SOLICITATION, OFFER AND AWARD	THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING DO-C9	PAGE SEE SECTION 11 BELOW

2. CONTRACT NO.	3. SOLICITATION NO.	4. TYPE OF SOLICITATION	5. DATE ISSUED	6. REQUISITION/PURCHASE NO.
NNJ11JA16B	NNJ09244782R	☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)	October 16, 2009	4200359390 & 4200360204

7. ISSUED BY CODE BJ2/JPF
NASA Lyndon B. Johnson Space Center
BJ2/Jennifer L. Krause
2101 NASA Parkway
Houston, TX 77058-3696

8. ADDRESS OFFER TO (If other than Item 7)
(Refer to Section L.13 of this solicitation)

APPROVED
JSC PROCUREMENT OFFICER
11/15/10
DATE

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

SOLICITATION

9. Sealed offers in original and copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, at the Lyndon B. Johnson Space Center, until **2:00 p.m.**, local time, on **6/11/2010**. **NOTE**: Volume IV, Model Contract is due at the place specified in Item 8, at the Lyndon B. Johnson Space Center, until **2:00 p.m.**, local time, on **6/3/2010**. For further information, see Provision L.13, Provision L.19.2, and the Government's Request for Final Proposal Revisions. CAUTION - LATE Submissions, Modifications, and Withdrawals: See Provision L.1 (FAR 52.215-1). All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO. (NO COLLECT CALLS) AREA CODE	NUMBER	EXT.	C. EMAIL ADDRESS
	Jennifer L. Krause	281	244-2379		jennifer.krause-1@nasa.gov

11. TABLE OF CONTENTS

(X)	SEC.	DESCRIPTION	PAGE	(X)	SEC.	DESCRIPTION	PAGE
PART I – THE SCHEDULE				**PART II – CONTRACT CLAUSES**			
☒	A	SOLICITATION/CONTRACT FORM		☒	I	CONTRACT CLAUSES	I-1
☒	B	SUPPLIES OR SERVICES AND PRICES/COSTS	B-1	**PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.**			
☒	C	DESCRIPTION/SPECS/WORK STATEMENT	C-1	☒	J	LIST OF ATTACHMENTS	J-1
☒	D	PACKAGING AND MARKING	D-1	**PART IV – REPRESENTATIONS AND INSTRUCTIONS**			
☒	E	INSPECTION AND ACCEPTANCE	E-1	☒	K	REPRESENTATIONS, CERTIFICATIONS AND	K-1
☒	F	DELIVERIES OR PERFORMANCE	F-1			OTHER STATEMENTS OF OFFERORS	
☒	G	CONTRACT ADMINISTRATION DATA	G-1	☒	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	L-1
☒	H	SPECIAL CONTRACT REQUIREMENTS	H-1	☒	M	EVALUATION FACTORS FOR AWARD	M-1

OFFER *(Must be fully completed by offeror)*

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within 180 (per Provision L.16) calendar days *(60 calendar days unless a different period is inserted by the offeror)* from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT *(See Section I, clause No. 52-232-8)*	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %

14. ACKNOWLEDGMENT OF AMENDMENTS *(The offeror acknowledges receipt of amendments to the SOLICITATION).* For offerors and related documents numbered and dated:

AMENDMENT NO	DATE	AMENDMENT NO	DATE
1	10/21/09	4	11/13/09
2	11/6/09	5	4/22/10
3	11/10/09	6	5/26/10

15. NAME AND ADDRESS OF OFFEROR — CODE 3CD16 FACILITY
DB Consulting Group, Inc.
8403 Colesville road, 10th Floor
Silver Spring, MD 20190

16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*
Gerald B. Boyd, Jr.
Chief Executive Officer

15B. TELEPHONE NO. *(Include area code)*	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE – ENTER ☐ SUCH ADDRESS IN SCHEDULE	17. SIGNATURE	18. OFFER DATE
301-589-4020 ext. 107		for Gerald Boyd	11/12/10

AWARD *(To be completed by Government)*

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
		See Purchase Requests 4200359390 & 4200360204

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION
☐ 10 U.S.C. 2304(c) ( ) ☐ 41 U.S.C. 253(c) ( )

23. SUBMIT INVOICES TO ADDRESS SHOWN IN: *(4 copies unless otherwise specified)* — ITEM Clause G.2

24. ADMINISTERED BY *(If other than Item 7)* CODE

25. PAYMENT WILL BE MADE BY CODE
NASA Shared Services Center (NSSC)
Financial Management Division(FMD) – Accounts Payable
Bldg. 1111, C. Road
Stennis Space Center, MS 39529

26. NAME OF CONTRACTING OFFICER *(Type or print)*	27. UNITED STATES OF AMERICA	28. AWARD DATE
Jennifer L. Krause	Jennifer L Krause *(Signature of Contracting Officer)*	11/15/10

IMPORTANT – Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

TABLE OF CONTENTS

SECTION A – SOLICITATION/CONTRACT FORM, SF33		PAGE
A.1	STANDARD FORM 33	A-1
A.2	TABLE OF CONTENTS	A-2
PART I – THE SCHEDULE		
SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS		
B.1	LISTING OF CLAUSES INCORPORATED BY REFERENCE	B-1
B.2	SCHEDULE OF SUPPLIES AND/OR SERVICES TO BE PROVIDED	B-1
B.3	ESTIMATED COST AND INCENTIVE FEE	B-1
B.4	CONTRACT FUNDING	B-2
B.5	CONTRACT VALUE	B-2
B.6	FIRM-FIXED PRICE (CONTRACT PHASE-IN)	B-2
B.7	MINIMUM AND MAXIMUM IDIQ CONTRACT VALUE	B-2
B.8	COST AND INCENTIVE FEE	B-3
B.9	IDIQ RATE TABLE AND ESTIMATING METHODOLOGY	B-4
SECTION C – DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK		
C.1	SPECIFICATIONS/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	D-1
SECTION E – INSPECTION AND ACCEPTANCE		
E.1	LISTING OF CLAUSES INCORPORATED BY REFERENCE	E-1
E.2	GOVERNMENT CONTRACT QUALITY ASSURANCE FUNCTIONS	E-1
E.3	INSPECTION AND ACCEPTANCE	E-1
E.4	QUALITY ASSURANCE SURVEILLANCE PLAN	E-1
SECTION F – DELIVERIES AND PERFORMANCE		
F.1	LISTING OF CLAUSES INCORPORATED BY REFERENCE	F-1
F.2	BILLS OF LADING	F-1
F.3	FLIGHT ITEM	F-2
F.4	COMPLETION OF WORK	F-2
F.5	PHASE-IN AND PHASE-OUT	F-2
F.6	METHOD OF PLACING TASK ORDERS	F-3
F.7	OPTION TO EXTEND COMPLETION DATE	F-3
F.8	PLACE OF PERFORMANCE	F-4
F.9	SHIPPING INSTRUCTIONS	F-5

SECTION G – CONTRACT ADMINISTRATION DATA		
G.1	LISTING OF CLAUSES INCORPORATED BY REFERENCE	G-1
G.2	SUBMISSION OF VOUCHERS FOR PAYMENT	G-1
G.3	DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE	G-2
G.4	TECHNICAL DIRECTION	G-3
G.5	CONTRACTOR REQUESTS FOR GOVERNMENT-PROVIDED PROPERTY (DEVIATION)	G-4
G.6	INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (DEVIATION) (ALT I)	G-5
G.7	FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS	G-6
G.8	IDENTIFICATION AND MARKING OF GOVERNMENT EQUIPMENT (DEVIATION)	G-7
G.9	PROPERTY MANAGEMENT CHANGES (DEVIATION)	G-8
G.10	LIST OF GOVERNMENT PROPERTY FURNISHED PURSUANT TO FAR 52.245-1	G-8
G.11	LIST OF GOVERNMENT PROPERTY FURNISHED PURSUANT TO FAR 52.245-2	G-9
G.12	PHYSICAL INVENTORY OF CAPITAL PERSONAL PROPERTY (DEVIATION)	G-9
G.13	RECORDS AND DISPOSITION REPORTS FOR GOVERNMENT PROPERTY WITH POTENTIAL HISTORIC OR SIGNIFICANT REAL VALUE (DEVIATION)	G-10
G.14	OCCUPANCY MANAGEMENT REQUIREMENTS (DEVIATION)	G-10
G.15	REAL PROPERTY MANAGEMENT REQUIREMENTS (DEVIATION)	G-11
G.16	SECURITY/BADGING REQUIREMENTS FOR FOREIGN NATIONAL VISITORS AND EMPLOYEES / REPRESENTATIVES OF FOREIGN CONTRACTORS	G-11
G.17	JSC HAZARDOUS MATERIALS USE	G-12
G.18	IDENTIFICATION OF EMPLOYEES	G-13
G.19	PROVISIONAL PAYMENTS	G-13
SECTION H SPECIAL CONTRACT REQUIREMENTS		
H.1	LISTING OF CLAUSES INCORPORATED BY REFERENCE	H-1
H.2	LIMITATION OF FUTURE CONTRACTING	H-1
H.3	TASK ORDERING PROCEDURE	H-2
H.4	SAFETY AND HEALTH (SHORT FORM)	H-3
H.5	KEY PERSONNEL AND FACILITIES	H-4
H.6	OBSERVANCE OF LEGAL HOLIDAYS (ALTERNATE I)	H-5
H.7	ADMINISTRATIVE LEAVE	H-5
H.8	REPRESENTATION, CERTIFICATION, AND OTHER STATEMENTS OF OFFERORS	H-6
H.9	CAPITAL EQUIPMENT	H-6

H.10	ASSOCIATE CONTRACTOR AGREEMENT (ACA) FOR THE INFORMATION RESOURCES DIRECTORATE / PUBLIC AFFAIRS OFFICE	H-7
H.11	ADVANCE UNDERSTANDING ON THE COST OF SPACE FOR GOVERNMENT PROPERTY AND CONTRACT SERVICES	H-8
H.12	INFORMATION MANAGEMENT TOOL	H-8
H.13	GOVERNMENT FURNISHED EQUIPMENT	H-9
H.14	GOVERNMENT FURNISHED INFORMATION	H-9

PART II – CONTRACT CLAUSES

SECTION I – CONTRACT CLAUSES

I.1	CLAUSES INCORPORATED BY REFERENCE	I-1
I.2	APPROVAL OF CONTRACT	I-5
I.3	NOTIFICATION OF OWNERSHIP CHANGES	I-5
I.4	INCENTIVE FEE	I-6
I.5	ORDERING	I-8
I.6	ORDER LIMITATIONS	I-8
I.7	INDEFINITE QUANTITY	I-9
I.8	NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES	I-9
I.9	STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES	I-11
I.10	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEVIATION)	I-11
I.11	OZONE-DEPLETING SUBSTANTANCES	I-12
I.12	CLAUSES INCORPORATED BY REFERENCE	I-13
I.13	AUTHORIZED DEVIATIONS IN CLAUSES	I-13
I.14	SECURITY CLASSIFICATION REQUIREMENTS	I-13
I.15	SECURITY REQUIREMENTS FOR UNCLASSIFIED TECHNOLOGY RESOURCES	I-13
I.16	OMBUDSMAN	I-16
I.17	NASA 8 PERCENT GOAL	I-17
I.18	ACCESS TO SENSITIVE INFORMATION	I-18
I.19	RELEASE OF SENSITIVE INFORMATION	I-19

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

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-1	INCENTIVE FEE PLAN	J-1-1
ATTACHMENT J-2	JSC DATA REQUIREMENTS LIST (DRL)	J-2-1
ATTACHMENT J-3	JSC DATA REQUIREMENTS DESCRIPTION (DRD)	J-3-1
ATTACHMENT J-4	ACRONYM LIST AND DEFINITIONS	J-4-1
ATTACHMENT J-5	LIST OF INSTALLATION ACCOUNTABLE GOVERNMENT PROPERTY	J-5-1

ATTACHMENT J-6	APPLICABLE DOCUMENTS	J-6-1
ATTACHMENT J-7	U.S. DEPARTMENT OF LABOR WAGE DETERMINATION	J-7-1
ATTACHMENT J-8	SAFETY AND HEALTH PLAN	J-8-1
ATTACHMENT J-9	MANAGEMENT PLAN	J-9-1
ATTACHMENT J-10	SYSTEMS TABLE	J-10-1
ATTACHMENT J-11	SOFTWARE INVENTORY	J-11-1
ATTACHMENT J-12	CONTRACT LABOR CATEGORIES	J-12-1
ATTACHMENT J-13	LIST OF GOVERNMENT FURNISHED PROPERTY	J-13-1
ATTACHMENT J-14	LIST OF GOVERNMENT PROPERTY PURSUANT TO FAR 52.245-2	J-14-1
ATTACHMENT J-15	SECURITY CLASSIFICATION REQUIREMENTS	J-15-1
ATTACHMENT J-16	HAZARDOUS MATERIALS LIST	J-16-1
ATTACHMENT J-17	PHASE-IN PLAN	J-17-1
ATTACHMENT J-18	PERSONAL IDENTITY VERIFICATION (PIV) CARD ISSUANCE PROCEDURES	J-18-1
ATTACHMENT J-19	ORGANIZATIONAL CONFLICT OF INTEREST AVOIDANCE PLAN	J-19-1
ATTACHMENT J-20	SERVER INVENTORY AND COMPLEXITY MATRIX	J-20-1
ATTACHMENT J-21	GOVERNMENT SPECIFIED APPLICATIONS	J-21-1
ATTACHMENT J-22	PERFORMANCE STANDARDS	J-22-1
ATTACHMENT J-23	IT SECURITY PLAN, RISK ASSESSMENT, AND FIPS 199 ASSESSMENT	J-23-1
ATTACHMENT J-24	EMERGENCY PLAN	J-24-1
ATTACHMENT J-25	LIST OF INSTALLATION PROVIDED FACILITIES AND SERVICES	J-25-1
ATTACHMENT J-26	LIST OF GOVERNMENT FURNISHED EQUIPMENT	J-26-1
ATTACHMENT J-27	LIST OF GOVERNMENT FURNISHED INFORMATION	J-27-1
ATTACHMENT J-28	CONTRACTOR PROPOSED APPROACHES	J-28-1

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
NONE INCORPORATED BY REFERENCE		

II. NASA FAR SUPPLEMENT (NFS) (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
NONE INCORPORATED BY REFERENCE		

(End of clause)

B.2 SCHEDULE OF SUPPLIES AND/OR SERVICES TO BE PROVIDED

The Contractor shall provide all services, facilities, and resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish all required services in accordance with the terms and conditions, Statement of Work (SOW), and documents attached hereto. The Information Technology and Multimedia Services (ITAMS) contract is a cost reimbursable Indefinite Delivery/Indefinite Quantity (IDIQ) contract. This contracting method provides for the acquisition of necessary labor, supplies, and other services of a recurring nature that cannot be sufficiently identified, predetermined, or qualified in advance. This contract shall utilize an incentive fee provision for the work being performed.

The Contractor is required to furnish all the services identified in the SOW. These services shall be ordered in accordance with Sections F and I. The Government's obligation for the indefinite quantity is limited to that specified in Clause B. 7.

(End of clause)

B.3 ESTIMATED COST AND INCENTIVE FEE (NFS 1852.216-84) (OCT 1996)

The target cost of this contract is $0. The target fee of this contract is $0. The total target cost and target fee as contemplated by the Incentive Fee clause of this contract are $0.

The maximum fee is $0. The minimum fee is $0.00.
The cost sharing for cost under-runs is: Government 80 percent – Contractor 20 percent
The cost sharing for cost over-runs is: Government 70 percent – Contractor 30 percent

(End of clause)

B.4 CONTRACT FUNDING (NFS 1852.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is $**5,000,000**. This allotment is for the ITAMS effort described in Section C, SOW. This allotment covers the following estimated period of performance: **TBD**. **The allotment covers the minimum quantity of work that will be ordered under this contract through issuance of cost reimbursable task orders as described in Clause B.7, "Minimum and Maximum IDIQ Contract Value."**

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

(End of clause)

B.5 CONTRACT VALUE

The contract value is as detailed below:

A	Phase-In (= Firm Fixed Price)	
B	IDIQ Task Orders (= Estimated Cost & Target Incentive Fee Available)	b4
C	Total Contract Value (= A + B)	

(End of clause)

B.6 FIRM-FIXED-PRICE (CONTRACT PHASE-IN)

The total firm-fixed-price of the phase-in of this contract is b4 The contract phase-in period is November 19, 2010 through January 17, 2011. Funds in the amount of b4 are obligated for the phase-in period. Phase-in is fully funded.

(End of clause)

B.7 MINIMUM AND MAXIMUM IDIQ CONTRACT VALUE

The guaranteed minimum quantity of work that will be ordered under this contract through the issuance of cost reimbursable task orders is *$5,000,000*. The maximum not-to-exceed value that may be ordered in accordance with the IDIQ clauses of this contract is *$150,500,000*.

(End of clause)

B.8 COST AND INCENTIVE FEE

The following target cost, estimated cost, and incentive fee values are established for performance of the ITAMS contract and are based on negotiated task orders:

		Contract Year 1 (1/18/11- 1/17/12)	Contract Year 2 (1/18/12- 1/17/13)	Contract Year 3 (1/18/13-1/17/14)	Contract Year 4 (1/18/14- 1/17/15)	Contract Year 5 (1/18/15- 1/17/16)	Total
A	Target cost	TBD	TBD	TBD	TBD	TBD	TBD
B	Material, Travel & Training	TBD	TBD	TBD	TBD	TBD	TBD
C	Total Estimated Cost	TBD	TBD	TBD	TBD	TBD	TBD
D	Target Incentive Fee	TBD	TBD	TBD	TBD	TBD	TBD
E	Maximum Incentive Fee	TBD	TBD	TBD	TBD	TBD	TBD
F	Target Cost Incentive Fee	TBD	TBD	TBD	TBD	TBD	TBD
G	Maximum Performance Incentive Fee	TBD	TBD	TBD	TBD	TBD	TBD
H	Maximum Cost Incentive Fee	TBD	TBD	TBD	TBD	TBD	TBD
I	Total IDIQ Contract Value	TBD	TBD	TBD	TBD	TBD	TBD

DEFINITION OF COST AND INCENTIVE FEE ELEMENTS

A	=	Target Cost	=	All Direct and Indirect Cost – B
B	=	Material, Travel, & Training	=	Negotiated Direct and Indirect Costs for Material, Travel, & Training
C	=	Total Estimated Cost	=	A + B
D	=	Target Incentive Fee	=	Target Fee Rate x A
E	=	Maximum Incentive Fee	=	Maximum Not-to-Exceed Fee Rate x A
F	=	Target Cost Incentive Fee	=	D x 25%
G	=	Maximum Performance Incentive Fee	=	D x 75%
H	=	Maximum Cost Incentive Fee	=	E – G
I	=	Total IDIQ Contract Value	=	C + E

Note: Target and Maximum Fee Rates are included in Contract Clause B.9

(End of clause)

B.9 IDIQ RATE TABLE AND ESTIMATING METHODOLOGY

These following labor, indirect, and fee rates shall be used in establishment of the estimated cost of individual task orders. The labor rates are fully burdened; but exclude fee. The indirect rates are those rates that may be applied to non-labor resources such as materials and travel. The fee rates are those used to establish the target and maximum incentive fee pools as described in Clause B.8.

The parties agree that the fully burdened labor rates established below shall not be subject to any equitable adjustment (upwards or downwards), regardless of actual rates incurred during contract performance.

A. Fully Burdened Labor Rates

Contract Labor Category	Contract Year 1 (1/18/11- 1/17/12)	Contract Year 2 (1/18/12- 1/17/13)	Contract Year 3 (1/18/13-1/17/14)	Contract Year 4 (1/18/14- 1/17/15)	Contract Year 5 (1/18/15- 1/17/16)
Administrative Assistant					
Administrative Specialist I (WSTF)					
Administrative Specialist II (WSTF)					
Animation Specialist					
Broadcast Engineer					
Business Specialist I (WSTF)					
Business Specialist II (WSTF)					
Camera Operator					
Clerk					
Configuration Management Specialist	b4	b4	b4	b4	
Contract Administrator					
Database Administrator					
Deputy Program Manager					
Designer I - Web					
Designer II – Web					
Digital Video Engineer					
Document Scanner I					
Document Scanner II					
Drafter I					
Drafter II					
Editor					
Education Coordinator					
E-Learning Lead					
Engineer I					
Engineer II					
Engineer III (JSC)					
Engineer I (WSTF)					
Engineer II (WSTF)					
Engineer III (WSTF)					
Engineering Tech I					
Engineering Technician II					
Engineering Technician III					
Exhibits Foreman					
Exhibits Specialist					
Forms Designer					
Graphics Designer					
Graphics Design Specialist/ Illustrator					
Help Desk Support I					
Help Desk Support II					
Historian					
Imaging Specialist I					
Imaging Specialist II					
Imaging Specialist III					

Information Engineer				
IT Professional I (JSC)				
IT Professional I (WSTF)				
IT Professional II (JSC)				
IT Professional II (WSTF)				
IT Professional III (JSC)				
IT Professional III (WSTF)				
IT Professional IV				
IT Professional V				
IT Technician I (JSC)				
IT Technician I (WSTF)				
IT Technician II (JSC)				
IT Technician II (WSTF)				
IT Technician III (JSC)				
IT Technician III (WSTF)				
Librarian / Researcher I				
Librarian / Researcher II				
Library Technician				
Live TV Technical Director				
Media Information Specialist/Commentator	b4	b4	b4	b4
Multimedia Quality Engineer (Quality Control Specialist)				
Photographer I (JSC)				
Photographer I (WSTF)				
Photographer II (JSC)				
Photographer II (WSTF)				
Photographer, Scientific				
Photographic Processing Machine Operator / Tender				
Photographic Specialist				
Producer / Director / Scriptwriter I				
Producer / Director / Scriptwriter II				
Program Manager				
Project Control Specialist				
Project Manager				
Protocol Staffer				
Public Relations Specialist				
Quality Control / Safety Manager				
Records Management Specialist				
Requirements Analyst				
Scenelister I				
Scenelister II				
Software Engineer I				
Software Engineer I WSTF				
Software Engineer II				
Software Engineer II WSTF				
Software Engineer III				
Software Quality Assurance I				
Software Quality Assurance II				
Taxonomist				
Tech Writer I				
Tech Writer II				
Technical Supervisor				
Video Editor				

Video Technician I					
Video Technician II					
Warehouse Specialist	b4	b4	b4	b4	b4
Other (Specify) :					
Indirect rates to be applied to non-labor resources. Identify the rate and basis of application.					
Material Handling:					
G&A:	b4	b4	b4	b4	b4
Target Fee Rate:					
Maximum Not-to-Exceed Fee Rate:	b4	b4	b4	b4	b4

Note: Target and Maximum Fee Dollars are included in Contract Clause B.8

B. Travel

All travel shall be as approved by the Government prior to travel and will be allocated to the contract based on actual airfare and per diem rates per the most current official CONUS Per Diem Rates, located at www.gsa.gov/travelpolicy. All requests for travel shall include the purpose and the rationale for the travel, such as why the purpose cannot be accomplished through a means other than travel (e.g., teleconferencing).

Costs relating to approved travel will be allocated directly to individual task orders under this contract. Vouchers may be submitted upon completion of individual trips and shall be prepared and submitted in accordance with Clause G.2 entitled *Submission of Vouchers for Payment*. The invoices shall include copies of receipts for airfare, lodging, car rental, and other expenses as required by the company policy. All costs for trips will be limited as follows:

1. Maximum allowable costs for lodging, meals and incidental expenses are limited to current Government-established per diem rates.
2. Maximum allowable cost for use of privately owned vehicles shall be restricted to the Federal Travel Regulation (FTR).
3. Allowable air travel expenses are limited to standard coach fare except as provided under the FTR.
4. Allowable automobile rental cost in accordance with the FTR. .
5. Per diem paid on travel days are ¾ per diem. The time actually spent in travel is not considered.
6. No fee shall be applied to the costs of trips.

C. Materials, Equipment and Other Non-labor Costs

As applicable, include separate cost estimates for materials, equipment and other miscellaneous non-labor costs that are required for performance of the task order. All non-labor costs that are proposed must be allowable and allocable in accordance with the FAR, NASA FAR Supplement, and any other applicable NASA procurement policy documents. The contractor shall include back-up information with their estimate that provides rationale for their proposed cost estimates for materials and other non-labor costs.

No fee shall be applied to the cost of materials, equipment or other non-labor costs.

D. Incentive Fee

Fee shall be allocated in accordance with Contract Attachment J-1, *Incentive Fee Plan*, with 25% of proposed fee allocated for the cost incentive and 75% for the performance incentive.

(End of clause)

[END OF SECTION]

Section C

Statement of Work

Note: The Work Breakdown Structure (WBS) contained in this Statement of Work describes the products and services required on this contract at the time of contract award. However, many of these WBSs are impacted by NASA's Information Technology Infrastructure Integration Program (I3P). As the agency-wide I3P contracts are awarded, work will transition from this contract to the I3Pcontracts. Information regarding the I3P contracts may be found at http://i3p-acq.ksc.nasa.gov/i3p/default.cfm

CONTENTS

1.0 GOALS AND OBJECTIVES 1

2.0 WORK BREAKDOWN STRUCTURE 1

3.0 MANAGEMENT AND ADMINISTRATION 1

3.1 Safety and Health 2
3.1.1 Facility Management 2
3.1.2 Environmental Compliance 2

3.2 Resources Management 3
3.2.1 Operations, Project, and Function Management 4
3.2.2 Risk Management 5
3.2.3 Property Management 5
3.2.4 Records Management 5
3.2.5 Procurement 5

3.3 Configuration Management 6

3.4 Work Authorization 6

3.5 Quality Management and Control 7
3.5.1 Metrics 7
3.5.2 Training 7

3.6 Project/System Integration 7

4.0 GENERAL CUSTOMER SUPPORT 8

4.1 Customer Support Center 8

4.2 Specialized Support Services 9

4.3 Customer Service Agent 11

5.0 INFORMATION TECHNOLOGY 11

5.1 Application Services 11
5.1.1 Commercial Off-the-Shelf (COTS) Development 13
5.1.2 eForms Development 13
5.1.3 Web Development 13
5.1.4 Custom Applications Development 13

5.2 Technical Assistance 14
5.2.1 IRD Administrative Support 14
5.2.2 Website Registration Process Support 14
5.2.3 IT Security Policy and Waiver Tracking and Reporting 15
5.2.4 Capital Planning and Investment Control (CPIC) Support 15
5.2.4.1 Exhibit 300 Support 16
5.2.4.2 Summary Investment Business Case (SIBC) Support 16
5.2.4.3 IT Planning Support 16
5.2.5 Privacy Support 16
5.2.6 IT Asset Management Support 17

5.2.7 Section 508 Support 17
5.2.8 Data Call Support 18
5.2.9 Support of the JSC IT Governance Structure 18
5.3 Enterprise Architecture 18
5.3.1 Enterprise Architecture Development 19
5.3.2 EA and IT Portfolio Management Integration 19
5.3.3 EA Review Support 19
5.3.4 Response to Agency Actions 19
5.4 IT Systems Engineering, Installation, Maintenance and Operations 19
5.4.1 Engineering and Installation 20
5.4.1.1 Planning and Estimating 20
5.4.1.2 System Development 20
5.4.2 Data Center Management 21
5.4.3 Server Administration 22
5.4.4 Storage Administration 23
5.4.5 Database Administration 24
5.4.6 Multimedia Engineering, Installation and Maintenance 25
5.4.6.1 Multimedia Engineering and Installation 25
5.4.6.1.1 Planning and Estimating 25
5.4.6.1.2 Minor Projects 26
5.4.6.1.3 Major Projects 26
5.4.6.1.4 Sustaining Engineering 26
5.4.6.2 Multimedia Maintenance 27
5.4.6.2.1 Preventive Maintenance 27
5.4.6.2.2 Repair 27
5.5 System Capacity Planning and Performance Management 27
5.5.1 Server and Storage Performance Monitoring 28
5.5.2 Network Performance Monitoring 28
5.5.3 Application Monitoring 29
5.6 IT Security Services 29
5.6.1 IT Security Engineering 30
5.6.2 IT Security Maintenance and Operations 30
5.6.2.1 Perimeter Firewall Systems 31
5.6.2.2 Content Monitoring and Filtering Systems 31
5.6.2.3 Network Intrusion Detection and Prevention Systems 31
5.6.2.4 Traffic Capturing and Analysis Systems 31
5.6.2.5 IT Security Support Systems 31
5.6.2.6 Vulnerability and Discovery Scanning Systems 31
5.6.2.7 Consolidated Logging Systems 32
5.6.2.8 Remote Access System 32
5.6.2.9 Public Key Infrastructure Registration Authority and Roaming Profile Systems 32
5.6.2.10 Security Information Management Systems 32
5.6.3 IT Security Administration 33
5.6.3.1 Consultation 33
5.6.3.2 Forum/Board Participation 33
5.6.3.3 Organizational Computer Security Official – Representative (OCSO-R) Duties 33
5.6.4 Vulnerability Management 33

5.6.4.1 Vulnerability Assessment 34
5.6.4.2 Vulnerability Remediation 34
5.6.5 IT Security Monitoring 34
5.6.6 IT Security Incident Response 34
5.6.7 Certification and Accreditation Consulting and Auditing Services 35

5.7 Planning and Integration 35

6.0 MULTIMEDIA OPERATIONS AND SERVICES 36

6.1 Imagery Acquisition 36
6.1.1 Engineering Testing Support 37
6.1.2 JSC Institutional and Mission Support 37

6.2 Human Spaceflight Multimedia Operations 37
6.2.1 Real-Time/Mission Processing, Recording, and Distribution 38
6.2.2 Post-Mission Processing, Recording, and Distribution 38

6.3 General Photographic Operations and Services 39
6.3.1 Film Processing and Scanning 39
6.3.2 Digital Imaging and Products 39
6.3.3 Flight Film Certification 40
6.3.4 Photographic Chemical Processing 40

6.4 General Video Operations and Services 40
6.4.1 Processing, Recording and Distribution 41
6.4.2 Video Products 41

6.5 Video Teleconferencing, Meeting and Presentation Support, Multimedia Equipment Loan Pool 42

7.0 INFORMATION MANAGEMENT 43

7.1 Document and Data Management 43
7.1.1 Electronic Document Management Systems 43
7.1.2 Content Management System (CMS) 43
7.1.3 Engineering Drawing Control Center (EDCC) 44
7.1.4 JSC Quality Documentation 44
7.1.5 Forms 45
7.1.6 Document and Data Scanning 45

7.2 Library and Multimedia Repository Management 45
7.2.1 JSC Library Operations 46
7.2.2 Satellite Library Operations 47
7.2.3 Multimedia Repository Management 47
7.2.4 Taxonomy Discovery and Formulation 47

7.3 Records Management 48

7.4 History Support 49

7.5 Writing, Editing and Graphics 49
7.5.1 Writing and Editing 49
7.5.2 Graphics 50

8.0 EXTERNAL RELATIONS SUPPORT SERVICES 51

8.1 Public Affairs Multimedia Services 51
8.1.1 Television Production 51
8.1.1.1 Briefings 51
8.1.1.2 In-Flight Events 52
8.1.1.3 Live Interviews and Appearances 52
8.1.2 Audio Program Control, Recording and Products 53
8.1.3 Mission Commentary 53
8.1.4 Video and Multimedia Production 54

8.2 External Relations, Information and Communications 54
8.2.1 Exhibits Program, Outreach Campaigns and Events 54
8.2.1.1 Traveling Exhibits 55
8.2.1.2 Exhibit Production and Refurbishment 55
8.2.1.3 Artifact and Exhibits Management/Maintenance 55
8.2.2 Outreach Program 56
8.2.2.1 Protocol and Guest Operations 56
8.2.2.2 Information Service Center 56
8.2.2.3 Speakers Bureau Program 57
8.2.2.4 Event Planning and Coordination 57
8.2.3 Communications 57
8.2.3.1 Internal Communications 58
8.2.3.2 External Communications 58
8.2.3.2.1 Strategic Communications Activities 58
8.2.3.2.2 Public Affairs Internet Content Operations 59
8.2.3.3 General Media Support Services 59
8.2.3.3.1 Media Resource Center Operations 60
8.2.3.3.2 Media Technical Assistance 60
8.2.4 Education Support Services 60
8.2.4.1 E-Learning 61
8.2.4.2 Education Outreach 61
8.2.4.3 JSC Education Program Support 61

1.0 GOALS AND OBJECTIVES

The primary goal of this contract is to provide the highest quality products and services in all areas of information technology, information management, multimedia services and external relations to the NASA Lyndon B. Johnson Space Center, Houston, TX, (JSC) and its associated sites and facilities (White Sands Test Facility, Las Cruces, NM, (WSTF), Ellington Field, Sonny Carter Training Facility (SCTF) and other areas as specified in task orders). Another goal of ITAMS is to provide products and services that result in a high level of customer satisfaction. The objectives related to meeting these goals are to:

- Improve sharing, teaming, and use of common processes
- Create a shared pool of resources and expertise
- Enhance commonality in approaches to product and service delivery including standards, tool sets, guidelines, training, and consultation
- Leverage efficiencies in service delivery and contract management identifying and prioritizing areas for improvement
- Provide greater accountability and consistent support for end-to-end product and service delivery
- Partner with our customer community through a well-structured customer service approach

The requirements described in this Statement of Work apply to all JSC-associated facilities listed above. Under this IDIQ contract, work locations will be specified in task orders. Any reference to JSC in this Statement of Work shall be interpreted to include its associated facilities unless indicated otherwise.

Policy and procedure documents referenced throughout the Statement of Work may be found in Attachment J-6, Applicable Documents.

2.0 WORK BREAKDOWN STRUCTURE

The Work Breakdown Structure (WBS) and the associated reference numbers shown below describe the products and services required on this contract. These WBS numbers will be used in Contractor task orders or work authorizations and in contract planning, cost reporting, scheduling of activities, and status reporting.

3.0 MANAGEMENT AND ADMINISTRATION

The Contractor shall provide the management and administrative functions required to satisfy the requirements of this contract (DRD-1, Management Plan). The Contractor shall comply with all policies and procedures as included in Attachment J-6, Applicable Documents. The Contractor shall follow the most current approved document wherever reference is made in this Statement of Work to specific policies, procedures or other documents (e.g., NPR 8715.3). The Contractor shall comply with all applicable unique work instructions (UWIs). UWIs can be found in the JSC/WSTF Quality Management System.

The Contractor shall assist JSC with the migration of elements of ITAMS to the various Agency-wide IT contracts (currently under the Information Technology Infrastructure Integration Program (I3P)) to ensure the successful transition of affected work.

The Contractor shall obtain security clearances as required for work on this contract (see Attachment J-15, Security Classification Requirements).

As a result of the nature of the work the Contractor shall accommodate nonstandard working shifts as specified in Attachment J-10, Systems Table.

The Contractor shall provide all labor and material resources required to perform this contract except items listed in Attachment J-5, List of Installation Accountable Government Property; and Attachment J-11, Software Inventory, Attachment J-13, List of Government Furnished Property, Attachment J-14, List of Government Furnished Property Pursuant to FAR 52.245-2, Attachment J-25, List of Installation Provided Facilities and Services, Attachment J-26, Government Furnished Equipment, and Attachment J-27, Government Furnished Information. The Contractor shall comply with all applicable Mission Focus Reviews (MFRs) (MFR 7, 100, and 137). The Government will notify the Contractor when new mandatory requirements are issued in MFRs.

The Contractor shall provide to the Government all deliverables listed in the Attachment J-2, JSC Data Requirements List (DRL).

The Contractor shall perform this Statement of Work in accordance with Attachment J-28, Contractor Proposed Approaches.

3.1 Safety and Health

The Contractor shall perform work in accordance with DRD-9, Safety and Health Plan. The Contractor also shall provide an annual safety and health program self-evaluation per DRD-26, Safety and Health Program Self Evaluation, a monthly safety and health metrics report per DRD-24, Monthly Safety and Health Metrics, and lessons learned per DRD-19, Lessons Learned Documentation, and JPR 2310.1, JSC Organizational Learning Program.

Contractor personnel required to work in confined spaces on site, in the JSC tunnel system, and in asbestos environments shall attend Government-provided training.

3.1.1 Facility Management

The Contractor shall provide facility management support as directed by the Government. Specialized training will be provided by the Government, and compliance with JPR 1700.1 is mandatory, where applicable. The Contractor-provided primary or alternate facility manager shall perform and coordinate activities necessary to maintain a functional, safe, and orderly work environment. This responsibility extends to the entire facility, not only specified work areas. The Contractor shall report on installation and removal of equipment per DRD-13, Contractor Status Report; MOA46, Memorandum of Agreement between IRD and Facility Engineering Division for Bldg 46; and NF1620, Change Control Request Form.

3.1.2 Environmental Compliance

All activities, products, and services shall be developed and performed in a manner consistent with JSC's environmental management system elements and the following NASA JSC directives: JPD 8500.1, JSC Environmental Excellence Policy; JPR 8550.1, JSC Environmental Compliance Procedural Requirements; JPR 8553.1, JSC

Environmental Management System (EMS) Manual; CWI JE9W-06, EMS Aspect/Impact Assessment and EMP Process; NPR 8570.1, Energy Efficiency and Water Conservation; and CWI J69W-03, Energy Conservation, and ISO 14001 for WSTF. The Contractor shall provide data on affirmative procurement, waste reduction activity, energy efficient product procurement, and ozone depleting substances on an Environmental and Energy Consuming Product Compliance Report (DRD-9). To accomplish this, the Contractor shall establish and maintain a comprehensive program that ensures all necessary environmental, safety, and regulatory specifications and criteria are met. The Contractor shall implement this program in a way that protects human life, the environment, and property. The proper handling of chemical waste produced in the photographic laboratory is a principal concern on this contract. As a result, the Contractor shall be required to report any waste generated by the photographic chemical processing system (DRD-9; JPR 8621.1, Johnson Space Center Mishap Response Plan; and JPR 5322.1, Contamination Control Requirements Manual).

The Government remains the owner and operator of record for all environmental activities conducted at NASA-owned properties unless otherwise documented in a signed agreement between NASA and the Contractor. The Contractor is advised that activities performed at JSC and associated facilities are subject to Federal, state and local regulatory agency inspections to assure compliance with environmental laws and regulations. For on-site issues, JSC's Environmental Office will be the single point of contact with Federal and state regulatory agencies and their representatives unless otherwise directed by the Contracting Officer. The Contractor shall immediately notify the JSC Environmental Office when contacted by external regulatory agency representatives and shall cooperate fully with regulatory agency requests as described in the JSC Environmental System. The Contractor shall complete, maintain, and make available to the Contracting Officer, JSC Environmental Office, JSC Energy Manager, or regulatory agency personnel all documentation relating to environmental compliance matters under applicable laws. The Contractor shall immediately notify the JSC Environmental Office upon issuance to the Contractor of a Notice of Violation or Noncompliance.

Should a Notice of Violation, Notice of Noncompliance, Notice of Deficiency, or similar regulatory agency notice be issued to the Government as a facility owner/operator on account of the actions or inactions of the Contractor or one of its subcontractors in the performance of work under this contract, the Contractor shall support the Government in correcting any problems and defending against regulatory assessment of any civil fines or penalties arising out of such actions or inactions.

3.2 Resources Management

The Contractor shall create, modify, maintain, and report resources information in accordance with DRD-5, Resource Management Plan; DRD-6, Resource Management Supplemental Report; and other requests for data requested by the Government.

The Contractor shall conduct an annual internal contract-wide requirements and resource review as defined in DRD-5. The Contractor shall present the results of this review to the Government and shall include recommendations for current and subsequent fiscal year (FY) contract resource requirements (DRD-5). This internal review shall be completed prior to the annual Capital Planning and Investment Control Process (DRD-3, Information Technology (IT) Capital Planning and Investment Control

(CPIC)) and the IRD Internal Task Agreement (organizational service level agreements) process.

3.2.1 Operations, Project, and Function Management

The Contractor shall manage designated production systems (Attachment J-10), ongoing and new projects, and functions and activities required to provide products and services to the JSC customer community in accordance with the Management Plan (DRD-1). The Contractor shall provide operations management for designated facilities (for example, Bldg. 46, the Teague Broadcast Facility, Exhibits shop/warehouse, Media Resource Center, WSTF Rotunda, Hypervelocity Facility) The Contractor shall adhere to Government policies, procedures and standards as referenced in this document and otherwise available to the Contractor through Government sources; and to industry standards. In addition, the Contractor shall attend forums as required (typically 8-10 times each month) to provide background data and expertise in support of the Government's decision-making process. To effectively manage the work, the Contractor shall perform the following activities:

- Review Government-provided policies (e.g., Section 508 of the Rehabilitation Act; NPR 2810.1, Security of Information Technology; Privacy Act of 1974; architectures (e.g., Microsoft Windows Servers/Active Directory); standards (e.g., NASA-STD-2818, Digital Television Standards for NASA); Homeland Security Presidential Directive 12 (HSPD-12)) and procedures affecting this contract and recommend appropriate modifications and implementation strategies.

- Attend key recurring Government-sponsored meetings/forums, such as the IRD Configuration Control Board, WSTF Configuration Control Board, and the Contractor's Safety Forum, as described above.

- Create and maintain project plans (DRD-2, Project Plans).

- Create and maintain a Capital Investment Plan (DRD-3).

- Document Standard Operating Procedures (DRD-10, Standard Operating Procedures).

- Report system and equipment performance in accordance with the performance management plan required by DRD-17, Performance Management and Capacity Plan.

- Create and maintain a preventive maintenance plan, operational readiness documentation and a maintenance agreement and license renewal plan for the hardware and software identified in Attachments J-5, J-10, J-11 (DRD-11).

- Create and maintain deliverables required to support the NASA Certification and Accreditation Process.

- Create Associate Contract Agreements (ACA) as required (contract clause H.10).

3.2.2 Risk Management

The Contractor shall assess, evaluate, document, and manage risks associated with the performance of this contract. The Contractor shall create, modify, maintain, and implement a contract-wide Risk Management Plan per DRD-2, NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements, and NPR 2810.1.

3.2.3 Property Management

The Contractor shall comply with Government-specified requirements for property management (DRD-25, Financial Reporting Contractor-Held Property, and Sections G and H of the contract) and perform property custodian functions for the Government furnished property per NPR 4200.1, NASA Equipment Management Procedural Requirements, and NPR 4200.2, Equipment Management Manual for Property Custodians w/Change 1. The Contractor shall use a Government specified application as a tool to administer Government property. Per DRD-28, Physical Inventory Plan, the Contractor shall conduct inventories for the Government property and information furnished to the Contractor.

Per DRD-32, Asset Management Planning and Reports, the Contractor shall keep a 100% complete listing of all hardware systems and the software/firmware residing on those systems (e.g., operating systems, middleware, and applications), physical location of those systems, and documentation describing the interrelationships between individual systems and facility infrastructure. The Contractor shall provide a tool (see H.12 of the contract) to establish and maintain an accurate inventory of hardware and software. The system shall be operational at the start of the contract. The system shall be used to provide monthly, quarterly, annual, and multi-year (seven-year projection) reports of hardware and software renewals or replacements (DRD-11, Preventive Maintenance and Operational Readiness Documentation).

3.2.4 Records Management

The Contractor shall maintain records appropriately and administer the disposition of records and non-records in accordance with NASA Records Retention Schedules, which has been approved by NASA and the National Archives and Records Administration.

3.2.5 Procurement

The Contractor shall procure and deliver equipment, materials, IT hardware and license renewals (software, production music, etc.) and media at the request of the Government. The Contractor shall also purchase hardware maintenance agreements and software support contracts associated with the new IT being purchased. When required, the Contractor shall purchase software licenses and media from vendors that have Enterprise License Agreements (ELA) already established with NASA.

As part of the procurement activity the Contractor shall ensure that its hardware and software inventory be updated. The Contractor shall ensure that maintenance and obsolescence schedules are updated as changes in the hardware and software

inventory occur. The Contractor shall ensure additions and deletions are posted to the database within seven calendar days from the change.

The Contractor shall be responsible for the renewal of hardware maintenance, software licenses, and software support contracts for the systems specified in this contract, both IT and multimedia. The Contractor also shall track proofs of purchase for all hardware warranties, software licenses, and software support contracts managed through this contract. The Contractor shall maintain complete purchasing documentation for all articles purchased under this contract including purchase request, purchase order, contact information, purchasing organization, ITAs, MOUs, other agreements and invoices.

The Contractor shall negotiate and establish maintenance agreements and software license renewals with vendors and report status of this activity in accordance with DRD-13. The Contractor shall submit a Maintenance Agreement and License Renewal Plan for hardware and software items listed in Attachments J-5, J-10, and J-11 in accordance with the Preventative Maintenance and Operational Readiness Document (DRD-11). The Contractor shall inform the Government a minimum of 90 days prior to expiration of agreements.

The Contractor shall provide monthly reports on License Renewal and Maintenance agreement changes for the hardware and software items maintained in the contractor-provided property management tool as per DRD-11.

3.3 Configuration Management

The Contractor shall provide, maintain and comply with a Government-approved configuration management process (per DRD-1) for all systems defined under this contract. The Contractor shall not change, modify, or relocate Government equipment or systems without prior approval unless otherwise stated in the approved Management Plan (DRD-1).

For the purpose of configuration management, the Contractor shall provide, revise, and maintain a complete set of engineering and exhibit drawings, hardware and software configurations, specifications, and associated change documentation as directed. The Contractor shall provide maintenance and configuration control for the items identified in Attachments J-5, J-10, J-11, and J-20, Server Inventory and Complexity Matrix. Where baseline configuration information does not exist, the Contractor shall define the baseline and obtain approval from the Government. The Contractor shall provide current configuration documentation for systems under this contract as specified in DRD-10.

The Contractor shall perform change management and discrepancy reporting as defined by DRD-10.

3.4 Work Authorization

The Government will use task orders to authorize work under this contract. The Contractor shall provide an automated system for processing task orders (see H.12) or use an existing system provided by the Government. The JSC Task Order Processing System (JTOPS) is the Government system. The task order will specify requirements, indicate schedules, and identify required quality level.

In addition, the Government will initiate via other methods discrete direction for portions of work already described in existing task orders. Those methods include work requests and an "Authority to Proceed (ATP)" process. Work requests are managed through an IRD customer service system (Government-provided software). The "ATP" process is managed through an automated system provided by the Contractor. The Contractor shall ensure that its internal work management and tracking systems interface seamlessly with the IRD customer service system for the purpose of receiving work requests and providing order status and tracking information to the Government. Projects initiated through the ATP method will be assigned a unique project number. The Contractor shall provide an automated system for tracking the costs associated with these projects including labor, materials, travel, training and other direct and indirect costs and report this information monthly with the NASA Form 533 Supplemental Reports (per DRD-5, Exhibits 1 and 2).

The Contractor shall work outside of normal business hours when directed by work authorization.

The Contractor shall be held to the performance standards in Attachment J-22, Performance Standards.

3.5 Quality Management and Control

The Contractor shall follow the JSC/WSTF Quality Management System (QMS) in its entirety, complying with American National Standards Institute (ANSI)/International Standards Organization (ISO)/American Society for Quality Control (ASQC) Q9001-2008, AS9100 (WSTF).

The Contractor shall document key processes and procedures using JSC-approved International Standards Organization (ISO) formats where required.

3.5.1 Metrics

The Contractor shall provide metrics as defined in DRD-4. Monthly metrics shall be provided and made continuously available in an online system.

3.5.2 Training

The Contractor shall obtain training on systems capabilities, operations, and architectures as required by task order and described in this document. The Contractor shall maintain the skills and expertise necessary to perform the requirements of this contract.

3.6 Project/System Integration

In accordance with NPR 7120.7, the Contractor shall integrate all multi-disciplinary activities associated with a project. Project development and implementation within this contract often requires contributions from varied technical disciplines. The Contractor shall institute a process that provides a single point of contact (lead) for a particular project as well as help unify all of the varied contributors into a single team. This lead will

serve as the primary communications channel to the Government for the implementation of the particular project.

4.0 GENERAL CUSTOMER SUPPORT

The Information Resources Directorate provides a broad range of products and services to the JSC community and requires customer-focused service delivery. As such, priorities for the services mentioned in 4.0 are set by the Government and modified as required.

4.1 Customer Support Center

The Contractor shall operate a Customer Support Center (CSC) based on industry best practices (e.g., those established by the Service and Support Professional Association) that provides users access to information about, assistance with, or distribution of IRD products and services. CSC personnel shall stay apprised of the information that is provided through a recognized Help Desk/Technical Support Professional association and pursue ongoing professionally recognized customer support training and certification. Support Center operations are intended to cover all aspects of IRD products and services. In some instances, other JSC contracts may include a centralized help desk function directly related to their specific contract deliverables. The Contractor shall ensure as part of Support Center operations that procedures and practices are in place to coordinate efforts with other service providers to ensure as seamless an approach as possible to providing an accurate, timely, and professional response to a customer's request. The Support Center shall provide accurate tracking, routing and reporting of the customer requirements in order to ensure a timely response and to determine the most effective mechanism for future responses to similar requests. As such, the Contractor shall be responsible for the following:

A. Answer all calls into the IRD Customer Support Line, during the hours specified by task order, ensuring where possible that the caller does not have to leave a voicemail. The Contractor shall implement a call logging capability. The Contractor shall respond to voicemail within two business hours and to e-mail within four business hours.
B. Sort, log, or respond to email received in the Customer Support mailbox. Email messages requiring a response shall be answered within four business hours.

C. Ensure that all customer requests, where appropriate, are routed to the appropriate solution provider, logged, tracked and completed in the Government-provided help desk tool (currently using Remedy Help Desk). This includes logging of requests and a focus on ensuring that solutions are recorded as part of the closure process of open items. The Contractor shall ensure that system data facilitates easy analysis of the current workload (frequency and type of service) (DRD-12, Problem Reporting/Resolution). The Contractor shall ensure that system data can be used as the core of a knowledge base designed to capture workload metrics as well as information that is useful to Customer Support Office personnel, management, and the JSC community at large (e.g., knowledge base of standard processes, applications of lessons learned to future support).

D. Provide support to customer organizations specified by IRD for the development and processing of service requests. This support includes gathering requirements, submitting requests, tracking, providing status reports to the Customer Service Office and customer. The Contractor shall monitor rejected SRs and notify customers or correct SRs in a timely manner as defined by task order.

E. Support product testing and user education on IRD-provided products and services. As part of assuming responsibility for informing customers of new or changing aspects of the services provided by IRD, the Contractor shall participate in various testing scenarios and in special teams to assess the capability or impacts of new or changing products and services.

F. Facilitate updates of the IRD Website. The Contractor shall maintain content for portions of the IRD Website and manage the feedback and comments from customers. The Contractor shall ensure the timeliness of information included in the IRD Website both for internal and external use. The priority focus will be on ensuring the JSC community is kept informed regarding IRD-provided products and services. The Contractor shall work with content managers to ensure the quality of the information posted on the IRD Website.

G. Provide other customer communications. The Contractor shall facilitate the dissemination of IRD information related to new products and services through other communication strategies such as writing JSC Today articles, providing support to Customer Forums (e.g., Logistics), and managing the Customer Forum section of the IRD Website.

4.2 Specialized Support Services

As part of the Customer Support Center, the Contractor shall be responsible for several distinct operational activities. As part of the continuing evolution of the products and services delivered by IRD, the list below is inclusive of the specialized functions provided by the Customer Support Center. The Contractor shall ensure that all support center personnel have knowledge available to them to ensure they are capable of helping customers in every area highlighted below.

A. Public Key Infrastructure: The Contractor shall provide services and expertise on existing and emerging technologies as they relate to NASA's Public Key Infrastructure (PKI). The Contractor shall pass and maintain NASA Registration Authority (RA) certification. The Contractor shall maintain PKI systems in accordance with the NASA Registration Authority (RA) Operations Manual (RAOps6v(2.3)), X.509 Certificate Policy for NASA PKI, NASA Certification Authority Certification Practice Statement, NASA computer security policies (see Attachment J-6, Applicable Documents), NASA PKI Practices Document, and JSC PKI Procedures (JSC29829). The Contractor shall provide identity checks of PKI recipients; maintain a knowledge base database for PKI digital certificates in accordance with JSC and NASA PKI practices and policies; and provide technical information to customers who have questions or problems with the PKI software suite. When required, the Contractor shall test PKI software installation packages for the supported PKI client software. The Contractor shall also, when

required, analyze and diagnose problems affecting customers as well as develop, enhance, and maintain PKI at JSC.

B. Senior Management Support: The Contractor shall provide one-on-one customer service for specified senior managers and their staff (for example, in-person workstation configuration and assistance) that fall outside the responsibility of the standard service provider.

C. Customer Service System Operations: The Contractor shall provide technical assistance for the Customer Service System (e.g., Remedy's Action Request System). The Contractor shall maintain expert knowledge and understanding of use of the Customer Service System including its related interfaces to other Contractor and IRD databases. The Contractor shall provide user help, documentation, training, and shall be responsible for logging and keeping track of all discrepancies and changes reported or requested to the system. The Contractor shall assume responsibility for leading efforts to improve and enhance the system based on information gathered from support desk calls.

D. Data Management Support: The Contractor shall provide data analysis and management where required, but primarily focused on the data that resides within the Customer Service System. The Contractor shall maintain a comprehensive understanding of the database operations of the Customer Service System as well as the help desk tool and enter and retrieve data as required. The Contractor shall perform data gathering, entry, and analysis tasks to ensure that a customer's entitlement to IRD products and services is documented. The Contractor shall be responsible for ensuring the effectiveness of the various reporting aspects available from the Customer Service System and shall define and retrieve data from the help desk tool. Additionally, the Contractor shall collect, create, analyze, and report information necessary to produce Fiscal Year Internal Task Agreements (ITA) for organizations outside of IRD. Some of this data may be developed from sources other than the Customer Service System, for example, requirements meetings with customers and vendor changes.

E. Software Distribution and Remote Network Access Instruction: The Contractor shall provide a software distribution capability for specific software products available to Center employees for take-home use (e.g., Antivirus software). The Contractor shall also be knowledgeable and provide instruction to users about all aspects of using the various remote access technologies used at the Center.

F. Electronic Information Management Systems: The Contractor shall provide specialized customer service specific to the Electronic Document Management System (EDMS) and the Design and Data Management System (DDMS). These systems are described under the Information Technology section of the Statement of Work.

G. Satellite Customer Service Areas: The Contractor shall provide support in locations, where required, outside the customer support center as defined by task order. The focus in these areas is more directly related to work order receipt and tracking and specific product distribution than it is support for

center operations. Examples include the photo and video customer support areas in Building 8 and the graphics customer support area in Building 227. The Contractor shall ensure in these areas that practices and procedures are consistent with overall support center practices (e.g., those established by the Service and Support Professional Association).

H. SharePoint: Users of the SharePoint system will be developing content and storing assets on the SharePoint server. The Contractor shall provide extended services and expertise to support SharePoint users. This shall include user training, assistance in building SharePoint sites, and troubleshooting.

I. Help Desk Support: The Contractor shall provide support for the operation of the local JSC Help Desk and user consultations for Center, Integrated Enterprise Management Program (IEMP), and e-GOV applications.

J. Government Specified Applications: The Contractor shall provide help desk support for Government specified applications. See Attachment J-21, Government Specified Applications, for a list of applications to be supported.

4.3 Customer Service Agent

The Contractor shall provide a Customer Service Agent function to support designated JSC organizations and Customer Relationship Managers. This activity requires an understanding of IRD products and services, knowledge of IT concepts, principles, methods, and practices; requirements analysis principles and methods; commercial off the shelf (COTS) products and components used at JSC; cost-benefit analysis principles and methods; internet technologies; project management principles and methods; acquisition management policies and procedures, and IT security principles and methods.

5.0 INFORMATION TECHNOLOGY

5.1 Application Services

The Contractor shall provide applications services and systems management including end–to-end system lifecycle support for new and existing application capabilities, database and database product administration, and middleware in accordance with NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements. NPR 7120.7 describes application lifecycle phases such as requirements definition, design, programming, prototyping, testing, documentation, customer acceptance, deployment, training, installation, operations, repair, sustaining engineering, and retirement. When specified by task order, the Contractor shall develop applications in accordance with the SEI Capability Maturity Model Integrated (CMMI) level 3 processes as directed by task order. CMM level 3 certification is not required. In year two of this contract the Contractor shall assist IRD in Level 3 certification. In instances when CMMI level 3 is requested, the Contractor shall follow the appropriate level of the JSC Software Engineering Process Group (NPR 7150.2). Typically, software developed and maintained by this Contract will be classes E through G. In rare instances when directed by the Government, the Contractor shall use a streamlined development methodology to quickly develop or provide updates to

systems as described in the IRD Project Lifecycle Guidelines. Federal law and guidance relating to Information Technology security issues, certification and accreditation (C&A), accessibility, privacy and application portfolio management (APM) shall be addressed in each phase of the lifecycle.

The Contractor shall deliver an assessment and recommendation for each new patch or update to be applied for all ITAMS supported platforms within 30 days of vendor release of the updates or patches, in accordance with IRD's Server Operations Management Plan. The Contractor shall provide system deliverables per DRD-2, Project Plans, prior to implementation of any software release. The Contractor system maintenance shall conform to IRD or customer configuration management processes.

The JSC application environment consists of a variety of COTS and internally built applications as well as web-based applications and utilities. Software applications are predominantly web-based with a database back end; with less frequent requests for new non-web (e.g., workstation, client/server, and mainframe) applications. Various architectures will be used for development and, if required, called out in task orders as part of the requirement, e.g., Service Oriented Architecture (SOA). The Contractor shall create a system to manage and disposition discrepancy reports and change requests for ITAMS systems.

The Contractor is encouraged to use existing systems and /or code to satisfy new requirements. The Contractor shall coordinate across other contracts and within its own contract to accomplish some tasks; for example, middleware or application administration on a machine not under the purview of ITAMS.

The Contractor shall provide sustaining engineering which includes implementing limited new capabilities, monitoring system performance, capacity utilization to identify, recommend and implement system enhancements, bug fixes, coordination of testing in response to new hardware and or operating system, and system releases. The Contractor shall ensure that existing and modified systems comply with NASA requirements, and applicable standards, policies, and directives (Attachment J-6, Applicable Documents).

When performing sustaining engineering the Contractor shall make every effort to avoid disruption of system availability during normal working hours. Unless specified by the Government, changes that require production outages shall be scheduled with the customer at least one week in advance of the outage. In the event the outage is an emergency, the Government shall be notified immediately and be kept informed of the progress and expected time of availability. The Contractor shall coordinate with all relevant entities, such as the application-hosting Contractor, the Customer Support Center, or the customer directly, as required.

The Contractor shall provide data management support activities in the following areas:

- Support data conversion activities to migrate to new Center, IEMP and e-Gov modules as required during this performance period.
- Support configuration and maintenance of the Hyperion (Brio) Intelligence server used by the JSC reporting applications.
- Human resources hardware/software support, training facilities support, and laptop and peripherals loaner pool operations.

The Contractor shall provide support to the computer training classrooms supported by the Human Resources Systems Office (HRISO), JSC Language Education Facility, and JSC Gilruth Conference Facility. The Contractor shall respond to requests for assistance in such a manner as to not interfere with the class and shall ensure smooth operations. Examples include the Gilruth center conference and training rooms, Gilruth Wellness Center, JSC foreign language classrooms, Engineering software training room, special student programs training rooms, and the end user training rooms.

5.1.1 Commercial Off-the-Shelf (COTS) Development

The Contractor shall provide software, product-level administration, customization, trouble shooting, and technical support for various COTS applications (see Attachment J-11, Software Inventory). The Contractor shall train system users, and clarify customer requirements. Where applicable, this work shall be conducted in concert with the Customer Support Center. The Contractor shall provide application and process-level development, such as Java- or Oracle-based development, XML technology integration, content and data management, and other related application services. For Windchill or its equivalent development, the Contractor shall maintain an in-depth understanding of Engineering (Organization code: EA) lifecycle processes with an emphasis on reusability of existing system modules where appropriate.

The Contractor shall coordinate with other Government entities and application vendors to apply fixes of defects in COTS products, and ensure that version upgrades to COTS software are applied.

5.1.2 eForms Development

The Contractor shall operate and maintain JSC electronic forms. The Contractor shall provide electronic forms development and maintenance utilizing the Agency and JSC standard forms products (Attachment J-11). These typically involve a back-end database for the storage of information entered through the electronic form, with a website for tracking signature and location status.

5.1.3 Web Development

The Contractor shall design, develop and maintain websites and applications hosted on Unix, Linux, Apple and Windows systems. The Contractor shall develop and maintain applications and scripts built using commonly available web development tools and formats (e.g., extensible mark-up language (XML), hypertext mark-up language (HTML), transition of HTML to XML (XHTML), Cold Fusion, Perl, C++, PHP, .NET, Javascript, Flash, Flex, Java, and wireless mark-up language (WML)). When developing Websites or Web applications, the Contractor shall, where required, facilitate interactions with other COTS hardware and software, peripheral hardware, and web applications (e.g., printers, network multicast, wireless devices, etc.).

5.1.4 Custom Applications Development

The Contractor shall provide custom application support services. These services include end-to-end support for stand-alone executable and client-server based applications. Typical languages include Perl, Java, C, C++, and Delphi.

5.2 Technical Assistance

IRD is responsible for assuring the implementation of both Center and Agency IT policy. Multiple boards and processes have been developed and implemented to assist with this task. The Contractor shall support these boards and processes with the tasks and activities listed below:

1. IRD Administrative Support
2. Web site Registration Process Support
3. IT Policy Waiver tracking and reporting
4. Capital Planning and Investment Control (CPIC) Support
5. Privacy Support
6. IT Asset Management Support
7. Section 508 Support
8. Data Call Support
9. Support of the JSC IT Governance Structure

5.2.1 IRD Administrative Support

The Contractor shall provide administrative support for various IRD meetings such as IT governance boards, control boards, technical forums, regular internal IRD meetings, and ad hoc meetings (as specified by task order). Support for ad hoc meetings will be addressed with the Government on a case-by-case basis. The Contractor shall write meeting agendas, schedule meeting rooms and related facilities including telecommunications services, security processing of meeting visitors, provide both electronic and paper distribution of meeting agendas, minutes and related meeting materials, and track action items.

The Contractor shall be the primary technical point of contact to Service Request (SR) writers and other customers of the appropriate Boards. The Contractor shall work with customers to ensure that the technical specifications of the SR may be implemented within the context of the security systems architecture. The Contractor shall also review an SR to determine its readiness for the board. The Contractor shall recommend the appropriate disposition for an SR to the Board members.

5.2.2 Website Registration Process Support

The Agency Web Site Registration System (AWRS) is a centralized, Web-based system for conducting Web site registration and Web/FTP server inventory. Functions include:

- Registration of public and private Web sites with NASA content (whether hosted by NASA or by external partners) and not fully integrated in the NASA Web Portal infrastructure.
- Inventory of NASA Web and FTP servers (hosts) located anywhere in the Agency that serve Web sites which require AWRS registration.
- Web site reviews by Center Subject Matter Experts (if required) for policy compliance and site content.
- Agency-level and Center-level reports.

