOD KIT	N/A	2	KT	FLT			BHOU	04/28/06	COMPLETE ON BHB2832. 04/27/2006. SSCN 9163 definitized on
50999	SSCN 9344; S/A 1310	Z1 MOD KIT, CMG #1 INSTALLATION AND	N/A	1	KT	FLT		FLT	KSC	10/13/05	COMPLETE ON BHB2681. 07/12/2005. SSCN 9344 definitized per
51000	05-0128; SSCN 8236; S/A	MODIFICATION KIT, ARIS RF GROUND STRAP	N/A	2	KT	FLT		FLT	B-HOU	06/27/05	COMPLETE ON BHB2657. 06/03/2005. Added per Boeing letter 2-
51005	SSCN 9279; S/A 1362	ANTIMICROBIAL DETECTION STRIPS	N/A	100	EA	FLT		FLT	JSC	6/29/2007	COMPLETE ON BHB3002. 06/28/2007. SSCN 9279 definitized on
51006	S/A 1368; SSCN 8941;	KIT SHUNTING PLUG, SSU	N/A	1	KT	FLT		FLT	KSC	06/02/06	COMPLETE ON BHB2861. 06/15/2006. Nomenclature/EDD
51007	S/A 1368; SSCN 8941;	KIT SHUNTING PLUG, SSU	N/A	1	KT	FLT		FLT	KSC	06/30/06	COMPLETE ON BHB2873. 07/18/2006. Nomenclature/EDD
51010	SSCN 9326; S/A 1334	EVA FLUID JUMPER ASSEMBLY	N/A	1	EA	FLT		FLT	BHOU	05/24/06	COMPLETE ON BHB2834. 09/28/2006. Change Destination per
51011	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	2	KT	FLT		FLT	KSC	10/14/05	COMPLETE ON BHB2735. 11/04/2005. SSCN 9457 definitized per
51012	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	2	KT	FLT		FLT	KSC	11/14/05	COMPLETE ON BHB2736. 11/04/2005. SSCN 9457 definitized per
51013	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	2	KT	FLT		FLT	KSC	01/13/06	COMPLETE ON BHB2737. 11/04/2005. SSCN 9457 definitized per
51014	SSCN 9457; S/A 1332	MOD KIT, BMRRM - COVER RETAINER FLIGHT	N/A	3	KT	FLT		FLT	KSC	02/17/06	COMPLETE ON BHB2738. 11/04/2005. SSCN 9457 definitized per
51015	SSCN 9457; S/A 1332	KIT, BMRRM - COVER RETAINER FLIGHT	N/A	3	KT	FLT		FLT	KSC	03/17/06	COMPLETE ON BHB2768. 01/06/2006. Quantity change; per
51018	SSCN 9145; S/A 1340	DUAL PURPOSE CONTAINER	N/A	1	EA	GSE			KSC	07/28/06	COMPLETE ON BHB2953. 07/18/2007. SSCN 9145 definitized on
51019	2-1150-05-0318; SSCN	P4 MOD KIT, RTAS GROUND LUG SPACER	N/A	1	KT	FLT		FLT	KSC	01/13/06	COMPLETE ON BHB2778. 01/06/2006. Added to J-27 per Boeing
51020	2-1150-05-0318; SSCN	S4 MOD KIT, RTAS GROUND LUG SPACER	N/A	1	KT	FLT		FLT	KSC	02/24/06	COMPLETE ON BHB2779. 01/06/2006. Added to J-27 per Boeing
51021	2-1150-05-0318; SSCN	S6 MOD KIT, RTAS GROUND LUG SPACER	N/A	1	KT	FLT		FLT	KSC	09/15/06	COMPLETE ON BHB2852. 05/03/2006. Added to J-27 per Boeing
51022	2-1150-06-0061	MOD KIT, CABLE TIES-MBSU JUMPER	N/A	1	KT	FLT		FLT	KSC	03/03/06	COMPLETE ON BHB2780. 03/15/2006. DIL Item added per
51024	06-0033; SSCN 7385;	ISL ROUTER ASSEMBLY	N/A	2	EA	FLT		FLT	HI	02/14/06	COMPLETE ON BHB2820. 08/17/2006. Added to J-27 per Boeing
51025	06-0033; SSCN 7385;	ECA, POWER SUPPLY	N/A	1	EA	FLT		FLT	HI	02/14/06	COMPLETE ON BHB2821. 03/10/2006. Added to J-27 per Boeing
51026	06-0033; SSCN 7385;	CCA, ETHERNET SWITCH-VME, 10/100	N/A	14	EA	FLT		FLT	HI	02/14/06	COMPLETE ON BHB2822. 03/10/2006. Added to J-27 per Boeing
51027	SSCN 9844; S/A 1355	MODIFICATION KIT, UMBILICAL ASSY,	N/A	1	KT	FLT		FLT	JSC	04/28/06	COMPLETE ON BHB2856. 05/25/2006. Ship short on BHB2837
51028	SSCN 9844; S/A 1355	MODIFICATION KIT, UMBILICAL ASSY,	N/A	1	KT	FLT		FLT	JSC	04/28/06	COMPLETE ON BHB2857. 05/25/2006. Ship short on BHB2842
51029	SSCN 9844; S/A 1355	MODIFICATION KIT, UMBILICAL ASSY,	N/A	1	KT	FLT		FLT	KSC	04/28/06	COMPLETE BHB2859. 05/26/2006. SSCN 9844 definitized on
51030	SSCN 9844; S/A 1355	SPECIAL TOOLS KIT, UMBILICAL ASSY,	N/A	1	KT	OSE		FLT	JSC	04/28/06	COMPLETE ON BHB2862. 06/06/2006. Ship short on BHB2848
51031	SSCN 9844; S/A 1355	BLOCKER ASSY, BLADE - TUS IUA	N/A	2	EA	FLT		FLT	JSC	04/28/06	COMPLETE ON BHB2860. 05/25/2006. Ship short in BHB2853
51033	SSCN 9722; S/A 1363	CABLE ASSY, POWER-OGS (W5881)	N/A	1	EA	FLT		FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change nomenclature and