As specified by task orders and following the direction of the applicable control boards, the Contractor shall assist JSC organizations in following the steps necessary for

completing the web registration process for websites through AWRS. This includes completing the AWRS registration form, assuring that the website complies with Section 508 (36 CFR Part 1194, Electronic and Information Technology Accessibility Standards) and other IT Policies (Attachment J-6), and obtaining necessary signatures from designated IRD personnel. The Contractor shall also generate reports from AWRS as specified in the task order.

5.2.3 IT Policy and Waiver Tracking and Reporting

The Contractor shall implement the IT Policy process as described by IRD's Policy and Requirements web page (Attachment J-6). This involves reviewing new or revised Headquarters' policy, OMB policy, and other policies as appropriate. The Contractor shall facilitate the drafting of policy, reviewing and disseminating new JSC policies or revisions, and providing weekly management reports of policies, actions, and change requests. The Contractor shall provide assistance in processing policy through the Agency and JSC policy review process. The Contractor shall provide support in summarizing policy and ensuring timely and accurate policy notification is provided via the IRD website.

The Contractor shall support the annual IRD IT policy review. This involves supporting the review of IRD IT policy and ensuring all policy is brought into compliance with the most current requirements.

The Contractor shall implement the IT Policy waiver process by following the current IRD Waiver Process described on IRD's Policy and Requirements Waivers web page (see Attachment J-6). The Contractor shall facilitate the development and revision of the policy waiver forms and policy waiver requirements as required. The Contractor shall assist JSC organizations through the waiver process including assisting in wording and processing of the waivers. The Contractor shall work with the appropriate IRD boards and working groups in support of implementing the waiver process. The Contractor shall maintain an on-going log of waivers status. The Contractor shall ensure proper implementation of the waiver process including final signature authority from the CIO. The Contractor shall facilitate the auditing of waivers by identifying expired waivers and ensuring the appropriate action is taken to bring configurations into compliance.

5.2.4 Capital Planning and Investment Control (CPIC) Support

Each Federal agency must establish and maintain a CPIC process that links mission needs, information, and information technology in an effective and efficient manner. The Center's IRM strategy must align with NASA's vision, mission, and strategic goals.

The CPIC process defines how NASA will select IT capital investments; how capital investments, once initiated, will be controlled to achieve intended cost, schedule, and performance outcomes; and how NASA will continue to evaluate performance once a project is operational.

The Contractor shall support the tasks described below in accordance with IRD CPIC processes, policies, and procedures relating to Agency IT management, budget execution and Office of Management and Budget (OMB) reporting requirements (OMB Circular No. A-130, Management of Federal Information Resources).

5.2.4.1 Exhibit 300 Support

An Exhibit 300 is an OMB IT budgetary requirement that provides an extensive narrative of a specific IT investment (system) which includes, for example, the IT investment's mission, goals, risk management, financial, enterprise architecture, and budgetary requirements.

The Contractor shall review all JSC and Kennedy Space Center (KSC) submitted Exhibit 300 documentation for quality control in accordance with OMB Circular No. A-11, Part 7, Section 300-Planning, Budgeting, Acquisition, and Management of Capital Assets (Attachment J-6), and shall document all findings and recommendations for improvement. The Contractor shall provide subject-matter expertise to JSC and KSC organizations responsible for developing Exhibit 300s.

5.2.4.2 Summary Investment Business Case (SIBC) Support

Summary Investment Business Cases (SIBCs) are IT investment data entered into the Agency IT Investment Management System (currently Prosight) as described in the OCIO Investment Management System (IMS) and IT Summary Investment Business Case (SIBC) User Guide (Attachment J-6). All financial data entered into the system are strategic in nature and multi-year covering the current and the next six fiscal years.

The Contractor shall compare current year SIBC data with prior year SIBC data and document those differences.

The Contractor shall provide subject-matter expertise to JSC organizations responsible for developing SIBCs.

5.2.4.3 IT Planning Support

The Contractor shall support the JSC IT planning process by assisting JSC organizations in developing their yearly IT plans in conjunction with their CPIC inputs in accordance with OMB Circular No. A-130 (Attachment J-6). The Contractor shall build and populate databases that represent each JSC organization's IT Plan for the upcoming fiscal year. The Contractor shall update SIBCs when developing these IT Plans.

Once the plans have been approved, the Contractor shall track organizational adherence with the plans, report compliance to IRD and assist IRD in ensuring that the JSC organizations follow the IT governance process for obtaining approval on any new requirements.

5.2.5 Privacy Support

Under the oversight and guidance of the Center Privacy Act Manager (PAM) and in accordance with NPR 1382.1, NASA Privacy Procedural Requirements, the Contractor shall support Center organizations in complying with the Privacy Act of 1974, the privacy provisions of the Electronic Government Act of 2002, the Children's Online Privacy Protection Act (COPPA), and the Office of Management and Budget (OMB) guidance on privacy.

The Contractor shall complete JSC responses to data calls and audits related to privacy to assist the Government in meeting all requests from NASA Headquarters and other federal government entities (OMB, OIG, OPM, etc.). The Contractor also shall support the completion of Information and Privacy Threshold Analyses (IPTA) and Privacy Impact Assessments (PIA) as described in NPR 1382.1 for Center organization IT systems and applications.

The Contractor shall support the completion and publication of System of Records Notices (SORNs) as described in NPR 1382.1 for identified Privacy Act Systems of Records.

The Contractor shall support activities related to reducing the JSC's use of personally identifiable information (PII) and eliminating its use of social security numbers (SSNs) as described in ITS-PLAN 1382.1, NASA Plan for Reviewing and Reducing Personally Identifiable Information (PII) and Eliminating Unnecessary Use of Social Security Numbers (SSNs).

In the event of a suspected or actual security breach affecting PII, the Contractor shall support activities associated with the Center's Breach Response Team (BRT) related to matters associated with privacy.

5.2.6 IT Asset Management Support

Under the oversight of the JSC IT Asset Manager (ITAM), the Contractor shall develop and maintain JSC policies, standards, processes, systems, and metrics that enable effective management of IT assets (hardware and software) with respect to risk, cost, control, governance, compliance, and business performance objectives.

The Contractor shall utilize a Government-provided software inventory tool to build and update an inventory of all commercial-off-the-shelf (COTS) software in use at JSC, as well as detailed system information about the hardware systems on which the software resides. The Contractor shall build an IT asset repository that stores IT asset inventory, software license, contractual, financial, and key personnel information about JSC's IT assets. At a minimum, this asset repository shall be updated on a quarterly basis.

The Contractor shall provide data/information to support the Center's response to all Government, Agency, and Center data calls related to IT Asset Management using the IT asset repository as the initial basis for that response. Under the oversight of the Center ITAM, the Contractor shall monitor compliance of JSC organizations with all Agency and Center enterprise software license agreements.

The Contractor shall participate in all Agency IT Asset Management periodic and ad hoc teleconferences and face-to-face meetings as directed by task order.

5.2.7 Section 508 Support

The Rehabilitation Act Amendments of 1998 cover access to federally-funded programs and services. The law strengthens Section 508 of the Rehabilitation Act and requires access to electronic and information technology provided by the Federal Government. Federal agencies must ensure that this technology is accessible to employees and

members of the public with disabilities to the extent that it does not pose an "undue burden".

Under the oversight of the Center Section 508 Coordinator, the Contractor shall support activities associated with Section 508 of the Rehabilitation Act at the JSC. This includes working with JSC organizations to complete a periodic Section 508 self-evaluation survey from the Department of Justice (DOJ) and assuring that these organizations fully comply with Section 508 when developing, maintaining, and procuring new electronic and information technology (E&IT) products and services. The Contractor shall assist the JSC organizations in determining whether an E&IT product or service under review complies with the technical standards of Section 508. The Contractor shall provide guidance to JSC organizations in matters related to Section 508.

5.2.8 Data Call Support

The Contractor shall assist government personnel in completing all requests for data/information from or through NASA Headquarters and external Federal Government entities (OMB, OPM, OIG, etc.). The Contractor shall log and track all data call products and provide final dispositions to IRD for reporting to Headquarters.

5.2.9 Support of the JSC IT Governance Structure

Under the direction of the Government, the Contractor shall support the Government in planning, implementing and operating a comprehensive IT Governance structure at JSC. This structure ensures the implementation of Federal, Agency and JSC IT policy requirements in support of JSC Program and Project requirements. The core areas of emphasis to be addressed within the JSC IT Governance structure include documentation, processes and procedures, boards and working groups, roles and responsibilities, decision authorities, resources, implementations, training, and communications.

The Contractor shall be responsible for the following:

- Updating the IT Governance structure documentation at JSC
- Updating the IT Governance processes and procedures
- Updating the board and working group charters and their respective processes
- Performing IT Governance operations which includes: recording meeting minutes, assigning tasks per the board direction, and auditing and closing actions from meetings, change management tracking system, waiver tracking management system, Configuration Management Item (CMI) Tracking System, and IRD Action Tracking System;
- Implementing all requirements for the Configuration Management (CM) Receipt Desk, including periodic review of the CM tool and existing or new requirements to ensure that IRD CM requirements are met; and
- Implementing and maintaining a CM Communications Plan.

5.3 Enterprise Architecture

Enterprise Architecture (EA) is the OMB-mandated effort to formalize and document the structure of the agency's services, data structures, and system implementations as well as to align them to support the Agency as a single enterprise. The JSC EA program is

developing the JSC enterprise architecture to support the Center's specific goals and objectives as well as to integrate with those of the Agency.

The Contractor shall support the following enterprise architecture activities in accordance with NPR 2830.1, NASA Enterprise Architecture Procedures.

5.3.1 Enterprise Architecture Development

The Contractor shall collect baseline information (artifacts and relationships) on JSC business activities, data, and supporting applications and technologies. The Contractor shall assist the JSC CEA in documenting, modeling, and analyzing the broad range of artifacts and relationships to identify opportunities for streamlining, collaboration, and consolidation. The Contractor shall maintain these artifacts in the Agency's proposed EA Repository. The Contractor shall document both the current (As-Is) as well as the desired future (To-Be) business and IT environments across JSC. The Contractor shall complete a gap analysis between the current state and the desired state. The Contractor shall develop transition plans resulting from the completion of EA gap analyses.

5.3.2 EA and IT Portfolio Management Integration

Under the oversight of the JSC CEA, the Contractor shall document the relationships between the business process and the technology assets managed in IT Portfolios defined by the CIO Office (i.e., create linkages between business objectives and IT objectives). The Contractor shall work with the JSC CEA to create metrics that accurately measure the impacts of architectural efforts on business operations, organizations, and JSC as a whole.

5.3.3 EA Review Support

The Contractor shall work with the JSC CEA in coordinating and supporting Center and Agency Enterprise Architecture reviews for major IT projects and activities per NPR 7120.5, NASA Space Flight Program and Project Management Requirements and NPR 7120.7 as described in NPR 2830.1.

5.3.4 Response to Agency Actions

The Contractor shall support the JSC CEA with responding to Agency EA initiatives and actions through data collection and integration.

5.4 IT Systems Engineering, Installation, Maintenance and Operations

The Contractor shall engineer, install, operate, and maintain computer systems and provide system administration. This activity shall be performed for Contractor-managed systems identified in Attachments J-10, Systems Table, J-11, Software Inventory, and J-20, Server Inventory and Complexity Matrix, of the contract. During the term of the contract, the number and type of systems the Contractor shall support may change. The Contractor shall ensure additions and deletions are posted within 7 calendar days from the change.

The Contractor shall use Government-provided tools to administer and manage the systems and applications for which it is responsible. The Contractor may recommend

alternate tools for Government consideration. These include, for example: inventory and asset management, systems management automation, performance data analysis and capture. The Contractor shall provide the Government full access to these tools and data. The Contractor shall provide all data to the Government at the end of the contract, as well as any tools that would allow the data to be readable.

The Contractor shall coordinate system maintenance with the Government according to DRD-11, Preventive Maintenance and Operational Readiness Documentation. The Contractor shall coordinate system administration schedules with the Government. In addition, the Contractor shall provide online system status for all systems managed under this contract. The Contractor shall provide full administrator or root-level access to the Government or authorized Contractors for all systems managed under this contract as approved by the Government and documented via an IRD service request (SR).

System Administrators shall also comply with personnel security investigation requirements as specified in NPR 2810.1, Security of Information Technology. The Contractor's system administrators shall acquire IT security training in accordance with NPR 2810.1.

The Contractor shall perform IT systems engineering, installation, maintenance and operations as described in the following sections in accordance with DRD-10, Standard Operating Procedures.

5.4.1 Engineering and Installation

The Contractor shall engineer new and re-engineer existing IT Server and Storage Systems as projects managed according to NPR 7120.7. IT Server and Storage Systems shall be engineered to ensure that safeguards for the protection of the confidentiality, integrity, and availability of unclassified IT resources are integrated into and support NASA's missions, functional lines of business, and infrastructure based on risk-managed, cost-effective IT principles and practices.

The Contractor shall execute the project plan by installing and integrating any system components as necessary into the existing network. The Contractor shall document the system architecture (including diagrams), create or modify security plans, write user's guides, and write operating procedures.

The Contractor shall implement projects for engineering and installation of IT Server and Storage Systems covered in the following sections.

5.4.1.1 Planning and Estimating

The Contractor shall develop and define project plans for new or existing IT systems supported under this contract. For each project or sustaining engineering task, the Contractor shall follow NPR 7120.7, where applicable.

5.4.1.2 System Development

The Contractor shall implement approved project plans following the guidelines and policies set in NPR 7120.7, where applicable.

5.4.2 Data Center Management

The Contractor shall perform configuration management of the Building 46 Data Center as well as facilitate modifications. The Contractor shall initiate and track implementation of facility requests, perform safety inspections, and coordinate the installation and removal of systems.

The Contractor shall:

Plan, organize, and coordinate Data Center activities;

Develop detailed project plans for Data Center related projects (infrastructure upgrades/improvements);

Maintain effective communications with customers, vendors, and other contractors associated with the facility;

Maintain and update the Data Center design and layout; and

Lead in the resolution of Data Center related problems/issues.

The Contractor shall recommend modifications to or upgrades for the physical facility. For example, the Contractor shall be responsible for analyzing and recommending proposed configuration changes to the following:

Electrical systems and Power Distribution Units (PDUs);

Power generation and Uninterruptible Power Supply (UPS) systems;

Heating, Ventilating, and Air Conditioning (HVAC) systems;

Fire suppression, water detection, and alarm systems;

Data Center design and layout;

Data Center environmental conditions (temperature and humidity).

In addition to the Data Center, the contractor shall perform power capacity planning for redundant network systems located in other buildings. This activity includes baseline configuration analysis, power monitoring, power impacts due to installation and removal of equipment, and coordination of outages with facilities, IRD, and customer personnel.

The Contractor shall be responsible for monitoring Data Center systems, as well as notifying IRD and Facility Operations, when appropriate, of any abnormal situation.

The Contractor shall monitor the following:

- Power systems (UPS, PDU), as well as other systems in which power data is available, (e.g., modular power, branch circuits, rack PDU, etc);
- Cooling systems;
- Temperature and
- Humidity.

The Contractor shall maintain an awareness of the modifications made to the layout of the Data Center facility and systems located in other buildings. The Contractor shall identify and document any changes made to the physical configuration of systems, particularly with respect to power management. Facility Layout Drawings shall be provided and maintained by the Contractor as specified in DRD-27, Data Center Reports.

The Contractor shall coordinate the installation and removal of systems and equipment in the Data Center. Removal shall include deletion of all sensitive data. Installation and removal activities require coordination with the COD Facility Engineering Electrical Branch, the property custodian, and Organizational Computer Security Officer (OCSO). Coordination is also required with system administrators to assure compliance with JSC29638, Server Operations Management Plan (SOMP), including NASA tagging of equipment and cables, logistics of delivery, placement, or removal of equipment. The Contractor shall coordinate and facilitate all under-floor work, including excess cable removal. In addition, the Contractor shall be responsible for initiating, tracking, and facilitating work performed by the Contractor, COD or other parties.

5.4.3 Server Administration

The Contractor shall be responsible for the administration and operation of systems managed under this contract to achieve system availability and performance as specified in Attachment J-20.

The individual components of a server system include server hardware, direct-access storage devices, racks, power distribution units (PDU), system software, virtual devices (servers, workstations, etc.), monitors, LCDs (liquid crystal display), power transfer switches, load balancer switches, and keyboard-video-mouse (KVM) switches. Some of these components may be combined into "clusters" to enhance system availability.

The Contractor shall provide, install, maintain, and upgrade middleware used by the applications defined in Attachment J-11, to achieve the system availability and performance requirements specified in Attachment J-20. Middleware support may require assistance from system administration outside this contract to accomplish these tasks.

The Contractor shall be responsible for completing server administration duties such as:

- Installing and configuring servers;
- Maintaining latest NASA-approved software/firmware patches on systems to remain current with vendor recommended compliance;
- Updating Operating System (as necessary) to remain fully compliant with vendor supported software as well as maintain application functionality.
- Managing a Hypervisor-based virtualization infrastructure;
- Configuring secure systems based on current NASA security requirements;
- Setting up the server file directory structure;
- File and share access provisioning;

- Creating and maintaining user accounts (Domain and Local);
- Configuring servers to support data transmission among systems;
- Monitoring and tuning servers for optimal performance;
- Maintaining and reviewing logs;
- Monitoring, creating, and deleting network printer queues;
- Backup and restoring files/databases;
- Scanning for viruses;
- Identifying and resolving problems;
- Documenting and maintaining server configuration management, such as operating system changes;
- Completing and documenting root-cause analysis to determine cause of an unscheduled outage within seven working days of outage;
- Complying with all NASA IT Security policies (NPR 2810.1, FIPS PUB199, Standards for Security Categorization of Federal Information and Information Systems);
- Implementing all appropriate NASA IT Security procedures (NPR 2810.1, FIPS-199).

All server administration processes and procedures shall adhere to NASA and JSC policies and procedures as outlined in the IRD SOMP.

5.4.4 Storage Administration

The Contractor shall be responsible for the administration and operation of IRD-managed storage systems to achieve system availability and performance as specified in Attachment J-20.

The individual components of a storage system include storage arrays, physical tape libraries, virtual tape libraries; master backup servers, media servers, Fibre Channel switches, related Fibre Channel cables, backup tapes, storage management software (Attachment J-11), and backup software.

The Contractor shall be responsible for completing storage administration duties such as:

- Implementing NASA-approved storage requests;
- Provisioning storage within 5 business days of Service Request (SR) approval;
- Coordinating storage activities with other Contractors as required;
- Migrating data files between storage allocations;

- Managing zones on storage fabrics to maintain the network traffic isolation between storage resources and their related end-user systems;
- Maintaining the configuration-managed architecture diagrams of the storage and backup systems; any changes to the architecture shall be documented within 5 business days;
- Backup and restoring all systems and servers as defined in Attachment J-20 per the IRD SOMP;
- Adhering to the standard IRD practices and procedures as outlined in the IRD SOMP;
- Documenting and maintaining storage device configuration management, such as firmware level. Any changes to the documentation shall be made within 5 business days;
- Completing and documenting root-cause analysis to determine cause of an unscheduled outage as defined in SOW Section 3.0;
- Complying with all NASA IT Security policies (NPR 2810.1, FIPS PUB199);
- Implementing all appropriate NASA IT Security procedures (NPR 2810.1, FIPS PUB199);
- Maintaining an off-site storage facility for backup recovery tapes;
- Maintaining a physical inventory of the backup tapes, clean cartridges, related cables, switches, and Host Bus Adapters (HBAs) for storage; and coordinate storage support activities with the Government. The Contractor shall provide full administrator or root-level access to the Government or authorized Contractors for all storage managed under this contract as approved by the Government.

All storage administration processes and procedures shall adhere to NASA and JSC policies and procedures as outlined in the IRD SOMP.

5.4.5 Database Administration

The Contractor shall provide Database Administration (DBA) for supported applications and database environments as provided in Attachment J-11. This includes product level software installation and configuration, user identification (ID) management, release testing and verification, problem resolution, tuning, upgrading, patching, and startup and shutdown of the databases and backups. Support for planning and integration of activities with other contractors (e.g., ODIN) may be required. Examples of databases to be managed include Oracle, Microsoft SQL Server, Microsoft Access, and MySQL.

The Contractor shall be responsible for completing database administration duties such as:

- Installing new software such as new versions of the database management system (DMBS) software, application software, and other software related to DBMS administration;

- Working with the server administrator and storage administrator to properly configure the hardware and software;
- Monitoring and administering DBMS security which includes adding and removing users, administering quotas, auditing, and checking for security problems;
- Analyzing data stored in the database and making recommendations related to database performance and efficiency;
- Participating in the preliminary design of a database by pointing out potential problems;
- Modeling data for the purpose of system optimization;
- Administering existing databases; and
- Analyzing, designing, and creating new databases.

5.4.6 Multimedia Engineering, Installation and Maintenance

The Contractor shall perform all the requirements of this section in order to implement, maintain and operate all multimedia systems identified in Attachment J-10. All multimedia engineering projects within this area shall comply with NPR 7120.7. This document describes lifecycle phases such as requirements definition, design, programming, prototyping, testing, documentation, customer acceptance, deployment, training, installation, operations, repair, sustaining engineering, and retirement. In rare instances designated by the Government the Contractor shall use a streamlined development methodology to quickly develop or provide updates to systems.

All multimedia engineering installations, maintenance and operations and service activities shall be conducted in accordance with the DRD-1, Management Plan, and shall be reported in accordance with DRD-13, Contractor Status Report. The Contractor shall ensure that all work described in this section conforms to applicable industry and Government standards, policies and practices for performance, quality, workmanship and safety (Society of Motion Picture and Television Engineers (SMPTE), Electronic Industries Association (EIA), and International Standards Organizations (ISO)). All multimedia engineering installations, maintenance, operations and service activities shall be conducted in accordance with NASA requirements for IT security (NPR 2810.1).

5.4.6.1 Multimedia Engineering and Installation

The Contractor shall perform minor and major multimedia engineering and installation projects, provide sustaining engineering and development engineering for multimedia systems as described in the following sections.

5.4.6.1.1 Planning and Estimating

The Contractor shall work with customers in the development and definition of project requirements for minor and major projects and sustaining engineering in cooperation with the designated Government project lead. For efforts which require an initial

estimate, the Contractor shall provide brief requirements analysis and rough order of magnitude (ROM) cost estimate for the project (defined in DRD-2).

For each minor or major project, sustaining or development engineering task the Contractor shall provide either an abbreviated or complete Engineering Project Plan (EPP), as specified by the Government, (defined in DRD-2).

5.4.6.1.2 Minor Projects

The Contractor shall perform minor multimedia engineering and installation projects. Minor projects are smaller tasks that typically do not require significant planning, design or component fabrication effort. A minor project is typically one requiring 20 or less hours to complete and the material cost is valued at less than twice the cost of the associated labor. Typical minor projects include efforts to provide, assemble, install, and test certain small items of audio, video or still imaging equipment (e.g., receiver/monitors and player/recorders) in offices, conference rooms, lobbies and laboratories. Minor projects could involve the modification, relocation or removal of existing multimedia systems or equipment. Minor projects may also require connections or changes to JSC audio and video networks.

5.4.6.1.3 Major Projects

The Contractor shall perform major multimedia engineering and installation projects. Major projects are those tasks that require significant planning and effort to design, assemble, install and test multimedia systems. These systems may consist of many components including cameras, monitors, scanners, printers, player/recorders, imaging or signal processing systems, control systems, television production equipment and other electronic or mechanical parts. Projects may also include major changes or additions to audio and video networks or require integration with computer, network-based systems or applications. Most project components are commercially available, but some may have to be specially designed and constructed.

The Contractor shall implement major projects. Testing shall be performed as needed to confirm the proper operation of components and complete systems and that project operational requirements are satisfied. Clear and complete operating instructions shall be prepared and provided to the NASA customer. Major projects are considered complete upon Government approval of the Project Completion Review documentation (NPR 7120.7).

5.4.6.1.4 Sustaining Engineering

The Contractor shall provide sustaining engineering services for JSC multimedia systems. Sustaining engineering is required to ensure that systems continue to perform to meet existing, modified or proposed requirements when existing hardware or software becomes inadequate, obsolete or fails and a simple maintenance replacement is not available or possible. These services may include an analysis and review of existing systems, system modifications, an evaluation of prospective new hardware or software, or the design and build up of a prototype solution. Sustaining engineering services also include procuring and integrating equipment into existing systems. Sustaining engineering efforts shall be documented in the Project Completion Review documentation (NPR 7120.7).

5.4.6.2 Multimedia Maintenance

The Contractor shall perform maintenance of JSC multimedia systems as described in the following sections.

5.4.6.2.1 Preventive Maintenance

The Contractor shall perform preventive maintenance (PM) on specific JSC multimedia equipment and systems (Attachment J-10). The Contractor shall provide analysis to NASA for identifying systems and equipment that require PM. The Contractor shall plan, establish, and conduct a PM program to ensure the reliable operation of all identified items and that the systems are functioning within required specifications, particularly for items related to human spaceflight mission operations. The Contractor shall determine the PM requirements for the identified items, including activities to be performed and schedules for those activities to be accomplished. The Contractor shall include these items in its Preventive Maintenance Plan and Preventive Maintenance Report (DRD-11). The Contractor shall review the PM program and amend or update the plans or procedures as required (DRD-11). The Contractor shall submit a copy of these PM plans and procedures to NASA for review and approval, when they are initially prepared and when they are revised (DRD-11).

The contractor shall develop an obsolescence plan for multimedia equipment and systems. The plan shall identify and address equipment systems that will become unsupportable during the period of execution of the contract. The plan shall identify what upgrades are necessary to maintain the functionality of the system or suggest a replacement system. The Contractor shall submit a copy of the obsolescence plan to NASA for review and approval, when initially prepared or revised (DRD-11).

5.4.6.2.2 Repair

The Contractor shall repair JSC multimedia systems, equipment and networks. Some identified items shall be repaired or replaced as needed to restore full operational capability in a timely manner. The Contractor shall notify NASA when the repair of an item is not considered to be cost effective and recommend if the item should be replaced. The Contractor shall also acquire and manage third party maintenance agreements as defined in WBS 3.2.5.

The Contractor shall repair items used to support operational space flight mission requirements immediately if notification occurs during periods of Contractor mission staffing. If Contractor mission staffing is other than 24/7, repairs shall be initiated at the beginning of the next supported shift or as directed by the Government for unusual and compelling circumstances.

5.5 System Capacity Planning and Performance Management

The Contractor shall perform capacity planning and performance management for systems identified in Attachments J-10, J-11, and J-20. System performance shall be quantified in terms of large and small transactions, as well as end-to-end transaction performance as measured from the end-user workstation to the host or data system. System capacity planning is a focus on ensuring systems will remain within acceptable performance constraints. Additionally, system capacity planning is charged with ensuring

that additional capacity is added in advance of the point it is needed. Examples of system performance measurements include application resources and licenses, related equipment (e.g., servers, physical storage space), and network bandwidth (e.g., television distribution network). In addition, the contractor shall analyze the environment to detect any systems that have experienced significant performance anomalies or an increase or decrease in resource utilization relative to previous baselines.

The Contract shall provide recommendations for improving any outstanding performance issues or capacity shortfalls and recommendations for systems reconfiguration or consolidation that reduce operating costs or improve resource availability (DRD-17, Performance Management and Capacity Plan).

The Performance Management and Capacity Plan shall be prepared and delivered on a periodic basis for supported systems, as determined by DRD-17. In addition, the data shall be provided electronically in Open Format defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

The Contractor shall document all system and component-level capacity planning and monitoring activities to ensure that adequate capacity and performance margins for new or modified systems are met.

In addition, the Contractor shall monitor the online system availability status for all systems managed under this contract.

The Contractor shall perform the following:

1. Server and Storage Performance Monitoring
2. Network Performance Monitoring
3. Application Monitoring

5.5.1 Server and Storage Performance Monitoring

The Contractor shall use the Service Performance Monitoring system to collect performance data from the server operating system and, in some cases, the hosted application.

The Contractor shall keep associated alert distribution lists and availability monitoring lists current, and shall tune thresholds as needed.

The Contractor shall deploy and troubleshoot agents and scripts on IRD-owned, ODIN-owned and other IRD customer-owned servers. The Contractor shall work with server owners when deploying and troubleshooting agents and scripts on all monitored servers.

The Contractor shall install the console for the Server Performance Monitoring application on designated workstations. Additionally, the Contractor shall provide access to a console for all system owners and system administrators of monitored servers.

5.5.2 Network Performance Monitoring

The Contractor shall monitor performance, analyze traffic, test, and troubleshoot problems within the JSC institutional network, which includes SCTF, Ellington Field and

WSTF. The Contractor shall perform the WSTF performance monitoring functions remotely from JSC. The Contractor shall use Government-provided network monitoring and troubleshooting tools. The Contractor shall provide performance and trend analysis data for traffic shaping or network architecture changes to be included in the Network Performance Report as specified in DRD-13.

The Contractor shall provide technical support to various IRD review boards such as the Network Access Control Board (NACB), the IRD Control Board (ICB), and others. The Contractor shall assist the Government in preparing presentations in support of these boards.

The Contractor shall work with personnel from IRD customer organizations to understand and report on detailed computer network connectivity requirements, as well as to troubleshoot network problems. The Contractor shall comply with all NASA and JSC IT Policies defined in Attachment J-6. The Contractor shall obtain IRD management approval through the TMR before any information is disseminated external to IRD.

The Contractor shall work with network personnel from the NASA Integrated Services Network (NISN) and network personnel from other NASA centers to troubleshoot connectivity issues between JSC and other Centers.

The Contractor shall attend conferences and training as required by task order and specified by the Government.

The Contractor shall be responsible for the completion and submission to the Government of the following deliverables:

- Project Status as specified in DRD-13;
- Troubleshooting Request electronic reports, as well as status reports on efforts spent analyzing and resolving issues.
- Network performance electronic reports using the network traffic monitoring tools provided by the Government. The report shall contain metrics data as specified by task order in accordance with DRD-13, Contractor Status Report

The Contractor shall maintain the hardware and software associated with network performance monitoring located in Attachment J-11 and J-20.

5.5.3 Application Monitoring

The Contractor shall use a Government-provided application monitoring tool to ensure availability of the application to the users and minimize downtime. The Contractor shall use real-user monitoring to measure the performance and availability experienced by actual users, diagnose individual incidents, and track the impact of a change.

5.6 IT Security Services

The Contractor shall provide IT Security Services that safeguard confidentiality, integrity, and availability of unclassified IT resources that are integrated into and support NASA's missions, functional lines of business, and infrastructure based on risk-managed, cost-effective IT security principles and practices. All IT security services shall be delivered in accordance with NPR 2810.1.

5.6.1 IT Security Engineering

The Contractor shall engineer new and re-engineer existing IT Security Systems as projects managed according to NPR 7120.7. The Contractor shall include quality of vendor customer support and documentation, National Information Assurance Partnership (NIAP) Common Criteria Evaluation and Validation Scheme (CCEVS) / Cryptographic Module Validation Program (CMVP) validation, and the ability to adapt to evolving security threats among requirements evaluated when producing a System Concept Review (see Attachment J-6).

The Contractor shall execute project plans by installing and integrating any system components as necessary into the existing network. The Contractor shall document the system architecture (including diagrams), create or modify security plans, write user's guides, and write operating procedures.

5.6.2 IT Security Maintenance and Operations

The Contractor shall be responsible for the maintenance and operations of the following JSC Institutional IT Security Systems per NASA and IRD policies and procedures (Attachment J-6):

1. Perimeter Firewall Systems
2. Content Monitoring and Filtering Systems
3. Network Intrusion Detection and Prevention Systems
4. Traffic Capturing and Analysis Systems
5. IT Security Support Systems
6. Vulnerability and Discovery Scanning Systems
7. Consolidated Logging Systems
8. Remote Access Systems
9. Public Key Infrastructure Registration Authority and Roaming Profile Systems
10. Security Information Management Systems

At a minimum, maintenance and operation duties include the following:

- Performing system and application installations and upgrades across the security systems listed above.
- Performing configuration changes (e.g., signature files, firewall rules, proxy database, etc.) across security systems.
- Maintaining complete, accurate, and up-to-date documentation for these systems.
- Monitor IT security system performance to minimize impact to the network environment.
- Collecting and analyzing data from IT security systems, such as packet capture, session (for example, TCP and HTTP sessions), statistical, and alert data for indicators and warnings to detect and escalate IT Security Incidents, including abuse of IT resources as defined by NASA and JSC Internet Usage policies, or to recommend improvements to security controls and practices.

5.6.2.1 Perimeter Firewall Systems

The Contractor shall operate, maintain and monitor the JSC and WSTF perimeter firewall systems (Attachment J-20). The Contractor shall perform firewall rule set administration—including the implementation of approved firewall rule changes — and configuration management of the JSC Institutional Firewall Systems per document JSC 29173, IRD Configuration Management Plan, Appendix A to safeguard the network from intentional or unintentional intrusion and to maintain and enhance the performance, fault-tolerance, and functionality of the firewall.

5.6.2.2 Content Monitoring and Filtering Systems

The Contractor shall operate, maintain and monitor the JSC Content Monitoring and Filtering Systems (Attachment J-20), a suite of tools capable of filtering access to Internet and internal content made by JSC devices, of caching content so as to reduce access latency, of logging content access requests to support investigations and application troubleshooting, and of detecting abuse of IT resources as defined by NASA and JSC Internet usage policies (Attachment J-6).

5.6.2.3 Network Intrusion Detection and Prevention Systems

The Contractor shall operate, maintain, monitor, and tune the Network Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) (Attachment J-20) consisting of hardened central management consoles, hardened IDS sensors, and hardened IPS filters placed on secure monitoring segments with access to key areas of network infrastructure to collect network traffic and tuned to avoid packet loss and to minimize disruption. The Contractor shall maintain knowledge of systems functionality in order to research the unique properties of suspicious traffic in order to write effective signatures to exclusively detect and prevent malicious or unauthorized activity unique to JSC.

5.6.2.4 Traffic Capturing and Analysis Systems

The Contractor shall operate, maintain and monitor the Traffic Capturing and Analysis Systems (Attachment J-20) consisting of hardened sensors placed on secure monitoring segments with access to key areas of network infrastructure to collect packet capture data, session data (for example, TCP and HTTP sessions), and URL requests and tuned to avoid packet loss.

5.6.2.5 IT Security Support Systems

The Contractor shall operate, maintain and monitor security tools and data archival on IT Security Support Systems (Attachment J-20) consisting of hardened servers placed on secure segments with adequate storage and processing resources for the analysis and archival of IT security data.

5.6.2.6 Vulnerability and Discovery Scanning Systems

The Contractor shall operate, maintain and monitor the Vulnerability and Discovery Scanning Systems (Attachment J-20) consisting of hardened scanners and sensors fixed or rendered mobile to perform vulnerability, network discovery, Certification and

Accreditation (C&A), ad hoc, wireless, and perimeter scanning. The Contractor shall assist with periodic scanning report creation using scripting and data correlation. The Contractor shall maintain knowledge of JSC networks, research the unique properties of vulnerabilities affecting widely-installed software, and optimize the scanner configuration in order to minimize disruption of daily operations for targeted systems and to minimize false positives and false negatives.

5.6.2.7 Consolidated Logging Systems

The Contractor shall operate, maintain, monitor, and tune the Consolidated Logging System (Attachment J-20) consisting of a hardened central management console and fault-tolerant hardened data collectors placed on secure monitoring segments with access to key areas of network infrastructure to archive computer and network device logs, and tuned to avoid data loss. The Contractor shall maintain knowledge of monitored systems and research the unique properties of suspicious traffic to create alert conditions to exclusively detect malicious or unauthorized activity unique to JSC.

5.6.2.8 Remote Access System

The Contractor shall operate and maintain the Remote Access Systems (Attachment J-20), consisting of hardened Virtual Private Network (VPN) Gateways using tunneling and proxy services to provide scalable, secure authentication and content encryption for thousands of remote users over the public Internet. The Contractor shall create, test, and manage custom profiles against requirements to provide non-JSC personnel (foreign nationals, university researchers, NASA personnel at other centers) secure access only to specific resources. The Contractor shall maintain multiple Secure Socket Layer (SSL) certificates for VPN Gateways. The Contractor shall incorporate the use of new authentication and encryption algorithms where appropriate. The Contractor shall perform Tier 2 troubleshooting to assist system administrators and users with the diagnosis and analysis of VPN problems. Tier 2 support is defined as a level of support beyond the scope of basic Help Desk service, requiring a subject matter expert.

5.6.2.9 Public Key Infrastructure Registration Authority and Roaming Profile Systems

The Contractor shall operate, maintain and monitor the Public Key Infrastructure (Attachment J-20) consisting of hardened Registration Authorities and Roaming Profile Servers which interoperate with the JSC Certificate Directory and the U.S. Treasury Certificate Authorities, providing scalable and distributable identification, authentication, non-repudiation, data integrity, and key recovery services for electronic transactions and communications. The Contractor shall implement and test PKI client software installation packages. The Contractor shall perform Tier 2 troubleshooting to assist enrollment agents and users with the diagnosis and analysis of faulty PKI operations.

5.6.2.10 Security Information Management Systems

The Contractor shall operate, maintain, monitor and tune the Security Information Management (SIM) Systems (Attachment J-20) consisting of a hardened central management console and hardened sensors placed on secure monitoring segments with access to key areas of network infrastructure to provide continuous collection of network traffic directly and indirectly from institutional or organizational data sources (for example, DHCP servers, Syslog servers, DNS servers, Active Directory Domain Controllers, and potentially any other IT Security System). The SIM is a JSC custom

application employing a database, web interface, scripted loaders, and fuzzy logic. Data loss shall be avoided by adapting the SIM configuration to continue to accept data as the locations and formats of data sources change. The Contractor shall augment and enhance SIM capabilities to support new technologies (for example, IP version 6), interpret data from new sources, and provide simpler, more intuitive operation (for example, adopting Universal Time and improving the user interface). The Contractor shall support ad hoc report generation for data calls, IT Security incident response or auditing, and other information gathering activities using the SIM Application Programming Interface (API).

5.6.3 IT Security Administration

The JSC IT Security Administration program consists of the following:

1. Consultation
2. Forum/Board Participation
3. Organizational Computer Security Official – Representative (OCSO-R) Duties

The Contractor shall administer the JSC IT Security Program in accordance with NPR 2810.1 (Attachment J-6).

5.6.3.1 Consultation

The Contractor shall accept and respond to IT security-related requests by providing technical support to customers with the development of requirements for IT security solutions (*e.g.,* designing firewall rules).

5.6.3.2 Forum/Board Participation

The Contractor shall provide technical expertise at both formal and ad hoc board meetings (for example, the Network Access Control Board (NACB) and IRD Control Board (ICB)), forums, and working groups as required to assist the Government's decision-making process.

5.6.3.3 Organizational Computer Security Official – Representative (OCSO-R) Duties

The Contractor shall be responsible for performing OCSO tasks and activities as identified in NPR 2810.1 with the exception of determining policy.

5.6.4 Vulnerability Management

The Contractor shall conduct scans of the JSC network and campus (including Sonny Carter Training Facility, WSTF and Ellington Field), such as network discovery scans, vulnerability scans, ad hoc scans, network perimeter scans, and wireless scans in accordance with NPR 2810.1. The Contractor shall coordinate with JSC organizations to remediate vulnerabilities and perform follow-up scans to validate remediation.

The Contractor shall use capabilities within the scanning software or other techniques to generate output for use by the Government.

5.6.4.1 Vulnerability Assessment

The Contractor shall use Government-furnished software and hardware as listed in Attachment J-20, to perform monthly vulnerability scans of all devices connected to the JSC network (or incorporate results of scans performed by other organizations behind their firewalls) in accordance with NASA requirements on vulnerability remediation as specified in NPR 2810.1. The Contractor shall use scripting and data correlation to create periodic scanning reports.

The Contractor shall conduct vulnerability assessment and compliance scanning as defined by task order in support of Certification and Accreditation (C&A) activities.

The Contractor shall conduct ad hoc vulnerability and configuration scanning of systems or websites to assess risk of IT security threats before attaching a system or website to the JSC network.

The Contractor shall administer the wireless intrusion detection system (WIDS) to detect rogue access points, ad hoc networks, other violations of IT policy (*e.g.,* access points not configured with encryption as defined by JSC standards), and access point leakage. For those areas not covered by the WIDS, the Contractor shall conduct manual monthly wireless scans. The Contractor shall identify the physical location (within a room on a floor plan or with latitude/longitude on a map), network location, and attributes (*i.e.,* vendor, SSID, MAC address, signal strength, channel, encryption type, network protocol/standard) of rogue access points and ad hoc networks.

The Contractor shall conduct monthly network discovery scanning to detect rogue IT assets which are not declared in IT Security Plans.

The Contractor shall conduct monthly vulnerability and compliance scanning of all externally-facing (perimeter) hosts which are allowed inbound access through the JSC Institutional firewalls.

5.6.4.2 Vulnerability Remediation

The Contractor shall coordinate with JSC organizations to remediate vulnerabilities and perform follow-up scans to validate that the JSC organization has completed actions to repair vulnerabilities or to accept and document vulnerabilities that cannot be repaired.

5.6.5 IT Security Monitoring

The Contractor shall collect and analyze packet capture data, session data, statistical data, and alert data for indicators and warnings to detect and escalate IT Security Incidents or to recommend improvements to IT Security controls and practices.

5.6.6 IT Security Incident Response

The Contractor shall participate in IT security incident response as members of the JSC Incident Response Team as defined by the JSC IT Security Incident Response Plan (Attachment J-6). The Contractor shall provide on-call IT security incident response 24 hours per day, 7 days a week.

The Contractor shall meet Service Level Agreements defined in the JSC IT Security Incident Response Plan for daytime/nighttime response, notification, and resolution.

The Contractor shall participate with system personnel (both civil service and contractor) when responding to an incident.

The Contractor shall provide detailed documentation of actions taken and the conclusions drawn from analysis. The Contractor shall protect all documentation and communications associated with incidents in accordance with Agency requirements for Controlled Unclassified Information (CUI) data at a minimum (Attachment J-6).

5.6.7 Certification and Accreditation Consulting and Auditing Services

The Contractor shall support JSC organizations in performing their Certification and Accreditation (C&A) tasks and activities in accordance with NPR 2810.1 requirements. The Contractor shall:

- Maintain an expert knowledge of new NIST & NASA requirements and understand their security implications in order to instruct JSC organizations on how to effectively implement security controls;
- Possess a thorough understanding of NIST's C&A processes in order to interpret policy, processes, and procedures;
- Train JSC organizations on how to perform C&A activities;
- Review the security controls of JSC IT Systems;
- Assist JSC organizations with managing their C&A packages in the C&A repository;
- Provide C&A repository training;
- Critique C&A documentation and provide feedback to the owning organization;
- Assist in performing pre-certification and perform Security Testing and Evaluation (ST&E);
- Assist with certifications and/or audits by outside parties;
- Perform audits to verify the completion of the Plan of Action and Milestone (POAM);
- Consult with system owners or designees in their performance of continuous monitoring (security control testing); and
- Attend appropriate control boards as directed by the Government, reporting on the meeting results and making recommendations to the JSC Certification and Accreditation Official (CAO).

5.7 Planning and Integration

The Contractor shall conduct planning for the development and implementation of new system capabilities; perform studies, market surveys, and benchmarking as directed; and make recommendations for new and improved capabilities, as well as for obsolescence management. The Contractor shall regularly evaluate all Government-provided tools and recommend changes.

Planning and Integration shall involve all disciplines within IRD and associated IT and multimedia components.

When requested by the Government, the Contractor shall provide technology assessments, proposals, and/or cost estimates. These may address a state of technology, infrastructure or application enhancements, service concepts, etc. The Contractor shall follow NPR 7120.7 during system engineering efforts.

Several WBS areas within this contract require the implementation of projects. In each WBS area, specific steps are provided to allow tracking and review of the implementation of these projects to assist NASA with an understanding of resource utilization, cost and other factors. To reduce duplication of effort, only a specific set of milestones shall be rolled up into an integrated plan. The Contractor shall be responsible for the delivery of this integrated plan per DRD-2.

The Contractor shall perform integration analyses and make recommendations to the Government regarding technology selection and implementation alternatives to ensure the compatibility of developed systems with applicable JSC and NASA standards for software and IT security.

The Contractor shall assess, design, and implement network architecture changes involving the JSC IT security infrastructure.

6.0 MULTIMEDIA OPERATIONS AND SERVICES

The Contractor shall provide multimedia products and services to support JSC in meeting institutional and program requirements, e.g., engineering analysis, mission operations and Public Affairs activities. Multimedia products and services are distributed through the JSC audio, video, and telecommunication (telecom) networks; NASA Television; the JSC and NASA computer intranet; and the Internet. They are also distributed on media such as audio or videotapes, compact discs (CDs), digital versatile discs (DVDs), photographic prints, and digital files.

The Contractor shall perform multimedia operations as described in the following sections in accordance with Government-approved Standard Operating Procedures as produced in accordance with DRD-10, Standard Operating Procedures, and WBS 5.4.6 Multimedia Engineering, Installation and Maintenance.

6.1 Imagery Acquisition

The Contractor shall provide motion, still and high-speed imagery acquisition. Specifically, the Contractor shall provide still and motion video/digital/photographic services for Human Spaceflight missions; engineering, testing and JSC institutional and training activities. The Contractor shall use applicable analog, digital, and film based formats as determined by individual project requirements.

Additional examples of imagery acquisition include: digital photography, digital high speed photography (~ 2 million fps), high speed video (60 to 120,000 fps), non-visible spectrum photography, pulse (time-lapse) imaging, infrared video, ultraviolet/infrared photography, Borescope imaging, remote operation of photo and digital video systems, aerial photography and macro photography.

6.1.1 Engineering Testing Support

The Contractor shall set up and operate video systems, electronic still cameras, film-based imaging systems, high speed imaging systems, and other imaging systems for instrumentation or documentation activities for engineering testing at JSC or other locations as required. The Contractor shall acquire imagery in pressure chambers (requiring specialized protective equipment), high-performance test aircraft, and laboratories using testing methods that require special safety or hazardous training provided by the Government. The Contractor may be required to use special image capture formats and processes (e.g. high-speed, time-lapse, different frame rates) to meet specific engineering testing needs or for data and information gathered in laboratory or hazardous environments.

Additionally, the Contractor shall prepare and operate television monitoring and recording systems for engineering testing activities at the Center. The Contractor shall provide routine system operations in the test facilities located in JSC buildings 7, 32, and 49. As requested by the Government (on average twice per year), the Contractor shall provide video monitoring services in other Government-owned facilities located at JSC and other locations as required. The imagery acquisition process includes signal processing, distribution, signal validation, video monitoring, and documentation. Video recording tapes provided by the Contractor to produce original (master) recordings or duplicate recordings (dubs) shall be of the highest commercial quality available for videotape recordings to ensure high, video-quality imagery with prolonged storage life.

The Contractor shall perform image capturing for test and training activities conducted during flight in Government-operated aircraft. These Contractor employees shall be required to pass an annual Air Force Class III physical and applicable flight training provided by the Government.

6.1.2 JSC Institutional and Mission Support

The Contractor shall provide still and motion imagery acquisition for JSC institutional, program, and training activities. The Contractor shall set up and operate video systems, electronic still cameras, and film-based imaging systems for the documentation of routine, non-mission activities conducted in JSC facilities. Examples of these activities are classroom training, field training, site surveys, procedure development, film tests, dignitary visits, accident investigations, and special events. The Contractor shall also provide image acquisition services in confined spaces on site and in the JSC tunnel system.

The Contractor shall provide mission imagery documentation of flight crew training and Flight Control Room activities. In the event of a spaceflight contingency, the Contractor shall comply with JSC 27847, Imagery Operations Shuttle Contingency Action Plan, including travel to domestic or overseas landing and recovery sites, if required.

6.2 Human Spaceflight Multimedia Operations

The Contractor shall provide mission imaging operations for motion and still imagery, including the processing of mission downlink and returned imagery. These systems are designed to receive, adjust, switch, record, playback, and distribute mission television, audio, and still imagery. This effort shall include operating the Video Downlink Record

and Playback System (VDRPS), the Master Record and Playback Area (MRPA), the Signal Validation and Adjustment System (SVAS), the Digital Imaging Laboratory (DIL), and the DIL Annex.

For International Space Station, Shuttle and Constellation program flight missions, the Contractor shall generate the mission imagery and support plans that identify the photographic and television products required for each mission as defined in the DRD-14, Mission Support Planning Documents. These documents shall be created from data derived from the ISS Increment Data Requirements Document Annex 3, ISS Increment Data Requirements Document Annex 5, the Space Shuttle Program Mission Integration Plan, SSP Flight Specific, Flight Requirements Document and Constellation Program mission requirements documents. The imagery plans shall be reviewed and approved in accordance with DRD-14, prior to each ISS Increment, Space Shuttle mission, Constellation mission, other downlink event or document revision. The Contractor shall submit a Mission Imagery Processing Plan as specified in DRD-14. This plan shall define the processing of both still and motion imagery for real-time and post-mission activities. A post-flight imaging report defining the type, quantity, labeling, and disposition of returned imagery media will be included as part of this plan.

The Contractor shall participate in mission simulations. These functions include the processing, monitoring, recording, and distribution of all video and still imagery downlinks and the switching to backup circuits or equipment if a device in the system malfunctions.

The Contractor shall verify the nominal operation and readiness of the JSC multimedia systems and associated networks, systems, and interfaces, for human spaceflight-related activities via periodic or scheduled readiness checks per DRD-11, Preventive Maintenance and Operational Readiness Documentation. The Contractor shall test and verify signal paths, ascertain and adjust the technical quality of the signals to meet broadcast or industrial standards as required, validate internal cable TV channels, and verify the integrity of data in the vertical interval of the television signal. These readiness checks include audio, video, still, and digital systems, operations involving data transfer, switching circuits and equipment, and retrieval and playback of video recordings.

6.2.1 Real-Time/Mission Processing, Recording, and Distribution

The Contractor shall process, monitor, validate, record, adjust, and distribute mission-related audio, video, and still imagery, which may originate from the Space Shuttle, ISS, International Partners and Participants, Constellation vehicles, satellite downlink, or interfaces to external sources.

During missions, the Contractor shall provide electronic imaging to the DIL Annex located in the Mission Control Center (MCC). As such, the Contractor shall provide real-time processing of electronic still camera imagery; transferring images and audio for web-based distribution; and manipulating files, printing digital images, and distributing imagery through networks and servers to other JSC and NASA locations and addresses.

6.2.2 Post-Mission Processing, Recording, and Distribution

The Contractor shall process, monitor, validate, record, adjust, and distribute mission-related audio, video and still imagery, which originates from videotapes, film or digital

media returned to JSC after a mission. Processing may include, as an example, transferring imagery to an archive medium, logging content information, and distributing imagery to program, institutional, and international customers.

6.3 General Photographic Operations and Services

The Contractor shall provide film and paper processing, process digital imagery, duplicate photographic products, transfer and distribute imagery, manipulate files, perform film testing and certification, perform photographic discharge management, and package and deliver photographic products. Photographic laboratory operations include, for example, production of the following products:

A. Paper prints

B. Film processing-color positive, black & white and color negative (35mm – 4x5 inches)

C. Transparent material

D. Flat-art scanning of originals up to 4' x 6'

E. Film scanning from 35mm to 9 x 9 inches original negatives or positives and long roll scanning

F. CDs/DVDs and other electronic media

G. Motion picture long roll handling, splicing and cleaning

6.3.1 Film Processing and Scanning

The Contractor shall provide products and services for the processing of film-based imagery. The processing may include standard chemical processing or may require special processing due to film or exposure deviations. Film processing includes, for example, 35mm, 70mm, 4x5 inches, positive, and negative media.

The Contractor shall scan all processed, film-based imagery to digital files for retention, printing, and distribution. The Contractor shall operate a variety of film scanning devices for the creation of digital files.

6.3.2 Digital Imaging and Products

The Contractor shall perform still digital imaging operations and provide products. The Contractor shall provide a color management system that encompasses all still digital imaging systems. The choice of system requires approval by the Government. A color management system is defined here as a system through which accurate color reproduction can be implemented across many devices and systems. The color management system will tie together all input devices (scanners, cameras, etc.), displays (monitors), output devices (printers), and independent devices (not linked to any specific device – used as a reference or storage profile). The color management system must conform to the ICC Color Management – Industry Best Practices (ICC Standard).

The Contractor shall transfer still and motion imagery from one format or medium to another. Media include 16mm motion picture, DVD, CD, digital files, and other film- and non-film-based media. Additionally, the Contractor shall transfer still imagery to and from a Government-provided, web-based server for distribution to customers.

The Contractor shall provide image file manipulation to digitally enhance the image quality, contrast, and color balance and to set the image resolution at multiple levels and multiple file formats when requested and where appropriate. The Contractor shall request Government approval for any manipulation that alters the original intent of the image.

6.3.3 Flight Film Certification

To verify the film meets the manufacturer's specifications for speed and tone reproduction characteristics, the Contractor shall perform certification testing on the photographic film to be flown, certifying each film type and emulsion separately. Certification shall be performed on all new film emulsions as well as on re-certifications. The Contractor shall verify the film using both the film's sensitometric curves and the manufacturer's control strips. A record shall be kept of each certification. Use of the certifications in processing the flight film is documented in an SOP in accordance with DRD-10.

6.3.4 Photographic Chemical Processing

The Contractor shall perform chemical storage, chemical mixing, plumbing, chemical processors, and the maintenance and operation of the zero-discharge hazardous waste processing system according to JPR 8550.1, JSC Environmental Compliance Procedural Requirements. A current listing of hazardous materials is provided in Attachment J-16, Hazardous Materials List.

The contractor shall report to the NASA Environmental Office on photography chemical handling and disposal in accordance with DRD-9, Safety and Health Plan.

The Contractor shall be responsible for the following activities:

Chemical Mixing: The Contractor shall be responsible for the chemical mixing, analysis, storage, and inventory of all photographic chemicals, providing and maintaining current Material Safety Data Sheets (MSDS) on all chemicals used. Data on types and quantities of chemicals produced shall be provided to the JSC Environmental Office when requested in accordance with DRD-9 and JPR 5322.1, Contamination Control Requirements Manual.

Zero Discharge System Maintenance and Operations: The Contractor shall be responsible for the daily operation and maintenance of the zero-discharge hazardous waste system. The Contractor shall manage the disposition of photographic waste including silver sludge waste, scrap paper and film waste.

6.4 General Video Operations and Services

The Contractor shall operate the television systems and facilities for JSC and NASA programs, projects, and institutional activities. This includes the processing, conversion,

recording, and distribution of video and audio content, the transfer of film imagery to video and data file formats and the creation of requested video products. The Contractor shall utilize the following network technologies to transfer video and audio signals: single and multi-mode fiber optic cable, coaxial copper cable, twinax cable, triaxial camera cable, cable television (CATV) cable, point-to-point and omni-directional microwave systems, twisted pair audio cable, internet protocol over computer wired, wireless and optical computer networks. The Contractor shall utilize video tape formats such as Digital Betacam, Beta SP, 1-inch SMPTE Type C, ¾ inch U-matic, HDV, DVCPRO100, and HDCAM. The contractor shall utilize other optical, solid state and file-based video formats such as Digital Versatile Disc-Video (DVD-Video), Blu-Ray Disc, P2, MPEG, formats required to support the NASA STD-2804, Minimum Interoperability Software Suite (e.g., Quicktime and Windows Media.)

Programs shall be distributed through the JSC base-band audio and video system, the JSC cable TV system, the JSC omni-directional microwave system, JSC computer network, NASA multi-channel DTV system, videotapes, digital files or optical media. The Contractor shall operate the Video Control Center (VCC), located in Building 8.

6.4.1 Processing, Recording and Distribution

The Contractor shall process, monitor, validate, record, adjust, and distribute non-mission-related video, which may originate from satellite downlinks, test, training, institutional activities, International Partners, or interfaces to external sources.

The Contractor shall operate JSC television and video systems (Attachment J-10, Systems Table). These systems are connected to the VCC and are routinely interconnected (switched) to mutually monitor tests, training, and mission simulations.

The Contractor shall schedule programming and operate television distribution systems including distribution of the NASA TV programs to the commercial media trailers. Program sources include the JSC satellite receivers, NASA inter-center networks, spacecraft, direct satellite broadcast receivers, playbacks from within the VCC, off-air antennas for local programming, JSC test and training facilities, and educational television microwave feeds.

The Contractor shall verify the nominal operation and readiness of the JSC television systems and associated audio systems, networks, and interfaces via periodic or scheduled verification checks. The Contractor shall test and verify signal paths, ascertain and adjust the technical quality of the signals to meet broadcast or industrial standards as required, validate internal cable TV channels, and verify the integrity of data in the vertical interval of the television signal. This activity includes audio and video operations involving switching circuits and equipment, and retrieval and playback of video recordings.

6.4.2 Video Products

The Contractor shall provide editing, transfer, and reproduction services as needed to create video and television products for JSC, NASA, and external customers. As part of the effort the Contractor shall perform the following functions:

A. Editing: The Contractor shall edit raw material to create usable quality video products. Editing may be performed as simple cuts-only, (e.g., with no special transitions required between segments), or may involve more complex transitions between scenes, depending on the product requirements. Scene-to-scene color correction or other image enhancement will be performed as required. Some products also will require slates, titles, graphics, effects or audio to complement the edited video segments.

B. Format and Media Transfer: The Contractor shall transfer raw or edited motion imagery from one format or medium to another. Accompanying audio will be synchronized with the video imagery as required. This transfer process may also include encoding and authoring. Formats and media include motion picture film, videotape, optical discs and digital files. Additionally, the Contractor shall distribute transferred motion imagery, such as to and from JSC or NASA intranet or Internet-based servers, to make the products available to customers.

C. Reproduction: The Contractor shall produce copies of NASA video products as required. This reproduction process also includes standards conversion, video and audio mixing, labeling and packaging as needed. Media formats for copies include videotape or optical disc. A full range of formats are used such as D-2, Digital Betacam, BetacamSP, HDCAM, DVCPRO, DVCAM, Mini DV, 8mm, HDV, and VHS. Disc formats include DVD, Blu-Ray, and removable hard disk. Standards conversion activities include to-or-from National Television Standards Committee (NTSC), PAL, SECAM, SDTV, and HDTV formats. Additionally, the Contractor shall operate a capability for managing the distribution of the copies produced.

6.5 Video Teleconferencing, Meeting and Presentation Support, Multimedia Equipment Loan Pool

The Contractor shall schedule and operate the audio and video equipment in video teleconference (VTC) rooms (Attachment J-10) in addition to the system distribution equipment that interfaces with the NASA Integrated Systems Network (NISN) and other associated networks. The Contractor shall operate the conference facilities either for the full duration of the video teleconference or long enough to brief participants on how to operate the controls. This effort shall include nontraditional teleconferencing application and techniques such as video-over-IP, desktop teleconferencing, and any other approaches developed under this contract or provided by NISN. The Contractor also shall produce and maintain standard operating procedures for all supported video teleconferencing facilities (DRD-10).

The Contractor shall deliver, set up, and operate audiovisual equipment and systems for conferences, symposia, educational courses, and other meetings held both on and off site. Requests for off-site support require approval. Audiovisual equipment includes audience and presenter microphones, audio and video mixers and switchers, loudspeakers, video and computer screen projectors; Web cast systems, and audio/ video recorders/playback equipment.

The Contractor shall provide the integration capabilities between the user-provided laptop and the multimedia equipment. The Contractor is not responsible for the content of the presentation, but shall provide technical assistance to customers, e.g., informing

them of supported formats and software, and the setup of the customer's laptop. Neither nonstandard-load software nor formats will be provided under this contract, but must be provided by the customer. The Contractor shall interface with all elements responsible for an event to ensure coordinated delivery of all products and services.

The Contractor shall provide specialized services for senior management conference rooms that may require coordination of audio/visual presentations and collaborative software applications (e.g., Group Systems software, presentation and VTC support).

The Contractor shall operate an audio/visual equipment loan pool to provide short-term equipment loans to JSC and on-site Contractor personnel for on-site and off-site use. The pool may consist of equipment such as microphones, speakers, audio mixers, lecterns, slide projectors, screens, video player/recorders, television receiver/monitors, video/computer projectors, camcorders, and video equipment stands. The Contractor shall deliver, set up, take down, and pick up equipment when required.

The Contractor shall coordinate with the customer representative for requirements.

7.0 INFORMATION MANAGEMENT

7.1 Document and Data Management

The Contractor shall provide access to and maintain legacy electronic and hardcopy document collections and engineering data as required by task order. The Contractor shall ensure the accuracy, currency, and comprehensiveness of JSC holdings at all times. The Contractor shall implement processes that can be transitioned to an electronic data management system as approved by the Government. The Contractor shall clearly identify and mark materials as "Property of the U.S. Government." The Contractor shall maintain reports containing statistics on the use of supported collections and facilities, and shall provide this information per DRD-13, Contractor Status Report. The Contractor shall be responsible for maintaining and processing new materials where required and for preserving identified physical collections. The Contractor shall ensure that information is stored under appropriate conditions based on the information format and according to NASA policies (e.g., NPR 2810.1, Security of Information Technology).

7.1.1 Electronic Document Management Systems

The Contractor shall be responsible for product and process-level operations for the creation and maintenance of new and legacy document collections (e.g., Document Index System (DIS)). Currently, a collection of over 100,000 documents resides in a vault in Building 45.

The Contractor shall implement a "scan-on-demand" capability whereby these hardcopy documents are digitized upon request and made available in an electronic repository. The Contractor shall develop and maintain process documentation and shall plan and conduct user training as necessary.

7.1.2 Content Management System (CMS)

The Contractor shall implement and sustain a Content Management System on a Government-provided environment as specified by task order. The Contractor shall

ensure that the data stored within the system conforms to the JSC Taxonomy per WBS 7.2.4. The Contractor shall provide recommendations to the Government on existing data or document collections to be migrated or linked to the content management system. The Contractor shall develop and implement processes and procedures for the creation and maintenance of new content as well as the migration of existing content. The Contractor shall develop and maintain Interface Control Documents for each existing data collection/repository that is linked to the CMS.

7.1.3 Engineering Drawing Control Center (EDCC)

The EDCC is an on-site repository for hardcopy, microform, and electronic drawings. Microform materials are no longer produced, although a large quantity of microform materials is housed within the EDCC. Supported collections include: released JSC Engineering hardware drawings and computer-aided drafting (CAD) files; hardcopy and digitized JSC Facility drawings; the collection of Facility Maintenance and Operations (M&O) equipment data and specifications; and the collection of Facility Housing Plans and Center Telephone System engineering drawings. The EDCC supports and uses several electronic systems, including the EDCC Drawing Repository, Electronic Drawing Review System (EDRS) and DDMS. The Contractor shall, where applicable, create engineering parts in the DDMS system as a result of the Engineering hardware drawing release process. The Contractor shall perform drawing release processes as outlined in JPR 8500.4, JSC Engineering Drawing System Manual.

The Contractor shall provide research and reproduction services for EDCC collections. The Contractor shall keep records of drawing numbers assigned, data released, and data received. The Contractor shall validate documentation and maintain master reproducible drawings and aperture cards if required. Duplicate and backup copies of Center facility drawings are maintained in electronic format. The EDCC coordinates with the Emergency Operations Center (EOC) to provide duplicates of all necessary facility drawings in the event of damage by weather or man-made threat (DRD-20, Emergency Plan). The Contractor shall transition paper and microform-based technical data repositories to the DDMS as needed when directed by the Government.

7.1.4 JSC Quality Documentation

The Contractor shall issue, revise, review, and verify authorization of changes to JSC Quality Documentation and transition the documents into the CMS. The Contractor shall author and review ISO documents as directed by the Government and in accordance with JPR 1281.5, Document and Data Control. The Contractor shall coordinate periodic document reviews; review, evaluate, and recommend the disposition of change requests; summarize change requests for management review; and finalize change requests based upon official disposition. The Contractor shall develop user aids, provide technical assistance for the development of official documentation, serve as primary point of contact for quality systems master list matters, and conduct training classes for ISO master list custodians. The Contractor shall ensure that requested information is provided within schedule guidelines and establish, document, and maintain a process to control all ISO System Level Procedures.

The Contractor shall support the IRD- and AC-sponsored Directives-QMS Document Merger working group, helping to create definitions for data and document, and evaluating sample document categories to determine the scope of a new center

document governance structure. The Contractor shall reformat, consolidate and update QMS documents for inclusion in the directives system.

7.1.5 Forms

The Contractor shall maintain a JSC website, a forms repository and a forms database which provide user access to all electronic forms, information on forms available in hard copy format only, and forms change-history information for management purposes. User training and assistance shall be performed during normal working hours. The Contractor shall distribute hard copy forms and execute all necessary reordering and restocking as described in NPD 1490.1, Printing, Duplicating, and Copy Management.

7.1.6 Document and Data Scanning

The Contractor shall provide scanning of original documentation to electronic portable document format (PDF), or tagged image file format (TIFF) at the request of the customer, for storage and distribution on such media as computer networks and compact discs. The contractor shall index the compact discs and shall make the PDF files searchable.

Originals include documents, fiche, aperture cards and engineering drawings (electronic drawings released from the EDRS database; electronic PDF files are resized and manipulated). Electronic originals may require conversion from one file format to another.

7.2 Library and Multimedia Repository Management

The Contractor shall, where applicable, ensure that management and operations of the main library, remote libraries and multimedia repositories are consistent with industry standard library practices and procedures. These standard practices shall be used when applicable and shall include, for example:

A. Circulation and Support: The Contractor shall provide check-out services for customers' requests for library materials (including digital files), and process returned materials, renewals and holds. The Contractor shall maintain a circulation database, where required, for all holdings, including customer, request, response, and usage data. As required, the Contractor shall monitor the database of materials on loan and prepare and issue overdue notices.

B. Cataloging and Processing: The Contractor shall provide cataloging and processing services where required. The Contractor shall catalog imagery by providing unique ID numbers and sufficient descriptive textual data for retrieval. Examples of cataloging activities include describing video recording content and still imagery indexing. All multimedia collections shall use metadata tags and structures sufficient to permit access and control that conform to appropriate standards and SP-1998-7501, NASA Thesaurus. The Contractor shall produce and maintain descriptions of all significant scenes contained in mission video downlink and on-board video recordings in the Video Asset Mission Imagery Management System (MIMS).

C. Reference and Research: The Contractor shall provide reference and

research as required. Requests for reference and research for multimedia resources may include JSC organizations, news media, educational organizations, media production companies, and other specialized organizations. When appropriate, the Contractor shall facilitate access to collections and materials for customers to conduct research. Materials shall be provided on loan or permanent retention as required.

Whenever practical, electronic systems shall be used as a primary method of providing information acquisition, management, and delivery services to customer desktops. The Contractor shall install, configure, facilitate access to, maintain, and enhance a full range of electronic services direct to customers, including CD-ROM and DVD databases, online services, Internet and Intranet database access, end-user document delivery, and other appropriate electronic resources. Collections shall be organized and accessible through an integrated searchable web-based interface.

The Contractor shall provide end-user instruction for library and multimedia repository services as required. One-on-one instruction shall be provided as necessary, including orientation classes and group instruction. The Contractor shall develop outreach and instructional materials and guides for meeting the needs of customers working in concert with the Customer Support Center where appropriate.

The Contractor shall follow Government-provided instructions to provide information requested under the Freedom of Information Act. The Contractor does not respond directly to FOIA requestors, but to the Government which will respond to the requestor.

7.2.1 JSC Library Operations

The Contractor shall perform the following Building 45 library functions:

A. Provide customers with services offered from the Building 45 library.

B. Provide instruction for and assistance with electronic resources as well as managing any remaining hard copy collections.

C. Support, where required, inclusion of electronic documents into the Electronic Document Management System, identifying hard copy candidates for scan-on-demand inclusion in the document management system.

D. Curate the library website, keeping current any library transition news or specific information related to available services.

E. Provide information to the Human Resources Office for employee termination clearances.

F. Provide courier services for JSC receipt and return of hard-copy University of Houston, Clear Lake (UHCL) library items.

G. Create and sponsor library outreach activities, including hosting Scientific and Technical Information Center (STIC) Open Houses, disseminating STIC information at Total Health and Safety Day, and hosting Center for AeroSpace

Information (CASI) representatives for periodic training sessions on CASI services and databases.

H. Control the assignment of JSC document numbers; physically maintain all hard copies and maintain the accuracy, currency and comprehensiveness of the JSC document collection in the JSC Document Index System (DIS).

I. Process and track STIC subscriptions, electronic journals, database services, and other publications. Complete and comprehensive subscription records shall be maintained, with any missed issues being reclaimed as necessary. The Contractor shall maintain an accurate, current and comprehensive holdings list for STIC subscriptions in the NASA online catalog and on the STIC web page, unless otherwise designated.

7.2.2 Satellite Library Operations

The Contractor shall provide complete library services in satellite locations as required by the requesting organization. Currently there are two satellite locations at JSC: the ISS Library located in Building 4 South and the Space and Life Sciences Library located in Building 37.

7.2.3 Multimedia Repository Management

The Multimedia Repositories used by internal and external JSC customers comprise several different media collections that include audio, motion, and still imagery produced at JSC and acquired from other sources. All audio and imagery meeting the criteria for permanent or temporary retention, recorded, created, or acquired at JSC, shall be maintained per the standards set forth in Section 6.0 of the Statement of Work, Multimedia Operations and Services. Media acquired from other NASA Centers or other NASA-sponsored projects shall be included in the collection when appropriate. The Contractor shall ensure that imagery products are maintained in the formats and quantities necessary to fulfill requests from JSC and NASA projects, programs, and internal and external customers.

7.2.4 Taxonomy Discovery and Formulation

Working with guidance provided by the Office of the Chief Knowledge Officer, the Contractor shall formulate a common taxonomy for use across Center institutional organizations. The Contractor shall lead the effort to develop an Information Resources Directorate (IRD) taxonomy for use in support of records, documents, imagery and information sharing within IRD. This taxonomy is to be used for tagging electronic information for improved search ability and categorization.

To develop this taxonomy the Contractor shall analyze existing JSC taxonomies used in support of records, documents, imagery and information sharing within IRD, across other directorates, and with the Jet Propulsion Laboratory.

The Contractor shall recommend a strategy for implementing the IRD taxonomy and a workflow process for tagging electronic data in repositories, including for example, the STIC repositories, history portal, imagery repositories, and document indexes. The

Contractor shall also recommend a strategy for implementing the common taxonomy across institutional directorates.

7.3 Records Management

IRD is responsible for providing leadership and policy development for Records Management at JSC. In addition, IRD is responsible for helping JSC customers with the organization and disposition of record materials including submitting and retrieving record materials to and from the Federal Records Center (FRC), (36 CFR, XII, Subchapter B) and coordination of location changes and disposal notices.

The Contractor shall provide records management briefings as required to JSC civil service or contractor employees for educational purposes (NPR 1440.6, NASA Records Management.

The Contractor shall also respond to routine employee requests for records management services or guidance on any aspect of records management, referring non-routine queries to the JSC Records Manager (NPD 1440.6, NASA Records Management; NPR 1441.1, NASA Records Retention Schedules). The Contractor shall log and status customer service requests for workload tracking purposes.

As part of coordinating the movement of records shipments to and from the FRC and the JSC Onsite Storage Facility, the Contractor shall:

A. Complete necessary shipping paperwork to obtain accession numbers; ship records to and from their destination; request retrievals; and notify custodians of accession numbers, record locations in the FRC, and arrival of retrieved records.

B. Coordinate with JSC Shipping, the FRC, records custodians, and JSC records management staff to accomplish proper records traffic.

C. Track records accessions, entering information at each stage of movement into the JSC records management database.

D. Query the JSC records management database for unreturned retrievals JSC has made and issue calls to custodians for the records to be returned.

As part of coordinating the location and disposition of records at the FRC, the Contractor shall

A. Enter location changes into JSC records management database, and notify records custodians of change.

B. Coordinate with the FRC, records custodians, and JSC records management staff to accomplish approval of records disposals and transfers.

Additionally, the Contractor shall provide Special Collection Archival Support which encompasses managing the STS-107 Archives database including maintaining a

comprehensive inventory of all records received in support of the STS-107 Investigation and subsequent accident investigations.

7.4 History Support

The Contractor shall operate and manage the JSC History program, and perform the duties of a JSC Historian as described below to preserve and interpret the historical record of JSC:

A. Serve as primary point of contact and coordinate history-related matters

B. Coordinate and oversee the Oral History Project, including reviewing and recommending interview candidates and integrating the activities of researchers (primarily interns) with Oral History production activities

C. Coordinate and facilitate the JSC/UHCL History Archive partnership (NNX07AU86A, NASA Grant/Cooperative Agreement)

D. Provide community outreach services for the JSC History Program

E. Identify and develop historical materials

F. Provide inputs to planning and budgeting activities

The Contractor shall maintain the content of the JSC History database. The Contractor shall plan, organize, conduct and transcribe interviews with individuals for the JSC Oral History Project. The Contractor shall compile research, known as "Data Books" (see Attachment J-6, Applicable Documents). The Contractor shall deliver to the designated JSC contact audio recordings of interviews on both digital tape and CD and transcripts in both hardcopy and electronic format. After JSC verification, the recordings and transcripts shall be provided to the History Archive at the UHCL Alfred R. Neumann Library. Those Oral History interview requirements originating with the NASA HQ History Office require similar preparations and deliverables to be forwarded to that office. A hardcopy transcript and CD will come to JSC to be placed in the History Archive.

7.5 Writing, Editing and Graphics

The Contractor shall provide writing, editing, and graphic services to produce materials in hard copy and electronic formats. Resulting products range from technical to journalistic, and may include graphical design and publication capabilities.

7.5.1 Writing and Editing

The Contractor shall provide technical writing and editing services required to produce scientific and technical reports, mission support documents, operational plans and procedures, systems briefs, speeches, newsletters, brochures, presentations, manuals, audio transcriptions, journal articles, and other related documentation. The Contractor shall edit documents based on guidelines specified in The Gregg Reference Manual, published by Glencoe McGraw-Hill and in the version of the SP-1999-7602, NASA Publications Guide for Authors, developed specifically for editors and writers. Document edits shall be based on defined levels for language and format specified in Jet

Propulsion Laboratory Publication 80-1, The Levels of Edit. The Contractor shall adhere to the following quality standards: NASA SP-7084, Grammar, Punctuation and Capitalization: A Handbook for Technical Writers and Editors; NPR 2200.2, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information (STI), as revised; Merriam Webster's Collegiate Dictionary, latest version; the United States Government Printing Office Style Manual (International Standard Book Number (ISBN) 0-16-050082-6; NASA STI Program direction at http://www.sti.nasa.gov; TM-105419, Technical Report Writing, as revised; and NASA Communications Materials Review System Style Guide, as revised. The Contractor shall retain the author's original intent and meaning, using the author's original language where possible. The majority of writing and editing tasks require a high level of skill in manipulating and working with electronic formats.

The Contractor shall comply with the quality standards specified in the preceding paragraph and with copyright laws.

7.5.2 Graphics

The Contractor shall provide graphics services that rely on traditional techniques as well as electronic creation and manipulation of graphics to produce products that satisfy the requirements of the JSC user community. The majority of work in graphics requires specialized skills for creating and manipulating electronic formats. The Contractor shall meet all Government and NASA regulations and policies in final products (e.g., NASA Insignia policy; Section 508 policy; GPO3006-8-011, Graphics Standard; Best Practices for Preparing & Submitting Electronic Design & Prepress Files; GPO300.6, The GPO Preflight Guide, NASA Communications Material Review Web Site).

The Contractor shall interpret, incorporate, and analyze customer requirements to produce engineering drawings, oversized artwork, facility drawings, software engineering releases and analyses, performance specifications, design review materials, precise dimensional layouts and figures, technical charts and graphs, maintenance and operations manuals, and technical illustrations and diagrams constructed to scale.

The Contractor shall provide complex visual designs and art products generally intended for orienting external audiences to NASA's programs and mission. These designs include conceptual designs, abstract renderings using mixed media, program logos and emblems, formal documents, brochures, educational packages, exhibit design and display boards. The Contractor shall maintain close coordination as defined by work authorization with the customer when producing more complex products to assure quality results.

The Contractor shall provide presentation and general artwork requiring conceptual design, composition and balance, color use, and space relationship. Products and services shall include simple to complex PowerPoint presentations, simple layouts, filling out templates with basic text for certificates and award presentation pieces, mounting, matting and framing of artwork, manual and electronic tracing, electronic scanning, placards and other miscellaneous display art.

The Contractor shall produce and update all graphics and information products using the appropriate media including the Web. The Contractor shall develop new content and features utilizing current JSC themes, policies, messages, and IT security requirements

(NPR 2810.1) and ensuring these are present and consistent in all products.

The Contractor shall participate in customer meetings and other activities as necessary to capture, consolidate, and document design concepts and requirements that may be generated by the customer orally, electronically, visually, or in writing. The Contractor shall maximize the use of customer-supplied material (e.g., video clips, graphics, photographs, fact sheets, scripts, interviews, information summaries, documents/reports) in the design and production of their product.

The Contractor shall provide production artwork involving the manual and electronic integration of design elements (camera-ready art) for all types of reproduction such as photographic imaging, electronic publishing, offset printing, and silk-screen. Camera-ready art includes all reproduction elements necessary for the printer/publisher to thoroughly understand and execute the requirements. Reproduction elements refer to all the components, electronic or otherwise necessary to construct a printed or reproducible product. The Contractor also shall evaluate page proofs and conduct other printing production reviews. Prior to publishing, the Contractor shall obtain approval from Government.

The Contractor shall be responsible for coordinating delivery of all products and information to the appropriate NASA customer. Additionally, the Contractor shall ensure the Center's graphics production systems are operating in accordance with NASA policies as described in Attachment J-6. The Contractor shall also be responsible for the filing, archiving, and data management of all products to facilitate retrieval.

8.0 EXTERNAL RELATIONS SUPPORT SERVICES

8.1 Public Affairs Multimedia Services

The Contractor shall provide products and services in support of the Office of Public Affairs and Communications' mission to disseminate information about NASA and JSC activities and programs. Products and services in this area are produced or performed in accordance with broadcast industry standards, Society of Motion Picture and Television Engineers (SMPTE) standards, and UWIs in Attachment J-6, Applicable Documents.

8.1.1 Television Production

The Contractor shall plan and execute live mission and institutional television programming as required during human space flight activity and non-mission events. Mission programming activities generally consist of live television program control, audio program control, recording mission-related audio circuits, televised briefings, and in-flight crew events. Non-mission television generally includes briefings, live television of events and institutional activities, and interviews at JSC or elsewhere.

The Contractor shall provide live television programming from the Program Control Room (PCR) in the Teague Broadcast Center for uplink and distribution on NASA Television via MultiChannel Digital Television (MCDTV), satellite and locally via closed circuit. Local distribution includes three additional isolated feeds, PAO-1, PAO-2, and HDTV which shall be coordinated and switched for media requirements. Video sources for the broadcasts and isolated feeds include mission downlink, Mission Control Center

(MCC) views, graphics, animation, video feeds from other NASA centers, recorded video segments and productions, live briefings and studio-based programs.

The Contractor shall generate, maintain, and distribute documentation of research and planning efforts (e.g., the NASA TV schedule of televised mission events and summary of in-flight special events) as described in the DRD-14, Mission Support Planning Documents.

Additionally, the Contractor shall provide mission and non-mission audio and video operations from the Teague Broadcast Center or remotely. Support shall include routing of video and audio sources and signals, playback of imagery from tape-based and non tape-based media, and coordination via internal and external intercom circuits with the PAO, media personnel, and other support.

8.1.1.1 Briefings

The contractor shall produce live multi-camera television briefings. This effort requires a producer/director and staff that plans, writes, schedules, and creates graphics, outlines, treatments and scripts. Also the producer/director directs a technical director, audio technicians, camera operators, lighting, studio technicians, graphic and videotape operators. This effort also requires coordinating satellite transmissions, NASA MCDTV, (SD/ HD), Wide Area Network (WAN) transmissions, foreign language interpretations, Section 508 compliance and integrating remote telephone, audio and video sources into the briefing. Briefings include NASA institutional and mission-related press conferences. The briefings are to inform the media and public and /or NASA internal audiences. Most briefings are moderated by a NASA Public Affairs Officer and may include graphics, imagery, animation, and multi-center telephone audio participation from remote locations such as NASA centers and international venues.

8.1.1.2 In-Flight Events

The Contractor, in a collaborative effort with PAO, shall provide planning, scheduling, and execution of live interactive broadcast events between crewmembers in orbit and participants on the ground—usually news media, VIPs and education audiences. In-flight events shall be conducted in accordance with UWI-AP141-001, Scheduling ISS Crew In-Flight Events. In addition, downlink messages for specific clients may be requested as part of the in-flight event capability. Such events typically consist of two-way audio between the spacecraft in orbit and remote locations around the world and include live downlink television from the spacecraft. This effort requires close interaction with ground-based customers and the flight control team. When planning these events, the Contractor shall receive a list of approved event candidates from PAO or may be asked to solicit candidates for the events. The number of events shall be dictated by the crew's flight-specific or weekly timeline. For Space Shuttle missions, the Contractor shall identify in the TV schedule, opportunities when such events may be scheduled. For ISS in-flight events, the Contractor shall attend the ISS weekly long-range planning meeting to obtain or negotiate updates to the dates and times of events and ensure that PAO is informed and in agreement. This support also shall extend to PAO's coordination of ISS in-flight events on behalf of the International Partners when the crew complement expands to a multinational six-person crew. The Contractor shall contact the customer promptly after having received the event information from PAO to discuss the event's technical configuration for audio and video circuits and the topics to be discussed during

the event. The Contractor shall send the customer biographical information about the crew, a mission synopsis, an interview protocol, and other pertinent information to ensure a successful interview.

8.1.1.3 Live Interviews and Appearances

The Contractor shall produce live interviews using satellite or ground-based links to transmit audio and video to selected customers, which may include news and educational organizations. Typically, the customer receiving the transmission will ask questions via a phone line configured to the interviewee through the Audio Control Room. The on-camera interviewee is usually an astronaut, scientist, or NASA manager addressing current issues and situated in the studio, briefing room, a remote van, or certain on-site facilities that can be configured to the television control rooms. The Contractor shall solicit customers for interviews and produce interview and appearance sessions that may include multiple customers per session. Typically, these sessions occur on anniversaries of historic NASA events, when NASA programs reach important development milestones, or when the news media are interested in an interview.

8.1.2 Audio Program Control, Recording and Products

The Contractor shall provide a variety of audio program control, recording, and production services for both mission and non-mission activities. The Contractor shall control multiple simultaneous audio programs during missions and during mission simulations from the JSC Audio Control Room. Programming shall include mixing multiple audio sources for live distribution. These sources consist of various Constellation, Space Shuttle Air-to-Ground (A/G) circuits, ISS Space-to-Ground (S/G) circuits, PAO commentary, audio playback, telephone and satellite circuits, dedicated four-wire circuits, briefing room and studio microphones or other sources. The Contractor shall mix audio for press briefings held at JSC and other NASA Centers and synchronize audio to video for all program feeds. The Contractor shall distribute programs to news media, JSC personnel, and NASA personnel at other centers and, if requested, will accommodate specific high-quality audio capability for individual customer needs. Audio programs consist of NASA Television audio, mission audio, inter-center audio, and PAO feeds. During ISS and certain international missions, additional audio circuit configuration may be required to broadcast and record interpretation to and from foreign languages.

Throughout the duration of human spaceflight missions for Space Shuttle, Constellation, ISS and for institutional activities, the Contractor shall record for archival, production, and distribution purposes a variety of audio circuits. The Contractor shall catalog, index, and archive recordings. The Contractor shall make use of automated audio indexing and search technology. The Contractor shall duplicate certain portions of the audio mission recordings for distribution to the news media and other users. When NASA's international partners participate in flights, the Contractor shall record additional audio circuits containing foreign language translation. To maintain the capability to play back and copy historic NASA audio recordings, the Contractor shall maintain operationally-unique recording/playback audio equipment such as the 30-track and 7-track recorders. The Contractor shall, on an ongoing basis, transfer these historic recordings onto current digital format media to assure their preservation.

8.1.3 Mission Commentary

The Contractor shall provide mission commentary from Mission Control or a remote facility, giving audio broadcast quality descriptions of mission events for distribution to the media and public. Mission commentary requires in-depth knowledge of human space flight systems and operations as well as the use of sound judgment in complex situations. The Government will provide training in mission commentary procedures and practices.

8.1.4 Video and Multimedia Production

The Contractor shall produce television productions, programs, features, video files, video news releases, video for Internet, and multimedia presentations required to publicly communicate JSC and NASA programs. This effort requires activities such as planning; writing outlines, treatments, and scripts; directing various activities; acquiring necessary footage; creating still graphics and animation; recording all necessary audio elements; and performing off-line and on-line edits. All products shall be Section 508 compliant. Requirements may range from a simple one-camera video documentation to a more complex multi-camera, fully-scripted studio production. Projects may require set construction. Multimedia products shall be distributed through the JSC cable TV system, Internet Protocol Television (IPTV), the JSC Omni-directional microwave system, NASA Television, MCDTV, video tapes, digital files, or other media formats. The Contractor shall format productions for potential additional use on the Web, or other electronic outlets.

For multimedia projects, the Contractor shall submit a written production plan and budget within two weeks of receiving the production request as described in DRD-15, Television Productions Deliverables (Example Production Estimate). Upon completion, the Contractor shall submit a final report and collect and store all project documentation in a permanent file in a Government-provided repository. For all projects, the Contractor shall assign a producer to work with the client throughout development, production, delivery, and final approval of the product. The Contractor shall provide status updates to customers.

The Contractor shall operate the facilities and equipment to accomplish all objectives of the SOW and be able to adapt to new or changing technologies as appropriate. The Contractor shall provide sustaining engineering including delivery of a Preventive Maintenance and Obsolescence Plan (DRD-11, Preventive Maintenance and Operational Readiness Documentation) for systems and equipment supporting television and multimedia production, and develop and update a strategic plan for technology infusion. The Contractor shall provide broadcast digital video engineering capability annually certified by the AVID Corporation to be full Systems Administrator-level for the JSC PAO AVID system with Unity and accessories. The capability shall include current year AVID certification at the 3rd level of technical competence for on-site repairs and triage. See J-10, Systems Table, for specific availability and performance requirements.

8.2 External Relations, Information and Communications

Under the oversight of the Government, the Contractor shall use a strategic communications approach to planning and implementing outreach activities to inform a broad public audience and specific target audiences regarding NASA's programs and

activities. The Government will provide top-level objectives and the Contractor shall develop plans and execute campaigns and specific activities to accomplish those objectives. The planning activity shall include elements such as defining communications goals, selecting a target audience, developing messages, choosing a media strategy and defining required products. After review and approval by the Government, the contractor shall execute the outreach campaigns and activities using methods such as exhibits, attendance at public events, internet-based activities and Web presence, imagery-based multimedia products and print materials of various types. Where practical, the Contractor shall develop and use objective measures of effectiveness as approved by the Government for outreach activities and provide the results to the Government. All communications products including exhibits shall be produced in compliance with the NASA Communications Material Review (CMR) Process and the NASA Style Guide available at: http://communications.nasa.gov/portal/site/osc.

8.2.1 Exhibits Program, Outreach Campaigns and Events

The Contractor shall produce, maintain, store, transport and schedule exhibits for NASA-sponsored outreach campaigns and events as well as in response to requests from customers to showcase NASA programs and technologies. Exhibits also may include display of human spaceflight program hardware at selected events or at a NASA Visitor Center. All Exhibits program activities shall be in accordance with NPR 1387.1, NASA Exhibits Program.

8.2.1.1 Traveling Exhibits

The Contractor shall implement the traveling exhibits program (JPD 1387.1, JSC Public Exhibits Program). Work to be performed includes activities such as supporting NASA outreach campaigns and events, developing event plans, and providing logistics coordination, which includes shipping/receiving of exhibit materials, assembly of the exhibits, inventory record-keeping, and scheduling of exhibit event locations and dates. The Contractor shall respond to requests for exhibits from external customers, processing requests, warehousing and shipping exhibits. Lunar sample displays are included in the exhibits to be managed. The contractor shall maintain all appropriate records including schedules, exhibition files, documentation and reports.

For outreach events for which NASA requires staffing, the Contractor shall be responsible for purchasing materials and for arranging for exhibit logistics services. The Contractor shall travel to exhibit locations for the purpose of assembling and dismantling exhibits including traveling trailer exhibits, and staffing the exhibit to disseminate information and respond to inquiries about NASA programs. For NASA exhibits mounted in towable trailers, the Contractor may be required to tow the trailer with a Contractor-provided vehicle to and from the display location.

8.2.1.2 Exhibit Production and Refurbishment

The Contractor shall design, fabricate, maintain, refurbish, and warehouse PAO exhibits for use at JSC, other NASA Centers and exhibit locations as specified by the Government. To accomplish this, the Contractor shall operate an exhibits shop. This effort requires activity such as operating large power tools including table saws, band saws, planers and other tools to fabricate exhibits from wood, metal, plastic and composites; using small power tools and hand tools; operating fork lifts to move heavy pallets of printed materials; operating painting and finishing equipment; drawing and

designing exhibits; and lifting and carrying moderately heavy materials, building stock, storage crates, and other items. The Contractor shall fabricate models using materials such as fiberglass, metal and wood. The Contractor shall provide and maintain audiovisual equipment associated with exhibits.

The Contractor shall collaborate with NASA staff to develop strategic communications approaches for exhibit graphics, images, and messages. The Contractor shall develop and update presentational narratives, research and prepare text, and select photographs for the existing exhibits in the JSC inventory and new exhibits that may be designed and produced.

The Contractor shall refurbish existing exhibits for JSC, other NASA centers and Space Center Houston. Refurbishment of exhibits consists of reconfiguring existing exhibit structures, providing new informational material on that structure and adding new interactive or electronic elements. The exhibits inventory consists of over 400 displays, including artifacts, scale models of spacecraft, static panel exhibits, mobile trailers, and dynamic exhibits containing both audio and projection systems, most of which are designed to be packed and shipped in fitted crates. (Attachment J-5, List of Installation Accountable Government Property)

8.2.1.3 Artifact and Exhibits Management/Maintenance

The Contractor shall store, catalog, and transfer NASA artifacts, both for temporary loan and for final disposition (NPR 4310.1, Identification and Disposition of NASA Artifacts). The Contractor shall store and eventually transfer space hardware selected by the Smithsonian Institution as an "artifact." The Contractor is responsible for material from receipt until shipment to the Smithsonian Institution or other designated locations. The Contractor shall store, secure, ship, and maintain artifacts at JSC. The Contractor also shall maintain NASA space flight artifacts at Space Center Houston. Artifacts are identified in Attachment J-5. Maintenance of artifact exhibits consists of minor repairs to make the exhibit show-ready for its next event.

8.2.2 Outreach Program

The Outreach Program is designed to inform the public about NASA programs and activities, share the excitement of NASA's mission with the public audience, build cooperative relationships with communities and generally increase public awareness of NASA's activities. The outreach program includes public relations campaigns, event campaigns, the Speakers Bureau, special events, exhibitions, the Information Service Center, cooperative projects with community organizations and other activities. The Outreach Program uses a variety of communications approaches including traditional media, social media, viral marketing, strategic partnerships, written and other communication products, grassroots-level marketing and other services and resources to implement a comprehensive program. The Government provides policy and strategic guidance for those elements of the outreach program operated by the Contractor.

8.2.2.1 Protocol and Guest Operations

The Contractor shall perform protocol operations for special guests of JSC. Special guests include high-ranking officials of the United States and foreign governments, heads of state, congressional office-holders and staff, cabinet-level officials, diplomatic personnel, guests of senior management and others as identified by the JSC External

Relations Office. Protocol operations shall include activities such as planning, coordination, and preparation of visit agendas; scheduling facilities and presenters; and arranging transportation, photographers, informational materials, and presentation items. The Contractor shall provide planning and implementation for mission-related activities such as Mission Control guest programs at JSC, JSC guest programs at KSC, and crew return ceremonies. The Contractor shall arrange on-site and near-site transportation for guests attending special programs.

8.2.2.2 Information Service Center

The Contractor shall respond to requests for information and materials in various media from JSC, other NASA Centers and the general public. The Contractor shall assemble, package, and disseminate NASA program and educational materials in paper and electronic form to fulfill requests, and shall prepare special replies to a variety of specific information requests, conducting the necessary research. On occasion, large-scale preparation of information packages shall be required to send to NASA-supported conventions, conferences, and educational events. The Contractor shall keep a record of requests and the disposition of requests.

The Contractor shall acquire, warehouse and maintain inventories of educational and public information publications and products in electronic and hard copy form. The Contractor also shall develop a method to archive, catalog and retrieve all PAO materials in electronic and hard copy form. The Contractor shall make the archives accessible to JSC employees in hard copy form and on the Internet.

The Contractor shall produce information products including written documents and schedules, information packages, press releases and articles, NASA/JSC customer or visitor listings, graphic materials, and develop and maintain mailing lists and labels. The Contractor shall perform this activity in accordance with policy and reference documents described in WBS 7.5.1.

The Contractor shall assess and propose approaches and systems to provide information and education materials via electronic means such as the Internet to increase the availability of materials and decrease printing, storage, and distribution costs. If innovations are acceptable to the Government, the Contractor shall implement new systems.

8.2.2.3 Speakers Bureau Program

The Contractor shall operate the JSC Speakers Bureau Program in accordance with JPR 1385.1, Official JSC Public Speaking Engagements. Responsibilities include developing outreach plans to inform organizations about speaker opportunities, recruit and train speakers, identify and prepare presentation tools, implement a Speakers Bureau Recognition Program, receive and process written and verbal requests for speakers, arrange travel, and develop and track metrics for the program.

8.2.2.4 Event Planning and Coordination

Under the oversight of the Government, the Contractor shall plan and implement outreach campaigns to identify, engage, and inform selected internal and external audiences. The Contractor shall create, plan, coordinate, publicize and staff special outreach events, including crew debriefings, auditorium-type programs, and special

events both on and off site. The Contractor shall organize campaigns and events to reach audiences as identified in Public Affairs strategic communications plans. Planning typically will include identifying appropriate audiences, designing campaigns and events, and coordinating all logistics requirements. All plans shall be reviewed and approved by the Government before being implemented by the Contractor. Publicity includes selecting a target audience, designing methods to reach that audience, and the design, writing, graphics, production and distribution of publicity materials. Staffing actions include assigning contractor staff, volunteer recruitment and scheduling both civil service and aerospace contractor volunteers. The Contractor shall implement a recognition program for event volunteers.

8.2.3 Communications

The Contractor shall provide a variety of communications and media services designed to inform and engage internal and external audiences. The services include strategic communications planning, internal and external communications products and activities, newsroom staffing, distribution of imagery and informational materials, assistance to visiting media, and advanced communications techniques involving the Web, text messaging, social media, and electronic systems. Distribution of information to the media and public shall be in accordance with JPD 1382.1, Release of Information to News Media.

8.2.3.1 Internal Communications

The Contractor shall provide services for internal communications programs and activities including production of the employee newspaper (Roundup), a daily e-mail-based employee information service (JSC Today), an on-line feature story Web site (JSC Features) with feature stories, photo and awards pages and other new products and services that may be developed to communicate with employees and other internal NASA audiences.

Production of the Roundup, JSC Today, JSC Features and other products shall encompass all phases of production including communications strategy, planning, writing, editing, layout, design, working with printers or Web technical staff, and all other elements needed to carry the product from concept to completion. The Contractor shall use writing, editing and graphic styles appropriate for the type of publication or product and audience.

The Contractor shall use other forms of internal communication as available and as appropriate for the communications objectives. These may include writing, editing and preparation of announcements for the JSC closed-circuit television system, fliers, posters, brochures, fact sheets and other media.

The Contractor shall develop and execute internal communications plans for such activities as publicity for special events and employee awareness campaigns that consider the appropriate strategy for communicating with the target audiences including use of available internal media, messages, timing and other factors.

8.2.3.2 External Communications

The Contractor shall provide strategy recommendations, creative capability, and services for a variety of communications activities and products designed to inform

external audiences of JSC and NASA programs as described below. All activities shall be reviewed and approved by the Government prior to implementation.

8.2.3.2.1 Strategic Communications Activities

Under the oversight of the Government, the Contractor shall develop and execute external communications plans that focus on delivering information to the public including specific external audiences in the most effective way possible. Both newly-developed and existing communications activities should be considered. These communications activities, including development and execution of strategic outreach and media campaigns, typically will use strategic communications methods to develop plans to select target audiences, define messages, choose a media strategy, develop products (news releases, features, fact sheets, fliers, brochures, posters and other collateral materials) and distribute these products in the most effective and efficient manner. Communications projects often will involve electronic products including development of content, managing on-going story and activity for Web sites, and creating material for stories using multimedia formats (written, still photo, video and audio formats). All communications plans shall be reviewed and approved by the Government before implementation. The Contractor shall distribute and promote the use of products such as public service announcements and other NASA materials. The Contractor shall identify and use quantitative and qualitative measures of effectiveness for communications activities (e.g., audience size, web page views, and event attendance).

8.2.3.2.2 Public Affairs Internet Content Operations

The Contractor shall produce or update information products for use on the Internet, making maximum use of other products developed for PAO (e.g., video, audio, fact sheets, scripts, interviews, graphics, photographs, and captions). Other files such as JPG, Shockwave/Flash File (SWF), Motion Picture Experts Group (MPEG), and advanced systems and software will be used in NASA websites including blogs and webcasts and third party sites such as YouTube, MySpace, and others.

The Contractor shall utilize PAO themes and messages and ensure that these are present and consistent in all Internet materials. The Contractor shall coordinate routine delivery of raw materials or data used to update PAO Internet products from other JSC provider organizations. Content shall meet prevailing World Wide Web (Internet) publishing standards, NASA policies for Web content and NPR 2810.1, Security of Information Technology.

For PAO Web initiatives, the Contractor shall:

- Generate and update content for all Space Shuttle and Constellation flights and significant ISS events. In the event of contingencies, the Contractor shall post appropriate updates to the development server within one (1) hour of notification.
- Develop and generate new Web features and content to increase visibility and public participation in plans and activities of the Constellation Program.
- Develop new content and features for the JSC public Web site and all its subsections, the spaceflight Web site, related portions of the One NASA Web

Portal, and various internal PAO Web sites. Video, photos, graphics and interactive components will be used extensively in new content and features.

- Propose, develop and execute new formats and systems that take advantage of growth of new sites such as YouTube, MySpace, Face Book, Twitter, and other social media. New formats may include animation. The contractor shall identify new methods for creating and publicizing sites including viral marketing.
- Coordinate with PAO staff and other organizations (e.g., the MCC and JSC Mission Television group) to arrange for delivery of real-time content.

8.2.3.3 General Media Support Services

The Contractor shall provide services to facilitate media coverage of JSC and NASA programs and activities. The Contractor shall provide products and services to the news media, educational organizations, media production companies (NPD 1383.2, NASA Assistance to Non-Government, Entertainment-Oriented Motion Picture, Television, Video and Multimedia Productions/Enterprises, and Advertising), other specialized organizations and individuals seeking acquisition of imagery and information about the space program. Products and services include operation of the Media Resource Center, media technical assistance, Public Affairs information products and services, document development, and Newsroom support services.

8.2.3.3.1 Media Resource Center Operations

The Contractor shall operate the Media Resource Center to provide imagery and multimedia products to news media and other customers as defined by PAO. The functions of the Media Resource Center include customer service, research, caption writing, cataloging and indexing, filing, records maintenance, order processing and shipping and inventory management. Still photograph caption information shall be written for selected imagery and maintained in a computerized database and shall be provided with the requested images. Imagery and information products are provided without charge to some internal and external customers (e.g., news media, educators, and other non-profit organizations). The Government will approve exceptions to this policy. .

8.2.3.3.2 Media Technical Assistance

To facilitate the media's acquisition of JSC imagery, the Contractor shall escort visiting news media and production crews in training facilities and other areas not accessible to the public. The Contractor shall coordinate access to the desired sites with the responsible facility managers and JSC Security.

The Contractor also shall facilitate the scheduling of astronaut interviews with news media, coordinate logistics arrangements such as badge processing for visiting media, and maintain statistical data and other media information on human spaceflights.

During human spaceflight missions and other high-interest activities the Contractor shall provide support to newsroom operations for answering queries from the media and public, distributing informational products, and providing general assistance to media over the telephone or in person.

8.2.4 Education Support Services

The Contractor shall deliver products and services in support of JSC and NASA's Education programs including Distance Learning and other learning technologies, activities, education outreach and events.

8.2.4.1 E-Learning

The Distance Learning Project consists of the development and distribution of NASA educational materials and curriculum support modules via an E-Learning mechanism. The process for delivery is primarily through the use of video conferencing, Webcasting, and Web-based media.

The Contractor shall schedule, coordinate and conduct weekly E-Learning events. This effort includes activities such as developing content specific to the NASA Mission Directorates and linked to National Education Standards. The Contractor also shall recruit subject matter experts for specific events, produce unique products for special events (e.g., Space Day, World Space Week, and Aquarius), produce video teleconferences and Webcasts, and promote E-learning events to participants, determining the correlation of events to required curriculum. The Contractor shall handle all pre- and post-event requirements.

8.2.4.2 Education Outreach

The Contractor shall provide logistics and operational services to educational outreach programs including scheduling and coordinating visits by educators and students; responding to requests for educational outreach events; and preparing and presenting professional development sessions using NASA education materials at education workshops, conferences and related events. The Contractor shall schedule special appearances and other volunteer work performed by JSC volunteers including yearly recruitment for SciAd and Education Outreach volunteers. The Contractor shall maintain metrics on numbers of events per year and volunteer data. The Contractor shall provide services for the JASON Project educational program. Specifically, the Contractor shall participate in the "train the trainers" workshop, lead teacher training activities at JSC, recruit area teachers to participate, conduct activities with students participating in the JASON Project broadcasts, coordinate administrative activities, and record data in the NASA Education Evaluation Information System (NEEIS)/Education Computer Aided Tracking Systems (EDCATS) database. In addition, the Contractor shall act as the JSC point of contact and backup point of contact to NEEIS.

Events include classroom visits/presentations, assembly presentations, science fairs, career days/shadowing, National Engineers Week, tutoring assignments and mentoring.

8.2.4.3 JSC Education Program Support

The Contractor shall plan and implement a variety of educational programs such as teacher workshops, educator conferences, and student competitions held at JSC. The number of programs varies each year with the average of six programs per year. Education programs range in duration from one-day to two-week events.

Overall operation of these programs includes developing and executing project plans that cover development of promotional materials, advertising, logistics (e.g., security,

presenters, and buildings), volunteer solicitation, establishing a judging committee, developing program content and content delivery.

The Contractor shall provide services for educational tours of JSC as identified by the Education and Student Programs Branch. Services include planning, coordinating, and preparing tour agendas; scheduling facilities and presenters; and arranging transportation, informational materials, and escorts.

[END OF SECTION]

SECTION D – PACKAGING AND MARKING

D.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
NONE INCORPORATED BY REFERENCE		

II. NASA FAR SUPPLEMENT (NFS) (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
NONE INCORPORATED BY REFERENCE		

(End of clause)

D.2 PACKAGING, HANDLING, AND TRANSPORTATION (NFS 1852.211-70) (SEPT 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

The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-3	MAY 2001	INSPECTION OF SUPPLIES—COST REIMBURSEMENT
52.246-5	APR 1984	INSPECTION OF SERVICES—COST REIMBURSEMENT

II. NASA FAR SUPPLEMENT (NFS) (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
1852.246-72	AUG 2003	MATERIAL INSPECTION AND RECEIVING REPORT

(End of clause)

E.2 GOVERNMENT CONTRACT QUALITY ASSURANCE FUNCTIONS (NFS 1852.246-71) (OCT 1988)

In accordance with the inspection clause of this contract, the Government intends to perform the following functions at the locations indicated:

Inspection and acceptance of all work shall be performed at the NASA Lyndon B. Johnson Space Center, Houston, TX; and the White Sands Test Facility, Las Cruces, New Mexico and other such places of performance or delivery of work required under this contract.

(End of clause)

E.3 INSPECTION AND ACCEPTANCE

Final inspection and acceptance shall be accomplished by the Contracting Officer or his/her duly authorized representative at the NASA Lyndon B. Johnson Space Center.

(End of clause)

E.4 QUALITY ASSURANCE SURVEILLANCE PLAN

A Quality Assurance Surveillance Plan will be developed and implemented by the Contracting Officer's Technical Representative 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 Contractor supplied data as required by Attachment J-3, JSC Data Requirements Description.

(End of clause)

[END OF SECTION]

SECTION F – DELIVERIES OR PERFORMANCE

F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.242-15	AUG 1989	STOP WORK (ALTERNATE I) (APR 1984)
52.247-34	NOV 1991	F.O.B. DESTINATION

II. NASA FAR SUPPLEMENT (NFS) (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
1852.239-70	NOV 1993	ALTERNATE DELIVERY POINTS

(End of clause)

F.2 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:

Transportation Officer
2101 NASA Parkway, M/C JB7
Houston, TX 77058-3696

If time is limited, requests may be by telephone: (281) 483-6507. 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.3 FLIGHT ITEM (JSC 52.247-95) (SEP 1989)

Block 16 of each Department of Defense Form 250 prepared for hardware or 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.4 COMPLETION OF WORK

All work required under this contract, including submission of all reports, shall be completed on or before January 17, 2014.

(End of clause)

F.5 PHASE-IN AND PHASE-OUT

(a.) Contractor Phase-In

(1) The services provided by this contract are vital to the Government's overall effort. Therefore, continuity of these services must be maintained at a consistently high level without disruption. To this end, the Contractor shall conduct an orderly phase-in of contract activities prior to assumption of responsibility for the effort described in the Statement of Work (SOW).

(2) The Contractor shall have up to 60 calendar days immediately prior to the effective date of the contract in which to conduct phase-in. Office space will not be provided by the Government during the phase-in period. During this time, the Contractor shall not be responsible for performance of the effort described in the SOW. It is understood that during phase-in the predecessor contractor(s) will be performing work, which will be covered by the SOW of this contract after phase-in.

(3) On the effective date of the contract, the Contractor shall assume full responsibility for the effort covered by the SOW.

(4) The total firm-fixed-price of Phase-In is identified in Clause B.6, *Firm-Fixed-Price (Contract – Phase-in)*. Any costs incurred in excess of this amount shall be unallowable under this or any other Government contract.

(5) During phase-in, the Contractor shall:

(i) participate in meetings with the predecessor contractor(s) to identify and discuss problems or areas requiring attention during the phase-in period; and

(ii) perform all activities described in the Contractor's phase-in plan submitted with its proposal, and all activities necessary, to ensure effective transfer of all effort from the predecessor contractor(s) and readiness to assume full contract performance. As a minimum, phase-in must include the following: all personnel must be trained and must meet contract requirements (certifications, permits, etc.); all Government Furnished Property must be inventoried; qualified staff must be available and ready to assume performance (and must have obtained security clearances (if required) and been badged by JSC, etc.)

(b.) Contractor Phase-Out

(1) The Contractor will conduct an orderly phase-out of contract activities prior to completion of this contract and assumption of responsibility for the effort described in the SOW by a successor contractor(s). The Contractor shall remain responsible for the effort covered by the SOW during phase-out activities. Phase-out activities shall be accomplished in accordance with FAR 52.237-3, Continuity of Services.

(2) Upon written notice by the Contracting Officer, the Contractor shall conduct phase-out activities for up to 60 calendar days prior to the contract completion date, including:

(i) support periodic meetings with the successor contractor(s) to identify and discuss problems or areas requiring attention during the phase-out period; and

(ii) negotiate in good faith a plan with the successor contractor(s) to determine the nature and extent of phase-in and phase-out activities required. The plan shall include effective transfer of all effort to the successor contractor(s); training of personnel; and any other agreements or steps necessary to ensure a smooth transition between the contracts. The plan shall be subject to the Contracting Officer's approval.

(End of clause)

F.6 METHOD OF PLACING TASK ORDERS

Task Orders may be placed only by the contracting officer. Task Orders will be in writing on Form OF 347 or orally, followed by written confirmation. Task Orders will be numbered "1," second will be Number "2", and each succeeding Task Order will be numbered consecutively.

Each Task Order placed against this contract shall consist of the following information: (A) task order number and contract number; (B) place of delivery or performance (including consignee); (C) item/items ordered, including quantity, unit price, and amount of each; (D) date of order, and required delivery date; (E) name of person placing order; (F) funding and appropriation data; (G) procurement placement code; (H) total amount; (I) signature of the contracting officer.

Amendments to orders may be issued in the same manner as original orders. Each order or amended order shall contain a citation of funds from which payment for the supplies or services ordered shall be made.

(End of clause)

F.7 OPTION TO EXTEND COMPLETION DATE

The Government may require the contractor to continue to perform services under this contract. The contracting officer may exercise this option by issuance of a unilateral contract modification 30 days or more before the completion date set forth in Clause F.4, *Completion of Work*. Should the option be exercised, the resultant contract will include all terms and conditions of the basic contract as it exists immediately prior to the exercise of the option, except for the following changes:

OPTION 1 (Year Four) (January 18, 2014 – January 17, 2015)

1. Clause B.7 (a): The guaranteed minimum contract value of work that will be ordered under this contract, and which will be initiated through the issuance of cost-reimbursable task orders shall be increased by $50,000 for Year 4 to a total of $5,050,000. The maximum value that can be ordered under the IDIQ provisions of this contract shall be increased from $150,500,000 to $201,000,000 by $50,500,000.

2. Clause F.4 shall be modified to extend the ending date of the contract to January 17, 2015.

3. Clause I.5: The first paragraph shall be modified to read "(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from January 18, 2011 through January 17, 2015."

4. Clause I.7: The last sentence shall be modified to read "The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after January 17, 2016."

OPTION 2 (Year Five) (January 18, 2015 – January 17, 2016)

1. Clause B.7 (a): The guaranteed minimum contract value of work that will be ordered under this contract, and which will be initiated through the issuance of cost-reimbursable task orders shall be increased by $50,000 for Year 5 to a total of $5,100,000. The maximum value that can be ordered under the IDIQ provisions of this contract shall be increased from $201,000,000 to $251,500,000 by $50,500,000.

2. Clause F.4 shall be modified to extend the ending date of the contract to January 17, 2016.

3. Clause I.5: The first paragraph shall be modified to read "(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from January 18, 2011 through January 17, 2016."

4. Clause I.7: The last sentence shall be modified to read "The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after January 17, 2017."

(End of clause)

F.8 PLACE OF PERFORMANCE

The primary effort required under this contract shall be performed at or near the Lyndon B. Johnson Space Center (JSC), Houston, Texas, Sonny Carter Training Facility, Houston, Texas, Ellington Field, Houston, Texas, and White Sands Test Facility, Las Cruces, New Mexico, and at other locations as covered by the Statement of Work.

(End of clause)

F.9 SHIPPING INSTRUCTIONS

All documentation shall be shipped to the following address:

Parcel Post Shipments and Freight Shipments

Ship to:	Transportation Officer, Building 421 NASA Johnson Space Center 2101 NASA Parkway Houston, TX 77058-3696
Mark for:	Accountable Property Officer
Mark with:	Contract Number: NNJ09JA03C

For reissue to: _____
(Name) (Mail Code) (Bldg) (Rm)

(End of clause)

[END OF SECTION]

SECTION G – CONTRACT ADMINISTRATION DATA

G.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
NONE INCORPORATED BY REFERENCE		

II. NASA FEDERAL ACQUISITION REGULATION SUPPLEMENT (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
1852.223-71	DEC 1988	FREQUENCY AUTHORIZATION
1852.227-86	DEC 1987	COMMERCIAL COMPUTER SOFTWARE-LICENSING
1852.242-71	DEC 1988	TRAVEL OUTSIDE THE UNITED STATES
1852.242-73	NOV 2004	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING

(End of clause)

G.2 SUBMISSION OF VOUCHERS FOR PAYMENT (NFS 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is indicated below. Public vouchers for payment of costs shall include a reference to the number of this contract.

(b) (1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

NASA Shared Services Center
Financial Management Division (FMD) Accounts Payables
Bldg. 1111, C. Road
Stennis Space Center, MS 39529

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as directed by the Contracting Officer.

(c) If the Contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the Contractor shall prepare and submit vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to:

NASA Lyndon B. Johnson Space Center
Attn: Contracting Officer
BJ2/Institutional Procurement Office
Houston, TX 77058-3696

(2) Five copies of SF 1034, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addresses:

(i) Copy 1 NASA Contracting Officer
(ii) Copy 2 Auditor
(iii) Copy 3 Contractor
(iv) Copy 4 Contract administration office; and
(v) Copy 5 Project management office.

(3) The Contracting Officer may designate other recipients as required.

(d) Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to:

NASA Lyndon B. Johnson Space Center
Attn: Contracting Officer
BJ2/Institutional Procurement Office
Houston, TX 77058-3696

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(e) 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.

(End of clause)

G.3 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NFS 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:

Title	Office Code	Address (including zip code)
New Technology Representative	AF2	AF2/Innovation Partnerships Office NASA Johnson Space Center, Houston, TX 77058
Patent Representative	AL	Patent Representative 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 1852.242-70) (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 1842.270. "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.

(b) The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that --

(1) Constitutes an assignment of additional work outside the statement of work;
(2) Constitutes a change as defined in the changes clause;
(3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
(4) Changes any of the expressed terms, conditions, or specifications of the contract; or
(5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.

(c) All technical direction shall be issued in writing by the COTR.

(d) 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 (b) of this clause, 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—

(1) Rescinded in its entirety; or
(2) 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.

(e) 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.

(f) 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 CONTRACTOR REQUESTS FOR GOVERNMENT-PROVIDED PROPERTY (DEVIATION) (NFS 1852.245-70) (SEP 2007) AND ALTERNATE 1 (DEVIATION) (SEPT 2007)

(a) The Contractor shall provide all property required for the performance of this contract. The Contractor shall not acquire or construct items of property to which the Government will have title under the provisions of this contract without the Contracting Officer's written authorization. Property which will be acquired as a deliverable end item as material or as a component for incorporation into a deliverable end item is exempt from this requirement.

(b)(1) In the event the Contractor is unable to provide the property necessary for performance, and the Contractor requests provision of property by the Government, the Contractor's request shall—

(i) Justify the need for the property;
(ii) Provide the reasons why contractor-owned property cannot be used;
(iii) Describe the property in sufficient detail to enable the Government to screen its inventories for available property or to otherwise acquire property, including applicable manufacturer, model, part, catalog, National Stock Number or other pertinent identifiers;
(iv) Combine requests for quantities of items with identical descriptions and estimated values when the estimated values do not exceed $100,000 per unit; and
(v) Include only a single unit when the acquisition or construction value equals or exceeds $100,000.

(2) Contracting Officer authorization is required for items the Contractor intends to manufacture as well as those it intends to purchase.

(3) The Contractor shall submit requests to the Contracting Officer no less than 30 days in advance of the date the Contractor would, should it receive authorization, acquire or begin fabrication of the item.

(c) The Contractor shall maintain copies of Contracting Officer authorizations, appropriately cross-referenced to the individual property record, within its property management system.

(d) Property furnished from Government excess sources is provided as-is, where-is. The Government makes no warranty regarding its applicability for performance of the contract or its ability to operate. Failure of property obtained from Government excess sources under this clause is insufficient reason for submission of requests for equitable adjustments discussed in the clause at 52.245-1, Government Property.

(e) In the event the Contracting Officer issues written authorization to provide property, the Contractor shall screen Government sources to determine the availability of property from Government inventory or excess property.

(1) The Contractor shall review NASA inventories and other authorized Federal excess sources for availability of items that meet the performance requirements of the requested property.

(i) If the Contractor determines that a suitable item is available from NASA supply inventory, it shall request the item using applicable Center procedures.
(ii) If the Contractor determines that an item within NASA or Federal excess is suitable, it shall contact the Center Industrial Property Officer to arrange for transfer of the item from the identified source to the Contractor.

(2) If the Contractor determines that the required property is not available from inventory or excess sources, the Contractor shall note the acquisition file with a list of sources reviewed and the findings regarding the lack of availability. If the required property is available, but unsuitable for use, the contractor shall document the rationale for rejection of available property. The Contractor shall retain appropriate cross-referenced documentary evidence of the outcome of those screening efforts as part of its property records system.

(End of clause)

G.6 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (DEVIATION) (NFS 1852.245-71) (SEP 2007) (ALT I) (NOV 2004)

(a) The Government property described in paragraph (c) of this clause may be made available to the Contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property unless authorized by the contracting officer under (b)(1)(iv). Under this clause, the Government retains accountability for, and title to, the property, and the Contractor shall comply with the following:

NASA Procedural Requirements (NPR) 4100, NASA Materials Inventory Management Manual
NASA Procedural Requirements (NPR) 4200, NASA Equipment Management Procedural Requirements
NASA Procedural Requirement (NPR) 4300, NASA Personal Property Disposal Procedural Requirements
Manual for Control of Programs Document 26549

Property not recorded in NASA property systems must be managed in accordance with the requirements of FAR 52.245-1.

The Contractor shall establish and adhere to a system of written procedures to assure continued, effective management control and 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, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished within NASA management information systems prescribed 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 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 the Supply and Equipment Management Office.

(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 52.245-1, Government Property, 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 Industrial Property Officer. The property shall be considered Government furnished and the Contractor shall assume accountability and financial reporting responsibility. The Contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR 52.245-1, Government Property, until its return to the installation. NASA Procedural Requirements related to property loans shall not apply to offsite use of property by contractors.

(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) of this clause 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.

(c) The following property and services are provided if checked.

X (1) Office space, work area space, and utilities. Government telephones are available for official purposes only.
X (2) Office furniture.
X (3) Property listed in Attachments J-5.

(i) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records.

(ii) The Contractor shall not bring to the installation 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.

__ (4) Supplies from stores stock.
X (5) Publications and blank forms stocked by the installation.
X (6) Safety and fire protection for Contractor personnel and facilities.
X (7) Installation service facilities: Attachment J-25
X (8) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.
X (9) Cafeteria privileges for Contractor employees during normal operating hours.
X (10) Building maintenance for facilities occupied by Contractor personnel.
X (11) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services may be provided on-site, as approved by the Contracting Officer.

(End of clause)

G.7 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (NFS 1852.245-73) (SEP 2007)

(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 has been delegated to DOD) to the following address: Michael Caputo, 2101 NASA Parkway, Houston, TX, 77058, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c)(1) 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 15. 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 15. Some activity may be estimated for the month of September, if necessary, to ensure the NF 1018 is received when due. However, contractors' procedures must document the process for developing these estimates based on planned

activity such as planned purchases or NASA Form 533 (NF 533 Contractor Financial Management Report) cost estimates. It should be supported and documented by historical experience or other corroborating evidence, and be retained in accordance with FAR Subpart 4.7, Contractor Records Retention. Contractors shall validate the reasonableness of the estimates and associated methodology by comparing them to the actual activity once that data is available, and adjust them accordingly. In addition, differences between the estimated cost and actual cost must be adjusted during the next reporting period. Contractors shall have formal policies and procedures, which address the validation of NF 1018 data, including data from subcontractors, and the identification and timely reporting of errors. The objective of this validation is to ensure that information reported is accurate and in compliance with the NASA FAR Supplement. If errors are discovered on NF 1018 after submission, the contractor shall contact the cognizant NASA Center Industrial Property Officer (IPO) within 30 days after discovery of the error to discuss corrective action.

(2) 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 NASA has received the required reports. 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.8 IDENTIFICATION AND MARKING OF GOVERNMENT EQUIPMENT (DEVIATION) (NFS 1852.245-74) (SEP 2007)

(a) The Contractor shall identify all equipment to be delivered to the Government using NASA Technical Handbook (NASA-HDBK) 6003, Application of Data Matrix Identification Symbols to Aerospace Parts Using Direct Part Marking Methods/Techniques, and NASA Standard (NASA-STD) 6002, Applying Data Matrix Identification Symbols on Aerospace Parts Handbook. This includes deliverable equipment listed in the schedule and other equipment when NASA directs physical transfer to NASA or a third party. The Contractor shall identify property in both machine and human readable form unless the use of a machine readable-only format is approved by the NASA Industrial Property Officer.

(b) Property shall be marked in a location that will be human readable, without disassembly or movement of the property, when the items are placed in service unless such placement would have a deleterious effect on safety or on the item's operation.

(c) Concurrent with equipment delivery or transfer, the Contractor shall provide the following data in an electronic spreadsheet format:

(1) Item Description.
(2) Unique Identification Number (License Tag).
(3) Unit Price.
(4) An explanation of the data used to make the unique identification number.

(d) For items physically transferred under paragraph (a) the following additional data is required:

(1) Date originally placed in service.
(2) Item condition.
(3) Date last serviced.

(e) The data required in paragraphs (c) and (d) shall be delivered to the NASA center receiving activity listed below:

TRANSPORTATION OFFICER JB7
NASA LYNDON B. JOHNSON SPACE CENTER
BLDG. 421 CENTRAL RECEIVING
2101 NASA PARKWAY
HOUSTON, TX 77058

(f) The contractor shall include the substance of this clause, including this paragraph (f), in all subcontracts that require delivery of equipment.

(End of clause)

G.9 PROPERTY MANAGEMENT CHANGES (DEVIATION) (NFS 1852.245-75) (SEP 2007)

(a) The Contractor shall submit any changes to standards and practices used for management and control of Government property under this contract to the assigned property administrator and Industrial Property Officer (IPO), prior to making the change whenever the change –

(1) Employs a standard that allows increase in thresholds or changes the timing for reporting loss, damage, or destruction of property;
(2) Alters physical inventory timing or procedures;
(3) Alters recordkeeping practices;
(4) Alters practices for recording the transport or delivery of Government property; or
(5) Alters practices for disposition of Government property.

(b) The Contractor shall contact the IPO at:

Michael Caputo
2101 NASA Parkway
Houston, TX 77058
Phone: (281) 483-7909
michael.caputo-1@nasa.gov

(End of clause)

G.10 LIST OF GOVERNMENT PROPERTY FURNISHED PURSUANT TO FAR 52.245-1 (DEVIATION) (NFS 1852.245-76) (SEP 2007)

(a) For performance of work under this contract, the Government will make available Government property identified in Attachment J-13 of this contract on a no-charge-for-use basis pursuant to the clause at FAR 52.245-1, Government Property. The Contractor shall use this property in the performance of this contract at the Lyndon B. Johnson Space Center, the White Sands Test Facility and at other location(s) as may be approved by the Contracting Officer. Under FAR 52.245-1, the Contractor is accountable for the identified property.

(End of clause)

G.11 LIST OF GOVERNMENT PROPERTY FURNISHED PURSUANT TO FAR 52.245-2 (NFS 1852.245-77) (SEP 2007)

(a) For performance of work under this contract, the Government will make available Government property identified in Attachment J-14 of this contract on a no-charge-for-use basis pursuant to FAR 52.245-2, Government Property Installation Operation Services. The Contractor shall use this property in the performance of this contract at the Lyndon B. Johnson Space Center and the White Sands Test Facility and at other location(s) as may be approved by the Contracting Officer.

(End of clause)

G.12 PHYSICAL INVENTORY OF CAPITAL PERSONAL PROPERTY (DEVIATION) (NFS 1852.245-78) (SEP 2007)

(a) In addition to physical inventory requirements under the clause at FAR 52.245-1, Government Property, the Contractor shall conduct annual physical inventories for individual property items with an acquisition cost exceeding $100,000.

(1) The Contractor shall inventory --

(i) Items of property furnished by the Government;

(ii) Items acquired by the Contractor and titled to the Government under the clause at FAR 52.2451;

(ii) Items constructed by the Contractor and not included in the deliverable, but titled to the Government under the clause at FAR 52.245-1; and

(iv) Complete but undelivered deliverables.

(2) The Contractor shall use the physical inventory results to validate the property record data, specifically location, condition and use status, and to prepare summary reports of inventory as described in paragraph (c) of this clause.

(b) Unless specifically authorized in writing by the NASA Industrial Property Officer (IPO), the inventory shall be performed and posted by individuals other than those assigned custody of the items, responsibility for maintenance, or responsibility for posting to the property record. The Contractor may request a waiver from this separation of duties requirement from the NASA IPO, when all of the conditions in either (1) or (2) below are met.

(1) The Contractor utilizes an electronic system for property identification, such as a laser bar-code reader or radio frequency identification reader, and

(i) The programs or software preclude manual data entry of inventory identification data by the individual performing the inventory; and

(ii) The inventory and property management systems contain sufficient management controls to prevent tampering and assure proper posting of collected inventory data.

(2) The Contractor has limited quantities of property, limited personnel, or limited property systems; and,

(i) The Contractor provides written confirmation that the Government property exists in the recorded condition and location; and

(ii) The items continue to be used exclusively for performance of the contract or as otherwise authorized by the Contracting Officer.

(3) The Contractor shall submit the request to the cognizant property administrator and obtain approval from the IPO prior to implementation of the practice.

(c) The Contractor shall report the results of the physical inventory to the property administrator and the NASA Industrial Property Officer within 10 calendar days of completion of the physical inventory. The report shall –

(1) Provide a summary showing number and value of items inventoried; and
(2) Include additional supporting reports of --
(i) Loss, damage or destruction, in accordance with the clause at 52.245-1, Government Property;
(ii) Idle property available for reuse or disposition; and
(iii) A summary of adjustments made to location, condition, status, or user as a result of the physical inventory reconciliation.