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51037	SSCN 9722; S/A 1363	CAGE ASSY, OGS FEEDWATER	N/A	1	EA	FLT	(b) (4)	FLT	BHOU	11/14/06	COMPLETE ON BHB2924. 10/08/2006. change nomenclature and
51038	SSCN 9633; S/A 1389	WIRELESS ACCESS POINT ASSY	N/A	4	EA	FLT		FLT	MOSCOW	09/13/07	COMPLETE ON BHB3058. 11/13/2007. SSCN 9633 definitized on
51039	SSCN 9633; S/A 1389	Repair Kit, Cable, Ethernet	N/A	3	KT	FLT		FLT	MOSCOW	09/13/07	COMPLETE ON BHB3094. 06/04/2008. SSCN 9633 definitized on
51042	SSCN 9722; S/A 1363	UPPER BEAM ASSEMBLY-OGS FEEDWATER	N/A	1	EA	FLT		FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change nomenclature and
51043	SSCN 9722; S/A 1363	LOWER BEAM ASSEMBLY-OGS FEEDWATER	N/A	1	EA	FLT		FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change nomenclature and
51044	SSCN 2632; S/A 1404	Mod Kit, Connector, Address - ATU, Cupola	1F16119-1	1	KT	FLT			KSC	8/21/2007	COMPLETE ON BHB3028. 08/21/2007. Definitized via SSCN
51045	2-1150-06-0125; S/A 1368	MDM-4 EXTERNAL (100 ohm)	N/A	1	EA	FLT		FLT	KSC	05/26/06	COMPLETE ON BHB2855. 05/31/2006. Added per Boeing Ltr 2-
51046	06-0160	BGA BOLT RETAINER	N/A	2	EA	FLT		FLT	KSC	07/28/06	COMPLETE ON BHB2890. 08/02/2006. Added per Boeing letter 2-
51047	2-1150-06-0210; S/A 1388	BRACKET, CONTROLLER - OGS FEEDWATER	N/A	1	EA	FLT		FLT	BHOU	11/14/06	COMPLETE ON BHB2922. 10/10/2006. change destination per
51050	SSCN 9918; S/A 1405	Modification Kit, PaRIS - CIR	1J06730-1	1	KT	FLT		FLT	BHOU	05/11/07	COMPLETE ON BHB2994. 05/11/2007. SSCN 9918 Definitized on
51052	2-1150-06-0238	1/4" Square Drive Insert Bit	N/A	1	EA	FLT		FLT	BHOU	10/20/06	COMPLETE ON BHB2945. 12/11/2006. Added per Boeing Ltr 2-
51053	SSCN 10359; S/A 1411	Mod Kit 1 Redesign Preload System (as installed)	MK7080105	1	KT	FLT		ULF3	L3	3/25/2008	COMPLETE ON BHB3109. 07/23/2008. Definitized via SSCN
51054	SSCN 10359; S/A 1411	ModKit 2 Redesign Preload System	MK7080105	1	KT	FLT		ULF3	L3	3/25/2008	COMPLETE ON BHB3108. 07/23/2008. Ship short on BHB3068
51055	SSCN 10359; S/A 1411	ModKit 3 Redesign Preload System	MK7080105	1	KT	FLT		ULF3	L3	3/25/2008	COMPLETE ON BHB3143. 10/29/2008. Definitized via SSCN
51056	SSCN 10359; S/A 1411	ModKit 4 Redesign Preload System	MK7080105	1	KT	FLT		ULF3	L3	3/25/2008	COMPLETE ON BHB3143. 10/29/2008. Definitized via SSCN
51057	SSCN 10359; S/A 1411	ModKit 5 Redesign Preload System	MK7080105	1	KT	FLT		ULF3	L3	3/25/2008	COMPLETE ON BHB3143. 10/29/2008. Definitized via SSCN
51058	SSCN 10194; S/A1400	Connector Saver, MCA Mass Spectrometer ORU O2	N/A	1	EA	FLT		FLT	KSC	02/23/07	COMPLETE ON BHB2967. 03/01/2007. SSCN 10194 Definitized
51060	SSCN 10194; S/A1400	Connector Saver, MCA Mass Spectrometer ORU O2	N/A	1	EA	FLT		FLT	KSC	03/23/07	COMPLETE ON BHB2981. 03/27/2007. SSCN 10194 Definitized
51070	SSCN 9633/ Letter # 2-	Russian Cable, Part Number 17KC.10K08210A-8670	17KC.10K08210A-	2	EA	FLT			Moscow	02/28/07	COMPLETE ON BHB2969. 03/26/2007. added per letter 2-1150-
51071	SSCN 9633/ Letter # 2-	Russian Cable, Part Number 17KC.10K08210A-8680	17KC.10K08210A-	2	EA	FLT			Moscow	02/28/07	COMPLETE ON BHB2968. 03/26/2007. added per letter 2-1150-
51072	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 5m	1F15940-1	5	EA	FLT			Moscow	03/30/07	COMPLETE ON BHB2982. 03/26/2007. added per letter 2-1150-
51073	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 10m	1F15940-501	5	EA	FLT			Moscow	03/30/07	COMPLETE ON BHB2983. 03/26/2007. added per letter 2-1150-
51074	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 15m	1F15940-503	10	EA	FLT			Moscow	03/30/07	COMPLETE ON BHB2984. 03/26/2007. added per letter 2-1150-
51075	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 5m	1F15940-1	5	EA	FLT			Moscow	03/31/08	COMPLETE ON BHB2999. 06/14/2007. added per letter 2-1150-
51076	SSCN 9633/ Letter # 2-	ISL Ethernet Cable, 10m	1F15940-501	5	EA	FLT			Moscow	03/31/08	COMPLETE ON BHB2998. 06/14/2007. added per letter 2-1150-
51077	SSCN 9633/ Letter # 2-	Circuit Card Assy - PCMCIA	1F15983	20	EA	FLT			Moscow	03/31/08	COMPLETE ON BHB3059. 11/13/2007. added per letter 2-1150-
51078	SSCN 9633/ Letter # 2-	Cable Assy, Power - WAP	1F15984	4	EA	FLT			Moscow	03/31/08	COMPLETE ON BHB3060. 11/13/2007. added per letter 2-1150-
51079	SSCN 9633/ Letter # 2-	Cable Assy, Power - WAP	1F15985	4	EA	FLT			Moscow	03/31/08	COMPLETE ON BHB3061. 11/13/2007. added per letter 2-1150-
51080	SSCN 10191; Mod 1416	Mod Kit, S6 BCDU (2)	1F16001-1	1	KT	FLT		15A	KSC	06/06/08	COMPLETE ON BHB3146. 11/06/2008. Ship short on BHB3050
51081	SSCN 10191; Mod 1416	Mod Kit, Power Cable, Heater - S6	1F15943-1	1	KT	FLT		15A	KSC	06/06/08	COMPLETE ON BHB3147. 11/06/2008. Ship short on BHB3051
51082	SSCN 10318; Mod 1509	Kit, Stowed Items, Vibration Isolation System (VIS),	N/A	1	EA	FLT		BHOU	BHOU	06/10/09	COMPLETE ON BHB3192. 06/03/2009. Ship short on BHB3171
51083	SSCN 10316; Mod 1456	Mod Kit; Wire Harness - UMA, ULC	N/A	1	KT	FLT			KSC	01/15/08	COMPLETE ON BHB3182. 06/22/2009. Added per SSCN 10316
51084	SSCN 10316; Mod 1456	Mod Kit; Wire Harness - UMA, ULC	N/A	1	KT	FLT			KSC	01/15/08	COMPLETE ON BHB3221. 08/28/2009. Added per SSCN 10316
51086	SSCN 10392; Mod 1443	Mod kit; S6 WIF 16	N/A	1	KT	FLT			KSC	06/15/07	COMPLETE ON BHB3004. 07/02/2007. Added per SSCN 10392
51087	SSCN 10429; Mod 1420	Mod Kit, SSU Blanket - EVA Upgrade	1F16105-1	1	KT	FLT		13A.1	KSC	05/11/07	COMPLETE ON BHB2993. 05/25/2007. added per definitization of
51088	SSCN 9279; Letter 2-1150-	Chart, Color-OPA test strip	N/A	10	EA	FLT			JSC	06/29/07	COMPLETE ON BHB3002. 06/28/2007. 51088 added per letter 2-
51101	SSCN 10470; Mod 1438	Coupler, Inline, Ethernet - Altered Item	N/A	25	EA	FLT			BHOU	06/20/07	COMPLETE ON BHB3001. 06/18/2007. Added per SSCN 10470
51106	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	1	EA	FLT		HI	HI	12/31/10	COMPLETE ON BHB3553. 02/08/2013. Added per SSCN 104729
51107	SSCN 10524; Mod 1443	Maintenance Support Equipment Kit Blanket Assy -	N/A	2	KT	FLT			KSC	09/04/07	COMPLETE ON BHB3040. 09/05/2007. Added per SSCN 10524
51108	SSCN 10524; Mod 1443	Maintenance Support Equipment Kit Blanket Assy -	N/A	2	KT	FLT			KSC	09/26/07	COMPLETE ON BHB3041. 09/26/2007. Added per SSCN 10524
51110	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, GN&C-1	684-014012-0001	1	KT	FLT		HI	HI	11/18/10	COMPLETE ON BHB3408. 06/09/2011. Ship short on BHB3380
51111	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, GN&C-2	684-014013-0001	1	KT	FLT		HI	HI	11/18/10	COMPLETE ON BHB3409. 06/09/2011. Ship short on BHB3385
51112	SSCN 10553, Mod 1504	MDM Card Spare	8275155-901	1	EA	FLT		BHOU	BHOU	12/16/10	COMPLETE ON BHB3404. 06/13/2011. Ship short on BHB3395
51113	SSCN 10553, Mod 1504	Gold MDM Card	8275155-901	1	EA	FLT		BHOU	BHOU	01/27/11	COMPLETE ON BHB3461. 11/01/2011. Added per SSCN 10553
51114	SSCN 10560; Mod 1452	Mod Kit, External Cables - S0 to N3	N/A	1	EA	FLT		B-Hou	KSC	03/03/09	COMPLETE ON BHB3180. 04/22/2009. Added per SSCN 10560
51120	SSCN 10586; Mod 1446	Mod Kit, CETA Light Cover (Beta Cloth)	N/A	1	KT	FLT			KSC	09/07/07	COMPLETE ON BHB3044. 09/21/2007. Added per SSCN 10586
51121	SSCN 10598; Mod 1444	Cable Assy, Power - Contingency FGB (W5993)	N/A	1	EA	FLT			KSC	08/01/07	COMPLETE ON BHB3017. 07/24/2007. Added per SSCN 10598
51122	SSCN 10598; Mod 1444	Cable Assy, Power - Contingency FGB (W6146)	N/A	1	EA	FLT			KSC	08/01/07	COMPLETE ON BHB3017. 07/24/2007. Added per SSCN 10598
51123	SSCN 10234; Mod 1436	Ethernet User Cable Kit	N/A	1	KT	FLT			MOSCOW	11/15/07	COMPLETE ON BHB3065. 11/13/2007. Added per SSCN 10234
51124	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	2	KT	FLT			MOSCOW	11/30/07	COMPLETE ON BHB3071. 02/06/2008. Added per SSCN 10234
51125	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	2	KT	FLT			MOSCOW	12/21/07	COMPLETE ON BHB3072. 02/06/2008. Added per SSCN 10234
51126	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	2	KT	FLT			MOSCOW	01/31/08	COMPLETE ON BHB3073. 02/06/2008. Added per SSCN 10234
51127	SSCN 10234; Mod 1436	Wireless Access Point Kit	N/A	7	KT	FLT			MOSCOW	04/30/08	COMPLETE ON BHB3080. 03/26/2008. Added per SSCN 10234
51132	SSCN 9633; added per	WIRELESS ACCESS POINT ASSY	N/A	1	EA	N/A		QUAL	MOSCOW	09/13/07	COMPLETE ON BHB3062. 11/13/2007. Added via letter 02-1150-
51133	SSCN 9633; added per	Cable Assy, Power - WAP	1F15984	1	EA	N/A		QUAL	Moscow	03/31/08	COMPLETE ON BHB3063. 11/13/2007. Added via letter 02-1150-
51134	SSCN 9633; added per	Cable Assy, Power - WAP	1F15985	1	EA	N/A		QUAL	Moscow	03/31/08	COMPLETE ON BHB3064. 11/13/2007. Added via letter 02-1150-