(d) The Contractor shall retain all physical inventory records, including records of all transactions associated with inventory reconciliation. All records shall be subject to Government review and/or audit.

(End of clause)

G.13 RECORDS AND DISPOSITION REPORTS FOR GOVERNMENT PROPERTY WITH POTENTIAL HISTORIC OR SIGNIFICANT REAL VALUE (DEVIATION) (NFS 1852.245-79) (SEP 2007)

(a) Items of Government property flown in space or used to support other pioneering NASA programs have increased probability of historic significance and an intrinsic value that is likely to exceed their unused material or physical value. Descriptions of physical characteristics alone are often insufficient to determine an item's historic significance or real value. In addition to the property record data required by the clause at FAR 52.245-1, Government Property in this contract, Contractor records of all Government property under this contract shall –

(1) Identify the projects or missions that used the items;
(2) Specifically identify items of flown property;
(3) When known, associate individual items of property used in space flight operations with the using astronaut(s); and
(4) Identify property used in test activity and, when known, the individuals who conducted the test.

(b) The Contractor shall include this information within item descriptions --
(1) On any Standard Form 1428, Inventory Schedule;
(2) In automated disposition systems;
(3) In any other disposition related reports; and
(4) In other requests for disposition instructions.

(c) The Contractor shall not remove NASA identification or markings from Government-furnished property prior to disposition without the advanced written approval of the NASA Industrial Property Officer.

(End of clause)

G. 14 OCCUPANCY MANAGEMENT REQUIREMENTS (DEVIATION) (NFS 1852.245-82) (SEP 2007)

(a) In addition to the requirements of the clause at FAR 52.245-1, Government Property, the Contractor shall comply with the following in performance of work in and around Government real property:
(1) NPD 8800.14, Policy for Real Property Management.
(2) NPR 8831.2, Facility Maintenance Management

(b) The Contractor shall obtain the written approval of the Contracting Officer before installing or removing Contractor-owned property onto or into any Government real property or when movement of Contractor-owned property may damage or destroy Government-owned property. The Contractor shall restore damaged property to its original condition at the Contractor's expense.

(c) The Contractor shall not acquire, construct or install any fixed improvement or structural alterations in Government buildings or other real property without the advance, written approval of the Contracting Officer. Fixed

improvement or structural alterations, as used herein, means any alteration or improvement in the nature of the building or other real property that, after completion, cannot be removed without substantial loss of value or damage to the premises. Title to such property shall vest in the Government.

(d) The Contractor shall report any real property or any portion thereof when it is no longer required for performance under the contract, as directed by the Contracting Officer.

(End of clause)

G.15 REAL PROPERTY MANAGEMENT REQUIREMENTS (DEVIATION) (NFS 1852.245-83) (SEP 2007)

(a) In addition to the requirements of the FAR Government Property Clause (FAR 52,245-1) the Contractor shall comply with the following in performance of any maintenance, construction, modification, demolition, or management activities of any Government real property:

(1) NPD 8800.14, Policy for Real Property Management.
(2) NPR 8831.2, Facility Maintenance Management.

(b) Within 30 calendar days following award, the Contractor shall provide a plan for maintenance of Government real property provided for use under this contract. The Contractor's maintenance program shall enable the identification, disclosure, and performance of normal and routine preventative maintenance and repair. The Contractor shall disclose and report to the Contracting Officer the need for replacement and/or capital rehabilitation. Upon acceptance by the Contracting Officer, the program shall become a requirement under this contract.

(c) Title to parts replaced by the Contractor in carrying out its normal maintenance obligations shall pass to and vest in the Government upon completion of their installation in the facilities. The Contractor shall keep the property free and clear of all liens and encumbrances.

(d) The Contractor shall keep records of all work done to real property, including plans, drawings, charts, warranties, and manuals. Records shall be complete and current. Record of all transactions shall be auditable. The Government shall have access to these records at all reasonable times, for the purposes of reviewing, inspecting, and evaluating the Contractor's real property management effectiveness. When real property is disposed of under this contract, the Contractor shall deliver the related records to the Government.

(e) The Contracting Officer may direct the Contractor in writing to reduce the work required by the maintenance program authorized in paragraph (b) at any time.

(End of clause)

G.16 SECURITY/BADGING REQUIREMENTS FOR FOREIGN NATIONAL VISITORS AND EMPLOYEES/REPRESENTATIVES OF FOREIGN CONTRACTORS (JSC 52.204-91) (JAN 2006)

(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 three 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 (NFNMS) 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. These individuals 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 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 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)

G.17 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 as "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)

G.18 IDENTIFICATION OF EMPLOYEES (JSC 52.242-92) (OCT 2006)

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 credentials and visitor badges will be issued only between the hours of 6:00 a.m. to 7:30 p.m., Monday through Friday, and 7:30 am to 3:00 pm on Saturday. 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, decals, keys, Controlled Access Area cards, clearance terminations, JSC Public Key Infrastructure (PKI)/special program deletions, etc.) may result in final payment being delayed.

(End of clause)

G.19 PROVISIONAL PAYMENTS

(a) The contractor can earn incentive fee from a minimum of zero dollars to the maximum stated in Clause B.3.

(b) Beginning one year after the effective date of this contract, the Government shall evaluate the Contractor's performance every year to determine the amount of incentive fee earned by the contractor during the period. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations will be considered by the Government in its evaluation. The incentive fee amounts will be determined based on the Contractor's performance in accordance with Attachment J-1.

(c) The Government will advise the Contractor in writing of the evaluation results. The NASA Shared Service Center will make payment based on issuance of unilateral modification by the contracting officer.

(d) After 85 percent of the potential incentive fee has been paid, the Contracting Officer may direct the withholding of further payment of incentive fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the total potential incentive fee.

(e) The amount of incentive fee which can be awarded in each evaluation period is limited to the amounts set forth in Attachment J-1. Incentive fee which is not earned in an evaluation period cannot be reallocated to future evaluation periods.

(f) (1) Provisional incentive fee payments will be made under this contract pending the determination of the amount of fee earned for an evaluation period. If applicable, provisional incentive fee payments will be made to the Contractor on a monthly basis. The total amount of incentive fee available in an evaluation period that will be provisionally paid is the lesser of 80 percent or the prior period's evaluation score.

(2) Provisional incentive fee payments will be superseded by the final incentive fee evaluation for that period. If provisional payments exceed the final evaluation score, the Contractor will either credit the next payment voucher for the amount of such overpayment or refund the difference to the Government, as directed by the Contracting Officer.

(3) If the Contracting Officer determines that the Contractor will not achieve a level of performance commensurate with the provisional rate, payment of provisional incentive fee will be discontinued or reduced in such amounts as the Contracting Officer deems appropriate. The Contracting Officer will notify the Contractor in writing if it is determined that such discontinuance or reduction is appropriate.

(4) Provisional incentive fee payments will be made prior to the first incentive fee determination by the Government.

(g) Incentive fee determinations are unilateral decisions made solely at the discretion of the Government.

(End of clause)

[END OF SECTION]

SECTION H – SPECIAL CONTRACT REQUIREMENTS

H.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
NONE INCORPORATED BY REFERENCE		

II. NASA FEDERAL ACQUISITION REGULATION SUPPLEMENT (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
1852.208-81	NOV 2004	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.223-76	JUL 2003	FEDERAL AUTOMOTIVE STATISTICAL TOOL REPORTING
1852.225-70	FEB 2000	EXPORT LICENSES PARAGRAPH (b) INSERT: "JOHNSON SPACE CENTER OR A CENTER APPROVED BY THE CONTRACTING OFFICER"

(End of clause)

H.2 LIMITATION OF FUTURE CONTRACTING (NFS 1852.209-71) (DEC 1988)

(a) The Contracting Officer has determined that this acquisition may give rise to a potential organizational conflict of interest. Accordingly, the attention of prospective offerors is invited to FAR Subpart 9.5—Organizational Conflicts of Interest.

(b) The nature of this conflict is that in performance of this contract, the contractor may have access to and use of NASA's sensitive financial and management data as well as to proprietary data from various NASA contracts and contractors.

(c) The restrictions upon future contracting are as follows:

(1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop specifications or statements of work that are to be incorporated into a solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias (this time shall in no case be less than the duration of the initial production contract). NASA shall not unilaterally require the Contractor to prepare such specifications or statements of work under this contract.

(2) To the extent that the work under this contract requires access to proprietary, business confidential, or financial data of other companies, and as long as these data remain proprietary or confidential, the Contractor shall protect these data from unauthorized use and disclosure and agrees not to use them to compete with those other companies.

(End of clause)

H.3 TASK ORDERING PROCEDURE (NFS 1852.216-80) (OCT 1996)

(a) Only the Contracting Officer may issue task orders to the Contractor, providing specific authorization or direction to perform work within the scope of the contract and as specified in the schedule. The Contractor may incur costs under this contract in performance of task orders and task order modifications issued in accordance with this clause. No other costs are authorized unless otherwise specified in the contract or expressly authorized by the Contracting Officer.

(b) Prior to issuing a task order, the Contracting Officer shall provide the Contractor with the following data:

(1) A functional description of the work identifying the objectives or results desired from the contemplated task order.

(2) Proposed performance standards to be used as criteria for determining whether the work requirements have been met.

(3) A request for a task plan from the Contractor to include the technical approach, period of performance, appropriate cost information, and any other information required to determine the reasonableness of the Contractor's proposal.

(c) Within fifteen (15) calendar days after receipt of the Contracting Officer's request, the Contractor shall submit a task plan conforming to the request.

(d) After review and any necessary discussions, the Contracting Officer may issue a task order to the Contractor containing, as a minimum, the following:

(1) Date of the order.

(2) Contract number and order number.

(3) Functional description of the work identifying the objectives or results desired from the task order, including special instructions or other information necessary for performance of the task.

(4) Performance standards, and where appropriate, quality assurance standards.

(5) Maximum dollar amount authorized (cost and fee or price). This includes allocation of award fee among award fee periods, if applicable.

(6) Any other resources (travel, materials, equipment, facilities, etc.) authorized.

(7) Delivery/performance schedule including start and end dates.

(8) If contract funding is by individual task order, accounting and appropriation data.

(e) The Contractor shall provide acknowledgment of receipt to the Contracting Officer within two (**2**) calendar days after receipt of the task order.

(f) If time constraints do not permit issuance of a fully defined task order in accordance with the procedures described in paragraphs (a) through (d), a task order which includes a ceiling price may be issued.

(g) The Contracting Officer may amend tasks in the same manner in which they were issued.

(h) In the event of a conflict between the requirements of the task order and the Contractor's approved task plan, the task order shall prevail.

(End of clause)

H.4 SAFETY AND HEALTH (NFS 1852.223-70) (APRIL 2002)

(a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.

(b) The Contractor shall take all reasonable safety and occupational health measures in performing this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.

(c) The Contractor shall take, or cause to be taken, any other safety, and occupational health-measures the Contracting Officer may reasonably direct. To the extent that the Contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable adjustment shall be determined pursuant to the procedures of the changes clause of this contract; provided, that no adjustment shall be made under this Safety and Health clause for any change for which an equitable adjustment is expressly provided under any other clause of the contract.

(d) The Contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the contract Schedule; or property loss of $25,000 or more, or Close Call (a situation or occurrence with no injury, no damage or only minor damage (less than $1,000) but possesses the potential to cause any type mishap, or any injury, damage, or negative mission impact) that may be of immediate interest to NASA, arising out of work performed under this contract. The Contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. In addition, service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the contract Schedule.

(e) The Contractor shall investigate all work-related incidents, accidents, and Close Calls, to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(f)(1) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. When the Contracting Officer becomes aware of noncompliance that may pose a serious or imminent danger to safety and health of the public, astronauts and pilots, the NASA workforce (including contractor employees working on NASA contracts), or high value mission critical equipment or property, the Contracting Officer shall notify the Contractor orally, with written confirmation. The Contractor shall promptly take and report any necessary corrective action.

(2) If the Contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (f)(1) of this clause, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.
(g) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (g) and any applicable Schedule provisions and clauses, with appropriate changes of designations of the parties, in all solicitations and subcontracts of every tier, when one or more of the following conditions exist:

(1) The work will be conducted completely or partly on premises owned or controlled by the Government.

(2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.

(3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).

(4) When the Contractor (or subcontractor or supplier) determines that the assessed risk and consequences of a failure to properly manage and control the hazard(s) warrants use of the clause.

(h) The Contractor (or subcontractor or supplier) may exclude the provisions of paragraph (g) from its solicitation(s) and subcontract(s) of every tier when it determines that the clause is not necessary because the application of the OSHA and DOT (if applicable) regulations constitute adequate safety and occupational health protection. When a determination is made to exclude the provisions of paragraph (g) from a solicitation and subcontract, the Contractor must notify and provide the basis for the determination to the Contracting Officer. In subcontracts of every tier above the micro-purchase threshold for which paragraph (g) does not apply, the Contractor (or subcontractor or supplier) shall insert the substance of paragraphs (a), (b), (c), and (f) of this clause).

(i) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the Contractor's safety and occupational health measures under this clause.

(j) The contractor shall continually update the safety and health plan when necessary. In particular, the Contractor shall furnish a list of all hazardous operations to be performed, and a list of other major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the Contractor. NASA and the Contractor shall jointly decide which operations are to be considered hazardous, with NASA as the final authority. Before hazardous operations commence, the Contractor shall submit for NASA concurrence --

(1) Written hazardous operating procedures for all hazardous operations; and/or
(2) Qualification standards for personnel involved in hazardous operations.

(End of clause)

H.5 KEY PERSONNEL AND FACILITIES (NFS 1852.235-71)(MAR 1989)

(a) The personnel and/or facilities listed below are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract.

(b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and that ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The list of personnel and/or facilities shown below may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities:

Program Manager – Jeff White
Deputy Program Manager – Norma Bearrow
Performance Excellence Manager – Julia Babineaux
IT Security Manager – Tony Gore
IT Integrated Solutions Manager – Curtis Bradley
Multimedia Operations and Services Manager – Chris Mitchell
External Relations and Information Management Manager – Jim Pruitt

(End of clause)

H.6 OBSERVANCE OF LEGAL HOLIDAYS (ALTERNATE I) (NFS 1852.242-72) (SEP 1989)

(a) The on-site Government personnel observe the following holidays:

New Year's Day
Labor Day
Martin Luther King, Jr.'s Birthday
Columbus Day
President's Day
Veterans Day
Memorial Day
Thanksgiving Day
Independence Day
Christmas Day

Any other day designated by Federal statute, Executive order, or the President's proclamation.

(b) When any holiday falls on a Saturday, the preceding Friday is observed. When any holiday falls on a Sunday, the following Monday is observed. Observance of such days by Government personnel shall not by itself be cause for an additional period of performance or entitlement of compensation except as set forth within the contract.

(c) On-site personnel assigned to this contract shall not be granted access to the installation during the holidays in paragraph (a) of the clause, except as follows: the Contractor shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by the Contracting Officer or authorized representative. If the Contractor's on-site personnel work during a holiday other than those in paragraph (a) of this clause, no form of holiday or other premium compensation shall be reimbursed as either a direct or indirect cost. However, this does not preclude reimbursement for authorized overtime work that would have been overtime regardless of the status of the day as a holiday.

(d) The Contractor shall place identical requirements, including this paragraph, in all subcontracts that require performance of work on-site, unless otherwise instructed by the Contracting Officer.

(End of clause)

H.7 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 working on-site; and
2. Contractor personnel dedicated to the contract effort who are

A. working off-site within 10 miles of JSC; and
B. unable to perform their NASA 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, the contractor shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by the Contracting Officer 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. The cost of salaries and wages to the Contractor for the period of any such excused absence shall be a reimbursable item of cost under this contract for effected employees in accordance with the 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 the Contractor's established accounting policy.
2. For fixed price contracts based on other than labor hours for deliverables, the Contracting Officer and 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 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.8 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

The completed provision 52.204-8, Annual Representations and Certifications, including any amended representation(s) made at paragraph (b) of the provision; and other representations, certifications, and other statements contained in Section K completed and submitted as part of the offer dated *December 2, 2009* are hereby incorporated by reference in this resulting contract.

(End of clause)

H.9 CAPITAL EQUIPMENT

1. Introduction: The parties recognize the Contractor may, from time to time during the basic period of performance of this contract, purchase equipment for the purpose of performing work described in the SOW. Any such capital equipment will be capitalized and depreciated in accordance with the Contractor's established cost accounting practices and procedures, which must be in conformance to any applicable requirements and standards of this contract.

2. Contractor Records: The Contractor agrees to maintain complete records of capital equipment that is subject to this clause. Such records shall include date of purchase, purchase price, depreciation schedule, and amount of depreciation recorded from time to time. The Contractor further agrees to make

these records available to the Contracting Officer promptly upon the latter's request, along with the Contractor's best estimate of the undepreciated balance of each equipment item.

3. Right to Purchase: The parties agree that if the Government does not exercise its option to extend the contract or does not thereafter 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 to any equipment identified by the Contracting Officer from the records reference above, to either (a) the Government, or (b) a successor Contractor.

4. If a request for transfer of title to the Government, the Government agrees to recognize as allowable costs under the contract, for identified capital equipment, so much of the cost of the equipment that has not been depreciated as of the end of the contract period of performance. Payment of such undepreciated balances will be no later than 30 days after transfer of title.

(End of clause)

H.10 ASSOCIATE CONTRACTOR AGREEMENT (ACA) FOR THE INFORMATION RESOURCES DIRECTORATE/EXTERNAL RELATIONS OFFICE (IRD/ERO)

(A) The success of the IRD/ERO is dependent on the efforts of multiple contractors. The ITAMS Contractor is a key participant. The other key participating Contractors are:

Contract Name	*Contract Number*
Logistics Contract	NNJ08JA01C
Facilities Contract	NNJ08JA02C
Environmental Contract	NNJ08JB01C
Outsourcing Desktop Initiative for NASA (ODIN) Contract / Delivery Order 4	NAS 5-98144 / NNJ07JF12D
Agency Consolidated End User Services (ACES) Contract	Contract Number TBD Estimated Contract Start = October 2010
Enterprise Application Service Technologies (EAST) Contract	Contract Number TBD Estimated Contract Start = October 2010
NASA Enterprise Data Center (NEDC) Contract	Contract Number TBD Estimated Contract Start = TBD
NASA Integrated Communications Services (NICS) Contract	Contract Number TBD Estimated Contract Start = October 2010
Web Enterprise Service Technologies (WEST) Contract	Contract Number TBD Estimated Contract Start = October 2010

The ITAMS contractor shall establish ACAs with other JSC contracts if it becomes apparent to the ITAMS contractor or IRD/ERO during the course of the contract that a significant interface exists. This clause is effective throughout the duration of the ITAMS contract, beginning at contract start.

Under the aforementioned contracts, the Contractors will provide the necessary resources and skills required to develop, operate, maintain, and utilize IRD/ERO systems, facilities and infrastructures.

(B) To achieve efficient and effective management and operation of the IRD/ERO systems, facilities, and infrastructure, the Contractor shall establish the means for coordination and exchange of information with associate contractors. The information to be exchanged shall be information required by the associate Contractors in the execution of their respective contract requirements. The associate Contractors are strongly encouraged to seek out and foster cooperative efforts and goodwill in a manner that will benefit the IRD/ERO with increased safety, efficiency, and productivity.

(C) Given the unique role of this contract and interrelations with the development, operation, maintenance, and utilization of the IRD/ERO, the Contractor will engage in cooperative relationships that facilitate effective management of the overall IRD/ERO effort. This joint cooperation will be

evaluated as part of the incentive fee process under the service quality metric as defined in Attachment J-1, *Incentive Fee Plan.*

(D) To ensure successful implementation and utilization of the IRD/ERO, the associate Contractors shall establish formal guidelines to address coordination, cooperation, and communication. All program elements shall work in a coordinated fashion. Each associate Contractor shall establish the means for the exchange of such data and communications as needed in order to keep other project elements fully informed.

(End of clause)

H.11 ADVANCE UNDERSTANDING ON THE COST OF SPACE FOR GOVERNMENT PROPERTY AND CONTRACT SERVICES

As of the effective date of this contract, the Contractor has an obligation to provide approximately 18,000 square feet of off-site space for: the storage of such items as exhibits, artifacts, television equipment, and video equipment; television engineering services; and television repair and maintenance services. It is anticipated that the Government will have space available at the Johnson Space Center for these items and services sometime prior to the completion date of the contract. It is recognized that, in the event Government provided space becomes available, the Contractor provided space may become idle facilities or idle capacity, as those terms are defined by FAR 31.205-17. Any lease arrangement entered into by the Contractor shall contain an escape clause allowing lease termination at any time during the period of performance of the contract.

Therefore, in the event the Government moves all items and services on-site, and the Contractor's space becomes idle in whole or in part, the parties agree to the following:

(a) the Contractor will use its best efforts to mitigate costs by promptly leasing, sub-leasing or other actions as the case may be, such idle facility or idle capacity;

(b) the Government will reimburse the cost of such idle facility or idle capacity (to the extent that such cost is otherwise allocable and reasonable), for one year after the date the space became idle, or until the expiration of the Contractor's lease for the space, whichever is sooner;

(c) any cost incurred by the Contractor for such idle facility or idle capacity, after expiration of the time limitation set forth in paragraph (b), above, shall be unallowable under this or any other Government contract.

(End of clause)

H.12 INFORMATION MANAGEMENT TOOL

The Contractor shall provide the information management tool *ITAMS Management System inclusive of all its parts which includes Task Order Management System (TOMS)* to the Government at no direct licensing cost. If applicable, *ITAMS Management System inclusive of all its parts which includes TOMS* shall be delivered to the Government with limited rights in accordance with Alternate III of the 52.227-14, Rights in Data Genera clause.

(End of clause)

H.13 GOVERNMENT FURNISHED EQUIPMENT

(a) The Government equipment listed in paragraph (e) of this clause is furnished to the Contractor in an "as-is, where-is" condition. The Government makes no warranty regarding the suitability for use of the Government equipment specified in this contract. The Contractor shall be afforded the opportunity to inspect the Government equipment as specified in the solicitation.

(b) The Government bears no responsibility for repair or replacement of any lost, damaged, or destroyed Government equipment. If any or all of the Government equipment is lost, damaged, or destroyed or becomes no longer usable, the Contractor shall be responsible for replacement of the equipment at the Contractor's expense. The Contractor shall have title to all replacement equipment and shall continue to be responsible for contract performance.

(c) Unless the Contracting Officer determines otherwise, the Government abandons all rights and title to unserviceable and scrap equipment resulting from contract performance. Upon notification to the Contracting Officer, the Contractor shall remove such equipment from the Government premises and dispose of it at Contractor expense.

(d) Except as provided in this clause, Government equipment furnished under this contract shall be governed by the Government Property Clause of this contract.

(e) Government equipment provided under this clause is listed in Attachment J-26.

(End of clause)

H.14 GOVERNMENT FURNISHED INFORMATION

(a) *Definitions.* As used in this clause—

"Government-furnished information" means information (1) in the possession of, or directly acquired by, the Government whereby the Government has title to or license rights in the information, and (2) subsequently furnished to the Contractor for performance of a contract.

"Information" means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data including computer databases, computer software, and computer software documentation, and information such as financial, administrative, cost or pricing, or management information.

(b) The Government shall deliver to the Contractor the Government-furnished information (GFI) described in Attachments J-11 and J-27 of this contract. The Government shall furnish related information needed for the intended use of the GFI.

(c) If applicable, the delivery and/or performance dates specified in this contract are based upon the expectation that the GFI will be suitable for contract performance and will be delivered to the Contractor by the dates stated in the contract.

(1) If the GFI is not delivered to the Contractor by the dates stated in the contract, the Contracting Officer shall, upon the Contractor's timely written request, consider an equitable adjustment to the contract.

(2) In the event GFI is received by the Contractor, or for GFI after receipt and installation, in a condition not suitable for its intended use, the Contracting Officer shall, upon the Contractor's timely written request, advise the Contractor on a course of action to remedy the problem. Such action may include repairing, replacing, modifying, returning, or otherwise disposing of the GFI at the Government's expense. The Contractor shall not perform any action that invalidates a license or maintenance agreement for commercial software. Upon completion of the required action(s), the Contracting Officer shall consider an equitable adjustment to the contract.

(3) The Government may, at its option, furnish GFI in an "as-is" condition. The Contractor will be given the opportunity to inspect such GFI prior to the GFI being provided. In such cases, the Government makes no warranty with respect to the serviceability and/or suitability of the GFI for contract performance. Any repairs, replacement, and/or refurbishment shall be at the Contractor's expense.

(d)(1) The Contracting Officer may by written notice, at any time—

(A) Increase or decrease the amount of GFI under this contract;

(B) Substitute other GFI for the GFI previously furnished, to be furnished, or to be acquired by the Contractor for the Government under this contract; or

(C) Withdraw authority to use GFI.

(2) Upon completion of any action(s) under paragraph (d)(1) of this clause, and the Contractor's timely written request, the Contracting Officer shall consider an equitable adjustment to the contract.

(e) *Title to or license rights in Government-furnished information.* The Government shall retain title to or license rights in all GFI. Title to or license rights in GFI shall not be affected by its incorporation into or attachment to any information not owned by or licensed to the Government.

(f) *Indemnification and creation of third party beneficiary rights.* The Contractor agrees to indemnify and hold harmless the Government, its agents, and employees from every claim or liability, including attorneys fees, court costs, and expenses, arising out of, or in any way related to, the misuse or unauthorized modification, reproduction, release, performance, display, or disclosure of Government-furnished information received from the Government by the Contractor or by any person to whom the Contractor has released or disclosed such GFI.

(g) *Equitable adjustment.* Equitable adjustments under this clause shall be made in accordance with the procedures of the Changes clause. The right to an equitable adjustment shall be the Contractor's exclusive remedy and the Government shall not be liable to suit for breach of contract for the following:

(1) Any delay in delivery of GFI.

(2) Delivery of GFI in a condition not suitable for its intended use.

(3) An increase, decrease, or substitution of GFI.

(4) Failure to repair or replace GFI for which the Government is responsible.

(End of clause)

[END OF SECTION]

SECTION I – CONTRACT CLAUSES

I.1 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 address:

Federal Acquisition Regulation (FAR) – http://www.acqnet.gov/far/
NASA FAR Supplement – http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm

NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	JUL 2004	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	SEP 2006	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RECISION, 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	SEP 2007	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.203-13	DEC 2008	CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT
52.203-14	DEC 2007	DISPLAY OF HOTLINE POSTER(S)
52.204-2	AUG 1996	SECURITY REQUIREMENTS
52.204-4	AUG 2000	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER
52.204-7	APR 2008	CENTRAL CONTRACTOR REGISTRATION
52.204-9	SEP 2007	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL
52.204-10	JUL 2010	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS
52.209-6	SEP 2006	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED SUSPENDED, OR PROPOSED FOR DEBARMENT
52.211-15	APR 2008	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.215-2	JUN 1999	AUDIT AND RECORDS—NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE—UNIFORM CONTRACT FORMAT
52.215-10	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA

52.215-11	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA – MODIFICATIONS
52.215-12	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA
52.215-13	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA – MODIFICATIONS
52.215-14	OCT 1997	INTEGRITY OF UNIT PRICES
52.215-15	OCT 2004	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-18	JULY 2005	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS OTHER THAN PENSIONS (PRB)
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA – MODIFICATIONS
52.216-7	DEC 2002	ALLOWABLE COST AND PAYMENT
52.217-9	NOV 1999	OPTION TO EXTEND THE TERM OF THE CONTRACT; INSERT "30 DAYS" AND "60 DAYS"
52.219-6	JUN 2003	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE
52.219-8	MAY 2004	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-14	DEC 1996	LIMITATION ON SUBCONTRACTING
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-3	JUN 2003	CONVICT LABOR
52.222-4	JULY 2005	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT OVERTIME COMPENSATION
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	MAR 2007	EQUAL OPPORTUNITY
52.222-35	SEP 2006	AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	SEP 2006	EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-41	NOV 2007	SERVICE CONTRACT ACT OF 1965, AS AMENDED
52.222-50	AUG 2007	COMBATING TRAFFICKING IN PERSONS
52.222-54	SEP 2009	EMPLOYMENT ELIGIBILITY VERIFICATION
52.223-3	JAN 1997	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (ALTERNATE I) (JUL 1995)
52.223-5	AUG 2003	POLLUTION PREVENTION AND RIGHT TO KNOW INFORMATION (ALTERNATE I) (AUG 03) AND (ALTERNATE II)(AUG 03)
52.223-6	MAY 2001	DRUG-FREE WORKPLACE
52.223-10	AUG 2000	WASTE REDUCTION PROGRAM

52.223-14	AUG 2003	TOXIC CHEMICAL RELEASE REPORTING
52.223-15	DEC 2007	ENERGY EFFFICIENCY IN ENERGY-CONSUMING PRODUCTS
52.223-16	DEC 2007	IEEE 1680 STANDARD FOR THE ENVIRONMENTAL ASSESSMENT OF PERSONAL COMPUTER PRODUCTS
52.223-17	MAY 2008	AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS
52.224-1	APR 1984	PRIVACY ACT NOTIFICATION
52.224-2	APR 1984	PRIVACY ACT
52.225-1	FEB 2009	BUY AMERICAN ACT - SUPPLIES
52.225-8	FEB 2000	DUTY-FREE ENTRY
52.225-13	JUN 2008	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.227-1	DEC 2007	AUTHORIZATION AND CONSENT
52.227-2	DEC 2007	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-3	APR 1984	PATENT INDEMNITY (APR 1984)
52.227-11	DEC 2007	PATENT RIGHTS—OWNERSHIP BY THE CONTRACTOR (DEC 2007) AS MODIFIED BY NASA FAR SUPPLEMENT 1852.227-11 PATENT RIGHTS—RENTENTION BY CONTRACTOR (SHORT FORM)
52.227-14	DEC 2007	RIGHTS IN DATA – GENERAL (ALTERNATE II) (DEC 2007) INSERT IN PARAGRAPH (G) (3) (i) USE (EXCEPT FOR MANUFACTURE) BY SUPPORT SERVICE CONTRACTORS; (ii) EVALUATION BY NONGOVERNMENT EVALUATORS; (iii) USE (EXCEPT FOR MANUFACTURE BY OTHER CONTRACTORS PARTICIPATING IN THE GOVERNMENT'S PROGRAM OF WHICH THE SPECIFIC CONTRACT IS A PART; (iv) EMERGENCY REPAIR OR OVERHAUL WORK; (v) RELEASE TO A FOREIGN GOVERNEMNT, OR ITS INSTRUMENTALITIES, IF REQUIRED TO SERVE THE INTERESTES OF THE U.S. GOVERNMENT, FOR INFORMATION OR EVALUATION, OR FOR EMERGENCY REPAIR OR OVERHAUL WORK BY THE FOREIGN GOVERNMENT (ALTERNATE III) (DEC 2007) AS MODIFIED BY NASA FAR SUPPLEMENT 1852.227-14 RIGHTS IN DATA GENERAL
52.227-15	DEC 2007	REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE
52.227-16	JUN 1987	ADDITIONAL DATA REQUIREMENTS
52.227-17	DEC 2007	RIGHTS IN DATA – SPECIAL WORKS AS MODIFIED BY 1852.227-17 DATA RIGHTS-SPECIAL WORKS
52.227-23	JUN 1987	RIGHTS TO PROPOSAL DATA (TECHNICAL)

52.228-7	MAR 1996	INSURANCE-LIABILITY TO THIRD PERSONS
52.228-8	MAY 1999	LIABILITY AND INSURANCE—LEASED MOTOR VEHICLES
52.229-10	APR 2003	STATE OF NEW MEXICO GROSS RECEIPTS AND COMPENSATING TAX
52.230-2	OCT 1998	COST ACCOUNTING STANDARDS
52.232-18	APR 1984	AVAILABILITY OF FUNDS
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	OCT 2008	PROMPT PAYMENT (ALTERNATE I) (FEB 2002)
52.232-33	OCT 2003	PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (CCR)
52.233-1	JUL 2002	DISPUTES (ALTERNATE I) (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.233-4	OCT 2004	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION
52.237-3	JAN 1991	CONTINUITY OF SERVICES
52.239-1	AUG 1996	PRIVACY OR SECURITY SAFEGUARDS
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
52.243-1	AUG 1987	CHANGES—FIXED PRICE (ALTERNATE II) (APR 1984)
52.243-2	AUG 1987	CHANGES---COST REIMBURSABLE (ALTERNATE II) (APR 1984)
52.244-2	JUN 2007	SUBCONTRACTS (ALTERNATE I) (JUN 2007)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	FEB 2009	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-1	JUN 2007	GOVERNMENT PROPERTY
52.245-2	JUN 2007	GOVERNMENT PROPERTY INSTALLATION OPERATION SERVICES
52.245-9	JUN 2007	USE AND CHARGES
52.247-1	FEB 2006	COMMERCIAL BILL OF LADING NOTATIONS
52.247-63	JUN 2003	PREFERENCE FOR U.S. FLAG AIR CARRIERS
52.247-64	FEB 2006	PREFERENCE FOR PRIVATELY OWNED U.S. FLAG COMMERCIAL VESSELS
52.248-1	FEB 2000	VALUE ENGINEERING
52.249-6	MAY 2004	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES

52.251-2	JAN 1991	INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

II. NASA FEDERAL ACQUISITION REGULATION SUPPLEMENT (48 CFR CHAPTER 18)

CLAUSE NUMBER	DATE	TITLE
1852.203-70	JUN 2001	DISPLAY OF INSPECTOR GENERAL HOTLINE POSTERS
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.223-74	MAR 1996	DRUG-AND ALCOHOL-FREE WORKFORCE
1852.227-86	DEC 1987	COMMERCIAL COMPUTER SOFTWARE—LICENSING
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.242-78	APR 2001	EMERGENCY MEDICAL SERVICES AND EVACUATION
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 Procurement Officer and shall not be binding until so approved.

(End of clause)

I.3 NOTIFICATION OF OWNERSHIP CHANGES (FAR 52.215-19) (OCT 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall—

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

(c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

I.4 INCENTIVE FEE (FAR 52.216-10) (MAR 1997)

(a) *General*. The Government shall pay the Contractor for performing this contract a fee determined as provided in this contract.

(b) *Target cost and target fee*. The target cost and target fee specified in the Schedule are subject to adjustment if the contract is modified in accordance with paragraph (d) of this clause.

(1) "Target cost," as used in this contract, means the estimated cost of this contract as initially negotiated, adjusted in accordance with paragraph (d) of this clause.

(2) "Target fee," as used in this contract, means the fee initially negotiated on the assumption that this contract would be performed for a cost equal to the estimated cost initially negotiated, adjusted in accordance with paragraph (d) of this clause.

(c) *Withholding of payment*. Normally, the Government shall pay the fee to the Contractor as specified in the Schedule. However, when the Contracting Officer considers that performance or cost indicates that the Contractor will not achieve target, the Government shall pay on the basis of an appropriate lesser fee. When the Contractor demonstrates that performance or cost clearly indicates that the Contractor will earn a fee significantly above the target fee, the Government may, at the sole discretion of the Contracting Officer, pay on the basis of an appropriate higher fee. After payment of 85 percent of the applicable fee, the Contracting Officer may withhold further payment of fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the applicable fee or $100,000, whichever is less. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of the certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.

(d) *Equitable adjustments*. When the work under this contract is increased or decreased by a modification to this contract or when any equitable adjustment in the target cost is authorized under any other clause, equitable adjustments in the target cost, target fee, minimum fee, and maximum fee, as appropriate, shall be stated in a supplemental agreement to this contract.

(e) Fee payable.

(1) The fee payable under this contract shall be the target fee increased by 20 cents for every dollar that the total allowable cost is less than the target cost or decreased by 30 cents for every dollar that the total allowable cost exceeds the target cost. In no event shall the fee be greater than the maximum not-to-exceed fee rate stated in Clause B.9 or less than 0 percent of the target cost.

(2) The fee shall be subject to adjustment, to the extent provided in paragraph (d) of this clause, and within the minimum and maximum fee limitations in paragraph (e)(1) of this clause, when the total allowable cost is increased or decreased as a consequence of—

(i) Payments made under assignments; or

(ii) Claims excepted from the release as required by paragraph (h)(2) of the Allowable Cost and Payment clause.

(3) If this contract is terminated in its entirety, the portion of the target fee payable shall not be subject to an increase or decrease as provided in this paragraph. The termination shall be accomplished in accordance with other applicable clauses of this contract.

(4) For the purpose of fee adjustment, "total allowable cost" shall not include allowable costs arising out of—

(i) Any of the causes covered by the Excusable Delays clause to the extent that they are beyond the control and without the fault or negligence of the Contractor or any subcontractor;

(ii) The taking effect, after negotiating the target cost, of a statute, court decision, written ruling, or regulation that results in the Contractor's being required to pay or bear the burden of any tax or duty or rate increase in a tax or duty;

(iii) Any direct cost attributed to the Contractor's involvement in litigation as required by the Contracting Officer pursuant to a clause of this contract, including furnishing evidence and information requested pursuant to the Notice and Assistance Regarding Patent and Copyright Infringement clause;

(iv) The purchase and maintenance of additional insurance not in the target cost and required by the Contracting Officer, or claims for reimbursement for liabilities to third persons pursuant to the Insurance Liability to Third Persons clause;

(v) Any claim, loss, or damage resulting from a risk for which the Contractor has been relieved of liability by the Government Property clause; or

(vi) Any claim, loss, or damage resulting from a risk defined in the contract as unusually hazardous or as a nuclear risk and against which the Government has expressly agreed to indemnify the Contractor.

(5) All other allowable costs are included in "total allowable cost" for fee adjustment in accordance with this paragraph (e), unless otherwise specifically provided in this contract.

(f) *Contract modification*. The total allowable cost and the adjusted fee determined as provided in this clause shall be evidenced by a modification to this contract signed by the Contractor and Contracting Officer.

(g) *Inconsistencies*. In the event of any language inconsistencies between this clause and provisioning documents or Government options under this contract, compensation for spare parts or other supplies and services ordered under such documents shall be determined in accordance with this clause.

(End of clause)

I.5 ORDERING (FAR 52.216-18) (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from January 18, 2011 through January 17, 2014.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

I.6 ORDER LIMITATIONS (FAR 52.216-19) (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than $1,000 the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor –

(1) Any order for a single item in excess of $1,500,000;
(2) Any order for a combination of items in excess of $50,000,000; or
(3) A series of orders from the same ordering office within 5 days that together call for quantities exceeding the limitation in paragraph (b)(1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 5 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

I.7 INDEFINITE QUANTITY (FAR 52.216-22) (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after October 31, 2014.

(End of clause)

I.8 NOTIFICATION OF EMPLOYEE RIGHTS CONCERING PAYMENT OF UNION DUES OR FEES (FAR 52.222-39) (DEC 2004)

(a) *Definition*. As used in this clause—

"United States" means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or

grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at http://www.nlrb.gov.

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR Part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR Part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR Part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to—

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that—

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall—

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at http://www.olms.dol.gov; or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR Part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of clause)

I.9 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only:
It is not a Wage Determination

Employee Class Monetary Wage	Fringe Benefits
See Attachment J-7, Wage Determination	

(End of clause)

I.10 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEVIATION) (FAR 52.222-99) (JUN 2010)

(a) During the term of this contract, the Contractor shall post a notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2 (d) and (f).

(1) Physical posting of the employee notice shall be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relation Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor shall also post the required notice electronically by displaying prominently, on any website that is maintained by

the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's website that contains the full text of the poster. The link to the Department's website, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required notice, printed by the Department of Labor, may be–

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency, if requested];

(3) Downloaded from the Office of Labor-Management Standards web site at www.dol.gov/olms/regs/compliance/EO13496; or

(4) Reproduced and used [as] exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the Employee Notification referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor shall comply with all provisions of the Employee Notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and FAR Subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR Part 471, which implements E.O. 13496 or as otherwise provided by law.

(f) *Subcontracts.* (1) The Contractor shall include the substance of this clause, including this paragraph (f), in every subcontract that exceeds $10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor is not permitted to procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this subpart.

(3) The Contractor shall take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for non compliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of clause)

I.11 OZONE-DEPLETING SUBSTANCES (FAR 52.223-11) (MAY 2001)

(a) Definition. "Ozone-depleting substance," as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR part 82 as-

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR part 82, Subpart E, as follows:
Warning

Contains (or manufactured with, if applicable) *_____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.
The Contractor shall insert the name of the substance(s).

(End of clause)

I.12 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.acqnet.gov/far/
NASA FAR Supplement (NFS) clauses:
http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm

(End of clause)

I.13 AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(a) The use in this solicitation or contract of any NASA FAR Supplement Regulation (48 CFR Chapter 18) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

I.14 SECURITY CLASSIFICATION REQUIREMENTS (NFS 1852.204-75) (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of Secret. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Attachment J-15

(End of clause)

I.15 SECURITY REQUIREMENTS FOR UNCLASSIFIED TECHNOLOGY INFORMATION RESOURCES (NFS 1852.204-76) (MAY 2008) (DEVIATION)

(a) The Contractor shall be responsible for information and information technology (IT) security when –

(1) The Contractor or its subcontractors must obtain physical or electronic (i.e., authentication level 2 and above as defined in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-63, Electronic Authentication Guideline) access to NASA's computer systems, networks, or IT infrastructure; or

(2) Information categorized as low, moderate, or high by the Federal Information Processing Standards (FIPS) 199, Standards for Security Categorization of Federal Information and Information Systems is stored, generated, processed, or exchanged by NASA or on behalf of NASA by a contractor or subcontractor, regardless of whether the information resides on a NASA or a contractor/subcontractor's information system.

(b) IT Security Requirements.

(1) Within 30 days after contract award, a Contractor shall submit to the Contracting Officer for NASA approval an IT Security Plan, Risk Assessment, and FIPS 199, Standards for Security Categorization of Federal Information and Information Systems, Assessment. These plans and assessments, including annual updates shall be incorporated into the contract as compliance documents.

(i) The IT system security plan shall be prepared consistent, in form and content, with NIST SP 800-18, Guide for Developing Security Plans for Federal Information Systems, and any additions/augmentations described in NASA Procedural Requirements (NPR) 2810, Security of Information Technology. The security plan shall identify and document appropriate IT security controls consistent with the sensitivity of the information and the requirements of Federal Information Processing Standards (FIPS) 200, Recommended Security Controls for Federal Information Systems. The plan shall be reviewed and updated in accordance with NIST SP 800-26, Security Self-Assessment Guide for Information Technology Systems, and FIPS 200, on a yearly basis.

(ii) The risk assessment shall be prepared consistent, in form and content, with NIST SP 800-30, Risk Management Guide for Information Technology Systems, and any additions/augmentations described in NPR 2810. The risk assessment shall be updated on a yearly basis.

(iii) The FIPS 199 assessment shall identify all information types as well as the "high water mark," as defined in FIPS 199, of the processed, stored, or transmitted information necessary to fulfill the contractual requirements.

(2) The Contractor shall produce contingency plans consistent, in form and content, with NIST SP 800-34, Contingency Planning Guide for Information Technology Systems, and any additions/augmentations described in NPR 2810. The Contractor shall perform yearly "Classroom Exercises." "Functional Exercises," shall be coordinated with the Center CIOs and be conducted once every three years, with the first conducted within the first two years of contract award. These exercises are defined and described in NIST SP 800-34.

(3) The Contractor shall ensure coordination of its incident response team with the NASA Incident Response Center (NASIRC) and the NASA Security Operations Center, ensuring that incidents are reported consistent with NIST SP 800-61, Computer Security Incident Reporting Guide, and the United States Computer Emergency Readiness Team's (US-CERT) Concept of Operations for reporting security incidents. Specifically, any confirmed incident of a system containing NASA data or controlling NASA assets shall be reported to NASIRC within one hour that results in unauthorized access, loss or modification of NASA data, or denial of service affecting the availability of NASA data.

(4) The Contractor shall ensure that its employees, in performance of the contract, receive annual IT security training in NASA IT Security policies, procedures, computer ethics, and best practices in accordance with NPR 2810 requirements. The Contractor may use web-based training available from NASA to meet this requirement.

(5) The Contractor shall provide NASA, including the NASA Office of Inspector General, access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases, and personnel used in performance of the contract. Access shall be provided to the extent required to carry out IT security inspection, investigation, and/or audits to safeguard against threats and hazards to the integrity, availability, and confidentiality of NASA information or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime. To facilitate mandatory

reviews, the Contractor shall ensure appropriate compartmentalization of NASA information, stored and/or processed, either by information systems in direct support of the contract or that are incidental to the contract.

(6) The Contractor shall ensure that system administrators who perform tasks that have a material impact on IT security and operations demonstrate knowledge appropriate to those tasks. A system administrator is one who provides IT services (including network services, file storage, and/or web services) to someone other than themselves and takes or assumes the responsibility for the security and administrative controls of that service.

(7) The Contractor shall ensure that NASA's Sensitive But Unclassified (SBU) information as defined in NPR 1600.1, NASA Security Program Procedural Requirements, which includes privacy information, is encrypted in storage and transmission.

(8) When the Contractor is located at a NASA Center or installation or is using NASA IP address space, the Contractor shall –

(i) Submit requests for non-NASA provided external Internet connections to the Contracting Officer for approval by the Network Security Configuration Control Board (NSCCB);

(ii) Comply with the NASA CIO metrics including patch management, operating systems and application configuration guidelines, vulnerability scanning, incident reporting, system administrator certification, and security training; and

(iii) Utilize the NASA Public Key Infrastructure (PKI) for all encrypted communication or non-repudiation requirements within NASA when secure email capability is required.

(c) Physical and Logical Access Requirements.

(1) Contractor personnel requiring access to IT systems operated by the Contractor for NASA or interconnected to a NASA network shall be screened at an appropriate level in accordance with NPR 2810 and Chapter 4, NPR 1600.1, NASA Security Program Procedural Requirements. NASA shall provide screening, appropriate to the highest risk level, of the IT systems and information accessed, using, as a minimum, National Agency Check with Inquiries (NACI). The Contractor shall submit the required forms to the NASA Center Chief of Security (CCS) within fourteen (14) days after contract award or assignment of an individual to a position requiring screening. The forms may be obtained from the CCS. At the option of NASA, interim access may be granted pending completion of the required investigation and final access determination. For Contractors who will reside on a NASA Center or installation, the security screening required for all required access (e.g., installation, facility, IT, information, etc.) is consolidated to ensure only one investigation is conducted based on the highest risk level. Contractors not residing on a NASA installation will be screened based on their IT access risk level determination only. See NPR 1600.1, Chapter 4.

(2) Guidance for selecting the appropriate level of screening is based on the risk of adverse impact to NASA missions. NASA defines three levels of risk for which screening is required (IT-1 has the highest level of risk).

(i) IT-1 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause very serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of spacecraft, satellites or aircraft.

(ii) IT-2 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; and those that contain the primary copy of "level 1" information whose cost to replace exceeds one million dollars.

(iii) IT-3 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause significant adverse impact to NASA missions. These systems include, for example, those that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; and systems operated by the Contractor for NASA whose function or information has substantial cost to replace, even if these systems are not interconnected with a NASA network.

(3) Screening for individuals shall employ forms appropriate for the level of risk as established in Chapter 4, NPR 1600.1.

(4) The Contractor may conduct its own screening of individuals requiring privileged access or limited privileged access provided the Contractor can demonstrate to the Contracting Officer that the procedures used by the Contractor are equivalent to NASA's personnel screening procedures for the risk level assigned for the IT position.

(5) Subject to approval of the Contracting Officer, the Contractor may forgo screening of Contractor personnel for those individuals who have proof of a –

(i) Current or recent national security clearances (within last three years);

(ii) Screening conducted by NASA within the last three years that meets or exceeds the screening requirements of the IT position; or

(iii) Screening conducted by the Contractor, within the last three years, that is equivalent to the NASA personnel screening procedures as approved by the Contracting Officer and concurred on by the CCS.

(d) The Contracting Officer may waive the requirements of paragraphs (b) and (c)(1) through (c)(3) upon request of the Contractor. The Contractor shall provide all relevant information requested by the Contracting Officer to support the waiver request.

(e) The Contractor shall contact the Contracting Officer for any documents, information, or forms necessary to comply with the requirements of this clause.

(f) At the completion of the contract, the contractor shall return all NASA information and IT resources provided to the contractor during the performance of the contract and certify that all NASA information has been purged from contractor-owned systems used in the performance of the contract.

(g) The Contractor shall insert this clause, including this paragraph (g), in all subcontracts that:

(1) Have physical or electronic access to NASA's computer systems, networks, or IT infrastructure; or

(2) Use information systems to generate, store, process, or exchange data with NASA or on behalf of NASA, regardless of whether the data resides on a NASA or a contractor's information system.

(End of clause)

I.16 OMBUDSMAN (NFS 1852.215-84)(OCT 2003) (ALTERNATE 1) (JUN 2000)

(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:

Melanie Saunders
Lyndon B. Johnson Space Center
Mail Code: AC
2101 NASA Parkway
Houston, TX 77058
Phone: 281-483-0490, Fax: 281-483-2200
Email: melanie.saunders-1@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.17 NASA 8 PERCENT GOAL (NFS 1852.219-76) (JULY 1997)

(a) **Definitions.**

"Historically Black Colleges or University," as used in this clause, means an institution determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority institutions," as used in this clause, means an institution of higher education meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which for the purposes of this clause includes a Hispanic-serving institution of higher education as defined in section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

"Small disadvantaged business concern," as used in this clause, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124.

"Women-owned small business concern," as used in this clause, means a small business concern (1) which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women, and (2) whose management and daily business operations are controlled by one or more women.

(b) The NASA Administrator is required by statute to establish annually a goal to make available to small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and

women-owned small business concerns, at least 8 percent of NASA's procurement dollars under prime contracts or subcontracts awarded in support of authorized programs, including the space station by the time operational status is obtained.

(c) The contractor hereby agrees to assist NASA in achieving this goal by using its best efforts to award subcontracts to such entities to the fullest extent consistent with efficient contract performance.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns.

(End of clause)

I.18 ACCESS TO SENSITIVE INFORMATION (NFS 1852.237-72) (JUN 2005)

(a) As used in this clause, "sensitive information" refers to information that a contractor has developed at private expense, or that the Government has generated that qualifies for an exception to the Freedom of Information Act, which is not currently in the public domain, and which may embody trade secrets or commercial or financial information, and which may be sensitive or privileged.

(b) To assist NASA in accomplishing management activities and administrative functions, the Contractor shall provide the services specified elsewhere in this contract.

(c) If performing this contract entails access to sensitive information, as defined above, the Contractor agrees to –

(1) Utilize any sensitive information coming into its possession only for the purposes of performing the services specified in this contract, and not to improve its own competitive position in another procurement.

(2) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(3) Allow access to sensitive information only to those employees that need it to perform services under this contract.

(4) Preclude access and disclosure of sensitive information to persons and entities outside of the Contractor's organization.

(5) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in this contract and to safeguard it from unauthorized use and disclosure.

(6) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(7) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(d) The Contractor will comply with all procedures and obligations specified in its Organizational Conflicts of Interest Avoidance Plan, which this contract incorporates as a compliance document.

(e) The nature of the work on this contract may subject the Contractor and its employees to a variety of laws and regulations relating to ethics, conflicts of interest, corruption, and other criminal or civil matters

relating to the award and administration of government contracts. Recognizing that this contract establishes a high standard of accountability and trust, the Government will carefully review the Contractor's performance in relation to the mandates and restrictions found in these laws and regulations. Unauthorized uses or disclosures of sensitive information may result in termination of this contract for default, or in debarment of the Contractor for serious misconduct affecting present responsibility as a government contractor.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), suitably modified to reflect the relationship of the parties, in all subcontracts that may involve access to sensitive information.

(End of clause)

I.19 RELEASE OF SENSITIVE INFORMATION (NFS 1852.237-73) (JUN 2005)

(a) As used in this clause, "sensitive information" refers to information, not currently in the public domain, that the Contractor has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.

(b) In accomplishing management activities and administrative functions, NASA relies heavily on the support of various service providers. To support NASA activities and functions, these service providers, as well as their subcontractors and their individual employees, may need access to sensitive information submitted by the Contractor under this contract. By submitting this proposal or performing this contract, the Contractor agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this procurement, subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

(c)(1) The Contractor shall identify any sensitive information submitted in support of this proposal or in performing this contract. For purposes of identifying sensitive information, the Contractor may, in addition to any other notice or legend otherwise required, use a notice similar to the following:

Mark the title page with the following legend:

This proposal or document includes sensitive information that NASA shall not disclose outside the Agency and its service providers that support management activities and administrative functions. To gain access to this sensitive information, a service provider's contract must contain the clause at NFS 1852.237-72, Access to Sensitive Information. Consistent with this clause, the service provider shall not duplicate, use, or disclose the information in whole or in part for any purpose other than to perform the services specified in its contract. This restriction does not limit the Government's right to use this information if it is obtained from another source without restriction. The information subject to this restriction is contained in pages [insert page numbers or other identification of pages].

Mark each page of sensitive information the Contractor wishes to restrict with the following legend:

Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.

(2) The Contracting Officer shall evaluate the facts supporting any claim that particular information is "sensitive." This evaluation shall consider the time and resources necessary to protect the information in accordance with the detailed safeguards mandated by the clause at 1852.237-72, Access to Sensitive Information. However, unless the Contracting Officer decides, with the advice of Center counsel, that reasonable grounds exist to challenge the Contractor's claim that particular information is sensitive, NASA

and its service providers and their employees shall comply with all of the safeguards contained in paragraph (d) of this clause.

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

(1) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.

(2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.

(3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(4) Allow access to sensitive information only to those employees that need it to perform services under its contract.

(5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.

(6) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.

(7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.
(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

[END OF SECTION]

SECTION J
LIST OF ATTACHMENTS

J-1 Incentive Fee Plan
J-2 JSC Data Requirements List (DRL)
J-3 JSC Data Requirements Description (DRD)
J-4 Acronym List and Definitions
J-5 List of Installation Accountable Government Property
J-6 Applicable Documents
J-7 U.S. Department of Labor Wage Determination
J-8 Safety and Health Plan
J-9 Management Plan
J-10 Systems Table
J-11 Software Inventory
J-12 Contract Labor Categories
J-13 List of Government Furnished Property
J-14 List of Government Furnished Property Pursuant to FAR 52.245-2
J-15 Security Classification Requirements
J-16 Hazardous Materials List
J-17 Phase-in Plan
J-18 Personal Identity Verification (PIV) Card Issuance Procedures
J-19 Organizational Conflict of Interest Avoidance Plan
J-20 Server Inventory and Complexity Matrix
J-21 Government Specified Applications
J-22 Performance Standards
J-23 IT Security Plan, Risk Assessment, and FIPS 199 Assessment
J-24 Emergency Plan
J-25 List of Installation Provided Facilities and Services
J-26 List of Government Furnished Equipment
J-27 List of Government Furnished Information
J-28 Contractor Proposed Approaches

Attachment J-1
Incentive Fee Plan

Information Technology and Multimedia Services (ITAMS)
Incentive Fee Plan

I. OVERVIEW

In accordance with the provisions of the Federal Acquisition Regulation (FAR), the NASA FAR Supplement (NFS), and Johnson Space Center's (JSC) policies and procedures, this plan covers the administration of the incentive fee clauses of the ITAMS contract.

Two separate and distinct appraisals shall be made of the Contractor's performance according to the procedures and criteria outlined in the following sections. An assessment of the contractor's performance against specified Performance Incentive Fee (PIF) factors shall be made to determine the amount of PIF to be awarded, if any. A separate and distinct review of the contractor's performance against target costs shall be made to determine the amount, if any, of additional incentive fee to be awarded.

All negotiated fee under this contract will be allocated between the PIF and the cost incentive fee (CIF) with 75% of the total available fee allocated to the PIF and 25% to the CIF. Fee shall not exceed the maximum available fee stated in Contract Clause B.8.

All disputes relating to this plan shall be resolved in accordance with FAR 52.233-1, Disputes.

II. PERFORMANCE INCENTIVE FEE

A. General - The PIF is designed to reward the Contractor's overall performance as it relates to the PIF factors. The Contractor may furnish for consideration a self-assessment against the performance factors specified in Attachment D for each performance period as defined in Attachment E. The self-assessment must be received by the Contracting Officer (CO) no later than 5 calendar days after the end of each performance period. The self-assessment shall be limited to 15 pages. In addition, the Contractor shall submit a Metrics Performance Plan in accordance with DRD-4.

B. PIF Determination- The PIF is divided into 2 distinct measurement criteria and weightings:

- Performance Metrics with a weighting of 52.5% of the total available fee (70% of the 75%) and the
- Service Quality Metric with a weighting of 22.5% of the total available fee (30% of 75%)

The Government may unilaterally change these weightings provided the Contractor receives notice of the changes 30 days prior to the beginning of the performance period to which the changes apply. Changes may be made to the plan during a performance period if mutually agreed to by both parties.

(1) *Performance Incentive Fee Determination* – PIF will be calculated by the Government's contract management team including the Contracting Officer's Technical Representative (COTR) and the CO for this contract. The COTR and CO have the primary responsibility of monitoring, establishing, and documenting, as appropriate, the Contractor's overall performance as it relates to the PIF factors. The COTR and CO will conduct formal appraisals at the end of each performance period, and, at a minimum, conduct informal quarterly performance appraisals. The informal appraisals will be conducted with the Contractor for the purpose of discussing any specific areas where the Contractor has excelled and areas where future emphasis is necessary.

At the end of each annual performance period the COTR and CO will meet and consider all of the information they have obtained and will prepare a report that will include their determination as to the numeric score and adjective rating to be assigned for the Contractor's performance for the period. Refer to Attachment C for details. The CO will make the determination of PIF to be awarded, if any.

The CO will notify the Contractor of the performance incentive score and the PIF findings. The Contractor will be afforded the opportunity to submit for consideration by the CO, exceptions to the appraisal or data used to calculate the PIF and supporting reasons for such exceptions. The Contractor's submission must be made in writing and submitted to the CO within 5 calendar days from the date of the Contractor's receipt of the PIF Determination.

(a) ***Performance Metrics and Weightings*** –The Contractor's performance will be calculated in accordance with Attachment D for determination of the Performance Metric Score. Attachment D consists of individual factors with individual weights for certain WBS areas. These weights are indicated in the Attachment D tables as a percent (%) at the end of the measurement description. The Government may unilaterally change the weightings associated with each individual factor provided the Contractor receives notice of the changes 30 days prior to the beginning of the performance period to which the changes apply. Changes may be made to the plan during a performance period if mutually agreed to by both parties.

These factors define the acceptable quality level for performance of this contract. In order to be eligible to earn the maximum fee associated with each WBS area, the Contractor must meet or exceed the stated Quality Standard for "excellent" performance. If performance is "poor," no fee is earned for the corresponding factor. A major breach of safety or security as defined in the Section H Clause 1852.223-75, may result in a score of zero for the performance period for the entire PIF.

Each individual factor will be measured and given a score based on the criteria in Attachment D. These scores are multiplied by a weighting and all weighted scores are added together to determine the overall grade for the WBS area. The grade for each WBS will be added to each other to determine the overall performance score. An adjective rating will be assigned based on Attachment C.

The percentage of available fee distributed for the performance metrics will be based on the total weighted numeric score against the factors. The weighted score is converted to a percent to determine the amount of fee to be distributed. For example, should the Contractor earn a weighted score of 85, the contractor would earn 85% of the available fee for performance metrics. Scores will be rounded to the nearest whole number.

The Contractor shall submit a Corrective Action Plan (CAP) for any factor receiving a rating of "fair" or "poor." The CAP shall detail the reasons for deficiencies and the measures to be taken to ensure deficiencies are corrected. CAPs shall be submitted within 10 working days after the final determination for each performance period. Concurrence shall be obtained from the CO and COTR.

(b) ***Service Quality Metric***- The Service Quality Metric will be used to rate the Contractor's performance in areas of Overall Management Performance, Customer Service, Project Planning and Schedules, and Quality of Deliverables. Measurement of this metric will be through an annual survey conducted by the CO and COTR of the ITAMS stakeholders. Attachment A illustrates the survey tool and Attachment B details the percentage of the Service Quality PIF earned, if any, based on the survey results. This survey tool *may* be used by the ITAMS Technical Management Representatives (TMRs) to provide informal feedback to the Contractor at tag-up meetings and by the CO and COTR for the informal quarterly performance appraisals. However, only the annual survey results will be used to calculate the service quality metric score. The CO will average the annual survey results to determine the Service Quality Metric Score.

A CAP will be required in accordance with the procedures described above in paragraph (a), *Performance Metrics and Weighting*.

C. PIF Distribution – PIF is determined based upon the scores for both the performance metric and the service quality metric. If PIF is earned, the CO will issue a contract modification awarding such fee in accordance with the final determination. The award will be made according to the schedule in Attachment E.

Each PIF determination is considered to be final. Any unearned fee is lost and cannot be moved into subsequent performance periods.

The modification will not be processed for payment prior to the expiration of the 5-day period described in paragraph (1), *Performance Incentive Fee Determination,* unless the Contractor states in writing that a submission will not be made.

D. PIF Administration

(1) With a view toward changing management emphasis, motivating higher performance, or improving the PIF determination process, the Contractor may provide recommended metrics and weightings for consideration by the Government to be implemented for the ensuing performance period no later than 60 days prior to the start of the applicable performance period. Recommendations shall be submitted to the CO and COTR and shall include appropriate rationale and justification. Consideration will be given to the Contractor's recommendations; however, 30 days prior to the start of the ensuing period, the Government will establish specific metrics and weightings and notify the Contractor in writing. With exception to weightings, any changes made in Attachment D shall be mutually agreed to by both parties through a bilateral contract modification. Should agreement not be reached prior to the first quarterly interim appraisal, the Government may institute the changes via unilateral modification.

(2) When nonperformance is caused by an occurrence beyond the reasonable control of the Contractor (ex: natural disaster), the Contractor shall provide written notification to the CO including a description of the circumstances as soon as is reasonably possible.

(3) This plan may be changed at any time during the performance period provided that the Government submits the changes to the Contractor in writing, the Contractor agrees in writing to accept the changes, and both the Government and the Contractor mutually agree on the effective date of the changes.

E. Provisional Payments under the PIF— Pending a determination of the amount of PIF earned, if any, a portion of the available fee for each performance period may be provisionally paid to the Contractor on a monthly basis, in accordance with Section G of this contract. The total amount of PIF available in a performance period that will be provisionally paid is the lesser of 80% or the prior period's PIF score.