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51135	SSCN 10628, Mod 1542	Pump Module	N/A	1	EA	FLT	(b) (4)	B-HOU	KSC	05/29/08	COMPLETE ON BHB3185. 05/08/2009. Ship short on BHB3169
51136	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT			HI	01/30/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51137	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT			HI	04/08/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51138	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT			HI	05/29/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51139	SSCN 10711, Mod 1529	Mod Kit, Boom – SGANT, Z1	N/A	1	KT	FLT		B-Hou	KSC	07/31/09	COMPLETE ON BHB3222. 08/21/2009. Added per SSCN 10711
51140	SSCN 10711, Mod 1529	Mod Kit, Internal, Cables - Lab	N/A	1	KT	FLT		B-Hou	KSC	07/31/09	COMPLETE ON BHB3165. 03/18/2009. Added per SSCN 10711
51145	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, C&C-1	684-014009-0001	1	KT	FLT		HI	HI	09/23/10	COMPLETE ON BHB3405. 06/09/2011. Ship short on BHB3374
51146	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, C&C-2	684-014010-0001	1	KT	FLT		HI	HI	09/23/10	COMPLETE ON BHB3406. 06/09/2011. Ship short on BHB3375
51147	SSCN 10553, Mod 1504	Mod Kit - MDM, EPIC, C&C-3	684-014011-0001	1	KT	FLT		HI	HI	09/23/10	COMPLETE ON BHB3407. 06/09/2011. Ship short on BHB3379
51151	SSCN 10759, Mod 1498	Mod Kit, Rate Gyro Assembly	N/A	1	KT	FLT			HI	06/30/09	COMPLETE ON BHB3142. 12/12/2008. Added per SSCN 10759
51152	SSCN 10832, Mod 1498	Modification Kit for IMV-ESD Circuitry	B47992-1	9	KT	FLT		Carleton	Carleton	12/04/09	COMPLETE ON BHB3354. 02/24/2011. Added per SSCN 10832
51153	SSCN 10234, Mod 1567	Ethernet User Cable Kit	1F15994-501	1	KT	FLT		Moscow	Moscow	03/31/08	COMPLETE ON BHB3084. 03/25/2008. Added per SSCN 10234
51154	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	3	EA	FLT		HI	HI	03/31/11	COMPLETE ON BHB3554. 02/07/2013. Added per SSCN 10472
51155	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	3	EA	FLT		HI	HI	04/29/11	COMPLETE ON BHB3555. 02/07/2013. Added per SSCN 10472
51156	SSCN 10472, Mod 1504	Module Assembly, Gas Trap	N/A	2	EA	FLT		HI	HI	05/27/11	COMPLETE ON BHB3557. 08/02/2013. Added per SSCN 10472 definitized on Mod 1504
51158	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	11/10/09	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51159	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	12/10/09	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51160	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	01/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51161	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	02/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51162	SSCN 10773, Mod 1544	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51163	SSCN 10625R5, Mod	Secondary Stanchion Post - Battery	N/A	1	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3137. 10/30/2008. Added per SSCN 10625 R
51164	SSCN 10625R5, Mod	Secondary Stanchion Post - Common	N/A	1	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3141. 10/27/2008E. Added per SSCN 10625
51165	SSCN 10625R5, Mod	Retainer Plate, Secondary Tiedown - Battery	N/A	1	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3135. 10/15/2008. Added per SSCN 10625 R
51166	SSCN 10625R5, Mod	Retainer Plate, Secondary Tiedown - Common	N/A	1	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3136. 10/15/2008. Added per SSCN 10625 R
51167	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3131. 10/08/2008. Added per SSCN 10625 R
51168	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3121. 09/30/2008. Added per SSCN 10625 R
51169	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3122. 09/30/2008. Added per SSCN 10625 R
51170	SSCN 10625R5, Mod	Stanchion Post Attachment Bolts	N/A	4	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3123. 09/30/2008. Added per SSCN 10625 R
51171	SSCN 10625R5, Mod	Stanchion Post Attachment Nuts	N/A	12	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3124. 09/30/2008. Added per SSCN 10625 R
51173	SSCN 10773, Mod 1544	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT		HSSSI	HSSSI	08/06/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51174	SSCN 10773, Mod 1544	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT		HSSSI	HSSSI	08/06/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51175	SSCN 10773, Mod 1544	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT		HSSSI	HSSSI	09/03/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51177	SSCN 10773, Mod 1544	Connector Saver, Assembly, Type II	360535-001	2	KT	FLT		HSSSI	HSSSI	09/01/09	COMPLETE ON BHB3291. 05/17/2010. Added per SSCN 10773
51178	SSCN 10773, Mod 1544	Connector Saver, Assembly, Type II	360545-001	2	KT	FLT		HSSSI	HSSSI	09/01/09	COMPLETE ON BHB3292. 05/17/2010. Added per SSCN 10773
51179	SSCN 10773, Mod 1544	Connector Saver, Assembly, Type II	360555-001	2	KT	FLT		HSSSI	HSSSI	09/01/09	COMPLETE ON BHB3293. 05/17/2010. Added per SSCN 10773
51181	SSCN 11038R4, Mod	MBS MT Crossover Cables	N/A	1	KT	FLT		B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51182	SSCN 11038R4, Mod	Mod Kit, Protective Sleeves, Connector Assembly	N/A	1	KT	FLT		B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51185	SSCN 11038R4, Mod	Mod Kit, Protective Sleeve, Connector Assembly, S0	N/A	1	KT	FLT		B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51187	SSCN 11038R4, Mod	Node 1 ESP-2	N/A	1	KT	FLT		B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51189	SSCN 11038R2, Mod	Mod Kit, Protective Sleeve, Connector Assembly,	N/A	1	KT	FLT		B-Hou	KSC	01/09/09	COMPLETE ON BHB3149. 11/11/2008. Added per SSCN 11038 R
51190	SSCN 10625R5, Mod	Secondary Stanchion Post - Common	N/A	1	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3138. 10/30/2008. Added per SSCN 10625 R
51191	SSCN 10625R5, Mod	Secondary Stanchion Post - DDCU-E	N/A	1	EA	FLT		Vendor	KSC	09/19/08	COMPLETE ON BHB3139. 10/30/2008. Added per SSCN 10625 R
51192	SSCN 9457 Rev 4; Mod	Mod Kit, BMRRM - Cover Retainer Flight	N/A	1	KT	FLT		KSC	KSC	06/20/08	COMPLETE ON BHB3115. 08/20/2008. SSCN 9457 Rev 4
51193	SSCN 10990; Mod 1557	Mod Kit – Improved Automated Payload Switch	384-014201-0001	1	KT	FLT		SEAKR	SEAKR	02/24/10	COMPLETE ON BHB3317. 07/21/2010. Added per SSCN 10990
51194	SSCN 10990; Mod 1557	Mod Kit – Improved Automated Payload Switch	684-014201-0501	1	KT	FLT		SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3323. 08/18/2010. Added per SSCN 10990
51195	SSCN 10990; Mod 1557	Control Card Assembly	960540-009	1	EA	FLT		SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3325. 11/02/2010. Added per SSCN 10990
51196	SSCN 10990; Mod 155x	Switch Card Assembly	960660-009	1	EA	FLT		SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3326. 11/02/2010. Added per SSCN 10990
51197	SSCN 11072; Mod 1512	Mod Kit, ULC Passive UMA, Fastner Replacement	N/A	3	KT	FLT		KSC	KSC	07/09/08	COMPLETE ON BHB3103. 07/11/2008. SSCN 11072 definitized
51198	SSCN 11072; Mod 1512	Mod Kit, ULC Passive UMA, Fastner Replacement	N/A	1	KT	FLT		KSC	KSC	07/09/08	COMPLETE ON BHB3104. 07/11/2008. SSCN 11072 definitized
51199	SSCN 11072; Mod 1512	Mod Kit, ULC Passive UMA, Fastner Replacement	N/A	1	KT	FLT		KSC	KSC	07/09/08	COMPLETE ON BHB3105. 07/11/2008. SSCN 11072 definitized
51200	SSCN 11123, Mod 1512	Mod Kit, RJMC	N/A	1	KT	FLT		HI	KSC	08/11/08	COMPLETE ON BHB3106. 08/01/2008. Added per SSCN 11123
51201	SSCN 10996, Mod 1557	Flight CCA	8275155-901	2	EA	FLT		HI	HI	04/25/11	COMPLETE ON BHB3447. 08/09/2011. Partial shipment on
51202	SSCN 10996, Mod 1557	Flight CCA (Spare)	8275155-901	1	EA	FLT		HI	HI	05/05/11	COMPLETE ON BHB3454. 08/30/2011. Added per SSCN 10996
51203	SSCN 10996, Mod 1557	Front Cover (Spare)	8275222-901	1	EA	FLT		HI	HI	05/05/11	COMPLETE ON BHB3455. 08/30/2011. Added per SSCN 10996
51207	SSCN 10996, Mod 1557	Front Cover	8275222-901	2	EA	FLT		HI	HI	04/25/11	COMPLETE ON BHB3446. 08/09/2011. Partial shipment on