Provisional PIF payments will be superseded by the final PIF appraisal for that period. If provisional payments exceed the amount due based on the periods final PIF score, the Contractor shall repay the Government within 30 days. If the CO determines that the Contractor's level of performance is not commensurate with the provisional payment, the provisional PIF payment may be reduced or discontinued. The CO shall notify the Contractor in writing if a reduction or discontinuance of payment is appropriate.

III. COST INCENTIVE FEE

(A) **General** - The purpose of the cost incentive fee (CIF) is to motivate the Contractor to control costs in accordance with the established contract baseline as described in Section B of this contract. The CIF will be reviewed at the end of the contract period of performance, inclusive of any performance periods exercised with contract options.

(B) **CIF Determination**

(1) The target cost, target cost incentive fee, and maximum cost incentive fee are detailed in Contract Clause B.8.

(2) In accordance with Contract Clause B.3, the Contractor shall share in cost over-runs and cost under-runs as follows:

- ***Over-run***: The cost incentive fee payable under this contract shall be the target cost incentive fee decreased by 30 cents for every dollar that the total allowable cost subject to the incentive is greater than target cost.
- ***Under-run***: The cost incentive fee payable under this contract shall be the target cost incentive fee increased by 20 cents for every dollar that total allowable cost subject to the incentive is less than target cost.

(3) The CIF shall not exceed the maximum cost incentive fee as described in Contract Clause B.8.

(4) In order to qualify to earn target CIF in a performance period, the Contractor must achieve an overall Performance Metrics Incentive Fee Score not less than 80 and a minimum score of 3.02 for the Service Quality Metric.

(C) **Provisional Payments under the CIF**— The decision to allow provisional fee payments associated with a projected under-run of target costs or to modify fee payments based on an over-run is at the discretion of the CO. Based on data, specifically the Contractor's Estimate at Completion (EAC), submitted in accordance with DRD-5, Resource Management Plan (NF 533), the CO may request additional information from the Contractor to further document and justify an under-run. The CO will examine the NF 533 data no earlier than the mid-point of the contract's basic period of performance to determine if provisional payments are appropriate. Subsequently, the CO will re-examine provisional payments for CIF at the end of the contract's basic period of performance and at the end of any periods of performance exercised by contract options.

The total amount of CIF available in a performance period that will be provisionally paid is not to exceed 80 percent of the target CIF. If the CO determines that the Contractor's EAC is not commensurate with the provisional payment (ex: costs are at target or over-running), the provisional CIF payment may be reduced or discontinued. The CO shall notify the Contractor in writing if a reduction or discontinuance of payment is appropriate.

Provisional CIF payments will be superseded by the final CIF assessment. If provisional payments exceed the amount due based on the periods final cost assessment, the Contractor shall repay the Government within 30 days.

ATTACHMENT A
SERVICE QUALITY METRIC QUESTIONNAIRE

Name: _____
Title: _____

Date: _____
WBS element evaluated: _____

Performance Area	Poor (Score = 1)	Fair (Score = 2)	Good (Score = 3)	Very Good (Score = 4)	Excellent (Score = 5)	Comments (Required)
Overall Management Performance						
Customer Service						
Project Planning and Schedules						
Quality of Deliverables						

TOTAL RATING: _____ **SCORE:** _____

Performance Area Descriptions

Overall Management Performance	Includes but is not limited to adherence to the requirements of the contract statement of work; NASA and JSC policies and procedures relating to work performed under this contract (see J-6, Applicable Documents); timeliness and quality of DRDs; compliance with requirements identified in DRDs; property management; environmental compliance, training and maintenance of certification for personnel; quality and timeliness of reported financial data; joint cooperation with associate contractors (per contract clause H.10 (Associate Contractor Agreements))
Customer Service	Includes but is not limited to all the requirements identified in Attachment J-22 for WBS area 4.0, primarily the overall satisfaction of customers; quality of instructor-led training; staffing and service provided in the libraries; other contract areas where customer service is an important element; responsiveness in special circumstances including handling of unique requests, special assignments, change management and emergencies
Project Planning and Schedules	Includes but is not limited to accuracy and timeliness of project planning (e.g.,ROMs, task plans, project plans); compliance with NPR 7120.7 requirements; meeting milestones and delivery dates.
Quality of Deliverables	Includes but is not limited to customer satisfaction with meeting specified quality requirements for products and services as specified in project plans and work authorization documents. Examples include quality of applications, multimedia products, writing and graphics tasks, Public Affairs television and multimedia products and services, IT security, photographic products and services and all other deliverables under this contract.

Ratings Definitions

1 = Poor	Numerous performance issues are noted. Performance is less than standard by a substantial margin and there are many elements for improvement which are not offset by better performance in other areas.
2 = Fair	Performance is generally average, but several performance issues are identified. Standard performance and performance considered better than standard are more than offset by lower performance in other areas of this WBS.
3 = Good	Performance is average. Performance issues are identified and those are somewhat offset by the performance in other areas of this WBS.
4 = Very Good	Performance is above average. Only minor performance issues are noted and those are offset by better performance in other areas of this WBS. Although there may be some need for improvement, contract requirements in this area of the SOW are fully met.
5 = Excellent	Performance is consistently exemplary. Little or no performance issues. Of the issues identified the impact to overall performance is negligible.

Instructions

The Score shall be computed by dividing the Total Rating by the number of Performance Areas.

ATTACHMENT B
SERVICE QUALITY METRIC

ADJECTIVE RATING	DESCRIPTION	NUMERICAL SCORE
Excellent	Performance is consistently exemplary. Little or no performance issues. Of the issues identified the impact to overall performance is negligible.	4.53 –5.0
Very Good	Performance is above average. Only minor performance issues are noted and those are offset by better performance in other areas of this WBS. Although there may be some need for improvement, contract requirements in this area of the SOW are fully met.	4.03 – 4.52
Good	Performance is average. Performance issues are identified and those are somewhat offset by the performance in other areas of this WBS.	3.53 – 4.02
Fair	Performance is generally average, but several performance issues are identified. Standard performance and performance considered better than standard are more than offset by lower performance in other areas of this WBS.	3.03 – 3. 52
Poor	Numerous performance issues are noted. Performance is less than standard by a substantial margin and there are many elements for improvement which are not offset by better performance in other areas.	0 – 3.02

Fee for Service Quality will be determined by applying the final score to the following scale:

Final Score *	Adjusted for a 100 point scale	Fee Paid **
4.53 – 5.0	Score x 20	91 – 100%
4..03 – 4.52	Score x 20	81 – 90%
3.53 – 4.02	Score x 20	71 – 80%
3.03 – 3.52	Score x 20	61 – 70%
0 – 3.02	Score x 20	0 – 60%

* The calculated final score will be rounded to the nearest one hundredth.
** The calculated percent for fee paid will be rounded to the nearest whole number.

A performance score of 3.02 and below eliminates the Contractor from being eligible for payment of the Service Quality Metric Fee.

ATTACHMENT C
ADJECTIVE RATING SCALE

Adjective Rating	Grade Range	Narrative Description of Performance
Excellent	91 - 100	Of exceptional merit; exemplary performance in a timely, efficient, economical, and safe manner; minor (if any) deficiencies exist with no adverse effect on overall performance
Very Good	81 - 90	Very effective performance, fully responsive to contract; contract requirements accomplished in a timely, efficient, safe and economical manner; only minor deficiencies exist with little effect on overall performance
Good	71 - 80	Effective performance; fully responsive to contract requirements, reportable deficiencies but with little identifiable effect on overall performance
Satisfactory	61 - 70	Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable effect on overall performance
Poor/ Unsatisfactory	60 and below	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies exist which adversely affect overall performance. The standard has not been achieved.

ATTACHMENT D: ITAMS METRICS

METRIC #1: SAFETY AND HEALTH

Statement of Work Reference: WBS 3.1, *Safety and Health*

Weight: 15% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The Contractor shall implement a safety and health program, adhere to the approved safety and health plan (DRD-9), manage safety incidents and injuries, and comply with JSC safety and health policies and procedures (See J-6, Applicable Documents). This metric shall measure the Contractor's safety and health performance with emphasis on the following:

1. Safety incidents and injuries in conjunction with reported monthly statistical information on the Contractor's Safety and Health Program (JSC Form 288);
2. Substantial leadership initiatives taken by management in injury prevention and property damage avoidance and employee awareness programs;
3. Proactive programs with measurable impact on injury/mishap reduction; and
4. Employee input and management approaches to corrective action and safety and health compliance.

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the Contractor shall meet **all four** of the following conditions:

1. Have a Lost Workday Case Rate (LWD) less than 25% of the industry average; a Days Away Plus Restricted Duty Plus Job Transfer (DART) and OSHA Recordable (REC) Rates less than 50% of the industry average; no property damage; and near zero instances of non-compliance with no compliance issues of a serious nature.
2. Demonstrate leadership through implementation of or participation in multiple activities such as special safety/injury analyses; safety and health training/seminars; ad-hoc inspection activities; hosting employee roundtables; and the JSC Safety Action Team (JSAT).
3. In accordance with the approved Safety and Health Plan (DRD-9), implement innovative safety and health programs that produce a measurable rate of improvement in LWD, DART, REC, property damage, and compliance that meet goals as stated in DRD-9.
4. In accordance with the approved Safety and Health Plan (DRD-9), implement innovative employee input systems and management approaches that produce a measurable rate of improvement in employee participation that exceed goals as stated in DRD-9.

GOOD = 80

To receive a "Good" rating, the Contractor shall meet **all four** of the following conditions:

1. Have a Lost Workday Case Rate (LWD) less than 50% of the industry average; a Days Away Plus Restricted Duty Plus Job Transfer (DART) and OSHA Recordable (REC) Rates less than 100% of the industry average; property damage not to exceed $250,000; or isolated instances of non-compliance in one or more areas.
2. Demonstrate leadership through implementation of or participation in one activity such as special safety/injury analyses; safety and health training/seminars; ad-hoc inspection activities; hosting employee roundtables; and the JSC Safety Action Team (JSAT).
3. In accordance with the approved Safety and Health Plan (DRD-9), implement innovative safety and health programs that produce a measurable rate of improvement in one of the following categories: LWD, DART, REC, property damage, and compliance that meet goals as stated in DRD-9.
4. In accordance with the approved Safety and Health Plan (DRD-9), implement innovative employee input systems and management approaches that produce a measurable rate of improvement in employee participation that meet goals as stated in DRD-9.

POOR = 0

The Contractor shall be rated "Poor" if they fall below the stated requirements for any single item in "Good." However, the Contractor may improve their rating to "Good" if they attain an "Excellent" level of performance in at least 2 of the remaining 3 categories.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews
3. COTR review of Contractor supplied data
4. COTR review of Government supplied data

METRIC #2: CUSTOMER SUPPORT CENTER

Statement of Work Reference: WBS 4.1, *Customer Support Center*

Weight: 5% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The Contractor shall operate a Customer Support Center according to WBS 4.0 based on industry best practices that provides users access to information about, assistance with, or distribution of IRD products and services. The Contractor shall provide expertise for all areas of WBS 4.1 and 4.2 during business hours to ensure accurate customer response.

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the Customer Support Office will be available 100% of the time.

POOR = 0

The Contractor shall be rated "Poor" if the Customer Support Office is not available 100% of the time (one or more occurrences of Customer Support Office not being staffed.)

Methods of Surveillance:

1. COTR review of Contractor supplied data
2. COTR review of Government supplied data

METRIC #3: GENERAL CUSTOMER SUPPORT

Statement of Work Reference: WBS 4.0, *General Customer Support*

Weight: 4% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

Contractor shall answer calls in less than 30 seconds. The Contractor shall respond to voice mail within 2 business hours of receipt of the message and e-mail within 4 business hours of receipt of the e-mail. Abandoned calls shall be less than 5%. If this performance measure is not supported by the JSC phone system, the contractor shall report call information as agreed upon by the CO and the Contractor. The percent of Performance Incentive Fee set aside for this area shall then be redistributed equally to the other 4.0 areas.

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the performance standard shall be met ≥ 95% of the time.

VERY GOOD = 90

To receive a "Very Good" rating, the performance standard shall be met > 90% of the time.

GOOD = 80

To receive a "Good" rating, the performance standard shall be met > 85% of the time.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the performance standard shall be met > 80% of the time.

POOR = 0

To receive a "Poor" rating, the performance standard shall be met ≤ 80% of the time.

Methods of Surveillance:

1. COTR review of Contractor supplied data
2. COTR review of Government supplied data

METRIC #4: INFORMATION TECHNOLOGY IMPLEMENTATION MANAGEMENT

Statement of Work Reference: WBS 5.0, *Information Technology*

Weight: 8% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The Contractor shall provide information technology management for implementation of new projects such that requirement specifications are met with no discrepancy. Discrepancies are inconsistencies between requirements and delivered products and are submitted to the Government via a Discrepancy Report (DR).

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the performance standard shall be met ≥ 98% of the time.

VERY GOOD = 90

To receive a "Very Good" rating, the performance standard shall be met > 92% of the time.

GOOD = 80

To receive a "Good" rating, the performance standard shall be met > 86% of the time.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the performance standard shall be met > 82% of the time.

POOR = 0

To receive a "Poor" rating, the performance standard shall be met ≤ 80% of the time.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews

METRIC #5: INFORMATION TECHNOLOGY MANAGEMENT

Statement of Work Reference: WBS 5.0, *Information Technology*

Weight: 11% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (i.e. Acceptable Quality Level):

The Contractor shall disposition change requests and discrepancy reports for all systems (J-10, J-11, and J-20) per tailored process of 7120.7 for M&O.
The Contractor shall provide maintenance and operations of new and existing systems in a timely manner (meet those milestones as defined in the Preventive Maintenance Plan, Obsolescence Plan and other project plans provided to the Government) per tailored process of 7120.7 for M&O within phase E.
The Contractor shall perform configuration changes (e.g., signature files, firewall rules, proxy database, etc.) across IT security systems.

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the performance standard shall be met ≥ 95% of the time.

VERY GOOD = 90

To receive a "Very Good" rating, the performance standard shall be met > 90% of the time.

GOOD = 80

To receive a "Good" rating, the performance standard shall be met > 85% of the time.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the performance standard shall be met > 80% of the time.

POOR = 0

To receive a "Poor" rating, the performance standard shall be met ≤ 80% of the time.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews

METRIC #6: HARDWARE AND SOFTWARE MAINTENANCE

Statement of Work Reference: WBS 5.0, *Information Technology*

Weight: 5% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (i.e. Acceptable Quality Level):

The contractor shall ensure that any hardware component that remains after end-of-life has a maintenance agreement or time and materials contract in place and that any software component has a valid license or support agreement. The hardware and software listings are provided in Attachments J-5, J-10 and J-11.

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the contractor shall have 0 instances in which a hardware component does not have a maintenance agreement or time and materials contract in place or a software component does not have a valid license or support agreement.

VERY GOOD = 90

To receive a "Very Good" rating, the contractor shall have no more than 1 instance in which a hardware component does not have a maintenance agreement or time and materials contract in place or a software component does not have a valid license or support agreement.

GOOD = 80

To receive a "Good" rating, the contractor shall have no more than 2 instances in which a hardware component does not have a maintenance agreement or time and materials contract in place or a software component does not have a valid license or support agreement.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the contractor shall have no more than 3 instances in which a hardware component does not have a maintenance agreement or time and materials contract in place or a software component does not have a valid license or support agreement.

POOR = 0

The contractor shall receive a "Poor" rating if there are 4 or more instances in which a hardware component does not have a maintenance agreement or time and materials contract in place or a software component does not have a valid license or support agreement.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews
3. Deliverables per DRD-11

METRIC #7: SYSTEM AVAILABILITY

Statement of Work Reference: WBS 5.0, *Information Technology*

Weight: 5% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The contractor shall maintain availability as described in "Attachment J-10: System Tables" and "Attachment J-20: Server Inventory and Complexity Matrix". Availability is defined as the percentage of time the system, server or other system listed is available for its intended use, excluding facility and network outages, IT incident investigations, and maintenance service. A criticality field will be used to weight availability of some systems as more important than others.

Rating Scale:

The table provided below defines the criteria for the ratings to be received based on the number of availability metrics met.

	Poor = 0	Fair = 70	Good = 80	Very Good = 90	Excellent = 100
Criticality 5	>=1	0	0	0	0
Criticality 4	>2	<=2	0	0	0
Criticality 3	>3	<= 3	<= 3	0	0
Criticality 2	>4	<= 4	<= 4	<= 4	0
Criticality 1	>5	<= 5	<= 5	<= 5	<= 5

Rating Scale Examples--

1. All availability measurements are met with the exception of 4 criticality 1 systems. The score would be valued as an excellent.
2. Two criticality 3 measurements are missed as well as 3, criticality 1. The score would be valued as good.
3. Four criticality 3 measurements are missed. The score would then be valued as poor.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews

METRIC #8: MAINTENANCE OF SERVER TO ADMINISTRATOR RATIO

Statement of Work Reference: WBS 5.0, *Information Technology*

Weight: 7% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The Contractor shall maintain a server to administrator ratio as negotiated with the Government and awarded in the task orders.

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the contractor shall increase productivity (i.e. complexity units per administrator) by 10% or more.

VERY GOOD = 90

To receive a "Very Good" rating, the contractor shall increase productivity (i.e. complexity units per administrator) by 8% or more.

GOOD = 80

To receive a "Good" rating, the contractor shall increase productivity (i.e. complexity units per administrator) by 5% or more.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the contractor shall increase productivity (i.e. complexity units per administrator) by 3% or less.

POOR = 0

To receive a "Poor" rating, the contractor shall does not increase productivity (i.e. complexity units per administrator).

Methods of Surveillance:

1. Metrics reporting

METRIC #9: MULTIMEDIA OPERATIONS AND SERVICES

Statement of Work Reference: WBS 6.0, *Multimedia Operations and Services*

Weight: 10% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The contractor shall complete major events and requests per customer required deadline and requirements as described in the SOW, task orders, project plans and other work authorization documents. The contractor shall meet spaceflight operations timelines and requirements as described in the SOW, task orders, project plans and other work authorization documents. ("Major" events or requests are defined as those that if missed negatively impact NASA's/JSC's mission - e.g. testing event, EVA downlink.)

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the contractor shall have no more than one instance of failure to meet defined requirements or deadlines.

VERY GOOD = 90

To receive a "Very Good" rating, the contractor shall have no more than two instances of failure to meet defined requirements or deadlines.

GOOD = 80

To receive a "Good" rating, the contractor shall have no more than three instances of failure to meet defined requirements or deadlines.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the contractor shall have no more than four instances of failure to meet defined requirements or deadlines.

POOR = 0

To receive a "Poor" rating, the contractor shall have no more than five instances of failure to meet defined requirements or deadlines.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews

ATTACHMENT E
FEE DISTRIBUTION

Contract Year	Performance Period	Period of Performance	Available Performance Metric Fee	Earned Performance Metric Fee	Available Service Quality Fee	Earned Service Quality Fee	Total PIF Available	Total PIF Earned
Contract Year 1	1	**1/18/11- 1/17/12**						
Contract Year 2	2	**1/18/12- 1/17/13**						
Contract Year 3	3	**1/18/13- 1/17/14**						
Contract Year 4	4	**1/18/14- 1/17/15**						
Contract Year 5	5	**1/18/15- 1/17/16**						

Attachment J-2
JSC Data Requirements List (DRL)

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
1	Management Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	Proposal	Proposal	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/Contracting Officer's Technical Representative (COTR) 1 Electronic copy posted as directed by COTR		9. Remarks Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
2	Project Plans	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	EOM/15	Upon Request	a. Type: Other b. 1
	8. Distribution *(Continue on a blank sheet if needed)* Electronic copy posted as directed by COTR		9. Remarks Project Plans shall be subitted within 2 weeks of request. Written approval by COTR or designee. As projects are defined, monthly status reports will be required on the 15th of each month. EOM= End of Month; Other = electronic copy (see block 8).			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
3	Information Technology (IT) Capital Planning and Investment Control (CPIC)	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	See DRD	See DRD	a. Type: Print b. 1
	8. Distribution *(Continue on a blank sheet if needed)* IA/Chief Information Officer Electronic copy posted as directed by COTR		9. Remarks Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
4	Metrics Performance Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/Contracting Officer's Technical Representative (COTR) 1 Electronic copy posted as directed by COTR		9. Remarks EOM = End of Month Electronic submittal required in addition to copies required in Block 7. See block 8.			

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
5	Resource Management Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/10	1st EOM/10	a. Type: Print b. 4

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
LF6/Cost Accounting
LI2/Budget/Program Analyst
1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
6	Resource Management Supplemental Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/10	1st EOM/10	a. Type: Print b. 3

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
LI2/Budget/Program Analyst
1 Electronic copy posted as directed by COTR

9. Remarks
EOM= End of Month

Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
7	Government Property Management Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	CSD + 30	Proposal	a. Type: Print b. 3

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative
JB/Property Administrator
1 Electronic copy posted as directed by the COTR

9. Remarks
CSD + 30 = Contract Start Date + 30 days. See DRD for submisssion requirements.
Written approval by Property Administrator.
Electronic submittal required in addition to copies required in Block 7. See block 8

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
8	Organizational Conflict of Interest Avoidance Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	CSD + 30	CSD + 30	a. Type: Print b. 2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 30 = Contract Start Date + 30 days
Electronic submittal required in addition to copies required in Block 7. See block 8

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
9	Safety and Health Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	CSD	With Proposal	Print	2
10	Standard Operating Procedures	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	N/A	CSD + 120	Other	1
11	Preventive Maintenance and Operational Readiness Documentation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	Print	1
12	Problem Reporting/Resolution	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	Print	1

Line item 9

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
NS/Safety and Test Operations Division (2 copies)
JSC Occupational Health Officer & JSC Emergency Prepardness Office
1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date
Initial with proposal/annual thereafter

Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 10

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 120 = Contract Start Date + 120 days
Written Approval by COTR or designee.
Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 11

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 12

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contractng Officer's Technical Representtive (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Electronic submittal required in addition to copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
13	Contractor Status Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/7	1st EOM/7	Print	2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Informal Weekly submittals to be submitted electronically from Contract Start Date + 1 week
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
14	Mission Support Planning Documents	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	Per DRD	CSD + 30 days	Print	1

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date
Written Approval by COTR or designee.
Electronic submittal required in addition to Copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
15	Television Productions Deliverables	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	See Block	See Block 9	Print	1

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
Initial plan prior to starting production.
Final report 15 days after completion.
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
16	Nondisclosure Statements	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	CSD	CSD	Print	2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to Copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
17	Performance Management and Capacity Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU	EOQ/7	1st EOQ/7	a. Type: Print b. 1
	8. Distribution *(Continue on a blank sheet if needed)* IA/Contracting Officer's Technical Representative 1 Electronic copy posted as directed by COTR		9. Remarks 1st EOQ = End of Quarter which begins at Constract Start + 90 days Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
18	Re-Procurement Data Package	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	OT	At Request	Per Request	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/Contracting Officer's Technical Representative 1 Electronic copy posted as directed by COTR		9. Remarks Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
19	ITAMS Lessons Learned Documentation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	Per DRD	Per DRD	a. Type: Other b. 3
	8. Distribution *(Continue on a blank sheet if needed)* IA/ Contracting Officer's Technical Representatiave (Electronic Copy) NS/Safety and Test Operations Division (Electronic Copy) AK/Chief Knowledge Officer 1Electronic copy posted as directed by COTR		9. Remarks On request, typically after completion of projects. Electronic submittal required in accordance with DRD.			
1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
20	Emergency Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Per DRD	CSD + 90 days	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/ Contracting Officer's Technical Representative 1 Electronic copy posted as directed by COTR		9. Remarks CSD = Constract Start Date Electronic submittal required in addition to copies required in Block 7. See block 8.			

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
21	Wage/Salary and Fringe Benefit Data	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Per DRD	CSD	Print	1
22	On-site Contractor (Headcount)	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU	EOQ/15	1st EOQ/15	Print	2
23	Notification of Labor Disputes & Contingency Strike Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	CSD	CSD	Print	2
24	Monthly Safety and Health Metrics	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/10	1st EOM/10	Print	4

Line item 21

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer

1Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 22

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/ Contacting Officer
IA/Contracting Officer's Technical Representative

1 Electronic copy posted as directed by COTR

9. Remarks
1st EOQ = End of Quarter which begins at Constract Start + 90 days
Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 23

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
BA/Contract Labor Relations Office

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to copies required in Block 7. See block 8

Line item 24

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative
NT2/Occupational Safety Branch (2 copies)
SD26/Occupational Health Officer

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month

Electronic submittal required in addition to copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
25	Financial Reporting Contractor-Held Property	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	Per DRD	Per DRD	Per DRD	a. Type: Other b.

8. Distribution *(Continue on a blank sheet if needed)*
Per DRD

9. Remarks
Electronic submittal required per DRD

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
26	Safety and Health Program Self Evaluation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Sept 30th/yr	09/30/2011	a. Type: Print b. 4

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative
NS/Safety and Test Operations Division
SD13/Occupational Health Safety Office
1 Electronic copy posted as directed by COTR

9. Remarks
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
27	Data Center Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	WK	CSD + 7	CSD + 7 days	a. Type: Print b. 1

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 7 = Contract Start Date + 7 days

Electronic submittal required. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
28	Physical Inventory Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Per DRD	Per DRD	a. Type: Print b. 2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/ Contacting Officer
IA/Contracting Officer's Technical Representative

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.	b. Contract/RFP No.	c. DRL Date/Mod Date
Information Technology and Multimedia Services (ITAMS)	NNJ11JA16B/NNJ09244782R	Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
29	Server Backup & Tape Usage Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	Other	1

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month

Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
30	Phase-In Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	Proposal	Proposal	Print	Per RFP

8. Distribution *(Continue on a blank sheet if needed)*
Per Request for Proposal (RFP)

9. Remarks
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
31	IT Security Plan, Risk Assessment, and FIPS 199 Assessment	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	CSD + 30	CSD + 30	Print	2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/ Contacting Officer
IA/Contracting Officer's Technical Representative
IM/Chief Information Officer Representative to Procurement
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 30 = Contract Start Date + 30 Days. See DRD for annual submisssion requirements.

Electronic submittal required in addition to copies required in Block 7. See block 8

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
32	Asset Management Planning and Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU	CSD + 90	CSD + 90	Other	1

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 90 = Contract Start Date + 90 Days.

Electronic submittal required in addition to copies required in Block 7. See block 8

Attachment J-3
JSC Data Requirements Description (DRD)

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Management Plan	March 2009	1	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall provide plans to coordinate and execute all technical and administrative tasks for all ITAMS management activities required to satisfy the requirements of this contract.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
	DRD-2 Project Plan

8. Preparation Information *(Include complete instructions for document preparation)*

A. The Management Plan shall include the plans for coordination and execution of all contract technical and administrative tasks, including resources management, contract administration, logistics and property management, documentation management, personal identity verification (PIV), and acquisition management. The Management Plan shall be updated to reflect significant changes that occur after its initial publication. The Management Plan shall be an umbrella document, which encompasses and integrates all Information Technology and Multimedia Services (ITAMS) management activities. As a minimum, the Management Plan shall cover:

- The significant policies and plans of all aspects of the ITAMS contract.
- Definition of the Contractor's organization (prime and subcontractors), including organization charts, with emphasis on roles and responsibilities of organizational elements.
- Levels of approvals.
- Flow of authority.
- External interfaces with the Government and other contractors.
- Functional relationships between internal organizational elements that differ from the flow of line authority.
- The relationship between and integration of contract DRDs to the overall management of the contract.

B. The Configuration Management Plan shall prescribe the process to be implemented for control of engineering (design) and operational configuration. The Configuration Management Plan shall:

- Define how configuration control will be recorded and documented
- Identify the specific part of the organization responsible for maintaining the configuration control records
- Identify the documentation and data systems being used to provide configuration control for all systems
- Identify the specific equipment, systems, and operational interfaces which are subject to configuration control
- Describe the procedures to be used to coordinate, define, test, monitor, and control all technical and operational interfaces
- Identify individuals responsible for writing and for approving configuration control procedures
- Define how NASA will be involved with final decisions in the change process.
- The information fields required for each category of equipment or software in the system shall include information on the category's description, location, user, external connections to other systems, maintenance support, manufacturer, and other fields normally contained in a configuration management system.

C. BASELINE CONFIGURATIONS

Baseline configuration descriptions and drawings shall be provided and maintained for all systems. These configuration descriptions and drawings shall be updated to reflect the results of approved changes to the configurations. These documents shall be numbered such that it is possible to determine the historical evolution of baseline configurations to the current configurations. Changes from the previous version of the documents shall be clearly noted. For drawings, the information shall be provided to reflect the connectivity represented by network drawings

D. CHANGE AUTHORIZATION DOCUMENT REPORTS
Summary reports of all the documents that authorize changes to be made to the ITAMS-managed systems shall be provided. These reports shall contain approved Service Requests, Change Requests, and the Contractor's internal documentation.

E. CHANGE TRACE
Trace documentation of all changes between the original baselined systems and the current configuration shall be maintained for ITAMS-managed data systems.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Project Plans	March 2009	2	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall provide project plans to define, coordinate, and execute projects as defined by task orders issued under the ITAMS contract.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
NPR 7120.7	DRD-1 Management Plan DRD-19 Lessons Learned Documentation

8. Preparation Information *(Include complete instructions for document preparation)*

For development projects performed under this contract, the Contractor shall follow the procedures defined in the NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements (NPR 7120.7). Appendix F in the NPR 7120.7 includes directions, templates and required documents for project plans. This document (NPR 7120.7) establishes the requirements by which the contractor will formulate and execute information technology and institutional infrastructure programs and projects, consistent with the governance model contained in the NASA Strategic Management and Governance Handbook (NPD 1000.0).

The Contractor shall deliver all required documentation at each Key Decision Point (KDP) as defined in NPR 7120.7 per the Data Requirements List (DRL).

The Contractor shall maintain an integrated project plan for all relevant activities such as application development, major and minor video engineering projects, server upgrades, etc.

To assist the Contractor, the following definitions are provided for this DRD and any associated work:

- Rough Order of Magnitude (ROM) – an estimate of the resources (e.g. labor, materials, travel, and training) needed to implement a project. The ROM should be within 40% of the final value. A ROM is not the final Contractor proposed cost, but rather a budgetary estimate provided to and used by NASA for planning purposes only. ROMS will not be used to implement changes.

- Brief Requirements Analysis – An activity to allow interaction with the customers and other potential stakeholders which results in a 2 to 3 page document describing a promising concept along with tentative project-level requirements and assumptions to be used to develop the ROM.

In the NPR 7120.7, these activities would occur within the Pre-phase A: Concept Studies phase.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Information Technology (IT) Capital Planning and Investment Control (CPIC)	March 2009	3	NNJ09244782R/NNJ11JA61B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

To document the contractor's compliance with Federal and NASA IT CPIC Planning and Reporting regulations and requirements

5. DRD Category: *(check one)*

- ☒ Technical
- ☐ Administrative
- ☐ SR&QA

6. References *(Optional)*

7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

INFORMATION TECHNOLOGY (IT) CAPITAL PLANNING & INVESTMENT CONTROL (CPIC)

Information Technology (as defined in the Clinger-Cohen Act) is subject to certain scrutiny and reporting requirements as set forth in Legislative actions and Executive and Agency mandates, and directives. The Office of Management and Budget (OMB) Circular A-130 establishes the foundation for CPIC. OMB Circular A-11 establishes the guidelines and requirements for reporting to the Executive Branch. Any additional reporting requirements associated with the CPIC data collection and reporting process will be covered by this DRD.

In conformance with CPIC processes, all contractors must participate in data collection and reporting efforts. All contractors must furnish the data needed for the Agency to comply with Office of Management and Budget reporting requirements including but not limited to those documented in OMB Circular A-11. Accurate and complete data submissions are to be made in a manner consistent with the reporting structure, and within the timeframes established for the Center.

Additionally, all contractors must submit their Fiscal Year spending plans for review and approval by the Johnson Space Center (JSC) Chief Information Officer (CIO), or designee, prior to the beginning of the Fiscal Year. Changes to spending plans during the Fiscal Year must be approved by the JSC CIO, or designee, before implementation. Formats and reporting processes and procedures will be provided annually based upon Center and Agency requirements.

Examples of documentation, formats, processes, procedures and structures can be provided upon request. However all formats, processes, procedures and structures are subject to change.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Metrics Performance Plan	March 2009	4	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

The Contractor shall provide a metrics performance plan to facilitate Government assessment of Contractor performance.

5. DRD Category: *(check one)*

- ☒ Technical
- ☐ Administrative
- ☐ SR&QA

6. References *(Optional)*

7. Interrelationships *(e.g., with other DRDs) (Optional)*

Attachment J-1, Incentive Fee Plan

8. Preparation Information *(Include complete instructions for document preparation)*

A. METRIC COLLECTION

The Contractor shall calculate and report service delivery, productivity, and problem identification/resolution for each functional area on a monthly basis (as described in Attachment J-1). Specific metrics may vary according to functional area. The monthly reports shall be available to the Government within 2 weeks following monthly closeout. The Contractor shall use the same information to create and report quarterly and annual roll-ups. These metrics may include, for example:

- Date of request (CR, DR, or SR)
- Original date of requested service completion
- Date of actual service completion
- Name of service requester and organization
- Amount of re-works and hours spent performing re-work
- Number of requests outstanding (amount of backlog)
- Problem identification, time identified, time closed, problem resolution, orgs of all who were affected

B. DAILY METRICS SUPPORT

The Contractor shall provide a web-accessible reporting system that provides current and historical performance and cost information by WBS element. Online read access to the detailed information shall be provided via electronic posting per the DRL. The COTR shall be able to request online reports, formatted from the available parameters and downloadable in Excel format. The content of the individual reports shall be negotiated between the Contractor and the COTR.

C. METRIC TECHNICAL PERFORMANCE AND STATUS REPORT

The Metric Technical Performance and Status Report shall document the actual results against the required results, as of the end of the previous month, as defined above. Reports shall include cumulative trend data showing metric results for each past reporting period. Status reports shall include reports on progress and problems encountered in meeting the quality and timeliness metrics in Attachment J-1.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data referenced in this DRD, as specified above, the data shall be provided electronically in an Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Resource Management Plan	March 2009	5	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Contract DRD for NF533 Reporting	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
SOW Reference: 3.0	DRD-6 Resource Management Supplemental Report

8. Preparation Information (Include complete instructions for document preparation)

Scope:

The NASA Form 533 (NF533) 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

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. NASA Procedural Requirements (NPR) 9501.2D entitled "NASA Contractor Financial Management Reporting," or its most current revision, identifies the cost reporting requirements for a contract.

The formats described in this Data Requirements Description, including Exhibits 1 and 2, are intended to satisfy the requirements of the form 533M.

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. Examples of accrual accounting for common cost elements reported on the NF533 follow:

Cost Elements	Definitions
Labor	Reported to NASA as hours are incurred.
Equipment & Materials (commercial off the shelf)	Generally reported to NASA when received and accepted by the contractor.
Manufactured Equipment	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.
Leases	Reported to NASA using a proration over the life of the lease.
Travel	Reported to NASA as costs are incurred.
Subcontracts	Actual and estimated costs reported by prime contractors shall include subcontractors' incurred costs for the same accounting period. Where subcontract costs are material, they should be separately identified on NF533 reports. The prime 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 prime 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 sub-divisions of work. Data submitted by the subcontractor should be structured similar to the prime contractor's NF533 to enable the prime contractor to properly report to NASA. For Firm Fixed Price subcontracts with a contract value greater than $500,000, the prime contractor is required to document the methodology used to generate the sub-contractor costs reported and provide this information to the Contracting Officer and Center Deputy Chief Financial Officer (Finance).
Unfilled Orders	Reported as the difference between the cumulative cost incurred to date and amounts obligated to suppliers and subcontractors.
Fee	Should 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 NF533 following the "Total Cost" line. Award fee must be reported by the following categories: Base Fee, Fee Earned, Interim Fee, Provisional Fee, Potential Additional Fee, and Total Fee. If any of the above fee categories do not pertain, they should not be included in the NF533.
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 NF533 below the cumulative cost amounts for the contract.

The NF533 reports are the official cost documents used at NASA for cost type, price re-determination, 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 NF533 must be reconcilable to the NF533.

Frequency:

The due dates for the NF533M report is outlined in Chapter 3 of NPR 9501.2D. The following is a summary of the NF533 due date requirements.

NF533 Report	Due Date
NF533M	Due not later than the 10th calendar day of the month. Should the 10th calendar day of the month fall on a weekend, the report shall be due the next business day.

The due dates reflect the date the NF533 reports are received by personnel on the distribution list, not the date the reports are generated or mailed by the contractor. It is critical that the NF533 reports are submitted in a timely manner to ensure adequate time for NASA to analyze and record the cost into the NASA accounting system.

Uncompensated Overtime:
Uncompensated overtime hours worked should be reported on NF533 reports as a separate line item or in the footnotes.

Baseline NF533:

An initial NF533 report is required in the NF533Q format to be used as a baseline for the life of the contract. The initial (baseline) NF533Q report shall be submitted by the contractor within 30 days after authorization to proceed has been granted. The initial report shall reflect the original contract value detailed by negotiated reporting categories and shall be the original contract baseline plan. In addition to the initial (baseline) report, monthly NF533 reporting shall begin no later than 30 days after the incurrence of cost.

Column 7b (planned cost incurred/hours worked for the month) and 7d (cumulative planned cost incurred/hours worked) of the NF533M (Exhibit 1) represent the negotiated baseline plan for the contract. There may not be a relationship between the estimates provided in columns 8 of the NF533M to columns 7b and 7d. Columns 7b and 7d represent the legally binding contract negotiated baseline plan plus all authorized changes.

Short and long-term cost estimates, which include all data entered in columns 8 and 9a on the NF533M report, shall be based on the most current and reliable information available. For Exhibit 1, the annual funding limit (Column 8e) shall reflect the results of the annual budget and content planning processes described in DRD-03, IT Acquisition Planning and any subsequent changes throughout the fiscal year.

Any prior period cost adjustments shall be reported in column 7a and 7c of NF533M with a footnote discussing the reasons for and amounts of the adjustments.

Monthly NF533 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 NF533 reports as long as estimates for the following period are included. If the final cost of a contract changes after the submission of the "final" contractor cost report, the contractor must submit a revised NF533 report in the month the cost change is recognized.

Hard Copy Format:

The reporting requirements outlined in this DRD shall include the following deliverables found in Section J-3, DRD-05, and Exhibit 1.

NF533M roll up summary for the entire contract where all elements of referenced cost and labor hours shall be shown. (Exhibit 1)

The NF533M forms are shown in the above exhibit and the explanation of the standard elements can be found in NASA Procedural Requirements (NPR) 9501.2D.

Maintenance:
Changes shall be incorporated by change pages or complete reissue with a footnote or attached supplemental narrative describing in detail the change(s) made.

The attached sample format, Exhibit 1, is an example of the proposed structure and format of the NF533 for this contract and is intended to closely though not exactly represent the final version. This example is not all inclusive and reporting levels may vary from year to year. See sample NF533 format for this contract in DRD 05 - Exhibits 1 and 2.xls. Exhibit 1 includes reporting data for both fiscal year and contract year.

Cost Reporting Levels:

Contract Summary:
The contractor shall be required to report costs at a contract summary level. All elements of cost shall be referenced on this document. Exhibit 1 provides a sample of this report.

Details:

Variance Analysis Report:
The contractor shall provide a written variance explanation (monthly estimates versus actuals) with a tolerance of +/- 5%, unless otherwise directed by NASA. This variance explanation shall be provided at the contract level, and submitted with the NF533.

Contract Review Meeting
The contractor shall support a monthly review of the contract cost and workforce data with the Information Resources Directorate management, Procurement Office, Resources management, and others as required. The contractor shall be required to:

1. Present and explain the data presented on NASA Form 533.
2. Clearly communicate cost and workload variances as reported in the monthly variance analysis report and be able to explain both actual costs and expectations.
3. Provide any additional data required to effectively demonstrate the Contractor's cost management effort.

Workforce Reporting
The contractor shall support various workforce exercises requested by the Government. For example, the contractor may be asked to provide the total contract headcount and how this number is split between on-site versus off-site. These exercises typically occur once or twice a year. The exact requirements and schedules will be determined as these exercises occur.

Budget Planning Support

The contractor shall support the Information Resources Directorate Internal Task Agreement (ITA) process. This process is two-fold. Prior to the Program Planning and Budget Execution (formerly known as Program Operating Plan) process each spring, the contractor shall provide estimates at the Task Order and Sub task levels for the next fiscal year. During the summer, IRD will request an update to these estimates, which will then be provided to IRD's customer organizations for the next fiscal year.

The contractor shall support the government in creating an annual cost-operating plan prior to the beginning of each government fiscal year (October 1 – September 30). As part of the annual budget planning, the contractor shall provide cost estimates, technical impact statements, and decision packages

as required. The exact support requirements and their schedule will be given when the support task is assigned.

Once the cost plan has been finalized and task orders have been completed, the contractor shall assist the Government in the management of the plan as cost and workload variances occur. The contractor will also be asked to support the Government throughout the life of the contract as it responds to variations in funding levels and technical priorities.

References:

** NASA Procedural Requirements (NPR) 9501.2D.

In support of this DRD, the Contractor shall provide the following:

1. On a monthly basis, a contract summary page shall be provided where all elements of cost referenced shall be shown.
2. Contractor accounting calendar report:
   The contractor shall provide, within 10 days of the contractor start date, the contractor's accounting calendar for each contract year and for each Government fiscal year, which lists accounting month, number of workdays in each month, number of work hours included in each month, and all holidays applicable to the Contractor for the duration of the contract.

Distribution:

Hard Copy

LF6 Cost Accounting (1 hardcopy)
BJ Contracting Officer (1 hardcopy)
LI2 Budget/Program Analyst (1 hardcopy)
IA Technical (1 hardcopy)
Additional distribution per CO letter

E-mail

Delivery via electronic mail is acceptable for some recipients. The Contracting Officer will provide the distribution list.

Electronic NF533 Requirement:

In addition to submitting the NF533M in a hardcopy format, NASA may choose to have the contractor submit the NF533 electronically by the same due date as the hardcopy. The data shall be submitted via email using the Government prescribed flat file format (see attached Agency Defined File Format for an example of the layout details) and shall include the following header information from the hardcopy.

Data Element	Description
Contract Number	NASA assigned contract number
Modification Number	Latest definitive Modification Number
Accrual Date	Date the data was generated for
Report Period End Date	Period ending date of the NF533
Operating Days	Number of operating days for the current NF533
Date Received/Submitted	Date the report is submitted
CCR Format	Monthly (NF533M)
Cost Unit of Measure	Unit of measure used to report cost on the report NF533
HR/WYE Unit of Measure	Unit of measure used to report Hours/Work Year Equivalents (WYEs) on the NF533 report
Authorized Contractor Representative	Name of Contractor Approving Officer
Authorized Contractor Representative Date Signed	Date the NF533 is approved and signed by the authorized Contractor Representative
Monthly Grand Total Cost Incurred (7a)	Grand Total Actual Monthly cost for the prior month

Monthly Grand Total HR/WYE (7a)	(column 7a on the NF533) Grand Total Actual monthly hours/WYEs for the prior month (column 7a on the NF533)
Monthly Grand Total Cost Planned (7b)	Prior month planned cost (column 7b on the NF533)
Grand Total Cost Incurred ITD (7c)	Grand total contract cost from Inception to Date (ITD) (column 7c on the NF533)
Grand Total Planned Cost (7d)	Grand total planned contract cost (column 7d on the NF533)
Grand Total Estimated Cost (8a)	Grand total current month cost estimate (column 8a on the NF533)
Grand Total Estimated HR/WYE (8a)	Grand total current month HR/WYE estimate (column 8a on the NF533)
Grand Total Next Month Estimated Cost (8b)	Grand total next month cost estimate (column 8b on the NF533)
Grand Total Balance of Contract (8c)	Contract Balance for the remaining estimate to complete
Grand Total Contractor Estimate (9a)	Contractor estimate to complete entire scope of contract
Grand Total Contract Value (9b)	Contractor distribution of contract value by the reporting categories
Grand Total Unfilled Orders Outstanding (10)	Unfilled order outstanding at the end of the reporting period

The flat file will also contain detail information for each Reporting Category (RC). A Reporting Category correlates to a task order, delivery order, or Work Breakdown Structure (WBS) and is the level at which cost is reported. Each RC can have Sub-Reporting Category line items (detailed cost elements) that add up to a RC. **The Contractor is required to coordinate with the NASA Resource Analyst assigned to the contract in order to establish and maintain the Reporting Categories the contractor shall use to comply with this data requirement.** The chart below describes the data elements to be included in this section of the flat file (see attached Agency Defined File Format for an example of the specific layout details).

Data Element Name	Description
Reporting Category (RC)	Task, Delivery Order, Work Breakdown Structure
Cost Incurred for Month (7a)	Prior month actual cost incurred for each RC (column 7a on NF533)
HR/WYE Incurred for Month (7a)	Prior month actual HR/WYE incurred for each RC (column 7a on NF533)
Contract prior month planned cost (7b)	Planned cost for prior month for each RC (column 7b on NF533)
Contract ITD cost (7c)	Contract ITD cost for each RC (column 7c on NF533)
Contract planned ITD cost (7d)	Contract planned ITD cost for each RC (column 7d on NF533)
Current month estimated cost (8a)	Cost estimate for the current month for each RC (column 8a on NF533)
Current month estimated HR/WYE (8a)	HR/WYE estimate for the current month for each RC (column 8a on NF533)
Next month estimated cost (8b)	Estimated cost for next month for each RC (column 8b on NF533)
Balance of Contract (8c)	Balance of contract for the remaining estimate to complete for each RC (column 8c on NF533)
Contractor Estimate (9a)	Contractor estimate for the total estimate to complete entire scope of contract for each RC (column 9a on NF533)
Contract Value (9b)	Contract value based upon contract modifications for each RC (column 9b on NF533)
Unfilled orders outstanding (10)	Unfilled orders outstanding at the end of the reporting

Reporting Category level	period for each RC (column 10 on NF533)
Reporting Category Identifier	Used by NASA's accounting system to determine the RC level
Category	Identifies if the RC is a actual Reporting Category or a Sub-Reporting

The flat file shall be saved as a text file with no extension (do not include .txt after the file name) and named in strict accordance with the specific format described in the attached Agency Defined File Format document.

Electronic NF533 Distribution:

Upon CO Direction, E-Mail Account (1 electronic copy)

File names must be provided in a specific format. Each file name will begin with the SAP 2 Character center abbreviation listed below. The contract number and date will be included in the file name as well. Below is a sample file name.

MACFPS001_NAS00-0001_yyyy_mm_dd

SAP 2 Charter Center Abbreviations

Headquarters	HQ	Dryden	DR
Marshall	MA	Goddard	GO
Ames	AM	Stennis	ST
Glenn	GL	Johnson	JO
Langley	LA	Kennedy	KE

Example File Format

Header (Non-Repeating Segment)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Format
HEADER:									
Record Type	Used by eGate to determine record type	'HD' for Header	Required	Required	RECORD_TYPE	1	2	2	CHAR
Contract Number	Contract Number (1b)	Header field—submitted with CONTRACT OR data or defaulted by interface or extension	Required	Required	CONTRACT_NUMBER	3	12	10	CHAR
	Latest definitive Modification Number(CR 8197)				MOD_NUMBER	13	18	6	CHAR
Accrual Date	Date the data was generated for. Used by SAP as part of Oracle table key	Accrual Date. MM01YYYY, where MM is the Accrual Month and YYYY is the fiscal year	Required	Required	ACCRUAL_DATE	19	26	8	DATE MM01YYYY
Report Period End Date	Report Period End Date is a date(2)	Header field—submitted with CONTRACT OR data or defaulted by interface or extension	Required	Required	REP_END_DATE	27	34	8	DATE
Operating Days	Operating days(2).	Header field—submitted with CONTRACT OR data	Required	Optional unless Required by contract	OPER_DAYS	35	40	6	NUMERIC
Date Received	Date Received (1d)	System Date upon which the cost data is loaded into the CCR Extension	Required	Required	DATE_REC	41	48	8	DATE
CCR Format	'M' for Monthly and 'Q' for Quarterly (SIR2047)	Submitted with CONTRACT OR data	Required	Required	CCR_FORMAT	49	49	1	CHAR
Cost Unit of Measure	Cost Unit of Measure (SIR2047)	Submitted with CONTRACT OR data	Required	Required	COST_UOM	50	51	2	CHAR
HR/WYE Unit of Measure	Hour/Work-Year-Equivalent Unit of	Submitted with CONTRACT OR data	Required	Required	HR_WYE_UOM	52	53	2	CHAR

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Forma
	Measure (SIR2047)								
	Authorized Contractor Representative – Name of Contractor Approving Officer (CR 8197)				AUTH_SIGNATURE	54	78	25	CHAR
	Authorized Contractor Representative Date Signed – Date CCR is approved/signed by authorized contractor representative(CR 8197)				AUTH_SIGNATURE_DATE	79	86	8	DATE MMDDYYYY
Grand Total Cost Incurred Month (7a)	The Grand Total Contract Prior Month Actual Dollars Column 7a reports actual costs for the prior month.	Submitted with CONTRACTOR data	Required.	Optional. Only required if lower detailed line item data is submitted in monthly batch file.	GT_COST_INCUR_MONTH	87	99	13	CURRENCY(2
Grand Total HR/WYE (7a)	The Grand Total Contract Prior Month Actual Hours Column 7a reports actual HR or WYE for the prior month.	Submitted with CONTRACTOR data	Required if detailed line item data is submitted in monthly batch file.	Required if detailed line item data is submitted in monthly batch file.	GT_HRWYE_PRIOR_MONTH	100	109	10	NUMERIC(1)
	The Grand Total Contract Prior Month Planned Dollars Column (7b) reports planned costs for the prior month. (CR8197)				GT_COST_PLANNED_MONTH	110	122	13	CURRENCY (2)
Grand Total Cost Incurred ITD (7c)	The Grand Total Contract Cost Dollars Column 7c which represents Contract Cost Inception to Date	Submitted with CONTRACTOR data	Required. Does not require detailed line item data if provided from Cost Incurred Month (7a)	Required if detailed line item data is provided for this column	GT_ITD_COST	123	135	13	CURRENCY (2)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Format
	Grand Total Cotract Planned Cost Dollars Column (7d) which represents Planned Contract Cost Inception to Date(CR 8197)				GT_COST_PLANNED_ITD	136	148	13	CURRENCY
Grand Total Estimated Cost (8a)	The Grand Total Contract Estimated Cost for first upcoming month, or Current Month Estimate for cost.	Submitted with CONTRACTOR data	Required	Required if detailed line item data is provided for this column	GT_EST_COST	149	161	13	CURRENCY (
Grand Total HR/WYE (8a)	The Grand Total Contract Estimated Hours for first upcoming month, or Current Month Estimate for HR/WYE.	Submitted with CONTRACTOR data	Required if detailed line item data is provided for this column	Required if detailed line item data is provided for this column	GT_HRWYE_FIRST_MONTH	162	171	10	NUMERIC (1)
Grand Total Next Month Estimated Cost (8b)	The Grand Total Contract Estimated Cost for second upcoming month or Next Month Estimate for cost.	Submitted with CONTRACTOR data	Required if detailed line item data is provided for this column	Required if detailed line item data is provided for this column	GT_NEXT_MONTH_EST	172	184	13	CURRENCY (2
	Grand Total Balance of Contract for the remaining estimate to complete (CR 8197)				GT_BALANCE_CONTRACT	185	197	13	CURRENCY (2)
	Grand Total Contractor Estimate for the total estimate to complete entire scope of contract (CR 8197)				GT_BALANCE_CONTRACTOR_ESTIMATE	198	210	13	CURRENCY (2)
	Grand Total Contract Value based				GT_CONTRACT_VALUE	211	223	13	CURRENCY (2)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Format
	upon Contract Modification s (CR 8197)								
	Grand Total Unfilled Orders Outstanding at end of reporting period (CR 8197)				ST_UNFILLED ORDERS	224	236	13	CURRENCY

Example File Format

Detail (Repeating Segment)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Format
CCR DETAIL LINE ITEMS:									
Record Type	'DM' for Monthly column 7a Detail; 'DQ' for ITD Column 7c Detail	"RD" for Detail	Required	Required	RECORD_TYPE	1	2	2	CHAR
Reporting Category	Reporting Category (6)	Line item field—submitted with CONTRACTOR data	Required	Required	SERV_ORD_CAT	3	26	24	CHAR
Cost Incurred Month (7a)	Prior Month incurred costs (ACTUALS) for given category.	Line item field—submitted with CONTRACTOR data	Required if detailed line item data is not provided from Cost Incurred Month (7c)	Determined by contract requirement-data from Column 7a, 7c or 8a	COST_INCUR_MONTH	27	39	13	CURRENCY (2)
HR/WYE Incurred Month (7a)	Prior month incurred hours worked [Actuals] for given category.	Line item field—submitted with CONTRACTOR data	Optional unless Required by contract for WYE calculation	Optional unless Required by contract for WYE calculation	HRWYE_INCUR_MONTH	40	49	10	NUMERIC (1)
	Contract Prior Month Planned Dollars Column (7b) reports planned costs for the prior month (CR 8197)				COST_PLANNED_MONTH	50	62	13	CURRENCY (2)
	Contract Cost Dollars Column (7c) which represents Contract Cost Inception to Date (CR 8197)				CUR_COST_INCUR_ITD	63	75	13	CURRENCY (2)
	Contract Planned Cost Dollars Column (7d) which represents Planned Contract Cost Inception to Date (CR 8197)				COST_PLANNED_ITD	76	88	13	CURRENCY (2)
Current Month Estimated Cost (8a)	Estimated costs for first upcoming month for given category.	Line item field—submitted with CONTRACTOR data	Required.	Determined by contract requirement-data from Column 7a, 7c or 8a	CUR_MONTH_EC	89	101	13	CURRENCY (2)
HR/WYE Current	Estimated hours for first	Line item field—	Optional unless	Optional unless	HRWYE_CUR_MONTH_EST	102	111	10	NUMERIC (1)

METRIC #9: MULTIMEDIA OPERATIONS AND SERVICES

Statement of Work Reference: WBS 6.0, *Multimedia Operations and Services*

Weight: 10% of the 75% of incentive fee allocated to Performance Metrics (See Section II, *Performance Incentive Fee*, Paragraph (B), *PIF Determination)*

Performance Standard (Acceptable Quality Level):

The contractor shall complete major events and requests per customer required deadline and requirements as described in the SOW, task orders, project plans and other work authorization documents. The contractor shall meet spaceflight operations timelines and requirements as described in the SOW, task orders, project plans and other work authorization documents. ("Major" events or requests are defined as those that if missed negatively impact NASA's/JSC's mission - e.g. testing event, EVA downlink.)

Rating Scale:

EXCELLENT = 100

To receive an "Excellent" rating, the contractor shall have no more than one instance of failure to meet defined requirements or deadlines.

VERY GOOD = 90

To receive a "Very Good" rating, the contractor shall have no more than two instances of failure to meet defined requirements or deadlines.

GOOD = 80

To receive a "Good" rating, the contractor shall have no more than three instances of failure to meet defined requirements or deadlines.

SATISFACTORY = 70

To receive a "Satisfactory" rating, the contractor shall have no more than four instances of failure to meet defined requirements or deadlines.

POOR = 0

To receive a "Poor" rating, the contractor shall have no more than five instances of failure to meet defined requirements or deadlines.

Methods of Surveillance:

1. Metrics reporting
2. Customer interviews

ATTACHMENT E
FEE DISTRIBUTION

Contract Year	Performance Period	Period of Performance	Available Performance Metric Fee	Earned Performance Metric Fee	Available Service Quality Fee	Earned Service Quality Fee	Total PIF Available	Total PIF Earned
Contract Year 1	1	**1/18/11- 1/17/12**						
Contract Year 2	2	**1/18/12- 1/17/13**						
Contract Year 3	3	**1/18/13- 1/17/14**						
Contract Year 4	4	**1/18/14- 1/17/15**						
Contract Year 5	5	**1/18/15- 1/17/16**						

Attachment J-2
JSC Data Requirements List (DRL)

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
1	Management Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	Proposal	Proposal	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/Contracting Officer's Technical Representative (COTR) 1 Electronic copy posted as directed by COTR		9. Remarks Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
2	Project Plans	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	EOM/15	Upon Request	a. Type: Other b. 1
	8. Distribution *(Continue on a blank sheet if needed)* Electronic copy posted as directed by COTR		9. Remarks Project Plans shall be subitted within 2 weeks of request. Written approval by COTR or designee. As projects are defined, monthly status reports will be required on the 15th of each month. EOM= End of Month; Other = electronic copy (see block 8).			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
3	Information Technology (IT) Capital Planning and Investment Control (CPIC)	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	See DRD	See DRD	a. Type: Print b. 1
	8. Distribution *(Continue on a blank sheet if needed)* IA/Chief Information Officer Electronic copy posted as directed by COTR		9. Remarks Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
4	Metrics Performance Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/Contracting Officer's Technical Representative (COTR) 1 Electronic copy posted as directed by COTR		9. Remarks EOM = End of Month Electronic submittal required in addition to copies required in Block 7. See block 8.			

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
5	Resource Management Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/10	1st EOM/10	a. Type: Print b. 4

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
LF6/Cost Accounting
LI2/Budget/Program Analyst
1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
6	Resource Management Supplemental Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/10	1st EOM/10	a. Type: Print b. 3

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
LI2/Budget/Program Analyst
1 Electronic copy posted as directed by COTR

9. Remarks
EOM= End of Month

Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
7	Government Property Management Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	CSD + 30	Proposal	a. Type: Print b. 3

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative
JB/Property Administrator
1 Electronic copy posted as directed by the COTR

9. Remarks
CSD + 30 = Contract Start Date + 30 days. See DRD for submisssion requirements.
Written approval by Property Administrator.
Electronic submittal required in addition to copies required in Block 7. See block 8

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
8	Organizational Conflict of Interest Avoidance Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	CSD + 30	CSD + 30	a. Type: Print b. 2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 30 = Contract Start Date + 30 days
Electronic submittal required in addition to copies required in Block 7. See block 8

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
9	Safety and Health Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	CSD	With Proposal	Print	2
10	Standard Operating Procedures	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	N/A	CSD + 120	Other	1
11	Preventive Maintenance and Operational Readiness Documentation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	Print	1
12	Problem Reporting/Resolution	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	Print	1

Line item 9

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)
NS/Safety and Test Operations Division (2 copies)
JSC Occupational Health Officer & JSC Emergency Prepardness Office
1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date
Initial with proposal/annual thereafter

Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 10

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 120 = Contract Start Date + 120 days
Written Approval by COTR or designee.
Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 11

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 12

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contractng Officer's Technical Representtive (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Electronic submittal required in addition to copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
13	Contractor Status Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/7	1st EOM/7	Print	2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month
Informal Weekly submittals to be submitted electronically from Contract Start Date + 1 week
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
14	Mission Support Planning Documents	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	Per DRD	CSD + 30 days	Print	1

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date
Written Approval by COTR or designee.
Electronic submittal required in addition to Copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
15	Television Productions Deliverables	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	See Block	See Block 9	Print	1

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
Initial plan prior to starting production.
Final report 15 days after completion.
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
16	Nondisclosure Statements	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	CSD	CSD	Print	2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative (COTR)

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to Copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
17	Performance Management and Capacity Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU	EOQ/7	1st EOQ/7	a. Type: Print b. 1
	8. Distribution *(Continue on a blank sheet if needed)* IA/Contracting Officer's Technical Representative 1 Electronic copy posted as directed by COTR		9. Remarks 1st EOQ = End of Quarter which begins at Constract Start + 90 days Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
18	Re-Procurement Data Package	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	OT	At Request	Per Request	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/Contracting Officer's Technical Representative 1 Electronic copy posted as directed by COTR		9. Remarks Electronic submittal required in addition to copies required in Block 7. See block 8.			
1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
19	ITAMS Lessons Learned Documentation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	Per DRD	Per DRD	a. Type: Other b. 3
	8. Distribution *(Continue on a blank sheet if needed)* IA/ Contracting Officer's Technical Representatiave (Electronic Copy) NS/Safety and Test Operations Division (Electronic Copy) AK/Chief Knowledge Officer 1Electronic copy posted as directed by COTR		9. Remarks On request, typically after completion of projects. Electronic submittal required in accordance with DRD.			
1. Line item no.	2. DRD Title	3. Data type	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
20	Emergency Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Per DRD	CSD + 90 days	a. Type: Print b. 2
	8. Distribution *(Continue on a blank sheet if needed)* BJ2/Contracting Officer IA/ Contracting Officer's Technical Representative 1 Electronic copy posted as directed by COTR		9. Remarks CSD = Constract Start Date Electronic submittal required in addition to copies required in Block 7. See block 8.			

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
21	Wage/Salary and Fringe Benefit Data	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Per DRD	CSD	Print	1
22	On-site Contractor (Headcount)	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU	EOQ/15	1st EOQ/15	Print	2
23	Notification of Labor Disputes & Contingency Strike Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR	CSD	CSD	Print	2
24	Monthly Safety and Health Metrics	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/10	1st EOM/10	Print	4

Line item 21

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer

1Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 22

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/ Contacting Officer
IA/Contracting Officer's Technical Representative

1 Electronic copy posted as directed by COTR

9. Remarks
1st EOQ = End of Quarter which begins at Constract Start + 90 days
Electronic submittal required in addition to copies required in Block 7. See block 8.

Line item 23

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
BA/Contract Labor Relations Office

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to copies required in Block 7. See block 8

Line item 24

8. Distribution *(Continue on a blank sheet if needed)*
IA/Contracting Officer's Technical Representative
NT2/Occupational Safety Branch (2 copies)
SD26/Occupational Health Officer

1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month

Electronic submittal required in addition to copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.
Information Technology and Multimedia Services (ITAMS)

b. Contract/RFP No.
NNJ11JA16B/NNJ09244782R

c. DRL Date/Mod Date
Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
25	Financial Reporting Contractor-Held Property	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	Per DRD	Per DRD	Per DRD	a. Type: Other b.

8. Distribution *(Continue on a blank sheet if needed)*
Per DRD

9. Remarks
Electronic submittal required per DRD

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
26	Safety and Health Program Self Evaluation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Sept 30th/yr	09/30/2011	a. Type: Print b. 4

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/Contracting Officer
IA/Contracting Officer's Technical Representative
NS/Safety and Test Operations Division
SD13/Occupational Health Safety Office
1 Electronic copy posted as directed by COTR

9. Remarks
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
27	Data Center Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	WK	CSD + 7	CSD + 7 days	a. Type: Print b. 1

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 7 = Contract Start Date + 7 days

Electronic submittal required. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
28	Physical Inventory Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	Per DRD	Per DRD	a. Type: Print b. 2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/ Contacting Officer
IA/Contracting Officer's Technical Representative

1 Electronic copy posted as directed by COTR

9. Remarks
CSD = Contract Start Date

Electronic submittal required in addition to copies required in Block 7. See block 8.