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51208	SSCN 8814; Mod 1586	Water Separator ORU Design Improvement Mod Kit	SVK1007191-1	2	KT	FLT	(b) (4)	HSSSI	HSSSI	09/24/09	COMPLETE ON BHB3297. 05/06/2010. Ship short on BHB3247.
51209	SSCN 8814; Mod 1586	Water Separator ORU Design Improvement Mod Kit	SVK1016815-1	5	KT	FLT		HSSSI	HSSSI	12/17/09	COMPLETE ON BHB3400. 11/02/2012. Partial shipment on
51221	SSCN 11010; Mod 1593	Improved Payload Ethernet Hub/Gateway (iPEHG)	AN64561-001-01	6	EA	FLT		BHOU	BHOU	05/16/11	COMPLETE ON BHB3527. 10/26/2012. Ship short on BHB3512
51224	SSCN 11214; Mod 1548	RPCM Type III Mod Kit (External)	N/A	1	KT	FLT		NSSD	KSC	11/07/08	COMPLETE ON BHB3127. 01/30/2009. Added per SSCN 11214
51225	SSCN 11214; Mod 1548	RPCM Type V Mod Kit (External)	N/A	2	KT	FLT		NSSD	KSC	11/07/08	COMPLETE ON BHB3127. 01/30/2009. Added per SSCN 11214
51226	SSCN 11214; Mod 1548	RPCM Type VI Mod Kit (External)	N/A	1	KT	FLT		NSSD	KSC	11/07/08	COMPLETE ON BHB3127. 01/30/2009. Added per SSCN 11214
51229	SSCN 11083; Mod 1554	Mod Kit, S1/P1 Fluid System EVA Label	N/A	4	KT	FLT		BHOU	BHOU	04/27/09	COMPLETE ON BHB3212. 07/13/2009. Ship short on BHB3188
51230	SSCN 11083; Mod 1554	Mod Kit, NTA Fluid Blanket Assembly Label	N/A	4	KT	FLT		BHOU	BHOU	04/27/09	COMPLETE ON BHB3187. 05/19/2009. Changed nomenclature
51231	SSCN 11214; Mod 1548	RPCM Type V Mod Kit (External)	N/A	4	KT	FLT		NSSD	HSR	11/07/08	COMPLETE ON BHB3128. 01/30/2009. Added per SSCN 11214
51232	Mod 1578	Bag Assy Cable, Channel 1/4 - SO to N3	N/A	1	EA	FLT		BHOU	BHOU	04/30/09	COMPLETE ON BHB3179. 04/15/2009. Added per letter 09-336
51233	Mod 1578	Bag Assy Cable, Channel 2/3 - SO to N3	N/A	1	EA	FLT		BHOU	BHOU	04/30/09	COMPLETE ON BHB3179. 04/15/2009. Added per letter 09-336
51234	SSCN 11372; Mod 1595	Integrated Communication Unit (ICU)	8080001-117	4	EA	FLT		BHOU	KSC	09/29/11	COMPLETE ON BHB3515. 09/07/2012. Partial and ship short on
51237	SSCN 10759; Mod 1567	Mod Kit, On-Orbit, S0 Rate Gyro Enclosure	684-014517-0001	1	KT	FLT		BHOU	BHOU	02/27/09	COMPLETE ON BHB3167. 03/13/2009. Added per SSCN 10759
51238	SSCN 10759; Mod 1567	Mod Kit, On-Orbit, S0 Rate Gyro Enclosure	684-014517-0001	1	KT	FLT		BHOU	BHOU	02/27/09	COMPLETE ON BHB3167. 03/13/2009. Added per SSCN 10759
51239	SSCN 10759; Mod 1567	Mod Kit, Rate Gyro Enclosure Assembly (RGEA)	684-014516-0001	1	KT	FLT		BHOU	BHOU	02/20/09	COMPLETE ON BHB3162. 02/24/2009. Added per SSCN 10759
51240	SSCN 10759; Mod 1567	Mod Kit, Rate Gyro Enclosure Assembly (RGEA)	684-014516-0001	1	KT	FLT		BHOU	BHOU	02/20/09	COMPLETE ON BHB3162. 02/24/2009. Added per SSCN 10759
51241	SSCN 10759; Mod 1567	Mod Kit, Rate Gyro Enclosure Assembly (RGEA)	684-014516-001	1	KT	FLT		BHOU	BHOU	02/20/09	COMPLETE ON BHB3162. 02/24/2009. Added per SSCN 10759
51249	SSCN 11372; Mod 1595	ICU CSCI	684-13301-02	1	EA	FLT		BHOU	JSC	05/31/11	COMPLETE ON BHB3540. 03/25/2013. Ship short on BHB3525
51252	SSCN 10773; Mod 1567	Modification Kit, Firmware Upgrade, ORU01	360405-001	3	KT	FLT		HSSSI	HSSSI	08/01/09	COMPLETE ON BHB3226. 10/29/2009. Added per SSCN 10773
51253	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51254	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51255	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51256	SSCN 10773; Mod 1567	Modification Kit, Input/Output Harness Assembly,	360406-001	1	KT	FLT		HSSSI	HSSSI	03/11/10	COMPLETE ON BHB3305. 06/04/2010. Added per SSCN 10773
51257	SSCN 10773; Mod 1567	Modification Kit, Gas Cylinder, ORU8	360407-001	1	KT	FLT		HSSSI	HSSSI	08/01/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51258	SSCN 10773; Mod 1567	Modification Kit, Gas Cylinder, ORU8	630407-001	1	KT	FLT		HSSSI	HSSSI	08/01/09	COMPLETE ON BHB3304. 07/30/2010. Added per SSCN 10773
51260	Mod 1578	Bag Assy Ammonia Lines - Node 3 to US Lab	N/A	1	EA	FLT		BHOU	BHOU	10/30/09	COMPLETE ON BHB3235. 10/28/2009. Changed delivery date per
51261	SSCN 11145; Mod 1586	Mod Kit, On-Orbit - T2 VIS	684-014673-0001	1	KT	FLT		BHOU	BHOU	11/06/09	COMPLETE ON BHB3232. 10/31/2009. Added per SSCN 11145
51262	SSCN 10359	Mod Kit, On-Orbit, Z1, CMG	684-014680-0001	4	KT	FLT		BHOU	BHOU	11/06/09	COMPLETE ON BHB3231. 10/24/2009. Added per letter 09-0369
51263	SSCN 11561; Mod 1583	Kit, Cable - N2 to HTV	684-014785-0001	1	KT	FLT		BHOU	BHOU	07/13/09	COMPLETE ON BHB3211. 07/13/2009. Added per SSCN 11561
51264	SSCN 10966; Mod 1590	Mod Kit, On-Orbit, S0, GPS Antenna Upgrade	N/A	4	KT	FLT		BHOU	BHOU	08/05/09	COMPLETE ON BHB3218. 08/04/2009. Added per SSCN 106966
51267	SSCN 11553; Mod 1625	Mod Kit 1, SARJ Full Redundancy Outboard Ops	684-014855-0001	1	KT	FLT		BHOU	BHOU	11/30/11	COMPLETE ON BHB3463. 10/26/2011. Added per SSCN 11553
51268	SSCN 11553; Mod 1625	Mod Kit 2, SARJ Full Redundancy Outboard Ops	684-014854-0001	1	KT	FLT		BHOU	BHOU	09/19/11	COMPLETE ON BHB3456. 09/02/2011. Added per SSCN 11553
51269	SSCN 11553; Mod 1625	RJMC Interface Unit (RIU) Assy	684-014900-0001	1	EA	FLT		BHOU	BHOU	10/19/11	COMPLETE ON BHB3460. 09/28/2011. Added per SSCN 11553
51272	SSCN 11670; Mod 1577	RPCM Type V Mod Kit (External)	N/A	4	KT	FLT		HOU	HSR	07/31/09	COMPLETE ON BHB3189. 05/27/2009. Added per SSCN 11670
51273	SSCN 11670; Mod 1577	RPCM Type V Mod Kit (External)	N/A	3	KT	FLT		HOU	HSR	07/31/09	COMPLETE ON BHB3189. 05/27/2009. Added per SSCN 11670
51274	SSCN 11670; Mod 1577	RPCM Type V Mod Kit (External)	N/A	1	KT	FLT		HOU	HSR	07/31/09	COMPLETE ON BHB3189. 05/27/2009. Added per SSCN 11670
51280	SSCN 11145; Mod 1586	Ground Strap Assy - T2-VIS	1F16208-1	1	EA	FLT		BHOU	BHOU	07/31/09	COMPLETE ON BHB3213. 07/16/2009. Added per SSCN 11145
51281	SSCN 11145; Mod 1586	Back Cup	080416J	20	EA	FLT		BHOU	BHOU	07/31/09	COMPLETE ON BHB3213. 07/16/2009. Added per SSCN 11145
51282	SSCN 11145; Mod 1586	Front Cup	080416F	40	EA	FLT		BHOU	BHOU	07/31/09	COMPLETE ON BHB3213. 07/16/2009. Added per SSCN 11145
51283	SSCN 11145; Mod 1586	Isolator Assy, X-Axis - T2-VIS	1F16152-1	2	EA	FLT		BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51284	SSCN 11145; Mod 1586	Isolator Assy, Y-Axis - T2-VIS	1F16153-1	2	EA	FLT		BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51285	SSCN 11145; Mod 1586	Isolator Assy, Z-Axis - T2-VIS	1F16154-1	2	EA	FLT		BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51286	SSCN 11145; Mod 1586	Isolator Assy, Upper - T2-VIS	1F16155-1	2	EA	FLT		BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51287	SSCN 11145; Mod 1586	Panel Assy, Umbilical - T2-VIS	1F16177-1	1	EA	FLT		BHOU	BHOU	08/21/09	COMPLETE ON BHB3219. 08/11/2009. Added per SSCN 11145
51288	SSCN 11348; Mod 1589	Mod Kit, Cable, 1553 Bus - FGB PDGF, Node 1	684-014523-0001	1	KT	FLT		BHOU	Moscow	12/18/09	COMPLETE ON BHB3254. 12/16/2009. Added per SSCN 11348
51296	SSCN 11809; Mod 1598	Mod Kit, Switchgear Control Assembly (SCA)	2R124312-10	2	KT	FLT		BHOU	BEP	10/30/09	COMPLETE ON BHB3228. 10/13/2009. Added per SSCN 11809
51297	SSCN 11908; Mod 1609	Mod Kit, Micro Handle	2R124521-10	2	KT	FLT		BHOU	PWR	12/23/09	COMPLETE ON BHB3250. 12/10/2009. Added per SSCN 11908
51298	SSCN 11812; Mod 1610	Mod Kit, Cable, Data/Power - Node 2	D684-95074-0001	2	KT	FLT		BHOU	BHOU	04/30/10	COMPLETE ON BHB3286. 03/26/2010. Added per SSCN 11812
51299	SSCN 11846	Mod Kit, Airlock Installation of O2/N2 Tank, On-Orbit	684-015019-0001	1	KT	FLT		BHOU	BHOU	11/23/09	COMPLETE ON BHB2333. 11/24/2009. Added per SSCN 11846
51302	SSCN 11947; CO e-mail	Mod Kit, Cable - Node 3	684-015072-0001	1	KT	FLT		BHOU	BHOU	04/09/10	COMPLETE ON BHB3282. 03/11/2010. Added per SSCN 11947
51303	SSCN 11947; S/A 1658	Mod Kit, Network Device - Node 3	684-015071-0001	1	KT	FLT		BHOU	BHOU	04/06/11	COMPLETE ON BHB3390. 05/03/2011. Added per SSCN 11947
51304	SSCN 11947; S/A 1658	Network Device	684-015068-0001	9	EA	FLT		BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Added per SSCN 11947
51305	SSCN 11947; S/A 1658	Cable Assy, Power, Network Device - Node 3	684-015073-0001	9	EA	FLT		BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Added per SSCN 11947
51306	SSCN 11947; S/A 1658	Adapter - M12 to RJ45	684-015069-0501	60	EA	FLT		BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Ship short on
51308	SSCN 11946; Mod 1690	Modification Kit, CDRA Bed (-4)	TBD	2	KT	FLT		HI	HI	07/10/12	COMPLETE ON BHB3534. 12/14/2012. Added per SSCN 11946
51332	SSCN 12062; Mod 1618	Mod Kit, Adapter Assy, Video Stanchion	684-015100-0001	1	KT	FLT		BHOU	BHOU	06/15/10	COMPLETE ON BHB3298. 06/07/2010. Added per SSCN 12062

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51333	SSCN 12088; CO e-mail	WPA External Filter Assembly, On-Orbit Non-	684-015084-0001	1	KT	FLT	(b) (4)	KSC	KSC	03/05/10	COMPLETE ON BHB3261. 01/29/2010. Added per SSCN 12088
51335	SSCN 11947; S/A 1658	RJ45 Ethernet Couplers	684-015363-0001	60	EA	FLT		BHOU	BHOU	08/12/11	COMPLETE ON BHB3449. 08/12/2011. Added per SSCN 11947
51339	SSCN 12088; Mod 1634	EFA Filters (Spare)	SV1018042-1	4	EA	FLT		HSSSI	HSSSI	04/15/10	COMPLETE ON BHB3285. 03/31/2010. Added per SSCN 12088
51340	SSCN 12140; Letter 10-	Adapter Assy, FSS-402-1	684-015090-001	1	EA	OSE		KSC	KSC	02/05/10	COMPLETE ON BHB3262. 02/01/2010. Added per SSCN 12140
51341	PIO 85; Letter 10-0270	SASA Blanket Kit	1F98549-1	1	KT	FLT		NSSD	NSSD	03/15/10	COMPLETE ON BHB3283. 03/16/2010. Added per PIO 85 on
51342	PIO 85; Letter 10-0270	SASA Blanket Kit	1F98549-1	1	KT	FLT		NSSD	NSSD	03/15/10	COMPLETE ON BHB3284. 03/18/2010. Added per PIO 85 on
51343	SSCN 12161; Letter 10-	Kit, Hydrogen Done Assy-ORU, Launch Cover	PLSV28789	1	KT	FLT		HSSSI	HSSSI	02/09/10	COMPLETE ON BHB3267. 02/03/2010. Added per SSCN 12161
51344	SSCN 12085; Mod 1633	MDM, PVCU	8260525-909	1	EA	FLT		HI	KSC	04/23/10	COMPLETE ON BHB3307. 06/07/2010. Added per SSCN 12085
51345	SSCN 12085; Mod 1633	MDM Assembly, Upper	R071818-41	1	EA	FLT		KSC	KSC	06/04/10	COMPLETE ON BHB3306. 07/21/2010. Added per SSCN 12085
51346	SSCN 12085; Mod 1633	MDM Assembly, Lower	R071826-1	1	EA	FLT		KSC	KSC	06/28/10	COMPLETE ON BHB3366. 03/07/2011. Added per SSCN 12085
51348	SSCN 11801; CCO 1636	Mod Kit, Cable, Power, Heater - Airlock	684-015108-0001	1	KT	FLT		BHOU	BHOU	07/16/10	COMPLETE ON BHB3299. 06/04/2010. Added per SSCN 11801
51352	SSCN 11947; S/A 1658	Mod Kit, Cable, Ethernet - Node 3	684-015146-0001	1	KT	FLT		BHOU	BHOU	11/01/10	COMPLETE ON BHB3339. 12/01/2010. Added per SSCN 11947
51353	SSCN 11947; S/A 1658	Mod Kit, Cable, Ethernet - Cupola	684-015147-0001	1	KT	FLT		BHOU	BHOU	11/01/10	COMPLETE ON BHB3340. 12/01/2010. Added per SSCN 11947
51354	SSCN 12216; S/A 1656	Mod Kit, Grapple Bar Assembly, FRGF Re-Clock	684-015151-0001	1	KT	FLT		KSC	KSC	01/31/12	COMPLETE ON BHB3465. 12/15/2011. Added per SSCN 12216
51357	SSCN 12270; CO Email	Cable Assy Power - Contingency, Node 1 (W5161)	684-015161-0001	1	EA	FLT		KSC	KSC	05/28/10	COMPLETE ON BHB3288. 05/04/2010. Added per SSCN 12270
51366	SSCN 10990; Letter 10-	(iAPS), On-Orbit	384-014201-0001	1	KT	FLT		SEAKR	SEAKR	02/24/10	COMPLETE ON BHB3318. 007/21/2010. Added per DIL 51193
51367	SSCN 10990; Letter 10-	Mod Kit - Improved Automated Payload Switch	684-014201-0501	1	KT	FLT		SEAKR	SEAKR	06/30/10	COMPLETE ON BHB3324. 09/17/2010. Added per DIL 51194 split
51368	SSCN 12398; Mod 1651	Modification Kit, Catalytic Reactor (as Installed)	SVK1019033-1	1	KT	FLT		HSSSI	HSSSI	10/15/10	COMPLETE ON BHB3331. 10/12/2010. Added per SSCN 12398
51369	SSCN 12398; Mod 1651	Modification Kit, Catalytic Reactor	SVK1019033-1	1	KT	FLT		HSSSI	HSSSI	10/15/10	COMPLETE ON BHB3345. 12/15/2010. Added per SSCN 12398
51371	SSCN 12465; Mod 1685	LMC Mechanical Installation Kit	683-93070-1	1	KT	FLT		BHOU	BHOU	03/03/11	COMPLETE ON BHB3367. 03/11/2011. Added per SSCN 12465
51372	SSCN 12455; S/A 1701	Mod Kit, Cable, Power, External - FGB	684-015330-0001	1	KT	FLT		BHOU	BHOU	03/16/11	COMPLETE ON BHB3351. 02/11/2011. Added per SSCN 12455
51375	SSCN 12446; S/A 1742	Mod Kit, Treadmill Two - Vibration Isolation System	684-015962-0001	1	KT	FLT		BHOU	BHOU	07/15/11	COMPLETE ON BHB3435. 07/29/2011. Added per SSCN 12446
51466	SSCN 12644; S/A 1713	Mod Kit, Cable, 1553 Bus - Node 2 Vestibule	684-TBD	1	KT	FLT		BHOU	BHOU	09/29/11	COMPLETE ON BHB3437. 07/27/2011. Added per SSCN 12644
51467	SSCN 10395; S/A 1769	Cable Assy, Power - MLM, Channel 1/4 Russian	684-015630-0001	1	EA	FLT		BHOU	BHOU	12/20/11	COMPLETE ON BHB3467. 12/20/2011. Added per SSCN 10395
51468	SSCN 10395; S/A 1769	Cable Assy, Power - MLM, Channel 2/3 Russian	684-015631-0001	1	EA	FLT		BHOU	BHOU	12/20/11	COMPLETE ON BHB3470. 12/20/2011. Added per SSCN 10395
51469	SSCN 10395; S/A 1769	Mod Kit, Cable, Power, External - MLM	684-015627-0001	1	KT	FLT		BHOU	BHOU	03/22/12	COMPLETE ON BHB3471. 01/17/2012. Added per SSCN 10395
51470	SSCN 12721; S/A 1717	Contingency Maintenance Kit, 1553/Memory, CCA	684-015601-0001	1	KT	FLT		BHOU	BHOU	04/01/11	COMPLETE ON BHB3370. 04/01/2011. Added per SSCN 12721