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.	b. Contract/RFP No.	c. DRL Date/Mod Date
Information Technology and Multimedia Services (ITAMS)	NNJ11JA16B/NNJ09244782R	Basic

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
29	Server Backup & Tape Usage Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	EOM/15	1st EOM/15	Other	1

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
EOM = End of Month

Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
30	Phase-In Plan	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	Proposal	Proposal	Print	Per RFP

8. Distribution *(Continue on a blank sheet if needed)*
Per Request for Proposal (RFP)

9. Remarks
Electronic submittal required in addition to copies required in Block 7. See block 8.

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
31	IT Security Plan, Risk Assessment, and FIPS 199 Assessment	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	CSD + 30	CSD + 30	Print	2

8. Distribution *(Continue on a blank sheet if needed)*
BJ2/ Contacting Officer
IA/Contracting Officer's Technical Representative
IM/Chief Information Officer Representative to Procurement
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 30 = Contract Start Date + 30 Days. See DRD for annual submisssion requirements.

Electronic submittal required in addition to copies required in Block 7. See block 8

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies a. Type	b.
32	Asset Management Planning and Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU	CSD + 90	CSD + 90	Other	1

8. Distribution *(Continue on a blank sheet if needed)*
1 Electronic copy posted as directed by COTR

9. Remarks
CSD + 90 = Contract Start Date + 90 Days.

Electronic submittal required in addition to copies required in Block 7. See block 8

Attachment J-3
JSC Data Requirements Description (DRD)

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Management Plan	March 2009	1	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall provide plans to coordinate and execute all technical and administrative tasks for all ITAMS management activities required to satisfy the requirements of this contract.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
	DRD-2 Project Plan

8. Preparation Information *(Include complete instructions for document preparation)*

A. The Management Plan shall include the plans for coordination and execution of all contract technical and administrative tasks, including resources management, contract administration, logistics and property management, documentation management, personal identity verification (PIV), and acquisition management. The Management Plan shall be updated to reflect significant changes that occur after its initial publication. The Management Plan shall be an umbrella document, which encompasses and integrates all Information Technology and Multimedia Services (ITAMS) management activities. As a minimum, the Management Plan shall cover:

- The significant policies and plans of all aspects of the ITAMS contract.
- Definition of the Contractor's organization (prime and subcontractors), including organization charts, with emphasis on roles and responsibilities of organizational elements.
- Levels of approvals.
- Flow of authority.
- External interfaces with the Government and other contractors.
- Functional relationships between internal organizational elements that differ from the flow of line authority.
- The relationship between and integration of contract DRDs to the overall management of the contract.

B. The Configuration Management Plan shall prescribe the process to be implemented for control of engineering (design) and operational configuration. The Configuration Management Plan shall:

- Define how configuration control will be recorded and documented
- Identify the specific part of the organization responsible for maintaining the configuration control records
- Identify the documentation and data systems being used to provide configuration control for all systems
- Identify the specific equipment, systems, and operational interfaces which are subject to configuration control
- Describe the procedures to be used to coordinate, define, test, monitor, and control all technical and operational interfaces
- Identify individuals responsible for writing and for approving configuration control procedures
- Define how NASA will be involved with final decisions in the change process.
- The information fields required for each category of equipment or software in the system shall include information on the category's description, location, user, external connections to other systems, maintenance support, manufacturer, and other fields normally contained in a configuration management system.

C. BASELINE CONFIGURATIONS

Baseline configuration descriptions and drawings shall be provided and maintained for all systems. These configuration descriptions and drawings shall be updated to reflect the results of approved changes to the configurations. These documents shall be numbered such that it is possible to determine the historical evolution of baseline configurations to the current configurations. Changes from the previous version of the documents shall be clearly noted. For drawings, the information shall be provided to reflect the connectivity represented by network drawings

D. CHANGE AUTHORIZATION DOCUMENT REPORTS
Summary reports of all the documents that authorize changes to be made to the ITAMS-managed systems shall be provided. These reports shall contain approved Service Requests, Change Requests, and the Contractor's internal documentation.

E. CHANGE TRACE
Trace documentation of all changes between the original baselined systems and the current configuration shall be maintained for ITAMS-managed data systems.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

Insert Excel Worksheet
"Actual – Exhibit Y"
Page 1

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Actual – Exhibit Y"
Page 2

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Actual – Exhibit Y"
Page 3

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 1

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 2

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 3

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 4

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 5

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 6

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

Insert Excel Worksheet
"Variance – Exhibit Z"
Page 7

From Excel Spreadsheet
"Section J-3 DRD-6 Exhibits X, Y, and Z"

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Government Property Management Plan	March 2009	7	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

To describe the method of administering Government personal property.

5. DRD Category: *(check one)*

- ☐ Technical
- ☒ Administrative
- ☐ SR&QA

6. References *(Optional)*

Clause 52.245-1

7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

DISTRIBUTION: Formatting per JSC Property Custodian direction and electronic distribution per DRL.

SUBMISSION:

a. Initial - Due with proposal b. Final - Due 30 days after contract award

SUBMISSION FREQUENCY: Initial, with updates as required.

SCOPE: The Government Property Management plan defines the contractor's use, maintenance, repair, protection, and preservation of Government personal property. It shall describe the contractor's approach to receiving, handling, stocking, maintaining, protecting, and issuing Government property. The Plan should include interaction and Departmental/Office responsibilities. The delegated Property Administrator will request detailed procedures after contract start.

APPLICABLE DOCUMENTS: Federal Acquisition Regulation (FAR) Part 45 NASA FAR Supplement (NFS) Part 1845

CONTENT: This plan shall reference those policies and procedures, which constitute the contractor's Property Management Manual and shall include at a minimum the following categories:

Property Management	Acquisition	Receiving
Identification	Records	Movement
Storage	Physical Inventories	Reports
Consumption	Utilization	Maintenance
Subcontractor	Control Disposition	Contractor Closeout
Reconcile Contractor Records with Financial Records		Center-Unique Considerations

FORMAT: Contractor format is acceptable; electronic format and availability as required by the DRL.

MAINTENANCE: Changes shall be incorporated by change pages or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Organizational Conflict of Interest Avoidance Plan	March 2009	8	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
To ensure that conflict of interest mitigation exits.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
	DRD-5, Resource Management Plan

8. Preparation Information *(Include complete instructions for document preparation)*

SCOPE:

In accordance with NFS 1852.237-72, Access to Sensitive Information, the Contractor shall deliver a Conflict of Interest Avoidance Plan within 30 days after contract award.

CONTENT:

The Organizational Conflict of Interest Avoidance Plan shall discuss the following:

(1) Mitigation of utilization any sensitive information coming into the Contractor's possession only for the purposes of performing the services specified in this contract which may improve the Contractor's competitive position in another procurement.

(2) Safeguards for sensitive information coming into its possession from unauthorized use and disclosure.

(3) Safeguards for allowing access to sensitive information only to those employees that need it to perform services under this contract.

(4) Mitigation precluding access and disclosure of sensitive information to persons and entities outside of the Contractor's organization.

(5) Training of employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in this contract and to safeguard it from unauthorized use and disclosure.

(6) Plans to obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(7) Strict segregation/firewall of all personnel having access to sensitive information, including identification by name of those individuals who have been segregated for purposes of accessing sensitive information. The Contractor shall keep this list current and make this list available to the Government. Individuals on this list shall be employees with a "need to know." Disclosure of sensitive information to non-Government individuals not on this list is strictly prohibited.

FORMAT:

The format of the Organizational Conflict of Interest Avoidance Plan shall be defined by the contractor. The file shall be compatible with the JSC standard office software (Microsoft's Word 2003.)

MAINTENANCE:

The Organizational Conflict of Interest Avoidance Plan is a one time delivery with revisions as required.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Safety and Health Plan	04/08 (replaces 09/07b version)	9	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

Establishes Safety, Health, and Environmental Compliance Plan for contractors providing support to JSC organizations. ***The Office of Primary Responsibility for this DRD is the JSC Safety and Test Operations Division

5. DRD Category: *(check one)*

- ☐ Technical
- ☐ Administrative
- ☒ SR&QA

6. References *(Optional)*

OSHA CSP 03-01-003, Voluntary Protection Program (VPP): Policies and Procedures Manual
JSC 17773, Instructions for Preparation of Hazard Analysis for JSC Ground Operations
JPR 1700.1, JSC Safety and Health Handbook

7. Interrelationships *(e.g., with other DRDs) (Optional)*

Safety and Health Program Self Evaluation

8. Preparation Information *(Include complete instructions for document preparation)*

NOTE: UPON NASA APPROVAL, THE CONTRACTOR'S SAFETY, HEALTH, and ENVIRONMENTAL COMPLIANCE PLAN ("The Plan") BECOMES A CONTRACTUAL REQUIREMENT.

Frequency of Submission. Initial submission with the proposal. Upon NASA approval, the Contractor's Safety and Health Compliance Plan become a Contractual Requirement.

Distribution: After the plan is approved by NASA, the CO will retain the plan in the Contract file. The Contractor will send additional copies to each of the following:
Contracting Officer (1 hard copy, 1 electronic copy)
NS/Safety and Test Operations Division (2 hard copies, 1 electronic copy)
JSC Occupational Health Officer (1 hard copy)
JSC Emergency Preparedness Office (1 hard copy)

Subsequent Revisions to the Plan: Review the plan annually or as directed by the CO. The plan shall be updated to meet the latest OSHA, JSC, and VPP requirements. Provide a copy of the updated plan with the changes highlighted to the distribution list above at the start of each Contract year. If no changes are required after the annual review, notify the individuals in the distribution list in writing to that affect.

Other Deliverables: The requirements for this plan as detailed in the instructions on plan content below include instructions for specific reports and data to be submitted to the Government. These instructions are to be included in the plan and represent contractual commitments by the Contractor to provide this information.

Format:

1. Cover page - to include as a minimum, blocks for the signatures of Contractor's project manager and designated safety official; NASA COTR; JSC Safety and Test Operations Division: JSC Occupational Health Officer: and the NASA Contracting Officer. Other signatures may be required at the discretion of the Government. Once approved by NASA, signatures will be collected and the plan placed on the contract.

2. Table of Contents. See content below.

3. Body of plan - as required. Contractor's format is acceptable but should be aligned with the elements of the content below.

4. When preparing its plan, the Offeror/Contractor is expected to review all the items below and tailor its plan accordingly. The plan will clearly identify those resources to be provided by the Contractor and proposed resources to be provided by the Government. This review and supporting rationale is to be made available to the Government as part of this plan. It can be documented as a checklist or outline, inserted directly in the body of the plan, or in any

format developed by the Contractor that clearly conveys the results of this review including the basis for any underlying assumptions.

Details:

1. MANAGEMENT LEADERSHIP AND EMPLOYEE PARTICIPATION

1.1 Policy: Provide the Contractor's safety and health compliance policy statement with the plan. Compare the Contractor's policy statement with those of NASA and OSHA and discuss any differences.

1.2 Goals and Objectives. Describe your approach to the following:

1.2.1 Specific annual safety and health goals and objectives to be met.

1.2.2 Methods to be used, if any, to improve on the Days Away Case Rate (DACR), the Total Recordable Injury Rate (TRIR), and the total Days Away plus Restricted Duty plus Job Transfer (DART).

1.3 Management Leadership. Describe management's procedures for implementing its sustaining commitment to safety and health compliance through visible management activities and initiatives including a commitment to exercise management prerogatives to ensure workplace safety and health. Describe processes and procedures to making this visible in all Contract and subcontract activities and products. Include a statement from the project manager or designated safety official indicating that the plan will be implemented as approved and that the project manager will take personal responsibility for its implementation.

1.4 Employee Involvement. Describe procedures to promote, implement, and sustain employee (e.g., non-supervisory) involvement in safety and health compliance program development, implementation and decision-making. Describe the scope and breadth of employee participation to be achieved so that approximate safety and health risk areas of the Contract are equitably represented. Describe methods to be used to obtain employee buy in and address the behavioral aspects of safety.

1.5 Assignment of Responsibility. Describe line and staff responsibilities for safety and health program implementation. Identify any other personnel or organization that provides safety services or exercises any form of control or assurance in these areas. State the means of communication and interface concerning related issues used by line, staff, and others (such as documentation, concurrence requirements, committee structure, sharing of the work site with NASA and other Contractors, or other special responsibilities and support). As a minimum, the Contractor will identify the following:

1.5.1 Safety Representative - identify by title, the individual who will be trained and certified in accordance with JPR 1700.1 to be responsive to Center-wide safety, health and fire protection concerns and goals, and who will participate in meetings and other activities related to the JSC Safety and Health program.

1.5.2 Company Physician/Occupational Injury/illness case manager - identify a point of contact who is responsible for the transfer or receipt of company medical data and who will be the primary contact for the company in the event any employee suffers a work related injury or illness (such as the company physician) by name, address, and telephone number to the JSC Occupational Medicine Clinic, mail code SD32. This will facilitate communication of medical data to Contractor management. Prompt notification to the JSC Occupational Medicine Clinic shall be given of any changes that occur in the identity of the point of contact.

1.5.3 Building Fire Wardens - provide a roster of fire wardens at the start of each Contract year (their names, telephone numbers and pagers, and mail codes). Contractor fire wardens are needed to facilitate the JSC fire safety program, including coordination of related issues with NASA facility managers and emergency planning and response officials and their representatives. Fire wardens will be trained in accordance with JPR 1700.1. The Roster shall be maintained by letter to the JSC Safety and Test Operations Division, mail code NS2, with copies to the Contracting Officer and the Contracting Officers Technical Representative. The initial letter shall be received by the Government not later than 15 days after contract start.

1.5.4 Designated Safety Official - identify by title the official(s) responsible for implementation of this plan and all formal contacts with regulatory agencies and with NASA.

1.6 Provision of Authority. Describe consistency of the plan for compliance with applicable NASA and JSC requirements and contractual direction as well as applicable Federal, State, and Local regulations and how compliance will be maintained throughout the life of the contract.

1.7 Accountability. Describe procedures for ensuring that management and employees will be held accountable for implementing their tasks in a safe, healthful, and environmentally compliant manner. The use of traditional and/or innovative personnel management methods (including discipline, motivational techniques, or any other technique that ensures accountability) will be referenced as a minimum and described as appropriate.

1.8 Program Evaluation. Describe your approach to safety and health program evaluation. The program evaluation consists of:

1.8.1 [RESERVED.]

1.8.2 A written self-evaluation report to be delivered once per year. The self evaluation shall be provided for the Contractor performance evaluation. The self-evaluation shall follow the VPP program evaluation report format found in OSHA CSP 03-01-003, Voluntary Protection Program (VPP): Policies and Procedures Manual, Appendix C, "Format for Annual Submissions", as mandated by the cognizant OSHA regional office. Contractors who have submitted a written self-evaluation as a VPP site may submit their original report to OSHA in lieu of writing a new self-evaluation provided that all action plans and status are updated. The self-evaluation shall as a minimum cover the elements of the approved safety and health plan.

1.9 Miscellaneous Reports. The Contractor will acknowledge the following as standing requests of the Government and to be handled as described below.

1.9.1 Roster of Terminated Employees. Identify personnel terminated by the contractor. Send to the JSC Occupational Health Officer, no later than 30 days after the end of each contract year. At the contractor's discretion, the report may be submitted for personnel changes during the previous year or cumulated for all years. Information required:

a. Date of report, Contractor identity, and Contract number.

b. For each person listed, provide name, social security number, and date of termination.

c. Name, address, and telephone number of Contractor representative to be contacted for questions or other information.

1.9.2 Material Safety Data Sheets (MSDS). The Contractor shall prepare and/or deliver MSDS for hazardous materials brought onto Government property or included in products delivered to the Government. This data is required by the Occupational Safety and Health Administration (OSHA) regulation, 29 CFR 1910.1200, "Hazard Communication", EPA "Emergency Planning and Community Right-to-Know (EPCRA, ref. 40 CFR 302, 311, 312); and the Texas Department of Health (TDH, ref. Chapters 505-507 of the Health and Safety Code), and Federal Standard 313 (or FED-STD-313), "Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities", as revised. This inventory is also required by JPR 1700.1, "JSC Safety and Health Handbook", as revised. 1 copy of each MSDS will be sent upon receipt of the material for use on NASA property to the JSC Central MSDS Repository, maintained by the JSC Occupational Medicine Occupational Health contractor, along with information on new or changed locations and/or quantities normally stored or used. If the MSDS arrive with the material and is needed for immediate use, the MSDS shall be delivered to the Central MSDS Repository by close of business of the next working day after it enters the site.

1.9.3 Hazardous Materials Inventory. The Contractor shall compile an inventory report of all hazardous materials it has located on Government property quarterly, and which is within the scope of 29 CFR 1910.1200, "Hazard Communication"; and Federal Standard 313 (or FED-STD-313), "Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities", as revised. This inventory is also required by JPR 1700.1, "JSC Safety and Health Handbook", as revised. The call for this inventory and instructions for delivery will be issued by the JSC Occupational Medicine Occupational Health contractor, mail code SD33. This information shall use the format used by JSC for chemical inventory compilation to provide the following:

a. The identity of the material (product number, chemical, manufacturer, and NSN as available.

b. The location of the material by building, room and area/cabinet number.

c. The quantity of each material normally kept at each location (number of containers, container size, type container, unit of measure, conversion factor, storage temp & pressure, physical state/form, specific gravity, total pounds).

d. Peak quantity stored.

e. Actual or estimated rate of annual usage of each chemical.

1.10 Government Access to Safety and Health Program Documentation. The Contractor shall recognize, in its plan, that all safety and health documentation (including relevant personnel records) be available for inspection or audit at the Government's request. Electronic access by the Government to this data is preferred as long as Privacy Act requirements are met and Government safety and health professionals and their representatives have full and unimpeded access for review and audit purposes. For Contractor activities conducted on NASA property, the Contractor will identify what records will made available to the Government in accordance with the criteria of OSHA as implemented in JPR 1700.1, "JSC Safety and Health Handbook", as revised. For the purpose of this plan, safety and health documentation includes but is not limited to: logs, records, minutes, procedures, checklists, statistics, reports, analyses, notes, or other written or electronic document which contains in whole or in part any subject matter pertinent to safety, health, or emergency preparedness.

1.11 Review and Modification of Safety Requirements. The Contractor may be requested to participate in the review and modification of safety requirements that are to be implemented by the Government including any referenced documents therein. This review activity will be implemented at the direction of the NASA Contracting Officer's Technical Representative (**COTR)** in accordance with established contractual procedures.

1.12 Procurement. Identify procedures used to assure that procurements are reviewed for safety and health compliance considerations and that specifications contain appropriate safety criteria and instructions. Set forth authority and responsibility to assure that safety tasks are clearly stated in subcontracts.

1.13 Certified Professional Resources. Discuss your access to certified professional resources for safety and health protection. Discuss their roles in motivation/awareness, worksite analysis, hazard prevention and control, and training.

2. WORKSITE ANALYSIS

2.1 ANALYSIS OF Worksite Hazards. . Contractor worksite hazards shall be systematically identified through a combination of surveys, analyses, and inspections of the workplace, investigations of mishaps and close calls, and the collection and trend analysis of safety and health data such as: records of occupational injuries and illnesses, findings and observations from preventive maintenance activities, facilities related incidents related to partial or full loss of systems functions; etc. Describe how hazards identified by any of the techniques identified below shall be ranked, processed, and mitigated in accordance with JPR 1700.1. All hazards on NASA property, which are immediately dangerous to life or health, shall be reported immediately to the Safety and Test Operations Division. All safety engineering products that address operations, equipment, etc., on NASA property will be subject to JSC Safety and Test Operations Division review and concurrence unless otherwise waived by the JSC Safety and Test Operations Division.

2.2 Industrial Hygiene. Describe your industrial hygiene program and how it will be coordinated with the JSC Government provided resources for industrial hygiene. In the event corporate resources are used to determine workplace exposures, copies of all monitoring data shall be provided to JSC Occupational Medicine Occupational Health contractor within 15 days of receipt of results.

2.3 Hazard Identification. Describe the procedures and techniques to be utilized to compile an inventory of hazards associated with the work to be performed on this Contract. This inventory of hazards shall address the work specified in this Contract as well as operations and work environments in the vicinity or in close proximity to Contract operations. The results will be reported to the Government in a manner suitable for inclusion in facilities baseline

documentation as a permanent record of the facility. Specific techniques to be considered include:

2.3.1 Comprehensive Survey - A "wall to wall" engineering assessment of the Contractor's worksite, which includes the Government furnished facilities to be used by the contractor and the immediate vicinity in which contractual work or tasks will be performed. This assessment encompasses facilities, equipment, materials, and processes.

2.3.22 Change (Pre-use) Analysis - Typically addresses modifications in facilities, equipment, processes, and materials (including waste); and related procedures for operations and maintenance. Change analyses periodically will be driven by new or modified regulatory and NASA requirements.

2.3.3 Hazard Analysis - May address facilities, systems/subsystems, operations, processes, materials (including waste), and specific tasks or jobs. Analyses and report formats will be in accordance with JSC 17773, "Preparing of Hazard Analyses for JSC Ground Operations."

2.3.4 The Contractors safety plan will describe the flow of the findings of the comprehensive survey of hazards into hazard analyses and job hazard analyses and subsequently into controls such as design, operations, processes, procedures, performance standards, and training. The contractor will discuss its approach to notify NASA and other parties external to the contract work of its identified hazards and subsequent analyses and controls.

2.4 Inspections. Includes assignments, procedures, and frequency for regular inspection and evaluation of work areas for hazards and accountability for implementation of corrective measures. The Contractor will describe administrative requirements and procedures for control of regularly scheduled inspections for fire and explosion hazards. The Contractor has the option, in lieu of this detail, to identify policies and procedures with the stipulation that the results (including findings) of inspections conducted on NASA property or involving Government furnished property will be documented in safety program evaluations or the monthly Accident/Incident Summary reports. Inspections will identify:

a. Discrepancies between observed conditions and current requirements, and,

b. New (not previously identified) or modified hazards.

c. Use of JSC's Hazard Abatement Tracking System to manage hazards onsite at JSC (see paragraph 3.12 below).

2.5 Protective Equipment - Set forth procedures for obtaining, inspecting, and maintaining all appropriate protective equipment, as required, or reference written procedures pertaining to this subject. Set forth methods for keeping records of such inspections and maintenance programs.

2.6 Employee Reports of Hazards - Identification of methods to encourage employee reports of hazardous conditions (e.g., close calls) and analyze/abate hazards. The Contractor will describe steps it will take to create reprisal-free employee reporting with emphasis on management support for employees and describe methods to be used to incorporate employee insights into hazard abatement and motivation/awareness activities.

2.7 Accident and Record Analysis

2.7.1 Mishap Investigation – identification of methods to assure the reporting and investigation of mishaps including corrective actions implemented to prevent recurrence. The Contractor will describe the methods to be used to report and investigate mishaps on NASA property and on Contractor or third party property. The Contractor will describe its procedures for implementing immediate notification of NASA using the call tree in 2.7.1.a below. The use of the quick incident reports found at the lower center of the home page of the NASA Incident Reporting Information System (IRIS) at https://nasa.ex3host.com/iris/newmenu/login.asp and use of NASA forms as specified in JPR1700.1 or any alternate forms used by Contractor. The contingency plan will emphasize timely notification of NASA; preliminary and formal investigation procedures; exercise of jurisdiction over a mishap investigation involving NASA and other contractor personnel; preparation and submission of a formal report to NASA; follow up of corrective actions; communication of lessons learned to NASA; and solutions to minimize duplications in reporting and documentation including use of alternate forms, etc. The Contractor will discuss its procedures for immediate notification requirements for fires, hazardous materials releases, and other emergencies. The Contractor will include appropriate details to address the following:

Note: the NASA Form 1627 is not attached since it is a three part carbonless form not conducive to reproduction. This form is NOT available from JSC or NASA forms management; it can be obtained from the following link: http://jschandbook.jsc.nasa.gov/ .

a. The Contractor will include a mishap contingency plan as part of the Safety and Health Plan which meets the requirements of NPR 8621.1B, "NASA Procedural Requirement for Mishap and Close Call Reporting, Investigating, and Recordkeeping", and JPR 1700.1, ****JSC Safety and Health Handbook".** The plan will identify the method of immediately notifying NASA in the advent of a type A or B mishap or C property damage mishap and close call with equivalent potential so NASA may take custody of the mishap scene and initiate its investigation as soon as it is safe following the mishap. The Contractor will immediately contact the JSC Safety and Test Operations Division at 281-483-1935 for guidance when a Type A or B mishap or Type C property damage mishap occurs in the course of performing work on a NASA Contract in whole or in part. The contingency plan will clearly identify the Government investigation as taking precedence over any contractor investigation.

b. For Type C injuries and all lower level mishaps, the Contractor will perform its own investigation and submit a report to NASA in accordance with the requirements of NPR 8621.1. The Contractor will ensure that NASA is promptly notified of any Type D mishap so that NASA provides a civil servant to oversee the investigation in an ex officio capacity prior to start of any formal investigation. All initial reports and selected follow up reporting will be accomplished using IRIS.

c. When a NASA investigation is required, witnesses will be identified and their names and contact information provided to NASA investigator but witness statement must be requested and collected by NASA. Such statements will be retained by the Government as part of the mishap file in accordance with NPR 8621.1.

d. The Contractor will deliver to NASA mishap reports which shall include the data specified in NPR 8621.1 for the level of mishap. NASA approval and endorsements will be required as specified in NPR 8621.1 and included in the approved Safety and Health Plan.

2.7.2 Trend Analysis – Describe approach to performing trend analysis of data (occupational injuries and illnesses; facilities, systems, and equipment performance; maintenance findings; etc.). Discuss methods to identify and abate common causes indicated by trend analysis. In support of site-wide trend analysis to be performed by the Government, the Contractor will discuss method of providing data as follows.

a. Accident/Incident Summary Report - The Contractor shall prepare and deliver Accident/Incident Summary Reports as specified on JSC Form 288, "Accident/Incident Statistics" as revised. All new and open mishaps, including vehicle accidents, incidents, injuries, fires, and close calls shall be described in summary form along with current status. Negative reports are also required monthly. Report frequency is monthly; date due is the 10th days of the month following each month reported. Report to be delivered to the JSC S & MA Directorate through the Safety and Test Operations Division, mail code NS2, by fax to 281-244-0426 or by attaching to an e-mail and transmitting to JSC-Safety-Report-Submittals@mail.nasa.gov.

b. Log of Occupational Injuries/Illnesses

i. For each establishment on and off NASA property that performs work on this Contract, the Contractor shall deliver, to the Government, a copy of its annual summary of occupational injuries and illnesses (OSHA 300 and OSHA 300A or equivalent) as described in Title 29, Code of Federal Regulations, Subpart 1904.5 If the Contractor is exempt by regulation from maintaining and publishing such logs, equivalent data in Contractor's format is acceptable (such as loss runs from insurance carrier) which contains the data required by JSC Form 288.

ii. Data shall be compiled and reported by calendar year and provided to the Government within 45 days after the end of the year to be reported (e.g. not later than February 15 of the year following).

3. HAZARD PREVENTION AND CONTROL

3.1 Identified hazards must be eliminated or controlled. In the multiple employer environment of the Center, it is

required that hazards including discrepancies and corrective actions be collected in a Center wide information system Hazard Abatement Tracking System (HATS) for risk management purposes. Describe your approach to implementing this requirement.

3.2 Appropriate Controls. Discuss approach to consideration and selection of controls. Discuss use of hazard reduction precedence sequence (see JPR 1700.1). Discuss approach to identifying and accepting any residual risk. Discuss implementation of controls including verifying effectiveness. Discuss scope of coverage (hazardous chemicals, equipment, energies, etc.). Discuss need for coordination with safety, health, and emergency authorities at NASA.

3.3 Hazardous Operations and Processes. Establish methods for notification of personnel when hazardous operations and processes are to be performed in their facilities or when hazardous conditions are found to exist during the course of this Contract. JPR 1700.1 will serve as a guide for defining, classifying, and prioritizing hazardous operations; 29 CFR 1910.119 will be the guide for hazardous processes when the material or process meets the requirements therein. Develop and maintain a list of hazardous operations and processes to be performed during the life of this Contract. The list of hazardous operations and processes will be provided to JSC as part of the plan for review and approval. JSC and the Contractor will decide jointly which operations and processes are to be considered hazardous, with JSC as the final authority. Before hazardous operations or processes commence, the Contractor will develop a schedule to develop written procedures with particular emphasis on identifying the job safety steps required. NASA will have access on request to any Contractor data necessary to verify implementation. For all identified operations or processes that may have safety or health implications outside Contract operations, the Contractor shall identify such circumstances to the JSC Safety and Test Operations Division and Occupational Health Officer who will provide additional instructions for further NASA management review and approval.

3.4 Written Procedures. Identification of methods to assure that the relevant hazardous situations and proper controls are identified in documentation such as inspection procedures, test procedures, etc., and other related information. Describe methods to assure that written procedures are developed for all hazardous operations, including testing, maintenance, repairs, and handling of hazardous materials and hazardous waste. Procedures will be developed in a format suitable for use as safety documentation (such as a safety manual) and be readily available to personnel as required to correctly perform their duties.

3.5 Hazardous Operations Permits. Identify facilities, operations and/or tasks where hazardous operations permits will be required as specified in JPR 1700.1 such as confined space entry, hot work, etc. Set forth guidance to adhere to established NASA JSC procedures. Clearly state the role of the safety group or function to control such permits.

3.6 Operations Involving Potential Asbestos Exposures. Set forth method by which compliance is assured with JSC Asbestos Control Program as established in JPR 1700.1, as revised.

3.7 Operations Involving Exposures to Toxic or Unhealthful Materials. Such operations must be evaluated by the JSC Occupational Health Office and must be properly controlled as advised by same. JSC Occupational Medicine must be notified prior to initiation of any new or modified operation potentially hazardous to health.

3.8 [Reserved.]

3.9 Baseline Documentation. Discuss the Contractor's responsibilities for maintaining facilities baseline documentation in accordance with JSC requirements. The Contractor will implement any facilities baseline documentation tasks (including safety engineering) as provided in the Contractor's plan approved by NASA or as required by Government direction.

3.10 Preventive Maintenance. Discuss approach to preventive maintenance. Describe scope, frequency, and supporting rationale for your preventive maintenance program including facilities and/or equipment to be emphasized or de-emphasized. Discuss methods to promote awareness in the NASA community (such as alerts, safety flashes, etc.) when preventive maintenance reveals design or operational concerns in facilities and equipment (and related processes where applicable).

3.11 Medical (Occupational Healthcare) Program. Discuss the Contractor's medical surveillance program and injury/illness case management to evaluate personnel and workplace conditions to identify specific health issues and

prevent degradation of personnel health as a result of occupational exposures. Discuss approach to Cardiopulmonary Resuscitation (CPR), first aid, and, return to work policies and the use of Government provided medical and emergency facilities for the initial treatment of occupational injuries/illnesses.

3.12. Hazard Correction and Tracking. Discuss your system for correcting and tracking safety, health, and environmental hazards with particular emphasis on integration with JSC's Hazard Abatement Process (found on line @ http://www.srqa.jsc.nasa.gov/HATS/). (The scope is restricted to establishments at JSC, Sonny Carter Training Facility, and Ellington Field.) This includes the following:

3.12.1 .1Personnel Awareness of Hazards. Discuss your approach to communicate unsafe conditions and approved countermeasures to your employees. Discuss your approach to communicating such conditions to the Government and other Contractors whose personnel may be exposed to such unsafe conditions. Discuss communications with Facility Managers. Discuss use of the NASA Lessons Learned Information System for both obtaining lessons from other sources and as a repository for lessons learned during performance of the Contract.

3.12.22 Interim and Final Abatement Plans - Describe how you will approach interim and final abatement of hazards. Describe how you will provide data to the JSC HATS for all hazards within Contractor-occupied facilities that are not finally abated (all interim and final abatement actions completed) within 30 days of discovery. Discuss your approach to posting such plans using JSC Form 1240, "JSC Notice of Safety or Health and Action Plan", or equivalent. Discuss compatibility of your system with JSC's role of facility managers in abatement planning, implementation, and verification.

3.13 Disciplinary System. Describe your system for ensuring safety and health discipline in your personnel (including subcontractors). Describe your approach to modifying personnel behaviors when personnel are exhibiting discrepant safety and health performance.

3.14 Emergency Preparedness. Discuss approach to emergency preparedness and contingency planning which addresses fire, explosion, inclement weather, etc. Discuss compliance with 29 CFR 1910.120 (HAZWOPER) and role in JSC Incident Command System (see JPR 1700.1 for details). Discuss methods to be used for notification of JSC emergency forces including emergency dispatcher, safety hotline, director's safety hotline, etc. Discuss establishment of pre-planning strategies through procedures, training, drills, etc. Discuss methods to verify emergency readiness.

4. SAFETY AND HEALTH TRAINING

4. Discuss the following:

4.1 Describe the Contractor's training program including identification of responsibility for training employees to assure understanding of safe work practices, hazard recognition, and appropriate responses for protective and/or emergency countermeasures, including training to meet Federal, State, and Local regulatory requirements.

4.2 Describe approach to identifying training needs including traceability to exercises such as job safety analyses, performance evaluation profiles, hazard analyses, mishap investigations, trend analyses, etc.

4.3 Describe approach to training personnel in the proper use and care of personal protective equipment (PPE).

4.4 Discuss tailoring of training towards specific audiences (management, supervisors, and employees) and topics (safety orientation for new hires, specific training for certain tasks or operations).

4.5 Discuss approach to ensure that training is retained and practiced. Discuss personnel certification programs. Certifications should include documentation that training requirements and physical conditions have been satisfied (examples include physical examination, testing, and on-the-job performance).

4.6 Address utilization of JSC safety and health training resources (such as asbestos worker training/certification, hazard communication, confined space entry, lockout/tagout, etc.) as appropriate with particular emphasis on programs designed for the multiple employer work environment on NASA property. If the Contractor wishes to train their personnel in any regulatory mandated training, an agreement will be secured with JSC Occupational Safety Branch and Occupational Health and Test Operations Division and the JSC Occupational Health Officer Support office

prior to beginning training. The agreement will ensure that safety and health training resources available from NASA are utilized where appropriate.

4.7 Discuss approach to making all training materials and training records available to NASA, and other Federal, state, and local agencies for their review upon request.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Standard Operating Procedures	March 2009	10	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

These procedures shall provide guidance for interfacing with other organizations and specific tasks required in the process of meeting customer requirements, and shall instruct technicians, production personnel, and other users in the proper setup and operations of systems. These procedures are not intended to document the details of how the tasks or interfaces are to be accomplished.

5. DRD Category: *(check one)*

- ☒ Technical
- ☐ Administrative
- ☐ SR&QA

6. References *(Optional)*

7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

A. NASA will provide existing SOPs, if available. The Contractor shall review the SOPs to determine if any modifications are required and submit Standard Operating Procedures documentation where required. Format for these SOPs shall be approved by the Government and similar to the template provided in Appendix A. SOPs shall include the detailed instructions necessary to provide the products and services as described in the SOW. These procedures shall:

1. Describe each system in terms of the requirements it fulfills, the equipment comprising the system, and any interconnection to other systems
2. Reference system engineering drawing numbers
3. Reference manufacturers' operations manuals
4. Give specific details on setup configurations related to the intended equipment functions
5. Give step-by-step system check instructions that, when performed, verify the system is functioning as designed
6. Give step-by-step instructions on how to operate the system equipment to achieve every stated purpose of the system, including references to manufacturers' manuals when appropriate
7. List the required customer interfacing tasks
8. List other procedures applicable to performing a specific system operation (e.g., NISN procedures should be referenced in documents related to establishing an inter-center video teleconference)
9. Cross reference any corresponding Standard Operating Procedures
10. Reference preventive maintenance procedures

B. The Contractor shall create and maintain detailed instructions necessary to manage, maintain, and distribute the still photography, video, film, audio collections and documents to clients as described in the SOW

These procedures shall describe:

1. Products to be distributed
2. Means of distribution
3. Record-keeping of distributed products including customers and organizations supported
4. How the products are organized in the library
5. How tasks assigned will be scheduled, performed, and managed
6. Each information search system in terms of the requirements it fulfills, the equipment comprising the system, and the interconnection to other systems

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

Information Technology and Multimedia Services
Information Resources Directorate
Lyndon B. Johnson Space Center
Houston, TX

DOCUMENT COVER SHEET

SOP title
SOP #

(DRD-10, Standard Operating Procedures)

Prepared by:	Name Title	Date:
Approved:	Name Title	Date:
Approved:	Name Title	Date:
NASA Approved:	Name Title	Date:
Received:	Name Title	Date:

Change Record

Rev.	Date	Originator/Phone	Description
Baseline	MM/DD/YY	Name/Extension	Initial Release

ITAMS
JSC/WSTF

DRD reference, if applicable
(Ex. DRD-10, Standard Operating Procedures)

TITLE
Descriptive Title (Ex. Mission Video Procedures for Automation System ISS Sleep Shift Record Checklist)
NUMBER
SOP Number (Ex. ITAMS-DMS-001)

EFFECTIVE DATE
MM/DD/YY

REPLACES ISSUE DATED
MM/DD/YY

1. PURPOSE:

Provides guidelines for what needs to be accomplished by this SOP.

Ex.: Provides guidelines for what needs to be accomplished by Mission Video on a week by week basis leading up to a shuttle launch.

2. SCOPE:

Provide a description of the relevant areas for which this SOP applies.

Ex.: Room 945 in building 1 is a conference room with the ability to connect to a video teleconference to view and speak with others at other VTC capable sites.

3. REFERENCES/DOCUMENTS:

Any associated reference or applicable documents referenced in this document or relevant in the preparation for use of this SOP (e.g. user manuals, other SOPs, system schematic, event schedules, etc.)

Ex.:

- Digital Mastering System Work Flow File Management, DMS-SOP-002
- Digital Mastering System Quality and Process Control, DMS-SOP-003
- DRD-14, Mission Support Planning
- Mission Imagery Products List (MIPL)

4. QUALITY RECORDS AND FORMS:

Provide any relevant quality records produced by this SOP and any forms needed during the execution of the procedure.

Ex.:

- Shuttle mission SVAS switch setting checklist
- Mission Imagery Products List (MIPL)

5. DEFINITIONS:

Provide any definitions needed
MRPA – Mater Record and Playback Area
DMS – Digital Mastering System
SVAS – Signal Validation and Acquisition System

6. RESPONSIBILITIES:

Provide a list of the responsibilities for the individuals involved in this process.

Ex.:
It is the responsibility of the operator mastering a set of Digital Imagery files received via OCA assets to ensure that the mastering process is completed in an identical fashion to the Digital Imagery clips that were mastered before them.

7. PROCEDURE:

Describe the procedure to be followed.

Ex.:
Any ISS crew may, at any time, downlink small video clips with their bulk still imagery dumps via OCA assets. Mission Video masters each Expedition's clips on their own master, **The ISS Exp. XX Digital Imagery reel.**

1. Clips arrive via OCA assets and are given to an operator in the DIL.

2. The DIL operator will notify the MRPA that the clips have been sent down, noting the number and format of the clips.

3. The naming convention of the clips will be as follows: EXP__GMTXXX-XXXXXXXXX, with the first set of X's representing the GMT date the clip was sent down and the second set of X's representing the clip's original name. If the clips have not been renamed to this convention upon receipt at Mission Video, they should be renamed as soon as possible.

4. The DIL operator either places the clips in a shared dropbox on the DMS SAN – P:\OCADownlink\Dropbox – or burns them to CD-R and hand delivers them.

5. A Mission Video operator will take the clips and determine if they are usable in Premiere Pro or if they need to be re-encoded as an uncompressed AVI.

6. A copy of both the original and converted files will be placed on an ongoing data DVD master. The originals will be placed in a folder entitled **Originals**, the converted into a folder entitled **Converted**. This DVD master is retained in the DMS on a labeled shelf until end of an ISS Increment.

7. The converted (if was necessary) files are also captured on a DigiBeta master. Each clip will be entered separately on the master log and be preceded by a slate with the current ISS crew title (i.e. Expedition 10), the name of the clip, the GMT date and time the clip was downlinked on, and the cut number on the master reel. The Digital Imagery file infrastructure can be found at **P:\Digital Imagery**. The slate master is there; please only make the changes you need and save as a new file when done. The exact same information is to be noted on the master log. Five seconds of black will follow each clip. Each clip must also be backed up to Profile, Exabyte, and to VAMS. The master DigiBeta resides in the library when not needed.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Preventive Maintenance and Operational Readiness Documentation	March 2009	11	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

These plans and reports are the contractor's description of how preventive maintenance and operational readiness check requirements will be satisfied and reported for all equipment. Operational Readiness Checks are primarily intended to be performed on equipment that is used to support missions, equipment that is often left idle for periods of time, and critical IT equipment. A list of systems and subsystems that require operational readiness checks are listed in the Attachments J-5, J-10 and J-11.

5. DRD Category: *(check one)*

- ☒ Technical
- ☐ Administrative
- ☐ SR&QA

6. References *(Optional)*

7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

These plans and reports shall describe the management activities and record-keeping processes necessary to maintain all equipment and systems listed in Attachments J-5, J-10 and J-11 and must be approved by the CO.

A. Preventive Maintenance (PM) Plan

- Individually list the systems, subsystems, and individual pieces of equipment that require preventive maintenance as well as the maintenance schedule.
- Create a list of parameters checked for every preventive maintenance item. For vendors doing the preventive maintenance, provide their checklist.
- Utilize vendor-provided information describing how PM is to be done for specific equipment. The Contractor shall utilize its knowledge of best practices for providing a reasonable maintenance approach when vendor recommendations are not available.

B. Operational Readiness Check (ORC) Plan

- Individually list the systems, subsystems, and individual pieces of equipment that require operational readiness checks. ORCs are simple checks of the operability of the systems typically performed by operations personnel. ORC processes can be automated such as the use of the Government provided NetIQ system for servers.
- Create a list of the operational functions checked for every system.

C. Maintenance Agreement and License Renewal Plan

- Individually list the hardware or hardware components that require maintenance agreements.
- Individually list the software or software components that require licensing renewals.
- Provide a schedule for the times when the maintenance agreements or licensing agreements are due and when the agreements or renewals will be put in place.
- Provide an estimated cost for each item and also totals based on hardware, software and total cost of agreements and renewals.

D. Preventive Maintenance Report

- In a cumulative report, list the system affected, the date of completion, and description of the work performed, for each PM activity.

E. Operational Readiness Check Report

- In a cumulative report, list the system affected, the date/time of completion, and description of the work performed, for each ORC activity (exceptions to items reported will be provided by the CO).

F. Maintenance Agreement and License Renewal Plan Report

- In a cumulative report, list the hardware/hardware components and the current status of the maintenance agreement.
- In a cumulative report, list the software/software components and the current status of the licensing renewals.
- In a report list the current status of all procurements that are due, in progress, or completed during the reporting period

G. Obsolescence Plan

- The contractor shall develop an obsolescence plan for equipment and systems. The plan shall identify and address equipment systems that will become unsupportable during the period of execution of the contract. The plan shall identify what upgrades are necessary to maintain the functionality of the system or suggest a replacement system.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Problem Reporting/Resolution	March 2009	12	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall use the IRD online problem reporting system to track and monitor operational failures, incidents, discrepancies, and problem disposition/resolution.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

The Contractor shall create a report using the IRD online problem reporting system that contains, at a minimum, the following information on operational failures, incidents, discrepancies, and problem disposition/resolution:

1. Ticket number
2. Customer name and organization
3. Date/time opened
4. Date/time closed
5. Nature of problem
6. System(s) affected
7. Who the ticket was assigned to
8. Problem Resolution

Status report shall be submitted monthly with format and content as negotiated with the COTR.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Contractor Status Report	March 2009	13	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Used to apprise the Government of significant actions, accomplishments, changes and problems associated with the delivery of products, services, and information, as specified under this contract. Also used to provide data for trend analysis and NASA management decision making.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

The Contractor shall prepare and submit monthly progress reports documenting status and progress at the WBS and Task Order levels. Interim informal weekly reports also will be submitted and follow the general content guidelines of the monthly report. The reports shall include, for example:

1. A narrative description of the status of the contract at the WBS and Task Order levels, including progress toward completion.
2. For Task Order level reporting, a description of the status of each activity.
3. A descriptive summary of all current problems, proposed action for resolution, and status of implementation.
4. A status of action items.
5. Any known threats to the successful execution of the activity.
6. A summary of activity planned for the next month.

Each SOW element may have specific reporting requirements that do not relate to the direct execution of the contract, but rather information regarding some item within the JSC infrastructure. The performance expectations for these reports are the same as the reports mentioned in this DRD.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Mission Support Planning Documents	March 2009	14	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall provide plans to define, coordinate, and execute the engineering, maintenance, logistics, and imagery support required during mission periods as defined by task orders issued under the ITAMS contract.	☒ Technical ☐ Administrative ☐ SR&QA
6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

The Mission Support Plan shall provide a plan for the engineering, maintenance, logistics, and imagery support required during mission periods. A Shuttle Imagery Plan (SIP) shall be prepared for every Space Shuttle launch. An ISS Increment Imagery Plan (ISSIP) shall be prepared prior to each International Space Station Increment Mission. A Constellation Imagery Plan (CIP) shall be prepared for each Constellation program mission or significant program event as directed by the Government.

Approval for the mission support plans shall be by the COTR.

A. Mission Support Plan (MSP)

The Mission Support Plan (MSP) shall designate the mission-sensitive systems for which the contractor has responsibility. The MSP shall include directives and constraints concerning installation, modification, configuration control, and operation during designated mission periods of the designated mission-sensitive systems, in accordance with the IRD Mission Support Plan, JSC-27877.

The MSP shall specify the necessary engineering, maintenance, and logistics support required during mission periods. The MSP shall include a current list of key contacts responsible for coordinating and providing the required Engineering and Maintenance Management, Hardware/ Facilities, Workstations, Telecommunications, Networks, Software, Computer Operations, and User Support during the designated mission periods.

B. Shuttle Imagery Plan (SIP)

The contractor shall prepare and deliver a Shuttle Imagery Plan (SIP) to the Government two (2) weeks prior to every Space Shuttle launch. This will include any products produced from downlinked imagery or film, video, and digital camera media brought down on the Shuttle. This also will include any film, videotape, or digital camera media brought down on the Shuttle, but considered to be ISS imagery. The SIP will be derived from requirements provided by the COTR, the Payload Integration Library System (PILS)[specifically the Payload Integration Plans (PIP) and the Flight Requirement Documents (FRD)], and the Increment Data Requirements Document (IDRD), annex 3.

A Shuttle Imagery Plan (SIP) shall include:

1. Films flown (including type, emulsion number, and film speed), video tape, PC Card, other media and quantities of each
2. A schedule depicting when all mission video and digital still camera processing events are scheduled to occur.
3. A schedule of mission products.
4. A report that summarizes when mission products have been completed.

A follow-up report for the Shuttle Imagery Plan (SIP) is required 45 calendar days after landing.

C. ISS Increment Imagery Plan (ISSIP)

Since ISS operations are continuous, an ISS Increment Imagery Plan (ISSIP) shall be prepared and updated 2 weeks prior to each ISS Increment Mission to document the level of support for ISS increments. This plan will include:

1. General staffing to meet ongoing requirements and reflect current budgetary restraints.
2. List of products produced.
3. A schedule depicting when all mission video and digital still camera processing events are scheduled to occur.

D. Constellation Imagery Plan (CIP)

The contractor shall prepare and deliver a Constellation Imagery Plan (CIP) to the Government two (2) weeks prior to every vehicle launch. This will include any products produced from downlinked imagery or film, video, and digital camera media created during a Constellation mission. The CIP will be derived from requirements provided by the COTR.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Television Production Deliverables	March 2009	15	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall provide plans to define, coordinate, and execute the television production projects as defined by task orders issued under the ITAMS contract.	☒ Technical ☐ Administrative ☐ SR&QA
6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

A. Television Production Plan

This plan shall summarize the requirements, describe the technical and creative approach that will satisfy those requirements, and provide preliminary technical information. The plan shall be provided to the Government for approval prior to start and the final report provided to the Government when the production is finished.

The Contractor shall prepare the document in the following format:

1. Outline of the programs
2. The Treatment (the narrative description of the approach to be used)
3. A description of the creative techniques and technical factors which are required to fulfill the approach
4. An explanation of any proposed changes in the scope or nature of the production, based on the producer's research and discussions with the requester.
5. Plan costs shall include estimates for labor hours and dollars, materials, and equipment. The labor cost estimates shall be based upon fully burdened rates, averaged for the anticipated skill mix.

B. Television Production Final Report

This report summarizes the actions and approval steps taken during the production phase. It includes detailed records that can be used to re-create or revise the program, if necessary. It consists of:

1. The Television Production Plan
2. The Final Script (With Producer's /Director's notes)
3. The Production Approval Sheet, documenting the reviews and approvals and milestones during the process.
4. Music and/or copyrighted clearances and talent releases.
5. A copy of the approved NASA work request.
6. The Final Title, description, program length, and reference numbers of the master videotape.
7. An abstract of production content.
8. Summary of costs.
9. Include a DVD copy of the production in a plastic sleeve.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data referenced in this DRD as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

EXAMPLE TREATMENT

Title: Constellation: Exploring the Future

Run time: Under 10 minutes in length

Producer: Joe Smith

Audience: General Public and NASA internal

Contacts: Constellation PAO Representative

Due Date: Sept 30, 2008

Purpose:

This short and dynamic video program will be used to inform the viewer about advances in exploration technology. The video will highlight the accomplishments achieved by the program, and illustrate how X Group is a key component to development of future planetary surface exploration requirements and technologies. Graphics and effects will be utilized to give the program a contemporary and energetic look.

Description:

The video will begin with a pan of the Martian landscape. A narrator begins to explain how "humankind is going farther and discovering more than ever before" and that the "tools, techniques and technology" needed for this exploration must be tested. We see a tight shot of a spacesuit glove, holding a rock just broken off as a sample. The sky and background are tinted red to give the impression we are on Mars, witnessing a new discovery taking place. Go to our host- someone young and energetic (TBD) who represents the future. This host will give a brief introduction to every chapter, and will narrate the production as well. For this first appearance, the host gives a brief description of XG - what the acronym stands for, who they are and what their mission is. This might also be a good place for the "legacy" part of the show. We might say the success of Apollo was linked to a RATS type of training, (photos/video of Apollo-era field training) and the modern RATS is far more sophisticated for a new era of exploration. Some of the program's main accomplishments might be listed here in the general intro, (photo excerpts of various DRATS chronology events) as well as a mention to the multi-center cooperation needed to make the program a success. With this explained, we move on to our chapters-
(A suggestion: keep all the topics focused on how it helps humans explore.)

1. Tools & Equipment- What new tools will the astronaut need to get the most out of exploration? Constellation

is working on this already- we have new generation of space suits with greater mobility, new tools for geology, etc. A soundbite from a suit engineer could help illustrate the flexibility of the new suit, showing the joints and movements up close would also be compelling. We can show other tools and illustrate how the tools range from a simple mallet to sophisticated scientific equipment (e.g., Science Trailer, etc.) Include a soundbite from a researcher discussing the range of ancillary tools and scientific equipment being evaluated in DRATS activities.

2. Technology- This would be the chapter to discuss some of the technological innovations utilized by the Constellation program, such as the use of robots to help humans explore. For example, what have the RATS field tests taught us so far, and what improvements have been derived from this work? In this segment, we could also show the new land rover under development as a major new technology (it follows the astronaut!) and show how Desert RATS is helping humans and machines work together to explore in new innovative ways that were unimagined in the past.

   Additional soundbites from suit and tools scientists would be useful in this segment.

3. Techniques- This is where we can illustrate how Constellation is really figuring out how a mission scenario will work out, pulling together all the elements and trying to answer all the important questions: How long will be able to explore? When do we recharge a suit? How do we mark and label samples? How do we get the samples back and where and when do we analyze them? How do we communicate? In other words, we show how Constellation is really figuring out the architecture of a mission. Perhaps this scene could even be played out as a real "mission", showing animation that takes you step by step through an EVA, as if you were on the Moon or Mars. The scene could be hurried and busy, just to illustrate the thought that goes on behind mission planning. Here we could use a soundbite from someone who is involved with organizing representative mission scenarios.

In the end, we go back to our host who gives a wrap-up, telling us how Constellation will continue to expand and refine its exploration plan, to make sure humankind is as prepared as it can be to make future discoveries. The host might sum up with an on-camera delivery of how Constellation will lead the way to new ways of exploring the Moon and Mars.

A closing graphic will lead viewers to more information (webpage, phone, address, etc.) and perhaps a parting shot of the astronaut from the beginning, now going from the regular blue colored sky to red…a reversal of the opening scene.

Production considerations:

First, a script will be written by the producer and approved by the client, then shooting can begin. New footage for the introduction of the astronaut on "Mars" and the support team will have to be staged and shot at the JSC "Rock Yard".

Also, footage of the host reading their introductions to each "chapter" and the closing remarks will need to be shot. The host's lines will be scripted and a teleprompter can be provided, allowing for quicker production. Other new materials needed to be shot are the soundbites from key personnel. Possible extra shots (cutaways) might be needed of any equipment that has not been adequately shot or demonstrated in archive material. In all cases, (intro, host footage, additional cutaways, and soundbites) all shoots will be conducted here at JSC.

Narration will be cut in the Building 2 sound booth. Graphics work for each chapter title and an opening title will help the production look more contemporary. Audio post production will include mixing all sound elements and adding music and sound effects.

Final video will be delivered on High Definition format with a downconverted Digibeta format and turned into the Building 8 video repository for duplication in any format the client desires.

EXAMPLE PRODUCTION ESTIMATE

Engineering Production	
Total Estimated Labor Hours	500
Proposed Labor Categories	
Producer	
Graphics	
Editor	
Audio support	
Camera support	
Total Labor:	$21,000
Materials:	$3,000
Tapes, etc.	
Travel:	
No travel	
Total Cost and Fee	**$26,400.00**

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Nondisclosure Statements	March 2009	16	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
To ensure that agreement is made between contractor employees and the Government to protect contract proprietary data and management sensitive Government Information.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

a. Data Type - Type 2 – Mandatory Submittal

b. Scope – The contractor shall submit Non-Disclosure Agreements for all personnel upon employment on Information Technology and Multimedia Services (ITAMS) Contract.

c. Content - Nondisclosure statements shall be prepared in accordance with company policies and procedures and the requirements of the ITAMS Contract.

d. Format - Contractor's electronic format is acceptable.

a. Submission:
   i. Initial – Required for all employees prior to contract start
   ii. Frequency – As necessary to meet 100% compliance for all employees

b. Distribution: Distribution specified below plus additional distribution per Contracting Officer's Letter
   i. Initial – Contracting Officer, COTR, 1 Electronic Posting as per COTR direction
   ii. Frequency – Contracting Officer, COTR, 1 Electronic Posting as per COTR direction
   iii. Updates – As required by the Contracting Officer

9. Maintenance – Revision shall be accomplished by complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Performance Management and Capacity Plan	March 2009	17	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
To establish the content and frequency of reporting for systems capacity planning and performance analysis.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

A. The Performance Management and Capacity Plan shall be prepared on a quarterly basis for supported systems, as determined by the COTR. Government provided performance monitoring tools, such as NetIQ Application Manager and Analysis Center, Urchin, and Symantec Command Central, are provided to collect the data for this analysis. The plan shall include the following where applicable:

1. By system, a summary of systems performance shall be quantified in terms of large and small transactions, as well as end-to-end transaction performance as measured from the end-user workstation to the data system.
2. By system, a summary of resource utilization, including CPU, Disk, Memory, related equipment (e.g., backup tape systems, offline/nearline storage systems, physical storage space), application resources and licenses, and network bandwidth (e.g., television distribution network) where applicable, with charts depicting observations for the current and previous 3 quarters and a trend line reflecting anticipated improvements or degradation during the coming 4 quarters.
3. A discussion of the analysis and findings for any systems that have experienced significant performance anomalies or an increase or decrease in resource utilization relative to the previous month's baseline.
4. Recommendations for improving any outstanding performance issues or capacity shortfalls.
5. Recommendations for systems reconfiguration or consolidation that reduce operating costs or improve resource availability.

Performance management and capacity planning applies to systems defined in the Attachment J-10, J-11 and J-20.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall be provided electronically in an Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Re-Procurement Data Package	March 2009	18	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Provide content and format requirements for delivery to NASA of all analytical models, tools, supporting documentation, equipment, data items and resource/cost information used to perform future re-procurement activities.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

The data package should contain the following:

- A catalog of models and tools provided according to any Data Requirement (DR) or Statement of Work (SOW) on this contract shall be developed which contains the following:
  - Unique name of item
  - Version number, revision number, or release date as appropriate
  - Abstract which describes purpose or use of item
  - Location of electronic copy (i.e. DDMS)
- Models and tools to be submitted include:
  - Models and tools developed/used in performance of this contract, but no other DRD shall be delivered in accordance with this DRD.
  - Models which are delivered per requirements contained in any other DR on this contract shall not be redelivered for this DR. However, each shall still be documented appropriately.
- Supporting documentation for the use of each item, including those submitted per other DRDs on this contract where that DRD doesn't require it, shall be submitted. The documentation shall include, at a minimum, the following information:
  - Purpose of the model or tool
  - Inputs required
  - Governing assumptions or constraints, including definition of the Vehicle configuration if pertinent to the model definition or its use
  - Model or tool certification history, including description of validation methods used and results of correlation activities
  - Association with other models
  - For models, necessary tools such as a specific software modeling environment required to operate the model
  - For tools, necessary platforms such as computer processor requirements or operating system limitations
- Data Items, for example, websites and internal work instructions developed for this contract that contains the following:
  - Unique name of item
  - Version number, revision number, or release date as appropriate
  - Abstract which describes purpose or use of item
  - Location of electronic copy (TBD)

- Data package containing the following:
  - Labor resources:
    - List of all direct labor skills by labor category, segregated by current work breakdown structure (WBS)
    - An estimate of the number of indirect labor skills such as business or computer support normally charged through an indirect expense pool or through a service center expense
    - Current annual average wage rates for each labor category and when these wages were last adjusted for escalation. Also indicate whether any adjustments are projected to be made prior to contract expiration
    - The number of FTEs (Full Time Equivalents) and the estimated number of productive hours for each labor category currently on contract, segregated by current WBS.
    - Seniority level of all skills on the current contract
  - Non-labor resources:
    - List of all materials, equipment, travel, supplies, etc., and the incurred annual cost by WBS
    - Provide a discussion associated with the major items identified above, such as the materials estimate includes a prompt payment discount of TBD% due to large volume discounts you have negotiated with your vendors.
  - The projected liability cost associated with unused accrued paid leave associated with non-exempt personnel. Provide a copy of any Collective Bargaining Agreements in place and a current status of any upcoming negotiations with a union.
  - Equipment (additional information to that listed in #2, a., above):

  List of all contractor-owned equipment (at the time of delivery of this DRD) being used in the performance of the contract. The list of equipment shall include:
    - Description of the equipment (include make and model #)
    - Location of the equipment (address, building and room #)
    - Date purchased
    - Purchase price of the equipment
    - Current depreciated value of the equipment

MAINTENANCE – All models/tools and data items shall be maintained electronically. All documentation developed to support the use of each model/tool and data items shall also be maintained electronically. Both the models and the supporting documentation shall be updated as necessary to perform the assessments for which they were developed.

REMARKS: It is only intended that unique models and tools developed for the ITAMS Program be delivered per this DRD. Unmodified commercially available tools should not be delivered, but must be referenced in the supporting documentation.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
ITAMS Lessons Learned Documentation	8/26/08	19	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Capture of lessons learned documentation for process improvement, S&MA lessorns learned documentation, and obtain lessons learnd from the Contractor for possible publication in the NASA Lessons Learned Information System (LLIS). *** The office of primary responsibility for this DRD is JSC Safety & Mission Assurance.	☐ Technical ☐ Administrative ☒ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

A. General Lessons Learned

Lessons Learned Documentation shall be provided for projects and activities performed under the contract according to JPR 2310 JSC Organizational Learning Program. Lessons Learned Documentation may pertain to any aspect of a project or activity, and should include recommendations for future process improvements. Lessons Learned Documentation shall typically consist of recommendations for improved approaches to service delivery, problem avoidance, technology evaluation and selection, etc.

B. S&MA Lessons Learned

Criteria for Selecting Lessons Learned. Uncommon insight arising from any event or observation that will benefit from sharing with a larger community of interested parties. Lessons learned are intended to prevent recurrence of undesirable events and to allow NASA and its team members to capitalize, to the greatest extent practical, on unique successes.

Frequency of submission. 30 days after triggering event or 30 days after mishap investigation or hazard analysis / evaluation is completed.

Distribution.
1. NS/Safety and Test Operations Division (1 electronic copy including photographs, drawings, etc., in web-ready format such as HTML or JPG)
2. Contracting Officer's Technical Representative (COTR) (1 copy)
3. AK/Chief Knowledge Officer

Content:

Subject - one line subject of the lesson.

Lesson Learned - usually one sentence that describes insight gained

Description of Event - narrative of what happened.

Recommendations - may be an action plan, suggestion, etc., that was adopted at event source.

Supporting documentation - as needed to give clear picture of lesson (photographs, illustrations, drawings, etc.)

Contact name and e-mail address (for follow up by Government prior to publication of lesson)

Definitions. Refer to NASA LLIS at http://llis.gsfc.nasa.gov/ for definitions of terms use.

Note: Lessons Learned are distributed by entry into the JSC Lessons Learned Database (LLDB) which submits lessons to the NASA LLIS once approved and published.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Emergency Plan	March 2009	20	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
To provide a plan for the protection of personnel, facilities, equipment and other assets from the effects of hurricanes, other natural and man-made disasters.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

The contractor shall prepare and maintain an emergency plan prescribing measures to be taken for the protection of assets from the effects of natural and man-made disasters.

This plan complements the JSC Mishap Plan (JPR 8621.1) and should conform to the recommendations in that plan. The Contractor shall describe other specific actions to implement this plan and mitigate the potential damage to facilities, equipment and other assets. The plan must set forth a program of informing contractor and other personnel occupying contractor-managed facilities at JSC and contractor-operated facilities off site of the dangers associated with disasters and their responsibilities in implementing the plan. The plan shall cover every phase from preparation through recovery.

The contractor shall create and maintain an emergency/severe weather contact roster of individuals with decision and implementation authority to carry out elements of the plan including preparations, shutdown, re-start and recovery phases.

The plan shall address how the contractor shall coordinate with all affected organizations to assure compatibility and integration with other organizations' emergency plans.

The first draft of the emergency plan shall be completed and submitted for review 90 days after contract initiation. Using the IRD Configuration Management process, a review of the plan shall be initiated and coordinated by the contractor every April 1st of the contract and re-baselined on or before every May 30.