51471	SSCN 12721; S/A 1717	Contingency Maintenance Kit, EDP CCA	684-015602-0001	1	KT	FLT		BHOU	BHOU	04/01/11	COMPLETE ON BHB3370. 04/01/2011. Added per SSCN 12721
51472	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA), 1553	684-015830-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3561. 03/29/2013. Changed delivery date per
51473	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015832-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3558. 04/03/2013. Changed delivery date per
51474	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015831-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3559. 03/29/2013. Changed delivery date per
51475	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Changed quantity per
51476	SSCN 12443; S/A 1771	Mod Kit, ELC Wireless Communications, WAP - US	684-015641-0001	1	KT	FLT		BHOU	BHOU	03/26/12	COMPLETE ON BHB3484. 03/26/2012. Added per SSCN 12443
51477	SSCN 12443; S/A 1771	Access Point Assy, Wireless - EWC	684-015639-0001	11	EA	FLT		BHOU	BHOU	05/25/12	COMPLETE ON BHB3495. 05/25/2012. Partial shipment 2 of 11
51478	SSCN 12443; S/A 1771	EVA Handrail/Antenna Assy - External Wireless	684-015274-0001	1	EA	FLT		BHOU	BHOU	03/26/12	COMPLETE ON BHB3485. 03/26/2012. Added per SSCN 12443
51479	SSCN 12443; S/A 1771	EVA Handrail/Antenna Assy - External Wireless	684-015274-0501	1	EA	FLT		BHOU	BHOU	03/26/12	COMPLETE ON BHB3485. 03/26/2012. Added per SSCN 12443
51480	SSCN 12443; S/A 1771	Antenna Assy - External Wireless System	684-015275-0001	2	EA	FLT		BHOU	BHOU	03/26/12	COMPLETE ON BHB3485. 03/26/2012. Added per SSCN 12443
51481	SSCN 12443; S/A 1771	Cable Assy, Power, WAP - EWC	684-015642-0001	6	EA	FLT		BHOU	BHOU	05/25/12	COMPLETE ON BHB3498. 05/25/2012. Partial shipment 2 of 6 on
51482	SSCN 12443; S/A 1771	Cable Assy, Coax, Antenna - Payload	684-015637-0001	10	EA	FLT		BHOU	BHOU	05/25/12	COMPLETE ON BHB3500. 05/25/2012. Added per SSCN 12443
51483	SSCN 12443; S/A 1771	Antenna, Payload - EWC	684-015636-0001	10	EA	FLT		BHOU	BHOU	05/25/12	COMPLETE ON BHB3499. 02/08/2013. Added per SSCN 12443
51484	SSCN 12443; S/A 1771	Interface Card, Network - EWC	684-015644-0001	12	EA	FLT		BHOU	BHOU	05/25/12	COMPLETE ON BHB3496. 05/25/2012. Added per SSCN 12443
51487	SSCN 12693; S/A 1736	Protective Cap	NATC-RPC-N-13-	12	EA	FLT		KSC	KSC	10/24/11	COMPLETE ON BHB3492. 06/18/2012. Added per SSCN 12693
51488	SSCN 12753; S/A 1720	Cover Assembly, Recycle Tank - ARFTA	683-99713-1	2	EA	FLT		BHOU	BHOU	06/10/11	COMPLETE ON BHB3402. 05/26/2011. Added per SSCN 12753
51489	SSCN 12753; S/A 1720	Cover Assembly, Recycle Tank - ARFTA	683-99713-1	1	EA	FLT		BHOU	BHOU	07/15/11	COMPLETE ON BHB3420. 06/23/2011. Added per SSCN 12753
51497	SSCN 12358; Letter 11-	Contingency Kit, PMA 3 Cover	684-015697-0001	1	KT	FLT		BHOU	BHOU	05/27/11	COMPLETE ON BHB3401. 05/27/2011. Added per letter 11-
51502	SSCN 12673; S/A 1733	Kit, Drive Lock Assembly Cover	684-015797-0001	2	KT	FLT		BHOU	BHOU	03/08/12	COMPLETE ON BHB3477. 03/02/2012. Added per SSCN 12673
51504	SSCN 12648; S/A 1738	MDM, EPIC, EXT	684-015894-0001	1	KT	FLT		HI	HI	10/15/12	COMPLETE ON BHB3524. 10/11/2012. Added per SSCN 12648
51505	SSCN 12648; S/A 1738	MDM, EPIC, EXT	684-015895-0001	1	KT	FLT		HI	HI	11/15/12	COMPLETE ON BHB3529. 11/08/2012. Added per SSCN 12648
51506	SSCN 12648; S/A 1738	MDM, EPIC, EXT (Spare Card)	8275155-901	1	EA	FLT		HI	HI	12/14/12	COMPLETE ON BHB3533. 12/05/2012. Added per SSCN 12648
51509	SSCN 10553; Letter 11-	Front Cover	8275222-901	2	EA	FLT		HI	HI	12/16/10	COMPLETE ON BHB3432. 06/27/2011. Ship short on BHB3393
51510	SSCN 10553; Letter 11-	MDM Card Spare	8275155-901	1	EA	FLT		HI	HI	12/16/10	COMPLETE ON BHB3431. 06/27/2011. Added per DIL 51112 split
51511	SSCN 12810; S/A 1743	Insulation Kit - SPCU HX	684-016801-0001	4	KT	FLT		BHOU	BHOU	04/30/12	COMPLETE ON BHB3481. 03/09/2012. Added per SSCN 12810
51611	SSCN 12443; S/A 1771	Antenna, Internal - EWC	684-017259-0001	20	EA	FLT		BHOU	BHOU	05/25/12	COMPLETE ON BHB3497. 05/25/2012. Added per SSCN 12443
51582	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA), 1553	684-015833-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3561. 03/29/2013. Changed delivery date per
51583	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015827-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3558. 04/03/2013. Changed delivery date per
51576	SSCN 12831; S/A 1834	Wire Harness Assy, EPS Y-Jumper, W5211	683-95211-1	1	EA	FLT		BHOU	BHOU	07/02/12	COMPLETE ON BHB3509. 07/02/2012. Added per SSCN 12831