Approval of the plan shall be upon signature of the CO.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Wage/Salary and Fringe Benefit Data	July 2007	21	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Wage/Salary and Fringe Benefit Data will be used by the NASA Contracting Officer and the Contract Labor Relations Office to provide the necessary data for submittal of Standard Form (SF) 98, Notice of Intention to Make a Service Contract and Response to Notice, to the Department of Labor, and to assist in the monitoring of Service Contract Act compliance.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
	FAR 52.222-41

8. Preparation Information *(Include complete instructions for document preparation)*

SCOPE: The Wage/Salary and Fringe Benefit Data must be submitted by the Contractor, and any subcontractors which are subject to the provisions of the Service Contract Act, to the Contracting Federal Agency. This requirement is in accordance with FAR regulations 22.1007 and 22.1008.

CONTENT: The Wage/Salary and Fringe Benefit Data should contain the data included in the enclosed DRD forms, titled "Wage/Salary Rate Information", "Fringe Benefit for Service Employees", and "Fringe Benefits per Collective Bargaining Agreement". The Wage/Salary Rate Information shall contain a listing of all exempt and nonexempt labor classifications working on the contract. Separate forms should be utilized for classifications working in different geographic areas and for each subcontractor. Wage determination numbers, appropriation labor organization names, and subcontractor names, must be reflected. All nonexempt labor classifications must be matched to wage determination classes or to Collective Bargaining Agreement (CBA) classifications if union represented employees are working on the contract. Annotate exempt or nonexempt and union or nonunion. The current hourly rates should reflect the actual lowest and highest paid employees, along with a computed average rate. State the number of employees working in each category. Separate Fringe Benefit forms should be completed for nonrepresented classifications and for each separate CBA, if applicable. A separate form must be completed for the prime and each subcontractor. Three hardcopies and one electronic copy of each Collective Bargaining Agreement are required if organized labor is represented on your contract.

FORMAT: The Wage/Salary and Fringe Benefit Data should be in a format substantially the same as enclosed with this DRD. (Forms 2, 3, and 3A)

DELIVERY AND MAINTENANCE: Initial submission start of contract at end of phase in period. Annual submission required 90 days prior to the anniversary date of the contract. Changes shall be incorporated as required by change page or complete reissue.

DRD Form 2

WORK SHEET FOR SF-98 DATA
WAGE RATE INFORMATION

CONTRACTORS LABOR CLASSIFICATION	WAGE DETERMINATION CLASSIFICATION	EXEMPT OF NONEXEMPT	UNION OR NONUNION	CURRENT HOURLY RATE	MYE NO OI EMPLOYEE
Illustration of required data:					
Project Manager	Not Required	E	N	$40.00	
Supervisor	Not Required	E	N	$32.00	
Electrical Engineer	Not Required	E	N	$26.50 - 30.00	
Engineering Tech, Jr	Engineering Tech, I	N	N	$16.59 - 18.00	1
Electrical Technician	Electronics Tech Maint II	N	U	$21.33 - $24.00	
Secretary	Secretary I	N	N	$14.67 - $17.50	
File Clerk	General Clerk II	N	N	$12.97	
Clerical Data Entry	Word Processor I	N	N	$11.45 - $12.90	

Submit data in the above illustrated format for all labor classifications used, or planned to be used, on this contract. All contractor labor classifications must be matched to wage determination classes listed in CBA's represented classes or classes shown in WD 2005-2516 for nonrepresented classes.

CONTRACTORS LABOR CLASSIFICATION	WAGE DETERMINATION CLASSIFICATION	EXEMPT OF NONEXEMPT	UNION OR NONUNION	CURRENT HOURLY RATE	MYE NO OF EMPLOYEE:

FRINGE BENEFITS PER COLLECTIVE BARGAINING AGREEMENT

For period from _____ to _____

Contractor:

Contract Number:

Number of employees in bargaining unit _____

Total number of employees on contract _____

1. Shift Differential: (Describe any pay over and above base rates for 2nd, 3rd, weekend, or other shifts.)

2. Health and Welfare Items and Other Fringe Items: (Indicate whether or not coverage is provided to employees and state current average hourly cost per employee covered by a Collective Bargaining Agreement.)

Item	**Coverage Provided (Yes or No)**	**Average Hourly Cost**
a. Life Insurance		
b. Accidental Death		
c. Disability		
d. Medical and Hospital		
e. Dental		
f. Retirement Plan		
g. Savings/Thrift Plan		
h. Sick Leave		
i. Tuition		
j. Other (Describe)		

3. Paid Absences

	Service Requirement	Days per Year
a. Vacation		
b. Holiday		
c. Sick Leave		
d. Jury Leave		
e. Funeral Leave		
f. Military Leave		
g. Other (Describe)		

4. Severence Pay: (Briefly describe terms and amounts.)

5. Other Fringe Benefits: (Describe any other fringe benefits not included above, and show average hourly cost.)

6. Premium Pay: (Discuss all premium pay provisions not previously shown on this form.)

Signature of Company Representative _____ Date _____

FRINGE BENEFITS FOR NONEXEMPT SERVICE EMPLOYEES

For Period from _____ to _____

Contractor:

Number of nonexempt employees on contract: _____

Total number of employees on contract: _____

1. Health and Welfare Items and Other Fringe Items:
(Indicate whether or not coverage is provided to employees and state current average hourly cost per service employee.)

Item	**Coverage Provided** (Brief Description)	**Average Hourly Cost**
a. Life Insurance		
b. Accidental Death		
c. Disability		
d. Medical & Hospital		
e. Dental		
f. Retirement Plan		
g. Savings/Thrift Plan		
h. Sick Leave		
i. Tuition Reimbursement		
j. Other (Describe)		

2. Paid Absences

	Service Requirement	**Average Days per Year**	**Average Hourly Cost**
a. Vacation			
b. Holidays			
c. Sick Leave			
d. Jury Leave			
e. Funeral Leave			
f. Military Leave			
g. Other (Describe)			

_____ _____
Signature of Company Representative Date

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC –STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
On-site Contractor (Headcount)	8/26/08	22	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Provide NASA with the number of contactors Onsite.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

A. The Contractor shall report the number of onsite contractors (headcount) by company. This includes all subcontractors, if onsite.

B. This data shall be provided as of the last day of each contract quarter or as requested by the CO.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Notification of Potential Labor Dispute and Contingency Strike Plan		23	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*

The Notification of Potential Labor Dispute and Contingency Strike Plan will be used by the NASA Contracting Officer and the Contract Labor Relations Officer to facilitate the coordination of activities between the Contractor and the affected NASA operational directorates to ensure that necessary steps are taken to prepare for any potential strike situations and to prevent the disruption of work.

5. DRD Category: *(check one)*

- ☐ Technical
- ☒ Administrative
- ☐ SR&QA

6. References *(Optional)*

7. Interrelationships *(e.g., with other DRDs) (Optional)*

FAR 52.222-1

8. Preparation Information *(Include complete instructions for document preparation)*

DISTRIBUTION: Contracting Officer
Contract Labor Relations Officer

INITIAL SUBMISSION: Start of contract.

SUBMISSION FREQUENCY: As required.

DATA PREPARATION INFORMATION:

SCOPE: A Notification of Potential Labor Dispute must be submitted at the first indication of potential labor unrest and 45 days prior to the expiration of any Collective Bargaining Agreement. The Notification shall describe the situation that has the potential of impacting the contract and provide the corrective actions initiated. A Contingency Strike Plan must be submitted at contract start and updated if there is any indication of a potential labor unrest or potential picketing activity. The Notification of Potential Labor Dispute and the Contingency Strike Plan are required for the prime and any subcontractors supporting this contract. Copies of all Collective Bargaining Agreements must be provided within 30 days of ratification.

APPLICABLE DOCUMENTS: None

CONTENTS: The Notification of Potential Labor Dispute shall describe the situation that has the potential of impacting the timely performance of the contract, it should provide the planned negotiation dates with organized labor, and describe other corrective actions initiated. Notification should be made prior to the expiration of collective bargaining agreements, prior to any significant changes to existing working conditions or pay practices, or any situation that could impact the performance of the contract through labor unrest. The Contingency Strike Plan shall describe the Contractor's plan for assuring the timely performance of the work under this contract during a strike or work stoppage. As a minimum, contents should include: information on implementation of the strike plan, a pre-strike checklist for managers and supervisors, a description of how critical work will be performed, an organization chart of the strike committee membership, phone numbers of key management personnel, and standards of conduct policies during the strike.

FORMAT: Contractor format is acceptable.

MAINTENANCE: Changes shall be incorporated as required by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Monthly Safety and Health Metrics	8/26/08	24	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Establishes selected Safety and Health Program metrics ***The Office of Primary Responsibility for this DRD is the JSC Safety, Reliability, and Quality Assurance Office.	☐ Technical ☐ Administrative ☒ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

Frequency of submission. Monthly by 10th of month following month being reported.

Distribution.
NT2/Occupational Safety Branch (2 copies)
SD26/Occupational Health Officer (1 copy)
Contracting Officer's Technical Representative (COTR) (1 copy)

Format: electronic to NT2, SD26; hard copy to COTR. Send as Excel spreadsheet or in tables compatible with MS Word.

Definitions. Refer to JPR 1700.1 and OSHA requirements for definitions of terms below.

Scope. The scope of the information required is limited to the JSC-administered establishments of Houston Texas at NASA Parkway; Sonny Carter Training Facility; White Sands Test Facility; and Ellington Field.

Content.

I. Management Commitment and Employee Involvement.

Date of Management Safety Committee Meeting		Type/Title of Meeting	No. of Managers attending		No. of supervisors attending		No. of non-supervisory attending	
This month	Year to date		This month	Year to date	This month	Year to date	This month	Year to date

Include **electronic** copies of minutes **or representative information**

No. of Employee Safety Meeting		Type/Title of Meeting	No. of Employees attending		No. of managers/supervisors attending	
This month	Year to date		This month	Year to date	This month	Year to date

Include **electronic** copies of minutes **or representative information**

II. Worksite Analysis. Refer to JPG 1700.1 for definitions of terms.

Division	No. of Hazard Analyses				No. of Job Safety Analyses				No. of Routine Inspections			
	Required		Performed		Required		Performed		Required		Performed	
	This month	Year to Date	This month	Year to Date	This month	Year to Date	This month	Year to Date	This month	Year to Date	This month	Year to Date
Total												

III. Hazard Prevention and Control - hazards below were found during routine and special inspections, close calls, mishap investigations, etc., and require correction.

No. of Hazards found			No. of Hazards closed <30 days			No. of Hazards open <30 days	No. of Hazards open >30 days			No. of Hazards closed >30 days			No. of JF1240s in place
Prior to month	This month	Year to date	Prior to month	This month	Year to date		Prior to month	This month	Year to date	Prior to month	This month	Year to date	

Attach copies (electronic ok if sent by e-mail) of JF 1240's **(or equivalent)** including monthly updates. Mark JF 1240's where abatement has been completed as closed.

IV. Safety and Health Training - List courses specific to **loss control initiatives (such as slips/trips falls, material handling; etc.) 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.)

Course Title	No. to be Trained	No. Trained	On Schedule

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Financial Reporting Contractor-Held Property	March 2009	25	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Report NASA Property in the custody of contractors on both a monthly and annual basis.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
NASA FAR Supplement Subpart 1845.7101	

8. Preparation Information *(Include complete instructions for document preparation)*

Submission:

a. The due date for the Monthly Property Financial Reporting submission is the 21st day after the close of the month, beginning at the first month after contract start. Example due dates for the monthly submission are as follows:

August 21 for the month ending July 31
September 21 for the month ending August 31
October 21 for the month ending September 30

c. The due date for Annual Property Reporting via NASA Form (NF) 1018 is November 30.
d. All reports shall be submitted electronically.

Data Preparation Information:

a. Monthly Property Financial Reports are required to be submitted using the format located at the URL referenced in paragraph below. Monthly Financial Report will be submitted in accordance with PIC 04-12.
b. Annual Property NF 1018 reports shall be submitted using the NF 1018 Electronic Submission System (NESS). The NF1018 report provides annual summary-level property management and financial data on Government-furnished and contractor-acquired NASA property.
c. The NF1018 shall be completed in accordance with NASA FAR Supplement Subpart 1845.7101 and any supplemental guidance provided by the Contracting Officer.

Contents

Monthly Property Financial Reports

a. Monthly property financial reports are required with item level supporting data. This data shall be submitted for all items with an acquisition cost of $100,000 or more, in the contractor's and its subcontractors' possession, in the following classifications: real property, equipment, special test equipment, special tooling, and agency peculiar property. Monthly reporting is not required for property in the above classifications with an acquisition cost under $100,000. Monthly data shall also be submitted for items of any acquisition cost in the classifications of materials and contract work-in-process (WIP). Itemized monthly data is required for materials and WIP line items of $100,000 and over. Summary monthly data is required for materials and WIP line items under $100,000. The monthly reports shall be electronically submitted using the Contractor-Held Asset Tracking System (CHATS) (http://nasachats.gsfc.nasa.gov/) using the format described in the CHATS user's manual.
b. Acquisition costs shall be developed using actual costs to the greatest extent possible, especially costs directly related to fabrication such as labor and materials. Supporting documentation shall be maintained and available for all amounts reported, including any amounts developed using estimating techniques.
c. All Adjustments shall be thoroughly explained and directly related to a specific fiscal year. If the fiscal year cannot be determined, the default shall be the previous fiscal year.

d. Work Breakdown Structures (WBS) shall NOT be provided for all Contractor acquired property (CAP), WIP, and any new materials acquired

NF 1018 Reports

a. Contractors shall report all NASA-owned property in US dollars, regardless of location.

b. Negative reports are required.

c. This reporting shall be completed in accordance with the NASA FAR Supplement (NFS) Subpart 1845.7101 and any supplemental guidance provided by the Contracting Officer.

Distribution:

a. The monthly reports shall be electronically submitted using the Contractor-Held Asset Tracking System (CHATS) (http://nasachats.gsfc.nasa.gov/) using the format described in the CHATS user's manual.

b. NASA Form (NF) 1018 reports shall be submitted using the NF 1018 Electronic Submission System (NESS) (http://ness.gsfc.nasa.gov/).

Maintenance:

a. Revisions shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Safety and Health Program Self Evaluation	8'/26/08	26	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Self evaluation of Contractor's safety and health program performance.	☐ Technical ☐ Administrative ☒ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
JPR 1700.1 (as revised)	

8. Preparation Information *(Include complete instructions for document preparation)*

1. The Contractor must conduct an annual self-evaluation of its safety and health program as required by its safety and health plan.

2. Information required:

2.a. The internal assessment of safety and health program effectiveness during the report period (i.e., the previous year) indicating the status of goals or objectives previously established and areas of strength and weakness in Contractor safety program performance.

2.b. Safety and health concerns and resolutions relating to JSC operations which may have been identified during the report period.

2.c. Unresolved safety and health concerns relating to JSC operations which the Contractor feels merit attention of JSC safety and health management.

2.d. The goals and objectives of the Contractor safety and health program for the next report period.

2.e. An analysis of the contractor's performance at JSC-administered establishments in each of the 32 Voluntary Protection Program sub-elements found in JPR 1700.1, Parts 1 – 4. For more information on OSHA Voluntary Protection Program requirements see the Federal Register Notice 65:45649-45663, July 24, 2000.

2.f. Attach action plans for identified problem areas. Action plans must include schedule for periodic progress reports to the Government on a frequency agreed to by the Government and the Contractor for each problem area.

3. Format to be as required by the cognizant OSHA regional office. Contractors who have submitted a written self-evaluation as a VPP site may submit their original report to JSC in lieu of writing a new self -evaluation provided that all action plans and status are updated.

4. Report due September 30th of each year.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data referenced in this DRD as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Data Center Reports	March 2009	27	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
Facility Layout Drawings will be used for planning removal and installation of systems as well as personnel relocation within the Building 46, Computer Systems Facility.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

The contractor shall develop and make available electronic and hard copy facility layout drawings of the three (3) floors that comprise building 46. The contractor shall conduct weekly inspections (walk-through) of building 46 to determine modifications to the facility. Modifications observed during the weekly inspections, shall be compiled and documented in the electronic and hard copy layouts. The contractor shall also develop power distribution drawings that represent the allocation of all server systems and other network devices located in building 46 to the power distribution units, uninterruptible power supplies, and the electrical grid system in building 46. Facility Layout Drawings shall include the following as described in Appendix A.

Hard copy facility drawings and Power Distribution Drawings shall be drawn on "E" size drawings. Electronic drawings shall be posted to a website to be designated by the COTR. Electronic layouts shall be capable of being displayed in a standard JSC desktop, and have zoom capabilities

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data shall also be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

Appendix A

a. Power Distribution Drawings shall include envelope representation of the server systems or network devices, power distribution units, uninterruptible power supplies, and building 46 breakers and power feeds. The power requirements of the systems and devices shall be represented on the drawings. All representations shall be marked in a way to differentiate like items and the interrelation among all of them.

b. The location of the IRD lab and the systems contained therein. Envelope type representations of the servers, server racks, or desktops shall be depicted. Iconic representation of the servers is preferred and encouraged but not required. The server, desktop, or system shall be identified by their function and by their system administrator in the legend section of the drawing; e.g., PKI Development Server; System Administrator: Ms. June Smith.

c. The location of server systems contained in the second and third floors. Envelope type representations of the servers, server racks, or desktops shall be depicted. Iconic representation of the servers is preferred and encouraged but not required. Server, desktop, or systems shall be identified by their responsible organization's name, if applicable the contract's name, the responsible system administrator, and their function; e.g., Space Station; Contract: SEAT, Sys. Administrator: Mr. Jack Jones.

d. Room number and generic room name shall identify the location of offices, conference rooms, and rest areas. The tenants' directorate name, and the name of the contractor (if tenant is a contractor) shall be identified for offices. For tenant contractors, the name of the contractor project manager and the COTR shall be identified in the legend section of the drawing

e. Room number and the title "mechanical room" shall be used to identify the location of the mechanical rooms. Systems within the mechanical room; e.g., uninterruptible power supply, shall be identified in envelope-type representations.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Physical Inventory Plan	March 2009	28	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The contractor shall conduct periodic physical inventories to verify the existance of hardware and software components and report findings to the Government.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

The contractor shall conduct a physical inventory of all Government furnished property and information. The contractor shall use the lists depicted in Attachments J-5, List of Installation Accountable Government Property, J-11, Software Inventory, J-13, List of Government Furnished Property, J-14, List of Government Furnished Property Pursuant to FAR 52.245-2, J-25, List of Installation Provided Facilities and Services, J-26, List of Government Furnished Equipment, and J-27, List of Government Furnished Information, as the starting point for the physical inventory. The contractor shall coordinate with the appropriate JSC property administrator, JB3, when conducting the physical inventory. The contractor shall document the physical inventory findings using the format of its choosing, but must include the following categories: Equipment or Software Name, System Name, Equipment Owner Organization (e.g., EA, IRD), Equipment Responsible Individual (i.e., the name of the individual), Manufacturer, Model, Serial #, Equipment Description, NEMS Tag #, Building #, Room#. The contractor shall provide the report on-line in a location as directed by the COTR. The physical inventory shall be completed in accordance to the following schedule: First instance, 30 days after initiation of the contract, all other instances, on July 30th of every year of the contract. The report due every July 30th shall be based on physical counts completed by June 30th.

a. Format – Contractor's electronic format is acceptable.

b. Submission -
   i. Initial – Plan due at start of phase-in. Inventory complete at contract start.
   ii. Final – Upon contract completion
   iii. Approval – N/A
   iv. Frequency – As required (see above)

c. Distribution – per the DRL.

Maintenance – Revision shall be incorporated by change page or complete reissue.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data referenced in this DRD, as specified above, the data shall be provided electronically in an Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Server Backup & Tape Usage Reports	March 2009	29	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The Contractor shall track and report status of server backup and tape usage reports.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Attachment J-20 ITAMS Server Inventory and Complexity Matrix	

8. Preparation Information *(Include complete instructions for document preparation)*

A. The contractor shall maintain a database (Attachment J-20) which reflects the status and number of server backups. A report shall be provided monthly with the details below:

- Period start and end time
- Number of servers being backed up weekly
- Number of servers not being backed up
- Total number of servers
- A summary for all backup devices including:
  - For **full backups**:
    - The total number of full backup jobs
    - The total successful
    - The number of failed
    - The reason for failure for each backup that failed
  - For **differential backups**:
    - The total number of differential backup jobs
    - The total successful
    - The number of failed
    - The reason for failure for each backup that failed
  - For **incremental backups**:
    - The total number of incremental backup jobs
    - The total successful
    - The number of failed
    - The reason for failure for each backup that failed
  - For **restore jobs**:
    - The total number of restore requests
    - The total successful
    - The number of failed
    - The reason for failure for each restore that failed
  - Total data restored in MB and the total time for the restores
  - Restoration rate: data backed up within the last 14 days
  - Restoration rate: data backed up between 15 days to 30 days ago
  - Restoration rate: data backed up more than 30 days ago
  - Meet/Not Meet restore requirements
  - Total Data Restored in MB
  - For each backup or restore failure provide:
    - System Name
    - Error Code - Explanation
    - Rerun Success

        - Notes
- A summary for each backup device including:
    - For **full backups**:
        - The total number of full backup jobs
        - The total successful
        - The number of failed
        - The reason for failure for each backup that failed
    - For **differential backups**:
        - The total number of differential backup jobs
        - The total successful
        - The number of failed
        - The reason for failure for each backup that failed
    - For **incremental backups**:
        - The total number of incremental backup jobs
        - The total successful
        - The number of failed
        - The reason for failure for each backup that failed
    - For **restore jobs**:
        - The total number of restore requests
        - The total successful
        - The number of failed
        - The reason for failure for each backup that failed
    - Total data restored in MB
    - Restoration rate: data backed up within the last 14 days
    - Restoration rate: data backed up between 15 days to 30 days ago
    - Restoration rate: data backed up more than 30 days ago
    - For each backup or restore failure provide:
        - System Name
        - Error Code - Explanation
        - Rerun Success
        - Notes
- For each server/device a detailed accounting of the following:
    - Categorize as:
        - Backed Up
            - Amount (in MB) to be backed up
            - Time required for backup
        - Backup Not Required
        - Appliance (Backup Not Required)
    - Success/Failure of backups performed for this device during the period
    - Total data restored in MB and the total time for the restores

B. The contractor shall maintain a count reflecting the usage and availability of tape media (Ex. Currently 2000 LT02 tapes and 2500 LT03 tapes in inventory. Of those, 700 of the LT02 and 2000 of the LT03 tapes are used and the rest are available for use). The report shall provide a projected number of tapes needed in the future and a recommendation of time and quantity when an acquisition is required.

C. The contractor shall maintain a count of the amount of fiber cables on-hand and provide a projected amount of fiber cables needed in the future and a recommendation of time and quantity when an acquisition is required.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Phase-In Plan	March 2009	30	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
This data package documents the contractor's approach for contract phase-in.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*

8. Preparation Information *(Include complete instructions for document preparation)*

SCOPE: This data package documents the contractors approach for contract phase-in.

CONTENT: The Contractor is expected to meet full performance requirements from the start date of the base contract period. Prior to performance of services ordered by the government under this contract, the Contractor shall accomplish all tasks required to begin work ordered under this contract.

Some examples of activities that remain the sole responsibility of the Contractor include managing transition activities, hiring personnel, obtaining personnel badges and clearances, training personnel, scheduling the performance of ordered work, ensuring approval of safety plan, and compliance with contractual data requirements.

The Offeror shall submit a Phase-In Plan which shall detail the proposed implementation proposed processes and strategies for effecting a smooth transition. The plan should contain, at a minimum, detailed rationale and your specific approach to successfully complete each item described below. For each item, (1) provide a detailed plan, schedule and point of contact responsible for completion of each item and (2) propose objective measures that can be used to determine if the item has been achieved.

a. A plan for ensuring a smooth phase-in consistent with maintaining efficient continuity of services for the 60-day period prior to contract start. Describe in detail the plan for maintaining continuous and efficient operations at JSC.

b. Provide a schedule for all phase-in steps/milestones to be accomplished, and your approach to how the schedule will be met. Included in the schedule shall be a plan to support the proposal to, and negotiation of, the first task order to be placed under the resultant contract. Provide a phase-in schedule for management items to be met.

c. Describe in detail plans for initial staffing and training of personnel. Discuss proposed key personnel and demonstrated that they are committed to employment prior to start of contract.

d. Describe how you will work with incumbent contractors and NASA, including resources and interfaces expected from each to ensure an effective transition and continuous service.

e. Plans for completion of badging requirements and personnel security clearances to ensure employees are cleared for access to JSC and its associated facilities, as required, prior to start of the contract.

f. Your company has completed an inventory of Government furnished property, implemented an appropriate system to account for the property, and signed for accountability of the property prior to start of contract.

g. Your company has completed all Certification and license requirements for the company and all personnel prior to start of contract.

h. Proposed Firm Fixed Price for your Phase-in Plan, in accordance with the Cost/Price Proposal Instructions and Excel Pricing Template "Phase-In Plan" that reconciles to contract clause B.6.

FORMAT: In addition to providing the data, referenced in this DRD, as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats. Contractor report format acceptable.

DELIVERY AND MAINTENANCE: Initial submission with proposal. Changes shall be incorporated as required by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Information Technology (IT) Security Plan, Risk Assessment, and FIPS 199 Assessment	March 2009	31	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
The contractor shall be responsible for Information Technology Security for all systems connected to a NASA network or operated by a NASA contractor. This plan will ensure contractor awareness and compliance with the NASA regulations.	☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
NFS 1852.204-76, Security Requirements for Unclassified Information Technology Resources (May 2007)	

8. Preparation Information *(Include complete instructions for document preparation)*

a. **Data Type – 1-Written Approval by the Contracting Officer is required before contractor implementation of the IT Security Management Program Plan.**

b. **Scope:** The contractor shall submit an IT security management program plan for its unclassified technology information resources. This program plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this contract. The Contractor's IT security management program plan shall be compliant with the IT security requirements in accordance with Federal and NASA policies as referenced in OMB Circular A-130 (Management of Federal Information Resources), NPR 2810.1A (Security of Information Technology), and NPR 1620.1 (Security Procedures and Guidelines). See the CIO-Procurement Website for any supporting documentation.

i) IT SECURITY PLAN(S)

The contractor shall have a line manager who is responsible for the contractor's systems in accordance with the definitions set forth in NPR 2810.1A. The IT security plan shall be kept up to date as changes to the baseline configuration of the system occur and shall be documented in the IT Security Plan.

Note: An IT Security Plan is specific to a system or group of systems, while an IT Security Management Program Plan is defined as the elements a contractor has outlined to meet the IT Security requirements for interfacing with other contractors and NASA, training requirements and meeting the requirements in NPR 2810.1A.

ii) TRAINING

Per NASA requirements, employees subject to this contract shall complete the NASA provided IT security awareness training annually. Contractor provided IT security awareness training may be substituted but must be approved annually by NASA as a substitute. When substituted, per NPD 2810.1A, the contractor shall provide evidence that periodic IT security awareness training has been met for all employees subject to this contract . The contractor shall submit periodic reports (as requested by the CO) detailing the overall status of the annual training program. The Annual training program is defined as the period from Oct. 1st through Sept. 30th.

iii) INFORMATION ON EMPLOYEES IN SENSITIVE AUTOMATED INFORMATION SYSTEMS (AIS) POSITIONS/ASSIGNMENTS REPORT

The contractor shall submit an annual report on employees in sensitive IT positions/assignments which shall include information for personnel screening as required by the NASA Procurement Information Circular (PIC) 02-04, NPR 2810.1A, and NPR 1600.1 on position risk. This report shall be compiled on an annual basis.

A list of all lead system administrators shall be updated by September 30 every year. This list will be used to

ensure the contractor, as outlined in PN 04-03, has met the system administrator certification requirements.

iv) SYSTEM ADMINISTRATORS
Within 30 days after contract award or notification from the Contracting Officer that a plan is required, system administrators shall be identified and their names submitted to the Contracting Officer and CIO Representative for Procurement.
A

c. **Format** – Electronic Format consistent with NPR 2810.1A.

d. **Submission-**
i) Initial: 30 days after contract start
ii) Approval: 60 days after contract start
iii) Frequency: Document shall be submitted annually by September 30

e. **Distribution**- for all aforementioned reports/plans:
COTR
Contracting Officer
Chief Information Officer (CIO) Representative to Procurement

f. **Maintenance**- Revisions shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123. See work page for instructions.)

1. DRD Title	2. Date of current version	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Asset Management Planning and Reports	March 2009	32	NNJ09244782R/NNJ11JA16B

4. Use *(Define need for, intended use of, and/or anticipated results of data)*	5. DRD Category: *(check one)*
To describe the method of managing and reporting information regarding IT assets.	☒ Technical ☐ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
	Section C WBS 3.2.3

8. Preparation Information *(Include complete instructions for document preparation)*

A. The Contractor shall keep a 100% complete listing of all hardware systems and the software/firmware residing on those systems (e.g., operating systems, middleware, and applications), physical location of those systems, and documentation describing the interrelationships between individual systems and facility infrastructure. The Contractor shall provide a tool (see H.12 of the contract) to establish and maintain an accurate inventory of hardware and software. The system shall be operational at the start of the contract. The system shall be used to provide monthly, quarterly, annual, and multi-year (seven-year projection) reports of hardware and software renewals or replacements (DRD-11, Preventive Maintenance and Operational Readiness Documentation). At minimum the Contractor shall maintain the following information:

Equipment or software name
System name
Equipment owner
Organization (e.g., EA, IRD)
Equipment responsible individual (i.e., the name of the individual)
Vendor
Manufacturer
Model
Serial number
Equipment description
Building number
Room number
Software license
Software proof of purchase

B. The Contractor shall deliver this listing quarterly and on an as needed basis as defined by the COTR.

ADDITIONAL DATA REQUIREMENT

In addition to providing the data, referenced in this DRD, as specified above, the data also shall be provided electronically in Open Format. For purposes of this DRD, "Open Format" is defined as a format for an electronic data file that is non-proprietary. Examples of non-proprietary data file formats include: comma delimited, tab delimited, text and rich text formats.

Attachment J-4
ITAMS Acronym List and Definitions

ITAMS Acronym List

ACA	Associate Contractor Agreement
ACR	Audio Control Room
A/G	Air-To-Ground Circuits
ANSI	American National Standards Institute
APM	Application Portfolio Management
ASQC	American Society for Quality Control
ATP	Authority to Proceed
AWRS	Agency Web Site Registration System
ASUS	Agency Software Update Service
C&A	Certification and Accreditation
CAD	Computer-Aided Drafting
CAO	Certification and Accreditation Official
CASI	Center for Aerospace Information
CATV	Cable Television
CCEVS	Common Criteria Evaluation and Validation Scheme
CD	Compact Disk
CEA	Chief Enterprise Architect
CFR	Code of Federal Regulations
CIO	Chief Information Officer
CISSP	Certified Information Systems Security Professional
CM	Configuration Management
CMS	Content Management System
CMVP	Cryptographic Module Validation Program
CO	Contracting Officer
COD	Center Operations Directorate
COPPA	Children's Online Privacy Protection Act
COTR	Contracting Officer's Technical Representative
COTS	Commercial Off-The-Shelf
CPIC	Capital Planning and Investment Control
CTS	Center Telephone System
CUI	Controlled Unclassified Information
CWI	Common Work Instruction
CxP	Constellation Program
DBA	Database Administration/ Database Administrator
D/L	Downlink (video)
DIL	Digital Imaging Laboratory
DBMS	Database Management System (RDBMS for relational)
DDMS	Design and Data Management System
DIS	Document Index System
DMZ	De-Militarized Zone
DRD	Data Requirements Document
DRL	Data Requirements List
DTV	Digital Television
DVD	Digital Versatile Disc
EA	Enterprise Architecture
EDCATS	Education Computer-Aided Tracking System
EDCC	Engineering Drawing Control Center
EDMS	Electronic Document Management System
EDRS	Engineering Drawing Review System
E&IT	Electronic and Information Technology
EIA	Electronic Industries Association

ELA	Enterprise License Agreement
FHP	Facility Housing Plans
FOIA	Freedom of Information Act
FRC	Federal Records Center
FTP	File Transport Protocol
FY	Fiscal Year
GOCO	Government Owned Contractor Operated
GOTS	Government Off-The-Shelf
GPO	Government Printing Office
GSA	General Services Administration
HBA	Host Bus Adapter
HDTV	High Definition Television
HDV	High Definition Video
HRISO	Human Resource Information Systems Office
HTML	Hypertext Mark-Up Language
HTTP	Hypertext Transfer Protocol
HVAC	Heating, Ventilating, and Air Conditioning
ICB	IRD Control Board
ICC	International Color Consortium
ID	Identification
IDS	Intrusion Detection System
IDIQ	Indefinite Delivery/Indefinite Quantity
IPP	Institutional Provided Property
IP	Internet Protocol
IPTV	Internet Protocol Television
IPS	Intrusion Prevention System
IPTA	Information and Privacy Threshold Analysis
IRD	Information Resources Directorate
IRM	Information Resources Management
ISBN	International Standard Book Number
ISC	Information Service Center
ISO	International Standards Organization
ISSO	Information Systems Security Officer
ISS	International Space Station
IT	Information Technology
ITA	Internal Task Agreement
ITAM	IT Asset Manager
ITAMS	Information Technology and Media Services
JIMMS	Johnson Space Center Information Management and Media Services
JETS	JSC Enabling Technology Services
JPD	JSC Policy Directive
JPEG	Joint Photographic Engineering Group
JPG	JSC Procedures and Guidelines
JPR	JSC Procedural Requirements
JSC	Johnson Space Center
JTOPS	JSC Task Order Processing System
KDP	Key Decision Point
KSC	Kennedy Space Center
KVM	Keyboard-Video-Mouse

LCD	Liquid Crystal Display
M&O	Maintenance and Operations
MAC	Media Access Control
MCC	Mission Control Center
MDRF	Mission Data Request Form
MFR	Mission Focus Review
MIPL	Mission Imagery Products List
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPEG	Motion Picture Experts Group
MPC	Multi-protocol Converter
MRPA	Master Record and Playback Area
MSDS	Material Safety Data Sheets
MSP	Mission Support Plan
NACB	Network Access Control Board
NASA	National Aeronautics and Space Administration
NASA-STD	NASA Standard
NEEIS	NASA Education Evaluation Information System
NIAP	National Information Assurance Partnership
NIST	National Institute of Standards and Technology
NISN	NASA Integrated Systems Network
NPD	NASA Policy Directive
NPG	NASA Procedures and Guidelines
NTSC	National Television Standards Committee
OBVT	On-board Video Tape
OCSO	Organizational Computer Security Official
OCSO-R	Organizational Computer Security Official – Representative
ODIN	Outsourcing Desktop Initiative for NASA
OEM	Original Equipment Manufacturer
OMB	Office of Management and Budget
ORC	Operational Readiness Check
ORI	Operational Readiness Inspection
ORR	Operational Readiness Review
OSHA	Occupational Safety and Health Administration
PAM	Privacy Act Manager
PAO	Public Affairs Office/ Public Affairs Officer
PCR	Program Control Room
PDF	Portable Document Format
PDU	Power Distribution Unit
PEB	Performance Evaluation Board
PII	Personal Identification Information
PKI	Public Key Infrastructure
PM	Preventative Maintenance
POA&M	Plan of Action and Milestone
QTR	Quarter
QMS	Quality Management System
RA	Registration Authority
RFP	Request for Proposal
ROM	Rough Order Of Magnitude/Read Only Memory

S&MA	Safety and Mission Assurance
S&H	Safety and Health
SATERN	System for Administration, Training, and Educational Resources for NASA
SCIAD	Science Advisor
SCTF	Sonny Carter Training Facility
SIBC	Summary Investment Business Case
SIP	Shuttle imagery plan
S/G	Space-To-Ground Circuits
S/W	Software
SAN	Storage Area Network
SB	Small Business
SBA	Small Business Administration
SDB	Small Disadvantaged Business
SEB	Source Evaluation Board
SEI	Software Engineering Institute
SF	Standard Form
SIM	Security Information Management
SMPTE	Society of Motion Picture and Television Engineers
SOA	Service Oriented Architecture
SOMP	Server Operations Management Plan
SORN	System of Records Notice
SOW	Statement of Work
SPMS	Service Performance Monitoring System
SR	Service Request
SSL	Secure Socket Layer
SSP	Space Shuttle Program
SSPP	System Safety Program Plan
ST&E	Security Testing and Evaluation
STI	Scientific and Technical Information
STIC	Scientific and Technical Information Center
SVAS	Signal Validation and Adjustment System
SWF	Shockwave/Flash File
SVG	Space Video Gateway
TBD	To Be Determined
TCP	Transmission Control Protocol
TDF	Tape Duplication Facility
TIFF	Tagged Information File Format
TMR	Technical Monitor Representative
TRR	Test Readiness Review
TSR	Television Service Request
UHCL	University of Houston – Clear Lake
UL	Underwriters Laboratory
UPS	Uninterruptible Power Supply
URL	Universal Resource Locator
USC	United States Code
UWI	Unique Work Instruction
VAMS	Video Asset Management System
VCC	Video Control Center
VCR	Video Cassette Recorder
VDRPS	Video Downlink Record and Playback
VIP	Very Important Person
VITS	Video Teleconference System
VM/ESA	Virtual Machine/Enterprise System Architecture

VPL	Video Processing Lab
VPN	Virtual Private Network
VPP	Voluntary Protection Program
VTC	Video Teleconference
WAN	Wide Area Network
WBS	Work Breakdown Structure
WJI	WSTF Job Instruction
WML	Wireless Mark-Up Language
WSI	WSTF Standard Instruction
WSSH	White Sands Space Harbor
WSP	WSTF Standard Procedure
WSTF	White Sands Test Facility
WWW	World Wide Web
XML	Extensible Mark-Up Language
XHTML	Transition of HTML to XML
YTD	Year To Date

Definitions

Assessment – A review of data collected during inspections, audits, and other activities under this SOW to determine the overall status of JSC's safety and health program.

Audit – A formal review of an organization's safety and health program to assess compliance with JSC's safety and health program requirements in JPR 1700.1, JSC Safety and Health Handbook and referenced documents.

Audio Control Room (ACR) – This room contains all the audio control equipment associated with producing live television and coordinating press conferences, live interviews, and other events. This facility serves as the Agency-wide hub for NASA multi-center press events and supports the audio for in-flight events.

Close call – see Mishap definition.

Color Management System – A system by which accurate color reproduction can be implemented across many devices and systems.

Community/Internal Events – Events where JSC is an active participant (e.g. JSC Open House, Houston Rodeo).

Contracting Officer – A person who is designated in writing and who performs the administrative functions listed in the Federal Acquisition Regulation (FAR) and the NASA FAR Supplement.

Contracting Officer's Technical Representative (COTR) – A Government employee authorized by the Contracting Officer to provide technical direction to the contractor. The COTR and Alternate COTR (who may act only in the COTR's absence) are the only Government employees other than a Contracting Officer who may give technical direction to the contractor, unless the COTR has delegated Technical Management Representatives (TMR).

Contractor – A non-federal employer working under a NASA contract, whether as prime contractor or subcontractor.

Critical system – Any facility support system or test system whose loss could result in injury to test personnel, property damage, or failure to detect or shut off a hazardous condition.

Customer Service System (CSS) – Web-based application managed and maintained by the Information Resources Directorate, which provides an electronic vehicle for requesting certain IRD products and services.

Customer Org – Organization code of the organization that funds and manages development.

Data Requirements Description – A detailed request for a specified data item, including purpose, content, format, rationale, references, maintenance requirements, submittal requirements and other pertinent information.

Dial-in – Computer networking that relies on communication through ordinary telephone lines via MODEM.

Digital Betacam – A digital videotape format.

Editing Suites - These rooms provide the production facilities for creating video productions.

E-learning – Method of producing and distributing interactive programming for educational purposes.

Facility Manager – A Facility Manager is the agent of his/her Director and single point of contact responsible for ensuring the general safety of a building and, through coordination with appropriate line management, the safety and health of that building's occupants.

Features – Special stories about JSC and contractor employees, events, and other stories of interest.

Flight hardware – Hardware intended to be used in spaceflight.

Graphic Products Basic – Any graphics project less than 10 hours.

Graphic Products Complex – Any graphics project more than 10 hours.

Government vehicle – A commercially leased or U.S. government agency-owned motor vehicle being used in support of federal operations.

Hazardous Activity – One that involves credible risks or dangers to personnel or facilities and equipment of JSC; include, but are not limited to, activities associated with human-tended hypobaric chambers, zero-g testing, and the Energy Systems Test Area.

Human Test facility – A facility testing hardware or procedures involving a human test subject.

Hybrid - Photographic – Conventional wet chemical photographic paper that has been exposed with digital printing devices.

Hypervisor – Also called a *virtual machine monitor* (*VMM*), a hypervisor is computer software/hardware platform virtualization software that allows multiple operating systems to run on a host computer concurrently.

Imminent Danger – Conditions or practices in any NASA/JSC or contractor workplace where a risk exists that could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such risk can be eliminated through normal procedures; these will be identified by Risk Assessment Code (RAC) 1 (see Chapter 3.2).

Inspection – A comprehensive survey of all or part of a workplace by qualified employees in order to detect safety or health hazards; inspections are normally performed during the regular work hours of the agency, except as special circumstances may require.

JSC Organizations – Organizational structure at JSC and WSTF

AA	Office of the Center Director
AB	Office of the Deputy Director
AC	Office of the Associate Director
AD	External Relations
AF	Advanced Planning
AH	Human Resources Office
AJ	Office of Equal Opportunity and Diversity
AK	Chief Knowledge Officer
AL	Legal Office
BA	Office of Procurement
CA	Flight Crew Operations Directorate
DA	Mission Operations Directorate
EA	Engineering Directorate

IA	Information Resources and Chief Information Officer
JA	Center Operations Directorate
KA	Astromaterials Research and Exploration Science Directorate
LA	Chief Financial Officer
MA	Space Shuttle Program Office
NA	Safety and Mission Assurance Office
OA	International Space Station Program Office
QA	Commercial Crew & Cargo Program Office
RA	White Sands Test Facility
SA	Space Life Sciences Directorate
XA	EVA Office
ZA	Constellation Program Office

Lock out – Placing a lockout device on an energy isolating device under established procedures and ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout Device – A lockout device uses a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

Lost Workday Cases – Injuries and illnesses that involve days away from work or days of restricted work activity; this classification applies to contractor or private sector employees, not to civil.service employees.

Information Service Center (ISC) - The ISC serves as a storage, assembly and distribution point for a variety of printed products. Materials contained in this room include lithographs of human spaceflight photos, fact sheets, brochures, posters, and other items used for educational activities, guest tours, and other events. The staff handles responses to incoming general public mail and assembles packages of printed materials for the activities mentioned above.**Internal Task Agreement** – Intracenter agreement between JSC organizations.

JASON Project – The JASON project refers to the JSC provided support to the JASON Foundation for Education that provides a yearly expedition using advanced interactive telecommunications to excite and engage students in science and technology and provide professional development opportunities for teachers.

JSC – For purposes of this document, JSC will be considered to include the JSC campus, Ellington Field, and the Sonny Carter Training Facility.

JSC Directives Management System (JDMS) – JDMS is a web-based library of JSC Management Directives.

JSC Policy Directive (JPD) – Agency-level policy document. Also known generically as a Management Directive. JPDs are available to the JSC community via the JSC Directives Management System (JDMS).

JSC Procedures and Guidelines (JPG) – Agency-level procedures document. Also known generically as a Management Directive. JPGs are available to the JSC community via the JSC Directives Management System (JDMS).

Key Decision Point (KDP) – A point in time where the Decision Authority makes a decision on the readiness of a program or project to progress to the next phase of the life cycle. KDPs serve at each phase as gates through which programs and projects must pass.

Kinescope – A method of converting video imagery to film. The device used to convert imagery to film.

Lost Workdays – Away From Work – The number of workdays (consecutive or not) during which the employee would have worked but couldn't because of an occupational injury or illness.

Lost Workdays – Restricted Work Activity – The number of workdays (consecutive or not) during which, because of injury or illness
The employee was assigned to another job on a temporary basis;
The employee worked at a permanently assigned job less than full time; or
The employee worked at a permanently assigned job, but couldn't perform all duties normally connected with the job.

Metadata – Structured Data used in applications, files and databases.

Middleware – Middleware sits "in the middle" between application software working on different operating systems. The middleware may span multiple systems or applications. Examples include JAVA, Cold Fusion, database systems, telecommunications software, transaction monitors, and messaging-and-queuing software.

Mission Focus Review (MFR) – Periodically, NASA administration calls the mission focus reviews to look broadly across the Agency and identify opportunities to redeploy resources to more directly support NASA's mission.

Mission Recording and Processing Area (MRPA) – This facility supports all the returned on-board video imagery, as well as institutional and training facilities.

NASA Policy Directive (NPD) – Agency-level policy document. Also known generically as a Management Directive. NPDs are available to the NASA community via the NASA Online Directives Information System (NODIS.)

NASA Online Directives Information System (NODIS) – Web-based library of agency-level Management Directives.

NASA Procedures and Guidelines (NPG) – Agency-level procedures document. Also known generically as a Management Directive. NPGs are available to the NASA community via the NASA Online Directives Information System (NODIS.)

NASA Television – NASA TV is a general use communication tool for NASA that operates much like a cable channel and is similar to CSPAN in its look. It broadcasts via the NASA Digital Television (DTV) intra-center wide-area network and satellite. Its principle target audience is the media, cable TV stations, and internal NASA communications.

Network Access Control Board (NACB) – Board managed by the IRD for reviewing and approving changes to JSC networks and associated security policies and controls.

Non-standard Working Shift – A shift other than 8 working hours between, 6AM to 6 PM, Monday through Friday.

Operational Readiness Check (ORC) – A visible or qualitative check of picture quality and functionality of a system as opposed to quantitative measurements to determine if a picture or signal is within specifications, which is considered preventive maintenance.

Operational Readiness Review (ORR) – A review of system readiness prior to its release to production.

PAO-1, PAO-2 and PAO-HD – Non-program video feeds between the media trailers and JSC television operations.

Program Control Room (PCR) - This is the live television production control facility in which producers and technical directors choose which video goes out on the NASA TV feed. It is also the central coordinating point for working with mission flight controllers and the PAO commentator in arranging in-flight events and supporting live mission TV.

Preventive Maintenance – Equipment maintenance activities that are performed in order to avoid unscheduled downtime from a component failure.

Projects - Application Development - The design, implementation, and documentation of software systems based on customer requirements. For purposes of this contract, these are categorized as combinations of small/medium/large efforts and low/medium/high complexity.

Projects – Engineering Development - The design, implementation, and documentation of a system or subsystem based on specific customer requirements. For purposes of this contract these are categorized as small, medium, or large based primarily on logistical scope and then cost as a secondary factor. Examples of each size project are described at the end of this glossary.

Public Key Infrastructure (PKI) – Public Key Infrastructure enables users of public networks, such as the Internet, to securely and privately exchange data through the use of a public and a private cryptographic key pair that is obtained and shared through a trusted authority.

Remedial Maintenance – Maintenance required returning a system, application, or piece of equipment to normal operating condition.

Security Plan – Document conforming to a JSC standard template that identifies a set of computing resources, associated risks, and the security controls required to mitigate unacceptable risks. Key points of contact are included.

Service Request (SR) – Document used for communication between the Contractor and the Government to specify which SOW requirements are applicable to each contracted position.

Space News ROUNDUP – The "house organ" paper for JSC; is produced and distributed for the JSC and Contractor community.

Statement of Work – A description of the effort the Contractor is to perform under the contract, including the criteria for determining whether the requirements are met.

Surveillance – Traditional NASA management philosophy of watchful care or oversight, sometimes requiring methods for insight to gather Contractor product and process data through involvement. Surveillance is NASA quality control activity, principally through inspection or review, to ensure contracted services and products meet the Government's overall requirements contained in the contract.

Sustaining Engineering – Development support required to maintain a piece of equipment or application system at an operational level. Also includes minor enhancements.

Signal Validation and Adjustment System (SVAS) - This is the distribution hub for all video and audio imagery on site at JSC. It includes cable TV distribution, baseband audio and video distribution, and satellite reception and transmission capabilities. This is also where all incoming video and audio sources are monitored and adjusted for quality.

Tape Duplication Facility (TDF) - In this facility, we do mass duplication of video imagery in a variety of formats. This includes standards conversion from NTSC to PAL and back for distribution to foreign countries.

Task Order – The means by which the NASA Johnson Space Center will provide authority to the contractor to perform work under the requirements of the Statement of Work.

Teague Broadcast Facility - Located in the south end of Building 2 South, this facility includes the ACR, PCR, video editing equipment, live TV production support equipment, and the TV studio.

Temporary Services – Services intended for no more than 1 year, which may be extended up to two more times in increments of up to 6 months each for a total effort of no more than 2 years.

Tours/Events – Tours may include special guests of the Center Director, congressional personnel, dignitaries from domestic and foreign lands, or educational groups. These tours or events can be typically 2 hours to a full day in length.

Trailer Events – Typically 3 – 4 days where the ISS Trailers (traveling exhibit) is displayed at a venue.

Video Downlink Recording and Playback System (VDRPS) - Recording of all video imagery downlinked for ISS and Shuttle programs—record and playback video downlink. This system supports flight ops/mission control, public affairs. It's designed to record six simultaneous downlinks at once, primarily on an IT-based system.

Video Processing Lab (VPL) - This facility is where simple editing support for HDTV, digitizing motion imagery to video CDs and DVDs, and any non-routine video processing is done.

Project Definition

Projects range from simple ones that involve developing a simple web page or installing a device in a room to large ones that involve installing a system with dozens of connections in multiple rooms or buildings. In general, small projects will have a lower overall cost than large projects and medium projects will fall between these two categories. However, cost is not the only consideration. In most cases, the difference between small, medium, and large projects is generally the logistical scope rather than the particular technology used. Small projects tend to require such things as the finalization and web publishing of existing information, interfacing with a single customer, one or two rooms covered, and a couple of interfaces with the network. Large projects tend to involve more complex integration of application and database services and technologies, multiple rooms, often more than one building, multiple organizations and much more time to coordinate the scheduling of each section to meet completion dates.

SMALL SIZED PROJECTS

1. Application development or support efforts of 500 hours or less **(SOW 5.0)**.
2. Running a cable television drop within a building from an existing tap, and installing a television, VCR, and television equipment stand in an office, or test facility. The job also might entail providing an extra tap on the cable backbone within the building, if required. Appropriate safety measures would be taken during the course of the installation including wearing protective equipment if the cable run was thru a ceiling space area that was treated with asbestos. Testing would be conducted and reported to ensure that the cable television signal was an appropriate level and the television equipment is in working order prior to operation by the customer. Manufacturers operating instructions would be provided to the customer. The cable television system drawings would be updated to show the new additions of a drop and tap using standard cable television drawing practices **(SOW 5.0)**.
3. Installing a multi-scan projector and ancillary equipment in a conference room. The job would entail selecting the right projector for the environment and providing cabling and interface hardware so that the projector could display laptops or personal computers. A cable television drop, tuner and interactive projection screen would also be installed. In some projects the projector could be ceiling mounted and specification on the mount and electrical power requirements should be provided to the Center Operations Directorate facilities contractor so that they could perform this work. In addition to the projector manufacturers operating instructions, a set of instructions should be created to provide information on the setup of the projector-computer interface for this application **(SOW 5.0)**.

MEDIUM SIZED PROJECTS

1. Application support efforts of greater than 500 hours and less than 1500 hours **(SOW 5.0)**.

2. A two (2) camera video monitoring system is required to view test articles in a small vacuum chamber used to test flight hardware. Approval should be obtained from the Test Facility management board on the suitability of the selected video components to operate in the vacuum chamber environment by submitting a test data package validating the performance. The camera's signals shall be distributed over the test facility cable television system by adding modulators, and distributed through the existing baseband switching system to video recorders. The video signals shall also have Greenwich Mean Time (GMT) superimposed, and GMT recorded as an IRIG-B coded signal on an audio channel **(SOW 5.0)**.

3. Establish a television network interface between a JSC test facility and the Video Control Center in building 8 using new fiber optic cables. The fiber optic interface will be used to transport serial digital interface (SDI) signals, and terminate into the central routing matrix in building 8 **(SOW 5.0)**.

4. Same requirements as small sized project no. 3, with the addition of the installation and configuration of one or more relatively straightforward COTS applications **(SOW 5.0)**.

LARGE SIZED PROJECTS

1. Application support efforts of 1500 or more hours **(SOW 5.0)**.

2. Upgrade the Center's security video monitoring system by providing fifteen extra cameras at various perimeter locations at the Center. Establish network connections from the video monitoring systems at Ellington Field and the Sonny Carter Training Facility (SCTF) so that the video signals can be viewed in the Emergency Operations Center in building 30. Perform a cost trade-off/performance analysis on potential network solutions such as leasing video lines, building a dedicated microwave link, compressing the video and running it over the JSC computer backbone or establishing a dedicated computer backbone leg **(SOW 5.0)**.

3. Install a video teleconferencing (VTC) system into an existing large conference room. The room system shall interface directly with an ISDN line. The room system shall be designed with a comprehensive control system that can control the major features of the room such as camera movement, video source selections, and audio level controls. Provide the capability to transmit PC generated signals over the VTC link. Provide a graphics camera for sending pictures of hardcopy material. The audio system shall be capable of operating as a teleconference only item when required **(SOW 5.0)**.

APPLICATION PROJECT COMPLEXITY

Application projects **(SOW 5.0)** may be characterized as low, medium, and high complexity, in addition to the small, medium, and large designation:

- **Low Complexity** refers to application support efforts that typically involve the maintenance of a web site for publishing information that is already in a presentation or near-presentation form. Integration with a database or other application services is not required.

- **Medium Complexity** typically involves the integration of database technology with an application front-end, but not complex transaction processing or workflow.

- **High Complexity** efforts are those that typically entail database integration, script development in support of business processing or advanced interface features (i.e., Flash and Java), interfacing with non-application technologies (i.e., interfacing to a badge reader), or advanced communications capabilities.

MULTIMEDIA PROJECT COMPLEXITY

Multimedia projects **(SOW 5.0)** may be characterized as low, medium, and high complexity, in addition to the small, medium, and large designation:

- **Low Complexity** projects are those that usually do not require significant planning, design or engineering and can readily be accomplished and adequately documented by an installation crew. Examples are: a project to provide or relocate a television and video player plus provide a connection to the cable TV system; a project to reverse the signal direction of a baseband video signal fiber path.

- **Medium Complexity** projects are those that require some degree of planning, design and engineering. Examples are: a project to install a multimedia projector in a conference room and provide a hardwired interface for computers or video players; a project to incorporate a minor

modification, such as improved recording capability, to a test facility video system; a project to install and configure a small addition to the baseband video or support audio distribution systems.

- **High Complexity** projects are those that require extensive planning, design and engineering. Examples are: a project to build a collaborative conference room audio visual support system with an integrated touch-screen control capability; a project to upgrade a video control room with new production and switching equipment; a project to provide a number of new security video cameras and route the signals to a central recording and monitoring point.

APPLICATION LIFE CYCLE PHASES

- **Planning** requirements gathering and specifications documentation
- **Development** design, implementation/integration
- **Sustaining** operations and retirement

General requirements for all projects include the performing and documenting acceptance testing, updating or generating engineering drawings that depict the configuration of the system, including documenting the software installed on a system. Computer Security plans are required for all projects that have computers connected to the network. Ancillary services, performed by other contractors, that are part of a project such as installing telephones, network hubs, environmental services, and facility modifications must be coordinated by the JIMMS contractor and documented in the project plans. All projects require submittal of a final report to NASA including a description of the work performed, when it was performed, and the cost of implementation.