J-27 DIL - COMPLETED LINE ITEMS

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51577	SSCN 12831; S/A 1834	Wire Harness Assy, OGS Converter Jumpers,	683-95212-1	1	EA	FLT	(b) (4)	BHOU	BHOU	09/06/12	COMPLETE ON BHB3518. 08/27/2012. Added per SSCN 12831
51578	SSCN 12831; S/A 1834	Wire Harness Assy, OGS Converter Jumpers,	683-95212-2	1	EA	FLT		BHOU	BHOU	09/06/12	COMPLETE ON BHB3518. 08/27/2012. Added per SSCN 12831
51579	SSCN 12831; S/A 1834	Wire Harness Assy, EPS H-Jumper, W5213	683-95213-1	1	EA	FLT		BHOU	BHOU	11/09/12	COMPLETE ON BHB3526. 10/29/2012. Added per SSCN 12831
51580	SSCN 12831; S/A 1834	Wire Harness Assy, Node 3 EPS XOVER Jumper,	683-95214-1	1	EA	FLT		BHOU	BHOU	01/30/13	COMPLETE ON BHB3535. 12/07/2012. Added per SSCN 12831
51584	SSCN 12422; S/A 1785	Bypass Cable, Utility Transfer Assembly (UTA),	684-015834-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3559. 03/29/2013. Changed delivery date per
51585	SSCN 12816; S/A 1754	Mod Kit, Cable, Ethernet, External – MLM	684-015947-0001	1	KT	FLT		MOSCOW	MOSCOW	05/21/12	COMPLETE ON BHB3519. 09/26/2012. Changed destination per
51597	SSCN 12637; S/A 1777	Kit, Waste and Hygiene Compartment	684-017251	1	KT	FLT		BHOU	BHOU	08/31/12	COMPLETE ON BHB3514. 08/15/2012. Added per SSCN 12637
51618	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3570. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51619	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3570. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51620	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT		BHOU	BHOU	06/29/13	COMPLETE ON BHB3571. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51621	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT		BHOU	BHOU	06/29/13	COMPLETE ON BHB3571. 06/25/2013. Added per SSCN 12441 definitized on S/A 1802.
51622	SSCN 12441; S/A 1802	VIA Assembly, N2- NORS	684-015187-0001	5	EA	FLT		BHOU	BHOU	08/29/13	COMPLETE ON BHB3581. 08/28/2013. Added per SSCN 12441 definitized on S/A 1802.
51623	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT		BHOU	BHOU	08/29/13	COMPLETE ON BHB3581. 08/28/2013. Added per SSCN 12441 definitized on S/A 1802.
51625	SSCN 12441; S/A 1802	VIA Assembly, O2- NORS	684-015310-0001	1	EA	FLT		BHOU	BHOU	10/28/13	COMPLETE ON BHB3606. 10/23/2013. Added per SSCN 12441 definitized on S/A 1802.
51630	SSCN 12441; S/A 1802	Thermal Blanket, Assy, Aft	684-015303-0001	1	EA	FLT		BHOU	BHOU	06/15/13	COMPLETE ON BHB3568. 06/10/2013. Added per SSCN 12441
51631	SSCN 12441; S/A 1802	Thermal Blanket, Forward	684-015305-0001	1	EA	FLT		BHOU	BHOU	06/29/13	COMPLETE ON BHB3568. 06/10/2013. Added per SSCN 12441
51632	SSCN 13005; S/A 1778	Spacer Bar Assembly – T2 VIS	1F16169-1	1	EA	FLT		BHOU	BHOU	09/12/11	COMPLETE ON BHB3458. 09/12/2011. Added per SSCN 13005
51633	SSCN 10553; S/A 1782	Front Cover	8275222-901	1	EA	FLT		HI	HI	11/11/11	COMPLETE ON BHB3464. 11/08/2011. Added per SSCN 10553
51634	SSCN 12803; S/A 1859	ARFTA Protective Cap	683-99713-1	3	EA	FLT		BHOU	BHOU	09/04/12	COMPLETE ON BHB3511. 08/02/2012. Added per SSCN 12803
51635	SSCN 10773; S/A 1809	Modification Kit, Gas Cylinder, ORU8	360407-002	3	KT	FLT		HSSSI	HSSSI	06/15/12	COMPLETE ON BHB3542. 03/08/2013. Added per SSCN
51675	SSCN 12202; S/A 1792	Assembly, Tie-down, Rear	684-017037-0001	3	EA	FLT		BHOU	KSC	08/15/19	COMPLETE ON BHB3488. 04/20/2012. Added per SSCN 12202
51677	SSCN 13070; S/A 1786	EPIC On-Orbit Tester	TBD	2	EA	FLT		BHOU	BHOU	12/13/11	COMPLETE ON BHB3469. 01/25/2012. Partial on BHB3468 dated
51679	SSCN 12283; S/A 1820	Power Distribution Unit	11M156M/FGB2	1	EA	FLT		MOSCOW	MOSCOW	10/15/12	COMPLETE ON BHB3520. 09/20/2012. Added per SSCN 12283
51680	SSCN 12283; S/A 1820	Main Bus Assembly	БСШ-2/FGB2	1	EA	FLT		MOSCOW	MOSCOW	10/15/12	COMPLETE ON BHB3520. 09/20/2012. Added per SSCN 12283
51681	SSCN 12283; S/A 1820	Filter Unit	БФ-2/FGB2	1	EA	FLT		MOSCOW	MOSCOW	10/15/12	COMPLETE ON BHB3520. 09/20/2012. Added per SSCN 12283
51682	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT		HI	HI	02/15/13	COMPLETE ON BHB3546. 01/10/2013. Added per SSCN 13062
51683	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT		HI	HI	04/15/13	COMPLETE ON BHB3549. 02/14/2013. Added per SSCN 13062
51684	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT		HI	HI	06/14/13	COMPLETE ON BHB3563. 04/23/2013. Added per SSCN 13062
51685	SSCN 13062; S/A 1833	MDM Card	8275155	1	EA	FLT		HI	HI	08/15/13	COMPLETE ON BHB3567. 06/07/2013. Added per SSCN 13062
51686	SSCN 13047; S/A xxxx	PMA-2 Thermal/MMOD Cover	684-TBD-0001	1	EA	FLT		BHOU	BHOU	05/11/12	COMPLETE ON BHB3491. 05/04/2012. Added per SSCN 13047
51687	SSCN 13123; S/A 1809	Mod Kit, LwAPA	684-TBD-0001	1	KT	FLT		KSC	KSC	04/18/12	COMPLETE ON BHB3487. 04/17/2012. Added per SSCN 13123
51688	SSCN 13096; S/A 1839	Modification Kit, WPA Waste Water ORU	TBD	1	KT	FLT		HSSSI	HSSSI	03/20/13	COMPLETE ON BHB3547. 01/16/2013. Added per SSCN 13096
51690	SSCN 13184; S/A 1824	Modification Kit, Heater Mat MLI and Handrail	684-017454-0001	1	EA	FLT		KSC	KSC	07/10/12	COMPLETE ON BHB3507. 06/22/2012. Added per SSCN 13184
51704	SSCN 13243; S/A 1842	Mod Kit, Cable-Data-Node 2 Vestibule	684-017966-0001	1	KT	FLT		BHOU	BHOU	06/15/12	COMPLETE ON BHB3502. 05/24/2012. Added per SSCN 13243
51705	SSCN 13245; S/A 1841	ELC Jumper Cables, On-Orbit Non-Standard Repair	684-017986-0001	1	KT	FLT		KSC	KSC	05/22/12	COMPLETE ON BHB3501. 05/22/2012. Added per SSCN 13245
51708	SSCN 13204; S/A 1887	Mod Kit, Cable - SpaceX	684-018022-0001	1	KT	FLT		BHOU	BHOU	01/30/13	COMPLETE ON BHB3548. 01/30/2013. Added per SSCN 13204
51716	SSCN 13276S/A 1852	Passive FRAM Modification	684-018072	1	EA	FLT		BHOU	BHOU	06/29/12	COMPLETE ON BHB3508. 06/27/2012. Changed destination per
51718	SSCN 13300; S/A 1874	Assy- Stanchion Panel	TBD	1	EA	FLT		BHOU	BHOU	02/20/13	COMPLETE ON BHB3550. 02/05/2013. Added per SSCN 13300
51719	SSCN 13300; S/A 1874	Assy- Connector Cover Panel	TBD	1	EA	FLT		BHOU	BHOU	02/20/13	COMPLETE ON BHB3550. 02/05/2013. Added per SSCN 13300
51738	SSCN 13312; S/A 1900	TBD – Maintenance Kit, MBSU, I-Level Repair	684-TBD-0001	1	EA	FLT		BHOU	BHOU	07/21/13	COMPLETE ON BHB3572. 07/15/2013. Added per SSCN 13312 definitized on S/A 1900.
51828	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0501	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51829	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0503	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51830	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0505	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51831	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0507	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51832	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0509	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51833	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0511	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51834	SSCN 12422; Letter 12-	Bypass Cable, Utility Transfer Assembly (UTA),	684-015838-0513	1	EA	FLT		BHOU	BHOU	06/28/13	COMPLETE ON BHB3560. 03/29/2013. Added per letter 13-
51820	SSCN 13544; S/A 1915	Cable Assy, Power, WAP- EWC (W5642)	684-015642-0501	4	EA	FLT		BHOU	BHOU	11/30/12	COMPLETE ON BHB3532. 11/30/2012. Ship short on BHB3530.
51845	SSCN 13773; S/A 1994	CCAA FSE Modification Kit	TBD	1	Kt	FLT		KSC	KSC	10/07/13	COMPLETE ON BHB3598. 09/25/2013. Added per SSCN 13773 definitized on S/A 1994.

J-27 DIL - COMPLETED LINE ITEMS					
--	--	--	--	--	--

DIL ID Number	CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
51865	SSCN 13859; S/A 2008	Passive FRAM - Modification	684-TBD	1	EA	FLT	(b) (4)	BHOU	BHOU	08/15/13	COMPLETE ON BHB3576. 07/22/2013. Added per SSCN 13859 definitized on S/A 2008.
100xxx Series											
100800	05-0057; S/A 1306; CCM	MODIFICATION KIT, RADIATOR ASSY, MDM -	N/A	1	KT	FLT		FLT	KSC	03/24/05	COMPLETE ON BHB2829. 05/09/2006. Ship short on BHB1960
100801	05-0057; S/A 1306; CCM	MODIFICATION KIT, RADIATOR ASSY, MDM -	N/A	1	KT	FLT		FLT	KSC	03/24/05	COMPLETE ON BHB2835. 05/09/2006. Ship short on BHB2587
101427	S/A 1275; SSCN 5778	MOD KIT, ACBSP, VOICE OVER LOW DATA RATE	N/A	1	KT	FLT		FLT	GDC4S	12/15/05	COMPLETE ON BHB2751. 12/15/2005. Nomenclature,
101428	S/A 1275; SSCN 5778	MOD KIT, ACBSP, VOICE OVER LOW DATA RATE	N/A	1	KT	FLT		FLT	GDC4S	12/15/05	COMPLETE ON BHB2752. 12/15/2005. Destination and delivery
101429	S/A 1275; SSCN 5778	MOD KIT, ACBSP, VOICE OVER LOW DATA RATE	N/A	1	KT	FLT		FLT	GDC4S	12/15/05	COMPLETE ON BHB2753. 12/15/2005. Destination and delivery
101430	S/A 1275; SSCN 5778	MOD KIT, TRANSPONDER, VOICE OVER LOW	N/A	1	KT	FLT		FLT	GDDS	09/22/04	COMPLETE ON BHB2483. 09/22/2004. Added per Boeing Ltr 2-
101431	S/A 1275; SSCN 5778	MOD KIT, TRANSPONDER, VOICE OVER LOW	N/A	1	KT	FLT		FLT	GDDS	09/22/04	COMPLETE ON BHB2484. 09/22/2004. Added per Boeing Ltr 2-
101432	S/A 1275; SSCN 5778	MOD KIT, TRANSPONDER, VOICE OVER LOW	N/A	1	KT	FLT		FLT	GDDS	09/22/04	COMPLETE ON BHB2485. 09/22/2004. Added per Boeing Ltr 2-
End of List											

J-27 DIL - DELETED LINE ITEMS										
CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
Pxx Series PIOs										
	Fitting Assembly - PVR (Accumulator Attachment Fitting)	83-42132-105	5	EA		(b) (4)		KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fitting Assembly - PVR (Accumulator Attachment Fitting)	83-42132-107	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Support, HEATER Controller - PVR	83-48373-101	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fixed Pulley Assembly, Torque Panel/Arm - PVR	83-42103-101	15	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fixed Pulley Assembly, Torque Panel/Arm - PVR	83-42103-105	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Mast Assembly - PVR	83-42064-101	10	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Cover Hinge Assembly - PVR (Outboard Hinge, Radiator Panel #1 - Torque Panel Side)	83-42026-101	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Cover Hinge Assembly - PVR (Outboard Hinge, Radiator Panel #1 - Torque Panel Side)	83-42026-102	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Fitting, Compression ShEAR -PVR	83-42192-101	20	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Lug Hinge Assembly, Radiator Panel - PVR (Inboard Hinge, Panel 1 Side)	83-42035-101	10	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge, Inboard Torque Panel - PVR (Inboard Hinge, Torque Panel Side)	83-42108-101	10	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge, Outboard Torque Panel - PVR (Outboard Hinge, Torque Panel Side)	83-42107-101	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge, Outboard Torque Panel - PVR (Outboard Hinge, Torque Panel Side)	83-42107-102	5	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Hinge Assy - HRS RDTR	83-39383-111	21	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Manifold Hinge Assy - HRS RDTR	83-39383-112	21	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Cinch Fitting Assembly - HRS RDTR (Cinch ShEAR/Compression Fitting)	83-45553-101	28	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Pivot Pin, Panel Assy - HRS RDTR	83-39791-101	14	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Panel/Arm Hinge - HRS RDTR	83-39705-103	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Panel/Arm Hinge - HRS RDTR	83-39705-104	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-101	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-102	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-103	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Strut, Outer, Torque Arm/Pnl - HRS RDTR (Torque Arm/Panel Structure - Outer)	83-39563-104	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Deploy Support Bracket, Base Structure - HRS RDTR (Base Structure Deploy Support Fitting)	83-39365-101	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Deploy Support Bracket, Base Structure - HRS RDTR (Base Structure Deploy Support Fitting)	83-39365-107	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-109	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-110	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-111	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-112	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-101	14	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Assy, Base Structure - HRS RDTR	83-39737-102	14	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Pin - HRS RDTR	83-39444-101	14	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Pin - HRS RDTR	83-39444-103	28	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Pin - HRS RDTR	83-39444-115	14	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Arm/Panel Hinge - HRS RDTR	83-39705-101	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Torque Arm/Panel Hinge - HRS RDTR	83-39705-102	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Clevis Assy, Scissor BEAm - HRS RDTR	83-39515-107	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
	Hinge Clevis Assy, Scissor BEAm - HRS RDTR	83-39515-108	7	EA				KSC/PPS	12/31/04	Deleted per SA 1265; STOP WORK PER NASA LETTER BG-04-070
MOD 1084; MOD 938; CCO 848; R812; P342	CONTROLLER ASSY.	TBD	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04; SHIPPED SHORT 2 EA. DD250 BHB1253 (1 EA) SHIPPED ADP ONLY; DD250 BHB1105 (1 EA) SHIPPED SHORT IPL AND ADP
MOD 1084; MOD 938; CCO 848; R812; P342	CPU PWA	683-61565-1	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	DAC PWA	683-61696-1	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-1	5	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 4 EA.DD250 BHB1191 (1 EA) ADP ONLY; DD250 BHB1121 (1 EA) SHIPPED SHORT IPL AND ADP

CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-2	5	EA		(b) (4)		KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;DD250 BHB1537 1 EA; SHIPPED SHORT 3 EA.DD250 BHB1187 (1 EA) ADP ONLY; DD250 BHB1125 (1 EA) SHIPPED SHORT IPL AND ADP; DD250 BHB1538 ADP
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-3	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 1 EA.DD250 BHB1188 (1 EA) ADP ONLY; DD250 BHB1124 (1 EA) SHIPPED SHORT IPL AND ADP
MOD 1084; MOD 938; CCO 848; R812; P342	ACTUATOR ASSEMBLY	683-61592-4	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 1 EA. DD250 BHB1189 (1 EA) ADP ONLY; DD250 BHB1123 (1 EA) SHIPPED SHORT IPL AND ADP
MOD 1084; MOD 938; CCO 848; R812; P342	ACCELEROMETER BOARD PWA	683-61622-1	2	EA				KSC/PPS	7/31/05	STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	ACCELEROMETER ASSY.	683-61720-1	4	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;SHIPPED SHORT 14 EA. DD250 BHB1192 (1 EA) ADP ONLY; DD250 BHB1102 (1 EA) SHIPPED SHORT IPL & ADP. ORU
MOD 1084; MOD 938; CCO 848; R812; P342	AMPLIFIER INTERFACE PWA	683-61560-1	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
MOD 1084; MOD 938; CCO 848; R812; P342	POWER SECTION PWA	683-61609-1	2	EA				KSC/PPS	7/31/05	Deleted per SSCN 8847 per SA 1310; STOP WORK per NASA letter BG-04-225 dated 07/28/04;REPAIR PARTS
S/A 1338	DPM1250	CAP,DUST	2	EA	270			KSC/PPS	11/1/04	Deleted per Boeing Credit proposal letter 2-1150-05-0249 dated 9/30/05 to NASA, definitized on S/A 1338.
20xxx Series PIOs										
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT	(b) (4)	HSSSI	KSC	01/29/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	03/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	05/31/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	07/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	09/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	11/30/10	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	01/31/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	03/30/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	05/30/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	07/29/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Multifiltration Bed	SV825452-1	1	EA	FLT		HSSSI	KSC	09/30/11	Deleted per NASA letter 10-023 dated 02/24/2010. Added per PIO 92/SSCN 10622 on Mod 1552.
PIO 92/SSCN 10622; Mod 1552 (H.57)	Inlet Deionizing Bed	SV825569-1	1	EA	FLT		HSSSI	KSC	03/29/13	Deleted per PIO 92 credit definitized on S/A 2024. Delivery date changed per letter 12-010848 concurrence dated 08/02/12. Added per PIO 92/SSCN 10622 on Mod 1552
PIO 92/SSCN 10622; Mod 1552 (H.57)	Microbial Valve Check	SV825499-1	1	EA	FLT		HSSSI	KSC	03/29/13	Deleted per PIO 92 credit definitized on S/A 2024. Added per PIO 92/SSCN 10622 on Mod 1552
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827939-1	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827940-1	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827940-2	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827940-3	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-1	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-2	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-3	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV827941-4	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.

CHANGE NUMBER	NOMENCLATURE	PART NUMBER	QTY	UNIT OF ISSUE	HWD TYPE	TOTAL COST	DD 250 POINT	DESTINATION	DELIVERY DATE	REMARKS / DELIVERY INFO
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828011-1	1	EA	FLT	(b) (4)	HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828011-2	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828012-1	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828012-2	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828012-3	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-1	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-2	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-3	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828019-4	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
PIO 95; Mod 1557 (H.57)	WPA System Hose	SV828021-1	1	EA	FLT		HSSSI	KSC	06/30/11	Deleted per letter 10-0456R2 concurrence dated 10/29/2010. Added per PIO 95 on Mod 1557.
4xxx Series										
01-670	MT CETA RAILS (STARBOARD)	N/A	1	EA		(b) (4)	FLT	KSC	5/7/04	Deleted per definitization of credit for MT CETA Rails on Mod 1431
10xxx Series										
						(b) (4)				
30xxx Series										
SSCN 6647A; BG-04-102	DEAD FACE CONNECTOR ASSEMBLY	N/A	5	EA		(b) (4)	FLT	BMSFC	3/17/04	Deleted per NASA Ltr BG-04-102 on 3/22/04. NOTE 1;
SSCN 6647A; BG-04-102	DEAD FACE CONNECTOR ASSEMBLY	N/A	1	EA			FLT	BMSFC	4/9/04	Deleted per NASA Ltr BG-04-102 on 3/22/04. NOTE 1;
SSCN 6647A; BG-04-102	CABLE 1553 TERMINATION ASSEMBLY	N/A	2	EA			FLT	BMSFC	7/19/04	Deleted per NASA Ltr BG-04-102 on 3/22/04. NOTE 1;
SSCN 6647A; SA1236	WIRE HARNESS ASSY. W7002	N/A	2	EA			FLT	BMSFC	3/17/04	Deleted per SA 1236. NOTE 1
SSCN 6647A; SA1236	WIRE HARNESS ASSY. W7001	N/A	2	EA			FLT	BMSFC	3/17/04	Deleted per SA 1236. NOTE 1

ATTACHMENT J-29

DIGITAL PRE-ASSEMBLY HARDWARE MEASUREMENT LIST

ATTACHMENT J-29

DIGITAL PRE-ASSEMBLY HARDWARE MEASUREMENT LIST

Digital Pre-Assembly (DPA) measurement and analysis shall be done for the following element interface hardware.

- A. SOW Paragraph 2.5.6.1 DPA Items
 - 1. Complete DPA measurement and analysis of ESP-2, P3/4, P5, P6, S3/4, S5, and S6 element-to-element interfaces.
- B. SOW Paragraph 3.4.1.7.1 DPA Items
 - 1. Complete or partial DPA measurement and analysis of ESA Columbus Module, JAXA JEM PS, JAXA JEM PM, and JAXA JEM ES element-to-element interfaces.
 - 2. Redo DPA measurement and analysis of MPLM FM1 and MPLM FM2 element-to-element interfaces due to hatch replacement.
- C. SOW Paragraph 5.16 DPA Items
 - 1. There are no additional DPA items for paragraph 5.16.
- D. SOW Paragraph 5.26 DPA Items
 - 1. Redo DPA measurement and analysis of Node 2 element-to-element interfaces due to hatch replacement.



International Space NAS15-10000 ATTACHMENT J-30

ORGANIZATIONAL CONFLICTS OF INTEREST (OCI) AVOIDANCE PLAN Rev. B

DATE: 09/13/2013

Submitted to: National Aeronautics and Space
Johnson Space Center Administration
Contract No. NAS15-10000

BOEING PROPRIETARY

REVISION AND HISTORY PAGE

REV	DESCRIPTION	PUB DATE
-	<i>Initial Release</i>	<i>03-08-07</i>
A	<i>Revision A</i>	<i>04-28-11</i>
B	<i>Revision B – Add to Appendix B (Matrix Summary Page B-2), and Add Appendix E</i>	<i>09-13-13</i>

**INTERNATIONAL SPACE STATION PROGRAM
ORGANIZATIONAL CONFLICTS OF INTEREST (OCI) AVOIDANCE PLAN
EFFECTIVE WITH LAST SIGNATURE**

CONCURRENCE

BY:

(b) (4)

Boeing, Contract/OCI Administrator
International Space Station Program


(b) (4)

9/13/2013
DATE

APPROVED BY NASA:

Janet

Jenny G. Arkinson
NASA, Contracting Officer
Space Station Procurement Office


SIGNATURE

09-26-13
DATE

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)