Attachment J-5
List of Installation Accountable Government Property

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
0016537	LENS, CAMERA	CANON CAMERA CO INC	J13X9BIE2	001066H	JS-1/916	$5,335.00
0016805	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	6304981	JS-2S/104	$573.00
0016806	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	6304974	JS-8/280	$573.00
0016826	RECEIVER, TELEVISION	SONY CORP	CVM1271	2011133	JS-12/154BA	$620.00
0016828	RECEIVER, TELEVISION	SONY CORP	CVM1271	2011058	JS-8/225A	$620.00
0016880	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9UA	7305197	JS-8 / 281	$551.00
0016881	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9UA	7305168	JS-8 / 226B	$551.00
0016882	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9UA	7305179	JS-8 / 281	$551.00
0016895	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	17204691	JS-8/280	$512.00
0016897	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	6304716	JS-8 / 281	$512.00
0016899	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	12204694	JS-8/273B	$544.00
0017086	MONITOR, TELEVISION	VIDEOTEK INC	VM8PRD	8881114	JS-8/226B	$1,020.00
0017087	MONITOR, TELEVISION	VIDEOTEK INC	VM8PRD	8881115	JS-8/226B	$1,020.00
0017303	MONITOR, WAVEFORM	TEKTRONIX INC	1750	B032926	JS-30M/319	$5,370.00
0017604	DISPLAY UNIT	SONY CORP	XVM30	302458	JS-8/272	$550.00
0017609	CAMERA SET, TELEVISION	SONY CORP	XC999	10374	JS-8/226B	$1,250.00
0017640	LENS, CAMERA	FUJINON INC	AB5X5.5BRD28	572284	JS-2S/109	$7,850.00
0017658	OSCILLOSCOPE	TEKTRONIX INC	2430A	BO22521	JS-8/181C	$8,596.00
0017679	CAMERA SET, TELEVISION	PANASONIC	WVD5100	07A00065	JS-8/215B	$995.00
0017749	RECEIVER, AUDIO	STANDARD COMMUNICATIONS	MT810	890100109	JS-T-588/100	$1,937.00
0017831	RECEIVER, SATELLITE	STANDARD COMMUNICATIONS	MT810	891100046	JS-T-588/100	$1,937.00
0017854	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407447	JS-2S/109	$575.00
0038864	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001627	JS-425/100B	$819.00
0038865	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001639	JS-2S/109	$819.00
0038867	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001622	JS-2S/109	$819.00
0038885	MONITOR, TELEVISION	IKEGAMI ELECTRONIC US INC	TM1420RH	KO629	JS-2S / STAGE	$4,530.00
0038886	MONITOR, TELEVISION	IKEGAMI ELECTRONIC US INC	TM1420RH	KO625	JS-2S/109	$4,530.00
0038962	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	17709955	JS-2S/212	$552.00
0038966	RECORDER, VIDEO CASSETTE	PANASONIC	AG7350	C3TC00389	JS-2S / 104	$2,075.00
0038973	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001023	JS-8/298H	$816.00
0038975	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001163	JS-8/298H	$816.00
0038978	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001165	JS-425/100B	$816.00
0038982	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	17709973	JS-8/280	$540.00
0038983	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	6800069	JS-8 / 281	$540.00
0038984	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	17709967	JS-8 / 281	$540.00
0038993	BACK, CAMERA STILL PICTURE	HASSELBLAD A B VICTOR	205TCC	15EH10941	JS-8/298	$6,384.00
0038994	BACK, CAMERA STILL PICTURE	HASSELBLAD A B VICTOR	205TCC	15EH10944	JS-8/298	$6,384.00
0039012	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001164	JS-8/273A	$816.00
0039199	CAMERA, STILL PICTURE	NIKON INC	SED33104056-3	1037	JS-8/298	$1,424.00
0040320	RECORDER, VIDEO CASSETTE	SONY CORP	HDW250	10032	JS-8/273A	$37,506.00
0040400	RECORDER, HI-8	SONY CORP	EVS2000	12180	JS-12/154BA	$804.00
0040410	CAMERA, BODY	NIKON INC	F4S	2474955	JS-8/298	$1,649.00
0040423	CAMERA SET, TELEVISION	PANASONIC	WVD5100HS	32A00283	JS-8/181B	$1,148.00
0040425	CAMERA SET, TELEVISION	PANASONIC	WVD5100HS	32A00282	JS-8/181B	$1,148.00
0040450	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004376	JS-2S/109	$861.00
0040451	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004372	JS-17/119	$861.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
0040452	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004560	JS-2S/109	$861.00
0040843	CAMERA SET, TELEVISION	PANASONIC	WVD5100HS	36A00035	JS-8/181B	$1,148.00
0040852	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9600	10510	JS-8 / 281	$2,197.00
0040856	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9600	11028	JS-8/208A	$2,880.00
0040857	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9600	11026	JS-8/215B	$2,880.00
0040861	GENERATOR, NTSC DIGITAL	TEKTRONIX INC	TSG170D	10621	JS-8/181B	$5,280.00
0040863	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9600	10509	JS-8 / 226B	$2,641.00
0040865	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9600	10511	JS-8 / 281	$2,197.00
0040867	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800313	JS-2S / 211	$550.00
0040868	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	6800090	JS-2S/211	$550.00
0040869	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800341	JS-2S / 211	$550.00
0040870	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800333	JS-8 / 281	$550.00
0040871	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800342	JS-8/273A	$550.00
0040872	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800362	JS-8/280	$550.00
0040873	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800314	JS-8 / 281	$550.00
0040874	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800304	JS-8/280	$550.00
0040875	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	7800315	JS-8/280	$550.00
0040880	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2003084	JS-2S/109	$765.00
0040881	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2003085	JS-8/298H	$765.00
0040898	MONITOR, TELEVISION	JVC CO OF AMERICA	TVM900SU	11933700	JS-8/215B	$520.00
0040903	MONITOR, TELEVISION	JVC CO OF AMERICA	TM900SU	11933747	JS-8 / 226B	$520.00
0040904	MONITOR, TELEVISION	JVC CO OF AMERICA	TVM900SU	11933868	JS-30A/1092	$520.00
0040907	MONITOR, TELEVISION	JVC CO OF AMERICA	TM900SU	11933781	JS-8 / 281	$520.00
0040919	MONITOR, TELEVISION	JVC CO OF AMERICA	TM900SU	11933864	JS-8 / 281	$520.00
0040950	MONITOR, VECTORSCOPE	TEKTRONIX INC	1720	B021129	JS-425/100B	$3,358.00
0040951	MONITOR, VECTORSCOPE	TEKTRONIX INC	1720	B021201	JS-425/100B	$3,358.00
0040954	RECORDER, VIDEO CASSETTE	SONY CORP	EVO9850	13409	JS-2S/104	$5,655.00
0040956	RECORDER, VIDEO CASSETTE	SONY CORP	EVO9850	13538	JS-2S/104	$5,655.00
0040958	RECORDER, VIDEO CASSETTE	SONY CORP	EVO9850	13404	JS-2S/104	$5,655.00
0040966	CAMERA, ELECTRONIC DIGITAL	EASTMAN KODAK CO APPARATUS DIV	DCS460	4601285	JS-8/298	$27,050.00
0041392	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004557	JS-8/226B	$861.00
0041395	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004371	JS-8 / 281	$861.00
0041396	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004555	JS-17 / 119	$861.00
0041397	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004364	JS-8 / 281	$861.00
0041399	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004417	JS-17/119	$861.00
0041400	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004559	JS-8/273A	$861.00
0041403	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004377	JS-2S/104	$861.00
0041404	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004550	JS-425/100B	$861.00
0041408	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2004552	JS-2S/109	$861.00
0041437	MONITOR, TELEVISION	SONY CORP	BVM1311	2000609	JS-8/280	$5,452.00
0041438	MONITOR, TELEVISION	SONY CORP	BVM1311	2000606	JS-2S / 208	$5,452.00
0041446	CAMERA SET, TELEVISION	SONY CORP	XC999	17691	JS-8/226B	$1,349.00
0041459	MONITOR, TELEVISION	PANASONIC	BTM1310Y	FE3640038	JS-8 / 281	$1,477.00
0072772	CAMERA SET, TELEVISION	TOSHIBA HOSHASEN CO LTD	1KM30	65530378	JS-PARII/HMFLB	$3,825.00
0074296	CAMERA SET, TELEVISION	SONY CORP	DXC3000H	15841	JS-1/916	$4,129.00
0074595	RECORDER, VIDEO CASSETTE	PANASONIC	AG6200	A8TA00059	JS-8/273B	$1,690.00
0078782	MONITOR, TELEVISION	SONY CORP	PVM1271Q	2033406	JS-8/226B	$775.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
0079098	AMPLIFIER AUDIO DISTRIBUTION	HEACO	5002B	PA0-1000	JS-2S/122	$6,650.00
0081098	MONITOR, TELEVISION	VIDEOTEK INC	VM13PRO	C09881151	JS-2S/109	$1,389.00
0081251	RECORDER-REPRODUCER	OTARI ELECTRIC CO LTD	MX55N	18890512D	JS-2S/123	$3,665.00
0081252	RECORDER-REPRODUCER	OTARI ELECTRIC CO LTD	MX55N	18890511D	JS-2S/107	$3,665.00
0081498	MONITOR, TELEVISION	NEC TECHNOLOGIES INC FRMLY NEC	DM3000	22000574	JS-2S/109	$3,635.00
0081524	RECEIVING SET, TELEVISION	PANASONIC	AG500R	G8MD00664	JS-2S/104	$735.00
0081527	RECEIVING SET, TELEVISION	PANASONIC	AG500R	G8MD00359	JS-45/100BB	$735.00
0082776	DEMULTIPLEXER	COLORADO VIDEO INC	497-4	38	JS-425/100B	$9,450.00
0149840	OSCILLOSCOPE	TEKTRONIX INC	2465A-DV	B012353	JS-8/215BA	$8,740.00
0153803	LENS CAMERA GYROZOOM	SCHWEN TECHNOLOGY INC	60/300	118308	JS-2S/109	$12,650.00
0156759	OSCILLOSCOPE	TEKTRONIX INC	2465ADV	B012909	JS-8/280	$8,740.00
0224437	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	SED33102115-3	1040	JS-8/251A	$1,280.00
0231192	RECEIVING SET, TELEVISION	RCA CP GVMT & COMMERCIAL SYS	JKR985	449370390	JS-2S/109	$680.00
0236186	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	500C/M	RC1304336	JS-8/298	$760.00
0236187	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	500C/M	RC1306753	JS-2/298	$760.00
0236188	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	500C/M	RC1306408	JS-8/298	$760.00
0236420	MONITOR, WAVEFORM	TEKTRONIX INC	1750	B020342	JS-30S/5301	$5,246.00
0270213	MONITOR, TELEVISION	TEKTRONIX INC	650HR	B020361	JS-T-586/100	$4,490.00
0271083	RECORDER, VIDEO CASSETTE	PANASONIC	AG6200	15TA00313	JS-SCH/ERC	$1,251.00
0271085	RECORDER, VIDEO CASSETTE	PANASONIC	AG6200	15TA00307	JS-8/273B	$1,251.00
0271680	PLAYER, CASSETTE VIDEO	SONY CORP	VP5000	49094	JS-SCH/ERC	$995.00
0271822	PLAYER, CASSETTE VIDEO	SONY CORP	VP5000	41099	JS-SCH/ERC	$995.00
0274964	MONITOR, TELEVISION	SONY CORP	PVM1910	2016289	JS-2S/109	$677.00
0275203	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	500ELX	RT1329361	JS-8/298	$1,148.00
0304471	RECEIVER, TELEVISION	SONY CORP	CVM1271	2006386	JS-12/154BA	$562.00
0513575	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5C	6447	JS-8/298	$3,918.00
0513604	CAMERA, MOTION PICTURE	REDLAKE IMAGING CORP	41-0014	155	JS-8/106R	$8,440.00
0513647	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5C	6578	JS-8/298	$3,050.00
0513648	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5C	6262 MOD-DBM	JS-8/298	$3,712.00
0513649	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5A	6960-1	JS-8/298	$3,220.00
0513655	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	500C/M	201471	JS-8/298	$740.00
0513684	BODY, CAMERA	HASSELBLAD A B VICTOR	2000FC	RS1513431	JS-8/298	$1,749.00
0515056	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5AM	5793	JS-8/298	$2,802.00
0515057	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5C	6577	JS-8/298	$3,050.00
0515087	CAMERA, MOTION PICTURE	TELEDYNE CAMERA SYSTEMS	DBM5C	6450	JS-8/298	$3,918.00
0515116	PRINTER PROJECTION PHOTOGRAPH	DURST U S A INC	L1800	400244	JS-8/110C	$10,250.00
0552824	MONITOR TELEVISION COLOR 14IN	IKEGAMA TSUSHINKI CO LTD	TM14-2RHA	37B2498	JS-8/208A	$3,850.00
0555691	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	500EL	USE14621	JS-8/298	$762.00
0558438	CAMERA, MOTION PICTURE	NIKON INC	F3	1522496	JS-8/298	$541.00
0601619	RECORDER-REPRODUCER SOUND	OTARI ELECTRIC CO LTD	MX50508D	17907014P	JS-2S/123	$4,240.00
0601682	RECORDER-REPRODUCER SOUND	OTARI ELECTRIC CO LTD	MX50508D	17907019P	JS-2S/123	$4,240.00
0601689	RECORDER TAPE	SOUNDSCRIBER CO THE	SS5395/1	2	JS-2S/107	$2,100.00
0666113	KIT COLOR HEAD HIGH INTENSITY	DURST U S A INC	2000	NONE	JS-8/110C	$7,995.00
0667059	CAMERA, STILL PICTURE	NIKON INC	F2AS	F27773870	JS-8/298	$677.00
0714635	RECORDER-REPRODUCER SET, SIGNA	AMPEX CORP F-INVAR ELECTR CORP	SP300	3092518	JS-2S/123	$6,956.00
0715135	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	33100040	1021	JS-8/251A	$2,100.00
0782308	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	C	TTW7125	JS-8/298	$520.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
0799977	MONITOR, TELEVISION	SONY CORP	PVM8200	504506	JS-2S / 207	$588.00
0799978	MONITOR, TELEVISION	SONY CORP	PVM8200	12171	JS-2S / 207	$636.00
0804285	GENERATOR, NTSC TELEVISION	TEKTRONIX INC	TSG170A	BO42207	JS-2S / 208	$5,449.00
0804286	GENERATOR, NTSC TELEVISION	TEKTRONIX INC	TSG170A	BO42206	JS-2S / 208	$5,449.00
0804321	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406953	JS-2S / 211	$528.00
0804323	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407181	JS-2S/201B	$528.00
0804324	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406956	JS-2S / 211	$528.00
0804325	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407153	JS-2S / 211	$528.00
0804327	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406970	JS-425/100B	$528.00
0804328	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406978	JS-2S / 211	$528.00
0804329	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406952	JS-2S / 211	$528.00
0804330	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406954	JS-2S / 211	$528.00
0804331	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407159	JS-2S / 211	$528.00
0804334	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406947	JS-2S / 211	$528.00
0804335	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406960	JS-2S / 211	$528.00
0804336	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406979	JS-2S/201B	$528.00
0804338	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406966	JS-2S / 211	$528.00
0804339	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406949	JS-2S / 211	$528.00
0804340	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406954	JS-2S/104	$528.00
0804341	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407065	JS-2S / 211	$528.00
0804343	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	134070150	JS-2S / 211	$528.00
0804344	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406974	JS-2S/109	$528.00
0804345	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406976	JS-2S / 211	$528.00
0804346	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407158	JS-2S / 104	$528.00
0804347	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407046	JS-2S / 211	$528.00
0804350	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407160	JS-2S / 211	$528.00
0804351	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	11406971	JS-8 / 281	$528.00
0804456	GENERATOR, SIGNAL	TEKTRONIX INC	1910	B022236	JS-425/100B	$7,500.00
0804459	GENERATOR, SIGNAL	TEKTRONIX INC	1910	B022235	JS-8/226B	$7,500.00
0804486	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407597	JS-2S / 211	$554.00
0804499	RECEIVING SET, TELEVISION	VIDEOTEK INC	RM8A	1900839	JS-17/1E2	$697.00
0804539	CAMERA, BODY	NIKON INC	F4S	2203746	JS-8/298	$1,479.00
0804548	GENERATOR, SIGNAL	TEKTRONIX INC	1910	BO22325	JS-8/280	$8,700.00
0805439	MONITOR, TELEVISION	SONY CORP	PVM8020	5017762	JS-2S/109	$557.00
0805440	DISPLAY UNIT	JVC CO OF AMERICA	TMR9U	10508791	JS-8/280	$575.00
0805442	DISPLAY UNIT	JVC CO OF AMERICA	TMR9U	10508786	JS-8 / 281	$575.00
0805478	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	6508205	JS-8 / 281	$560.00
0805479	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407173	JS-8 / 281	$560.00
0805481	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407464	JS-8 / 281	$560.00
0805483	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407478	JS-8/280	$560.00
0805484	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407484	JS-8 / 281	$560.00
0805485	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	10508800	JS-8/280	$560.00
0805486	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407166	JS-8/280	$560.00
0805487	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	17408191	JS-8/280	$560.00
0805488	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407473	JS-8/280	$560.00
0805489	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	6508219	JS-8 / 281	$560.00
0805490	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407486	JS-8/280	$560.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
0805491	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407504	JS-8 / 281	$560.00
0805492	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13407483	JS-8 / 281	$560.00
0805505	DISPLAY UNIT	JVC CO OF AMERICA	TMR9U	16508906	JS-2S/109	$560.00
0805552	RECORDER, CASSETTE VIDEO	PANASONIC	AG1960	CIHG00736	JS-9NW/2170	$908.00
0805823	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	8609210	JS-1/968	$575.00
0806123	CAMERA	NIKON INC	F4S	240655Z	JS-8/298	$1,464.00
0806143	CAMERA, STILL PICTURE	NIKON INC	SED33104056-3	1025	JS-8/298	$1,424.00
0806177	LENS, CAMERA	CANON CAMERA CO INC	J8X6B41RS	112043H	JS-2S/109	$9,378.00
0806219	RECORDER, VIDEO CASSETTE	SONY CORP	DSR-20	19264	JS-8/298	$2,993.00
0807244	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	6800165	JS-9NW/2170	$544.00
0807245	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	6800203	JS-9NW/2170A	$544.00
0807264	GENERATOR, SIGNAL	TEKTRONIX INC	1910	B011267	JS-8/226B	$9,491.00
0807355	GENERATOR, NTSC DIGITAL	TEKTRONIX INC	TSG170D	BO10627	JS-2S/109	$5,425.00
0807357	GENERATOR, NSTC DIGITAL	TEKTRONIX INC	TSG170D	BO10623	JS-425/100B	$5,425.00
0807358	GENERATOR, NTSC DIGITAL	TEKTRONIX INC	TSG170D	BO10625	JS-425/100B	$5,425.00
0807440	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO21495	JS-8/215BA	$9,390.00
0807455	RECORDER, VIDEO CASSETTE	SONY CORP	EV09850	10839	JS-12/154BA	$5,005.00
0807463	RECEIVING SET, TELEVISION	SONY CORP	BVM1310	2002133	JS-2S / 104	$4,888.00
0807468	RECORDER-REPRODUCER, VIDEO	PANASONIC	AG7350	F2TC01102	JS-2S / 104	$1,940.00
0807496	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2001420	JS-2S/109	$2,310.00
0807539	MONITOR, TELEVISION	JVC CO OF AMERICA	TMR9U	13760459	JS-8/280	$630.00
0807545	GENERATOR, NTSC DIGITAL	TEKTRONIX INC	TSG170D	B010614	JS-8/215BA	$5,040.00
0807551	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2000657	JS-2S/109	$763.00
0807552	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2000682	JS-2S/109	$763.00
0807553	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2000656	JS-8/273A	$763.00
0807554	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2000623	JS-8/215BA	$763.00
0807555	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2000613	JS-2S/109	$763.00
0807556	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2000359	JS-2S/109	$763.00
0807577	OSCILLOSCOPE	TEKTRONIX INC	2465B	BO61194	JS-8/215B	$7,008.00
0807590	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO21599	JS-343/1001	$9,390.00
0807611	MONITOR, TELEVISION	SONY CORP	BMV1310	2002226	JS-2S / 208	$4,901.00
0840229	RECORDER, CASSETTE VIDEO	SONY CORP	VO7600	12813	JS-423/106	$2,545.00
1167290	RECORDER-REPRODUCER SET, VIDEO	AMPEX CORP F-INVAR ELECTR CORP	VPR3	850879	JS-8/208A	$91,660.00
1171917	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171918	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171919	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171920	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171921	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171922	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171923	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171924	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171925	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1171926	FILE UNIT MOBILE DOUBLE FACE	WHITE STORAGE & RETREVIAL SYS	NONE	NONE	JS-45/100BB	$5,499.00
1172053	TAPE DRIVE, BACKUP	WANGDAT TECHNOLOGY INC	1300XL	14910155	JS-12/154BA	$1,440.00
1172058	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2002755	JS-8/215B	$949.00
1172234	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO21264	JS-9A/CEP	$9,700.00
1172263	CAMERA BODY, LINHOF	TECHNICA LTD	SED33102506-3	1004	JS-8/251A	$7,226.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1172266	LENS, CAMERA 90MM F5.6	TECHNICA LTD	SED33102509-3	1004	JS-8/251A	$4,555.00
1233256	RECEIVER, COMPACT W/ACCESSORIE	LECTROSONICS INC	CR195	245	JS-2S/122	$1,649.00
1233258	TRANSMITTER, COMPACT W/ACCESS	LECTROSONICS INC	CR195	147	JS-2S/122	$1,649.00
1234151	RECORDER, CASSETTE VIDEO	SONY CORP	EVO9500A	11598	JS-425/100B	$1,825.00
1234155	RECORDER, CASSETTE VIDEO	SONY CORP	EVO9500A	11591	JS-8/181B	$1,825.00
1234159	CORRECTOR, COLOR VIDEO	SONY CORP	BVXD10	10200	JS-8/273A	$8,636.00
1234187	ADAPTER, PLAYBACK	SEKAI ELECTRONICS OF AMERICA	PA800	10043	JS-8/273A	$8,950.00
1234205	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2003486	JS-8/226B	$962.00
1234217	DISPLAY UNIT	GOLDSTAR CO LTD	1620VGA	MC20200030	JS-12/154BA	$765.00
1234221	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO21498	JS-8/215B	$9,376.00
1234222	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO21499	JS-8/280	$9,376.00
1234223	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO21500	JS-8/215BA	$9,376.00
1234328	VIDEO LINK RGB	SPECTRUM CORP	16000	16341	JS-2S/109	$6,365.00
1234353	RECORDER, CASSETTE VIDEO	PANASONIC	AG7750P	G2TC00388	JS-8/273A	$4,760.00
1234368	TEST SET, AUDIO PORTABLE	AUDIO PRECISION	P1PLUS	P1P10431	JS-8/181B	$5,160.00
1234383	CRANE, CAMERA CONTROLLER	STANTON VIDEO SERVICES	JIMMY JIB II	NONE	JS-2S/109	$7,901.00
1235151	MONITOR, TELEVISION	SONY CORP	PVM1340	2011652	JS-425/100B	$590.00
1235219	CAMERA, BODY	HASSELBLAD A B VICTOR	503CX	1431442	JS-8/298	$1,185.00
1237286	MONITOR, TELEVISION	PANASONIC	BTS1360Y	3150070	JS-8/215BA	$610.00
1237296	MONITOR, TELEVISION	PANASONIC	BTN1350Y	3150015	JS-2S/109	$963.00
1237297	MONITOR, TELEVISION	PANASONIC	BTH1350Y	3150009	JS-2S/109	$963.00
1237300	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2009796	JS-8/208	$919.00
1237325	FRAME SYNCHRONIZER	DIGITAL PROCESSING SYSTEMS	ES2000	9303E2C019	JS-8/280	$8,809.00
1237326	BODY, CAMERA	HASSELBLAD A B VICTOR	503CX	11EP22601	JS-8/298	$1,438.00
1237327	BODY, CAMERA	HASSELBLAD A B VICTOR	503CX	11EP22508	JS-8/298	$1,438.00
1237329	BODY, CAMERA	HASSELBLAD A B VICTOR	503CX	11EP22558	JS-8/251A	$1,438.00
1237359	MONITOR, TELEVISION	MITSUBISHI ELECTRIC CORP	CS35AXI	502331	JS-30S/2312	$1,578.00
1237380	MONITOR, TELEVISION	SONY CORP	PVM1944Q	2002645	JS-2S / 109	$1,546.00
1237386	RECORDER, VIDEO CASSETTE	PANASONIC	AG7150	C3TC00119	JS-8/225B	$1,558.00
1239962	PRINTER, ADP	CANON CAMERA CO INC	NP780	32201034	JS-45/100	$10,972.00
1296633	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2007222	JS-8 / 281	$759.00
1296634	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2007043	JS-8 / 281	$759.00
1296636	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	11003	JS-8/181B	$4,369.00
1296645	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10948	JS-8/181B	$4,369.00
1296647	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10941	JS-8/181B	$4,369.00
1296686	RECORDER, VIDEO CASSETTE	PANASONIC	AGW1	F3MD00238	JS-8/218	$1,945.00
1296711	RECORDER, VIDEO CASSETTE	PANASONIC	AG1970	G3TA00220	JS-2S/112	$1,250.00
1296712	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2011651	JS-2S / 104	$919.00
1296713	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2011649	JS-2S / 104	$919.00
1296714	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2011646	JS-2S/110	$919.00
1296720	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	11194	JS-8/181B	$4,369.00
1296723	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	11197	JS-425/100B	$4,369.00
1296726	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	11198	JS-8/2100	$4,369.00
1296727	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10950	JS-30S/2326	$4,369.00
1296730	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10945	JS-30S/2326	$4,369.00
1296733	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10942	JS-2S/109	$4,369.00
1296769	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2007011	JS-8 / 281	$759.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1296770	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850383	JS-425/100B	$575.00
1296772	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850379	JS-425/100B	$575.00
1296773	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850377	JS-425/100B	$575.00
1296776	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850486	JS-8 / 281	$575.00
1296777	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	15850589	JS-8 / 281	$575.00
1296778	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850380	JS-8 / 281	$575.00
1296780	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850488	JS-425/100B	$575.00
1296781	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	15850540	JS-8 / 281	$575.00
1296782	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850476	JS-8 / 281	$575.00
1296785	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850361	JS-8 / 281	$575.00
1296786	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	15850563	JS-425/100B	$575.00
1296787	MONITOR, TELEVISION	JVC CO OF AMERICA	TM550U	14850384	JS-8 / 281	$575.00
1296797	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2009419	JS-8/208	$900.00
1296798	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2010026	JS-8/208	$900.00
1296801	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2007005	JS-2S/207	$919.00
1296802	RECORDER, VIDEO D2	BROADCAST VIDEO SYSTEMS LTD	DCR20N	11309	JS-425/100B	$38,750.00
1296804	RECORDER, VIDEO D2	BROADCAST VIDEO SYSTEMS LTD	DCR20N	11302	JS-425/100B	$38,750.00
1296806	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2007004	JS-8/273A	$919.00
1296807	RECORDER, VIDEO D2	BROADCAST VIDEO SYSTEMS LTD	DCR20N	11303	JS-425/100B	$38,750.00
1296828	FRAME, INTERCOM MATRIX	RTS SYSTEMS	FR9500	6697	JS-2S/104	$8,590.00
1296832	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2007038	JS-8 / 281	$759.00
1296870	SWITCHER, VIDEO	BROADCAST VIDEO SYSTEMS LTD	VENUS64X64	NONE	JS-8/208	$54,166.00
1296871	SWITCHER, VIDEO ROUTING	BROADCAST VIDEO SYSTEMS LTD	VENUS96X96	NONE	JS-8/280	$61,758.00
1296896	TRANSMITTER	COMWAVE	SB050B	S3302	JS-1/PENTH	$13,137.00
1296897	TRANSMITTER	COMWAVE	SB050B	S3302	JS-1/PENTH	$13,137.00
1296898	TRANSMITTER	COMWAVE	SB050B	S3300	JS-1/PENTH	$13,137.00
1297095	POWER SUPPLY	EMERGENCY POWER ENGINEERING	UPS4225T480-4	13045-00	JS-46 / 1M1A	$74,445.00
1298110	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2004375	JS-2S / 104	$962.00
1298144	MONITOR, TELEVISION	SONY CORP	PVM1340	2009883	JS-2S/206	$578.00
1298147	MONITOR, TELEVISION	SONY CORP	PVM1340	2010356	JS-2S/109	$578.00
1298148	MONITOR, TELEVISION	SONY CORP	PVM1340	2010024	JS-2S/109	$578.00
1298150	MONITOR, TELEVISION	SONY CORP	PVM411	19423	JS-T-588/100	$578.00
1298151	MONITOR, TELEVISION	SONY CORP	PVM411	19490	JS-T-588/100	$578.00
1298179	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10438	JS-2S/109	$4,070.00
1298189	CAMERA-RECORDING, VIDEO	SONY CORP	DXC930	10473	JS-8/181B	$4,070.00
1298196	SYNCHRONIZER, VIDEO	TEKTRONIX INC	110S	B031781	JS-2S / 208	$14,005.00
1298232	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2003120	JS-1/PENTH	$1,053.00
1298270	RECORDER, CASSETTE VIDEO	SONY CORP	EVO9500A	12033	JS-8/225A	$1,779.00
1298271	RECORDER, CASSETTE VIDEO	SONY CORP	EVO9500A	12047	JS-1/968	$1,779.00
1298272	RECORDER, CASSETTE VIDEO	SONY CORP	EVO9500A	12042	JS-8 / 281	$1,779.00
1298273	RECORDER, CASSETTE VIDEO	SONY CORP	EVO9500A	12035	JS-8/225B	$1,779.00
1298313	FRAME, FIBER OPTIC TRANSMITTER	DYNAIR ELECTRONICS INC	SERIES1200T	334413M2	JS-30S/13M15	$5,295.00
1298315	FRAME, FIBER OPTIC TRANSMITTER	DYNAIR ELECTRONICS INC	SERIES1200T	334419M2	JS-8/280	$5,295.00
1298323	FRAME, FIBER OPTIC TRANSMITTER	DYNAIR ELECTRONICS INC	SERIES1200T	334406M2	JS-4S/10T1	$5,295.00
1298332	RECORDER-REPRODUCER, VIDEO	PANASONIC	AG7350	G2TC00863	JS-2S / 104	$1,940.00
1298338	GENERATOR, SIGNAL HANDHELD	TEKTRONIX INC	TSG90	BO10324	JS-2S/109	$690.00
1345508	TRANSMITTER	COMWAVE	SB050B	S3303	JS-1/PENTH	$13,137.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1345524	RECORDER, VIDEO D2	BTS BRAODCAST TELEVISION SYS	DCR20N	11310	JS-2S / 104	$38,750.00
1345532	RECORDER, VIDEO CASSETTE	SONY CORP	PVW2800	18650	JS-8 / 281	$13,860.00
1345533	RECORDER, VIDEO CASSETTE	SONY CORP	PVW2800	18920	JS-8 / 281	$13,860.00
1345614	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12337	JS-8 / 226B	$7,415.00
1345615	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12583	JS-8/208	$7,415.00
1345616	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12468	JS-425/100B	$7,415.00
1345617	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12436	JS-8/208	$7,415.00
1345618	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12482	JS-8/208	$7,415.00
1345619	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12483	JS-8/208	$7,415.00
1345624	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12476	JS-8/208	$7,415.00
1345625	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12578	JS-8/208	$7,415.00
1345626	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12459	JS-8/208	$7,415.00
1345627	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12458	JS-8/208	$7,415.00
1345628	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12462	JS-8 / 226B	$7,415.00
1345629	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12520	JS-8/218	$7,415.00
1345630	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12474	JS-8/208	$7,415.00
1345631	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12465	JS-8/208	$7,415.00
1345632	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12359	JS-8/208	$7,415.00
1345633	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12463	JS-8/208	$7,415.00
1345637	SHELVING SYSTEM	SPACESAVER CORP	HC3	NONE	JS-8/225B	$18,453.00
1345676	MONITOR, TELEVISION	SONY CORP	PVM1354Q	2001385	JS-T-588/100	$965.00
1345688	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	12576	JS-2S / 208	$7,415.00
1345693	BOOTH, ACOUSTICAL AUDIO	INDUSTRIAL ACOUSTICS CO INC	69-12	NONE	JS-2S/109A	$13,686.00
1345741	MONITOR, TELEVISION	SONY CORP	PVM2530BS	2042979	JS-2S/110	$1,172.00
1345742	MONITOR, TELEVISION	SONY CORP	PVM3230BS	2003182	JS-2S/HALL	$2,101.00
1345751	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2010210	JS-8 / 281	$765.00
1345752	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2010207	JS-9NW/2170	$765.00
1345753	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2010218	JS-8 / 215B	$765.00
1345754	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2010206	JS-8/215B	$765.00
1345766	GENERATOR, REFERENCE	COMWAVE	REFERENCE DI	S3305	JS-1/PENTH	$1,685.00
1346512	TRANSMITTER/RECEIVER, IRIG	GRAY ENGINEERING LABS INC	DTR333C+	4650	JS-8/208	$3,810.00
1346534	MONITOR, TELEVISION	SONY CORP	PVM8041Q	2501200	JS-8 / 281	$765.00
1346537	TRANSMITTER/RECEIVER, IRIG	GRAY ENGINEERING LABS INC	DTR333C+	4651	JS-8/273A	$3,810.00
1346538	TRANSMITTER/RECEIVER, IRIG	GRAY ENGINEERING LABS INC	DTR333A	4648	JS-8 / 281	$2,920.00
1346539	TRANSMITTER/RECEIVER, IRIG	GRAY ENGINEERING LABS INC	DTR333C+	4649	JS-8 / 281	$3,810.00
1346540	TRANSMITTER/RECEIVER, IRIG	GRAY ENGINEERING LABS INC	DTR333C+	4652	JS-8/208	$3,810.00
1346549	TRANSMITTER/RECEIVER, IRIG	GRAY ENGINEERING LABS INC	DTR333C+	4653	JS-8 / 281	$3,810.00
1347127	MAGAZINE, FILM	TECHNICA LTD	SED33102507-3	1008	JS-8/251A	$6,889.00
1351093	RACK, ELECTRICAL EQUIPMENT	DIGITAL ASSOCIATES CORP	H9A-10CC	NI524N8043	JS-8 / 125B	$5,000.00
1447365	RECORDER, DOCKABLE	SONY CORP	PVV3	10992	JS-2S/109	$8,243.00
1447511	PLAYER, COMPACT DISC	TASCOM CORP	CD301	TCA320100	JS-2S/107	$530.00
1447512	RECORDER, AUDIO TAPE	PANASONIC	SV3700	AA4AA16282	JS-2S/210	$1,322.00
1447513	RECORDER, AUDIO CASSETTE	TASCOM CORP	112RMKII	TCA60230	JS-2S/210	$808.00
1447514	RECORDER, AUDIO TRACK	TASCOM CORP	32	TCA340147	JS-2S/HALL	$1,586.00
1447516	RECEIVING SET, TELEVISION	SONY CORP	1954Q	NONE	JS-8/181B	$1,670.00
1447519	SWITCHER, AUDIO/VIDEO	BTS BRAODCAST TELEVISION SYS	FC32X32V	NONE	JS-2S / 208	$61,317.00
1447520	SWITCHER, AUDIO ROUTING	BTS BRAODCAST TELEVISION SYS	VC32X32A	NONE	JS-2S / 208	$13,440.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1447541	INTERFACE, SERIAL CONTROL	BTS BRAODCAST TELEVISION SYS	SI3000	8280178	JS-8/208	$5,175.00
1447549	MONITOR, TELEVISION	PANASONIC	BTM1310Y	FE4240031	JS-2S / 211	$1,477.00
1447583	FRAME, DISTRIBUTION VIDEO	DYNAIR ELECTRONICS INC	FR84008	344858	JS-30S/2334A	$6,080.00
1447585	RECEIVER, CONTROL CAMERA	COHU INC	MPCD156	228872	JS-30S/2306	$1,480.00
1447586	RECEIVER, CONTROL CAMERA	COHU INC	MPCD156	228868	JS-425/100B	$1,480.00
1447587	RECEIVER, CONTROL CAMERA	COHU INC	MPCD156	228865	JS-425/100B	$1,480.00
1447589	RECEIVER, CONTROL CAMERA	COHU INC	MPCD156	228858	JS-30S/2306	$1,480.00
1447590	RECEIVER, CONTROL CAMERA	COHU INC	MPCD156	228853	JS-30S/2326	$1,480.00
1447591	RECEIVER, CONTROL CAMERA	COHU INC	MPCD156	228866	JS-30S/2326	$1,480.00
1453730	PRINTER, ADP	HEWLETT-PACKARD CO	C3155A	USFB087416	JS-9NW/2170	$1,014.00
1456131	RECEIVING SET, TELEVISION	RCA ASTRO ELECTRONICS DIV	F35755MB	523466843	JS-30S/2326	$1,390.00
1456132	RECEIVING SET, TELEVISION	RCA ASTRO ELECTRONICS DIV	F35755MB	523466844	JS-30S/2326	$1,390.00
1456140	RECEIVER VIDEO	WEGENER COMMUNICATIONS INC	DRV96	1415	JS-T-588/100	$1,735.00
1456716	CAMERA, INTERFACE UNIT	COHU INC	ER2986	272767	JS-8/215A	$2,034.00
1456723	CAMERA, INTERFACE UNIT	COHU INC	ER2986	272768	JS-8/215A	$2,034.00
1456798	MONITOR, TELEVISION	SONY CORP	PVM14N2U	6001806	JS-8/181B	$510.00
1456800	MONITOR, TELEVISION	SONY CORP	PVM14N2U	6001803	JS-8/215B	$510.00
1456802	TRANSMITTER, MICROWAVE	COMWAVE	SBSA301	S3304	JS-1/PENTH	$13,138.00
1456839	RECORDER, BETACAM	SONY CORP	PVW2800P	10211	JS-8/208	$17,600.00
1456869	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9600	13293	JS-2S / 104	$3,448.00
1457362	DISPLAY UNIT	SONY CORP	PVM8044Q	2505316	JS-1/916	$1,278.00
1457363	DISPLAY UNIT	SONY CORP	PVM8044Q	2505267	JS-1/916	$1,278.00
1457364	DISPLAY UNIT	SONY CORP	PVM8044Q	2505311	JS-1/916	$1,278.00
1544850	DISPLAY UNIT	NEC ELECTRONICS USA INC	JC1735VMA	6714086KA	JS-8/106R	$2,956.00
1545868	TRIPOD SYSTEM	SACHTLER CORP OF AMERICA	2000	206920	JS-2S/109	$5,400.00
1601561	CONVERTER, VIDEO STANDARDS	VIDEO INTERNATIONAL	DTC1600P6	18816	JS-8/208	$10,492.00
1601565	RECEIVER, RADIO WEATHER	TFT INC	EAS930A	10102874	JS-8/280	$1,350.00
1601831	SERVER, ADP	JUNIPER NETWORKS	NS-ISG-2000-SK	79062005000004	JS-46 / 218	$59,788.00
1601848	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	2001FP	CNOC0646466334AD0	JS-46 / 138	$1,000.00
1601853	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	1HS6F61	JS-46 / 300	$5,212.00
1601854	RECEIVER	OPTELECOM INC	9215AR/SM-ST	N1076920	JS-8/215B	$1,872.00
1602472	RECORDER, VIDEO CASSETTE DIG-S	JVC CO OF AMERICA	BRD92U	15310359	JS-8/273A	$22,308.00
1602524	CAMERA, VIDEO CCD	SONY CORP	SSCC370	15450	JS-8/181B	$626.00
1602559	CONVERTER, TELEVISION	SNELL GEORGE R & ASSOC	CVR45	2609044	JS-8/208	$15,067.00
1602574	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2501216	JS-9NW/2170	$957.00
1602575	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2501289	JS-8 / 281	$957.00
1602582	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2501203	JS-9NW/2170	$957.00
1602583	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2501205	JS-9NW/2170	$957.00
1602584	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2501328	JS-9NW/2170	$957.00
1602585	MONITOR, TELEVISION	SONY CORP	PVM5041Q	2501212	JS-9NW/2170	$957.00
1606482	RECORDER, VIDEO CASSETTE	PANASONIC	AGW1	F3MD00240	JS-8/208	$1,945.00
1606483	RECORDER, VIDEO CASSETTE	PANASONIC	AGW1P	A5KD00133	JS-8 / 281	$2,035.00
1607804	COMPUTER, MICRO	HEWLETT-PACKARD CO	DL320	6J36KVJ6B01J	JS-46 / 218	$1,984.00
1607809	COMPUTER, MICRO	HEWLETT-PACKARD CO	DL320	6J36KVJ6B02N	JS-46 / 218	$1,984.00
1609955	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWER EDGE 2	BXGN531	JS-46 / 300	$3,553.00
1609957	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWER EDGE 2	FXGN531	JS-46 / 300	$3,553.00
1615514	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	DAE2	APM00060201922	JS-46 / 300	$35,123.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1615515	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	DAE2	APM00060201920	JS-46 / 300	$35,123.00
1615517	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	DAE2	APM00060201921	JS-46 / 300	$35,123.00
1615518	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	DAE2	APM00060201919	JS-46 / 300	$35,123.00
1616140	CONTROLLER, ROUTING SWITCHER	ARTEL VIDEO SYSTEMS INC	SC3AC	99050151	JS-8/280	$14,000.00
1617037	SYNCHRONIZER VIDEO FRAME	LEITCH AND CO	DPS475/575	BJ475A0035	JS-8/181B	$6,435.00
1617038	SYNCHRONIZER VIDEO FRAME	LEITCH AND CO	DPS475/575	BJ475A0036	JS-8/280	$6,435.00
1617039	SYNCHRONIZER VIDEO FRAME	LEITCH AND CO	DPS475/575	BJ475A0034	JS-8/280	$6,435.00
1617048	COMPUTER SYSTEM, AUTOMATION	NVERZION	XMC	1902214	JS-8/280	$2,750.00
1617049	COMPUTER SYSTEM, AUTOMATION	NVERZION	NCONTROL	19032210809	JS-8 / 281	$2,750.00
1617050	COMPUTER SYSTEM, AUTOMATION	NVERZION	NGEST	1.90605E+11	JS-8 / 281	$2,750.00
1617051	COMPUTER SYSTEM, AUTOMATION	NVERZION	NGEST	0001903Z210772	JS-8 / 281	$2,750.00
1617053	SERVER, VIDEO AUTO SYSTEM	NVERZION	XPANSION	NONE	JS-8 / 212	$6,650.00
1617074	RECEIVER, WIRELESS MICROPHONE	SHURE	U4D-UA	1025021346	JS-9NW/2170	$1,604.00
1617075	RECEIVER, WIRELESS MICROPHONE	SHURE	U4D-UA	1025021345	JS-9NW/2170	$1,604.00
1617077	RECORDER, VIDEO CASSETTE	JVC CO OF AMERICA	SR-S365U	16732876	JS-1/952A	$1,170.00
1617106	COMPUTER, MICRO	SUPERMICRO	SC7331-300	NONE	JS-8/195	$4,197.00
1617131	CAMERA SET, TELEVISION	SONY CORP	EVI-D100	117049	JS-9NW/2170	$971.00
1617142	ENCODER-DECODER	VBRICK SYSTEMS INC	9110-6200-0002	6200002353	JS-12/236B	$8,196.00
1617143	ENCODER-DECODER	VBRICK SYSTEMS INC	9110-6200-0002	620000235	JS-9NW/2170	$8,196.00
1617144	DISPLAY UNIT	MARSHALL ELECTRONICS	V-LCD8-PRO	NONE	JS-9NW/2170	$713.00
1617149	CAMERA SYSTEM, DIGITAL	VISION RESEARCH INC	VR1-V9-1288MM	4512	JS-8/298	$94,476.00
1617151	DISPLAY UNIT	MARSHALL ELECTRONICS	V-151P	117768 06734 0	JS-425/100B	$1,998.00
1617156	RECORDER, CD	TEAC CORP	CD-RW750	50609	JS-8/273A	$504.00
1617172	DISPLAY UNIT	SONY CORP	LMD-170W	2001417	JS-8/273A	$4,646.00
1617230	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	26B7G51	JS-46 / 300	$4,827.00
1617231	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	56B7G51	JS-46 / 300	$4,827.00
1617232	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	B6B7G51	JS-46 / 300	$4,827.00
1617249	CAMERA, DIGITAL VIDEO RECORDER	CANON CAMERA CO INC	DM-XL1S A	42650500282	JS-9NW/2170	$3,963.00
1617250	CAMERA, DIGITAL VIDEO RECORDER	CANON CAMERA CO INC	DM-XL1S A	42440200621	JS-9NW/2170	$3,963.00
1617251	CAMERA, DIGITAL VIDEO RECORDER	CANON CAMERA CO INC	DM-XL1S A	42270000690	JS-9NW/2170	$3,963.00
1617252	CAMERA, DIGITAL VIDEO RECORDER	CANON CAMERA CO INC	DM-XL1S A	42650500283	JS-9NW/2170	$3,963.00
1617255	DISPLAY UNIT	AVG AUTOTECH/VIKTRON GROUP	EZ-T10C-FSH	43059069	JS-8/181C	$2,808.00
1617256	DISPLAY UNIT	SAMSUNG ELECTRONICS	191N	NB19HCHX419970	JS-8/208	$782.00
1617647	CAMERA, BODY	HASSELBLAD A B VICTOR	500CM	10ES11293	JS-8/298	$990.00
1617648	CAMERA, BODY	HASSELBLAD A B VICTOR	503CX	1431523	JS-8/298	$1,185.00
1617649	SWITCH, 32 PORT	DELL COMPUTER CORP F-PC'S LTD	DS-32B2	BRCB060005095	JS-46 / 218	$13,750.00
1617660	RECEIVER, SATELLITE KU-BAND	STANDARD COMMUNICATIONS	MT930B	14060181	JS-T-588/100	$2,775.00
1617661	RECEIVER, SATELLITE KU-BAND	STANDARD COMMUNICATIONS	MT930B	01U0G0129	JS-T-588/100	$2,775.00
1617662	RECEIVER, SATELLITE KU-BAND	STANDARD COMMUNICATIONS	MT930B	16060151	JS-T-588/100	$2,775.00
1617689	SWITCH, 32 PORT	DELL COMPUTER CORP F-PC'S LTD	DS-32B2	BRCB060005081	JS-46 / 218	$13,750.00
1617690	SWITCH, 32 PORT	DELL COMPUTER CORP F-PC'S LTD	DS-32B2	BRCB060005080	JS-46 / 218	$13,750.00
1617691	SWITCH, 32 PORT	DELL COMPUTER CORP F-PC'S LTD	DS-32B2	BRCB060005096	JS-46 / 218	$13,750.00
1617706	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	CX400-DE	APM00033502249	JS-46 / 218	$44,599.00
1617707	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	CX400-DE	APM00043003773	JS-46 / 218	$16,373.00
1617708	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	CX400-DE	APM00043003774	JS-46 / 300	$16,373.00
1617710	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	CX400-DE	APM00043005411	JS-46 / 300	$16,373.00
1617711	DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	CX400-DE	APM00043003640	JS-46 / 300	$16,373.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1617718	DISPLAY UNIT	HEWLETT-PACKARD CO	HPL1925	CNB4260HMC	JS-2S / 205	$1,008.00
1617725	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42181	JS-8/208	$2,300.00
1617726	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42081	JS-8/208	$2,300.00
1617731	RECORDER, AUDIO	SOUND DEVICES INC	SD-722	4.70305E+11	JS-2S/107	$2,528.00
1617732	RECORDER, DVD	PIONEER CO	PRV9000	BKTT003236CC	JS-8/273A	$1,682.00
1617733	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42146	JS-8/208	$2,300.00
1617734	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42080	JS-8/208	$2,300.00
1617735	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42087	JS-8/208	$2,300.00
1617736	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42177	JS-8/208	$2,300.00
1617738	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42086	JS-8/208	$2,300.00
1617739	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42071	JS-8/208	$2,300.00
1617741	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42151	JS-425/100B	$2,300.00
1617742	RECORDER, VIDEO CASSETTE	SONY CORP	SVO9500MD	42152	JS-8/208	$2,300.00
1617743	RECORDER, HI-8MM	SONY CORP	EV09850P	11349	JS-8/208	$8,150.00
1617806	MONITOR, TOUCH SCREEN	ELO TOUCH SYSTEMS INC	ET192SL8UWA1	92SLIU5513232K	JS-2S / 211	$1,591.00
1617807	CONTROL PANEL	TELEMETRICS INC	CP-R-3A	20050205	JS-8/280	$7,554.00
1617837	SWITCHERM ROUTING VIDEO	UTAH SCIENTIFIC INC	AV-32	5070248	JS-9NW/2170	$10,205.00
1617838	SWITCHER, ROUTING AUDIO	UTAH SCIENTIFIC INC	A-32	5070247	JS-9NW/2170	$6,944.00
1617844	FIREWALL APPLIANCE	NETSCREEN TECHNOLOGIES	NS-5200-P01A-5	40062003000026	JS-17 / 134	$71,280.00
1617845	FIREWALL APPLIANCE	NETSCREEN TECHNOLOGIES	NS-5200-P01A-5	40062003000015	JS-17 / 134	$71,280.00
1617846	FIREWALL APPLIANCE	NETSCREEN TECHNOLOGIES	NS-5200-P01A-5	40062003000024	JS-46 / 300	$71,280.00
1617847	FIREWALL APPLIANCE	NETSCREEN TECHNOLOGIES	NS-5200-P01A-5	4006200300004	JS-46 / 300	$71,280.00
1617871	COMPUTER, POCKET	COMPEQ MANUFACTURING CO LTD	IPAQ	4G2BDW3390PR	JS-46 / 326	$4,322.00
1617879	MONITOR, TELEVISION	JVC	TM-910SU	7008715	JS-9NW/2170	$634.00
1618115	SWITCH, CATALYST	CISCO SYSTEMS INC	WS-C2948-GE-T	JPE0838Z01F	JS-46 / 300	$10,924.00
1618158	SERVER, POWEREDGE 2650	DELL COMPUTER CORP F-PC'S LTD	221-3298	79G5T61	JS-46 / 218	$11,782.00
1618205	MONITOR, WAVEFORM	TEKTRONIX	WFM601E	B012824	JS-425/100B	$7,095.00
1618206	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LTH10137416026	JS-8/280	$6,397.00
1618207	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LTH10137416024	JS-8/280	$6,397.00
1618208	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LTH10137416023	JS-8/280	$6,397.00
1618209	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LTH10137416025	JS-8/280	$6,397.00
1618243	CAMERA-RECORDING, VIDEO	SONY CORP	DSR-PDX10	1320169	JS-8/298	$2,381.00
1618509	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	4R76D81	JS-46 / 300	$7,414.00
1618521	MONITOR, TELEVISION	MARSHALL ELECTRONICS	V-R563P	37167084533	JS-8/280	$1,310.00
1618522	MONITOR, TELEVISION	MARSHALL ELECTRONICS	V-R563P	37154084539	JS-8/280	$1,310.00
1618567	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	DTGBG81	JS-46 / 300	$8,842.00
1618568	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	HTGBG81	JS-46 / 300	$8,842.00
1618569	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	JTGBG81	JS-17 / 134	$8,842.00
1618570	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	3VGBG81	JS-46 / 300	$8,842.00
1618572	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMM	BG85D81	JS-46 / 300	$13,924.00
1618573	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	ECM	7NP4D81	JS-227 / 4	$4,288.00
1618574	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	ECM	9NP4D81	JS-227 / 4	$4,288.00
1618575	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMM	8G85D81	JS-46 / 300	$13,924.00
1618583	SERVER, ADP	JUNIPER NETWORKS	NS-5200	4.0062E+13	JS-46 / 218	$7,700.00
1618584	SERVER, ADP	JUNIPER NETWORKS	NS-5200	4.0062E+13	JS-46 / 218	$7,700.00
1618589	PROCESSOR, DISK	DELL COMPUTER CORP F-PC'S LTD	CX500-DE	APM60053101229	JS-46 / 300	$120,508.00
1618598	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	33FZK81	JS-46 / 300	$4,568.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1618604	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN53740260	JS-46 / 300	$35,416.00
1618605	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN53740286	JS-46 / 300	$35,416.00
1618609	DISK DRIVE UNIT	JOBO GIGA	GIGA VU PRO	GIG009481	JS-8/251	$561.00
1618610	CAMCORDER	JVC	GY-HD100U	13050966	JS-8/298	$5,171.00
1618614	CONTROLLER	DNF CONTROLS	4040 CL-L-8	11505	JS-2S / 211	$5,903.00
1618660	AUDIO MATRIX ADVANCED DIGITAL	TELEX COMMUNICATIONS INC	90007517000	75343	JS-2S/110	$21,971.00
1618685	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	PH0003	JS-8/181C	$1,874.00
1618701	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	PH0022	JS-8/103R	$1,874.00
1618703	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	PH0025	JS-8/181C	$1,874.00
1618705	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	PH0030	JS-8/121E	$1,874.00
1618747	DISPLAY UNIT	ACNODES	NSM-2003-US	202806	JS-425 / 100B	$8,400.00
1618748	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWER EDGE 7	2CFKG81	JS-8 / 281	$3,675.00
1618982	CAMERA SYSTEM, DIGITAL	NIKON INC	DX2	5061168	JS-8/251	$4,620.00
1618983	CAMERA SYSTEM, DIGITAL	NIKON INC	DX2	5061171	JS-8/251A	$4,620.00
1619628	MONITOR, WAVEFORM	TEKTRONIX INC	WFM601E	B011405	JS-30S/5301	$6,667.00
1619639	MEASUREMENT SET, VIDEO	TEKTRONIX INC	VM700A	BO31179	JS-8/280	$31,555.00
1619641	CAMERA SYSTEM, DIGITAL	KODAK CANADA LTD	DCS520C	K520C01379	JS-8/298	$12,175.00
1619643	CAMERA SYSTEM, DIGITAL	KODAK CANADA LTD	DCS520C	K520C01500	JS-8/298	$12,175.00
1619656	CAMERA, MINI CCD	SONY CORP	XC999	41106	JS-2S/109	$886.00
1619657	CAMERA, MINI CCD	SONY CORP	XC999	41127	JS-2S/109	$886.00
1619662	RECORDER, DIGITAL BETACAM	SANYO	DVWA500	16584	JS-8/208	$39,600.00
1619680	RECORDER, VIDEOTAPE	SONY CORP	DNWA75	11298	JS-8/208A	$24,300.00
1619687	RECORDER, VIDEO CASSETTE	SONY CORP	DSR20	12427	JS-12/154BA	$3,288.00
1619688	RECORDER, VIDEO CASSETTE	SONY CORP	DSR20	12435	JS-8/225A	$3,287.00
1619714	RECEIVER, WIRELESS MICROPHONE	SHURE BROS INC	U4D-UA	716990570	JS-2S/201B	$1,795.00
1619715	RECEIVER, WIRELESS MICROPHONE	SHURE BROS INC	U4D-UA	716990569	JS-2S/201B	$1,795.00
1619717	RECEIVER, WIRELESS MICROPHONE	SHURE BROS INC	U4D-UA	727990880	JS-2S/201B	$1,830.00
1619718	RECEIVER, WIRELESS MICROPHONE	SHURE BROS INC	U4D-UA	727990879	JS-2S/201B	$1,830.00
1619722	RECORDER, VIDEO CASSETTE	SONY CORP	DSR20	16101	JS-425/100B	$2,920.00
1619928	SWITCH, FIBRE CHANNEL	BROCADE COMMUNICATIONS SYS INC	3800SILKWORM	E-E900-01-5640A	JS-8/273A	$25,383.00
1619963	RECORDER, DIGITAL VIDEO	SONY CORP	DSR-2000	102638	JS-8/273A	$13,456.00
1619968	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	8MPQ1	7QGGX21	JS-46 / 300	$6,839.00
1619969	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	8MPQ1	8QGGX21	JS-46 / 218	$6,839.00
1619979	SERVER, ADP	SUPERMICRO	NONE	NONE	JS-46 / 300	$3,215.00
1619980	CAMERA SET, TELEVISION	SONY CORP	EVI-D100	108804	JS-1/967	$952.00
1619981	CAMERA SET, TELEVISION	SONY CORP	EVI-D100	108929	JS-1/967	$952.00
1619982	CAMERA SET, TELEVISION	SONY CORP	EVI-D100	108930	JS-1/360	$952.00
1619984	SERVER, ADP	SUN MICROSYSTEMS INC	600-7880-01	325V0468	JS-46 / 218	$40,426.00
1619985	SERVER, ADP	SUN MICROSYSTEMS INC	600-7880-01	325V0477	JS-46 / 218	$40,426.00
1619990	RECORDER, VIDEO CASSETTE	SONY CORP	DVW-500	14090	JS-8/208	$42,618.00
1619991	RECORDER, VIDEO CASSETTE	SONY CORP	DVW-500	14088	JS-8 / 281	$42,618.00
1619992	CAMERA SYSTEM, DIGITAL	EASTMAN KODAK CO	DCS-14N	P14N-07632	JS-8/251A	$5,645.00
1619995	CAMERA SYSTEM, DIGITAL	EASTMAN KODAK CO	DCS-14N	P14N-07609	JS-8/298	$5,645.00
1619999	DISPLAY UNIT	SAMSUNG	191T	GH19HCHW601852	JS-8 / 281	$727.00
1620000	DISPLAY UNIT	SAMSUNG	191T	GH19HCHW601850	JS-8 / 281	$727.00
1620001	MONITOR, LCD PANEL	MARSHALL ELECTRONICS INC	V-R44P	08357 07187	JS-8/208	$1,320.00
1620002	MONITOR, LCD PANEL	MARSHALL ELECTRONICS INC	V-R44P	08360 07187	JS-8/208	$1,320.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1620004	SERVER, ADP	NVERZION	CS2001942	200316662	JS-8 / 281	$11,873.00
1620021	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-R9U	13407060	JS-8 / 281	$528.00
1620024	COMPUTER, POCKET	COMPAQ COMPUTER CORP	IPAQ	4G2BKVL1505X	JS-46/144D	$538.00
1620044	CAMERA, DIGITAL VIDEO RECORDER	CANON CAMERA CO INC	DM-XL1S A	42650500262	JS-9NW/2170	$3,963.00
1620140	CAMERA SYSTEM, DIGITAL	NIKON INC	COOLPIX950	710508	JS-8/261C	$833.00
1620141	LENS, CAMERA ZOOM	FUJINON INC	A15X8BEVM-28	65571	JS-8/298	$8,835.00
1620142	LENS, CAMERA ZOOM	FUJINON INC	A15X8BEVM-28	65329	JS-8/298	$8,835.00
1620143	CAMERA SYSTEM, DIGITAL	KODAK CANADA LTD	DCS-620X	611	JS-8/298	$7,533.00
1620144	CAMERA SYSTEM, DIGITAL	KODAK CANADA LTD	DCS-660C	K660C-00794	JS-8/298	$23,495.00
1620145	CAMERA SYSTEM, DIGITAL	KODAK CANADA LTD	DCS-620X	638	JS-8/298	$7,533.00
1620146	CAMERA SYSTEM, DIGITAL	KODAK CANADA LTD	DCS-660C	K660C-00795	JS-8/298	$23,495.00
1650593	SWITCH, FIBER CHANNEL	INCITE NETWORK SOLUTIONS	IC-SAN-16PSW	ANR003900015	JS-2S/110	$18,000.00
1650609	DISPLAY UNIT	MARSHALL ELECTRONICS INC	V-LCD12	03-12000116	JS-1/968	$713.00
1650610	DISPLAY UNIT	MARSHALL ELECTRONICS INC	V-LCD12	03-12000098	JS-1/968	$713.00
1650611	DISPLAY UNIT	MARSHALL ELECTRONICS INC	V-LCD12	03-12000287	JS-1/968	$713.00
1650613	RECORDER, VIDEO CASSETTE	PANASONIC	AG-7350	F7TC00077	JS-1/952A	$1,953.00
1650616	PROCESSOR, SIGNAL	SHURE BROS INC	P4800	R1032945350	JS-1/968	$2,000.00
1650633	LENS, CAMERA ZOOM	CANON CAMERA CO INC	J17AX7-7-7B	20611344	JS-2S/122	$11,980.00
1650634	LENS, CAMERA ZOOM	CANON CAMERA CO INC	J17AX7-7-7B	20611915	JS-2S/122	$11,980.00
1650636	TELEPHONE CONFERENCE GROUP	TANDBERG DATA A/S	NONE	22.52052	JS-9NW/2170	$19,993.00
1650638	CAMERA SET, TELEVISION	SONY CORP	EVI-D30	172738	JS-9NW/2170	$3,147.00
1650639	CAMERA, STILL PICTURE	TANDBERG DATA A/S	TANDBERG CE	18.12106	JS-9NW/2165	$3,147.00
1650640	CAMERA, STILL PICTURE	TANDBERG DATA A/S	TANDBERG WA	19.01884	JS-9NW/2170	$3,147.00
1650668	COMPUTER, LAPTOP	TOSHIBA HOSHASEN CO LTD	P25-S607	83024505C	JS-8/298	$4,108.00
1650806	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	8JKJH91	JS-46 / 300	$12,540.00
1651047	COMPUTER, LAPTOP	TOSHIBA HOSHASEN CO LTD	PP350U-002GF4	33129777P	JS-1/952A	$2,263.00
1651048	SERVER, ADP	HEWLETT-PACKARD CO	PROLIANT DL58	D312FSZ1H175	JS-46 / 300	$16,199.00
1651049	SERVER, ADP	HEWLETT-PACKARD CO	PROLIANT DL58	D312FSZ1H190	JS-46 / 300	$16,199.00
1651050	DISPLAY UNIT	HEWLETT-PACKARD CO	TFT5600RKM	9X34JTJ85087	JS-46 / 218	$2,200.00
1651114	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	7HWX231	JS-46 / 218	$10,507.00
1651115	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	8HWX231	JS-46 / 218	$10,507.00
1651116	SERVER, ADP	NFR SECURITY	NID320D	KRCR215A0023	JS-46 / 300	$16,716.00
1652090	NET OPTICS, 8X1	FEDERAL DATA CORP	96282-8	34085	JS-46 / 218	$5,487.00
1652260	SERVER, ADP	NFR SECURITY	NID320D	116211 KRCR226A011	JS-46 / 300	$16,716.00
1652261	SERVER, ADP	NFR SECURITY	NID320D	116212 KRCR226A010	JS-46 / 300	$16,716.00
1652262	SERVER, ADP	NFR SECURITY	NID320D	116213 KRCR226A002	JS-46 / 300	$16,716.00
1652380	SWITCH	HEWLETT-PACKARD CO	322120-B21	USB3T00598	JS-8 / 281	$6,387.00
1652381	SWITCH	HEWLETT-PACKARD CO	322120-B21	USB3T00686	JS-8 / 281	$6,387.00
1652383	WAVEFORM MONITOR	TEKTRONIX INC	WVR611A	B011482	JS-8/280	$8,202.00
1652384	WAVEFORM MONITOR	TEKTRONIX INC	WVR611A	B010298	JS-8/208	$8,202.00
1652394	MONITOR, TELEVISION	DATA CHECK CORP	26010	1225	JS-8 / 281	$4,394.00
1652421	MONITOR, TELEVISION	IKEGAMI ELECTRONIC US INC	TM14-17RZ	7141	JS-8/280	$2,021.00
1652422	MONITOR, TELEVISION	IKEGAMI ELECTRONIC US INC	TM14-17RZ	7136	JS-8 / 281	$2,021.00
1652423	MONITOR, TELEVISION	IKEGAMI ELECTRONIC US INC	TM14-17RZ	7115	JS-8/280	$2,021.00
1652426	MONITOR, LCD	MARSHALL ELECTRONICS	V-R151P	12024067348	JS-13/150	$1,776.00
1652427	MONITOR, LCD	MARSHALL ELECTRONICS	V-R151P-4	12092070103	JS-8/280	$2,243.00
1652428	MONITOR, LCD	MARSHALL ELECTRONICS	V-R151P	12023067349	JS-425 / 100B	$1,776.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1652429	DECODER, HDTV	HARRIS CORP BROADCAST SYS DIV	200	03DV06000209	JS-8/280	$15,480.00
1652505	SERVER, POWEREDGE 2650	DELL COMPUTER CORP F-PC'S LTD	SMP01	8FF0B41	JS-46 / 218	$7,269.00
1652516	DISPLAY UNIT, LCD	NEC	1760V-BK	41416839TA	JS-9NW/2170	$505.00
1652554	MONITOR, LCD	MARSHALL ELECTRONICS	V-R151P	1.16E+11	JS-2S / 208	$1,958.00
1652584	SERVER, POWEREDGE 1750	DELL COMPUTER CORP F-PC'S LTD	IMU	3YKM051	JS-46 / 300	$4,708.00
1652587	SERVER, ADP	SUN MICROSYSTEMS INC	602-2623-01	FN4130038	JS-46 / 300	$10,732.00
1652634	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	5FPT351	JS-46 / 218	$7,379.00
1652826	VAULT, POWER	DELL COMPUTER CORP F-PC'S LTD	AVM	840BX01	JS-46 / 218	$67,690.00
1652870	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	73HK811	JS-46 / 218	$10,745.00
1652871	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	53HK811	JS-46 / 218	$10,745.00
1652872	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	6QT9911	JS-46 / 218	$10,745.00
1652873	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	8QT9911	JS-46 / 218	$10,745.00
1652874	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	7QT9911	JS-46 / 300	$10,745.00
1652875	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	3GL9911	JS-46 / 218	$10,745.00
1652876	VAULT, POWER	DELL COMPUTER CORP F-PC'S LTD	56F	5Y6H911	JS-46 / 300	$16,883.00
1652877	VAULT, POWER	DELL COMPUTER CORP F-PC'S LTD	56F	JL8H911	JS-46 / 300	$16,883.00
1652908	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	SMP	67QZD11	JS-46 / 218	$10,763.00
1652963	CONVERTER, A TO D	APOGEE SYSTEMS INC	AD8000	3261	JS-2S/107	$6,050.00
1652980	WALKIE TALKIE	SIECOR CORP___F-SUPERIOR CABLE	SM16	EAO674	JS-8/2M4	$740.00
1652981	WALKIE TALKIE	SIECOR CORP___F-SUPERIOR CABLE	SM16	EAO675	JS-8/2M4	$740.00
1653011	CAMERA SYSTEM, DIGITAL	EASYRIG2	400N	NONE	JS-2S/109	$2,600.00
1653013	GENERATOR, DIGITAL SYNC	TEKTRONIX INC	SGP422	BO35241	JS-8/280	$5,233.00
1653014	GENERATOR, DIGITAL SYNC	TEKTRONIX INC	SGP422	BO35243	JS-8/280	$5,233.00
1653016	DISPLAY UNIT	IKEGAMI ELECTRONIC US INC	TM14-17RA	4461	JS-8 / 281	$2,000.00
1653017	DISPLAY UNIT	IKEGAMI ELECTRONIC US INC	TM14-17RA	4468	JS-8 / 281	$2,000.00
1653018	DISPLAY UNIT	IKEGAMI ELECTRONIC US INC	TM14-17RA	4462	JS-8 / 215A	$2,000.00
1653019	DISPLAY UNIT	IKEGAMI ELECTRONIC US INC	TM14-17RA	4458	JS-30S/5301	$2,000.00
1653020	DISPLAY UNIT	IKEGAMI ELECTRONIC US INC	TM14-17RA	4480	JS-8 / 281	$2,000.00
1653022	DISPLAY UNIT	DATACHECK	2600	1016	JS-8/280	$3,500.00
1653023	DISPLAY UNIT	DATACHECK	2600	1018	JS-8 / 298H	$3,500.00
1653024	DISPLAY UNIT	DATACHECK	2600	1040	JS-8/286	$3,500.00
1653027	DISPLAY SYSTEM, MULTIIMAGE	MIRANDA TECHNOLOGY	KALEIDO BASE	0273-0207	JS-8 / 281	$24,869.00
1653054	ENCODER, PROGRAMMABLE COND	DOLBY LABS INC	DP569	500641	JS-2S/107	$5,000.00
1653058	MONITOR AUDIO SWITCHABLE	MARTINEZ CUSTOM TRAILERS	MULTIMAX-EX	MXML274	JS-2S/107	$3,095.00
1653277	MONITOR, WAVEFORM	TEKTRONIX INC	WFM601E	B013273	JS-8/280	$7,127.00
1653278	SYNCHRONIZER, VIDEO FRAME	LEITCH AND CO	DPS475	BI475A0003	JS-8/280	$6,239.00
1653279	SYNCHRONIZER, VIDEO FRAME	LEITCH AND CO	DPS475	BI475A0002	JS-8/280	$6,239.00
1653282	CAMERA SYSTEM, DIGITAL	HITACHI DENSHI LTD	KPD591U	120268	JS-2S/122	$1,580.00
1653287	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP	3XL7X01	JS-46 / 218	$4,813.00
1653292	CONTROLLER, NETWORK	CINE SYSTEM	MDCU5	S60106395	JS-2S/109	$6,203.00
1653293	SCANNER, ADP	IMACON	FLEXTIGHT PR(	PG00058018	JS-8/103R	$16,470.00
1653365	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47586	JS-425/100B	$2,335.00
1653366	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47887	JS-8/208	$2,335.00
1653367	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47884	JS-8/208	$2,335.00
1653368	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47654	JS-8/208	$2,335.00
1653369	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47882	JS-425/100B	$2,335.00
1653370	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47879	JS-8/208	$2,335.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1653371	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47892	JS-8/208	$2,335.00
1653372	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47881	JS-425/100B	$2,335.00
1653373	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47661	JS-8/208	$2,335.00
1653375	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47889	JS-8/208	$2,335.00
1653376	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47652	JS-8/208	$2,335.00
1653377	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	47878	JS-425/100B	$2,335.00
1653378	RECORDER, VIDEO CASSETTE SVHS	JVC CO OF AMERICA	SRS365U	7731258	JS-8/2100	$1,095.00
1653393	CAMERA SET, TELEVISION	SONY CORP	EVI-D30	174045	JS-1/945	$1,089.00
1653394	CAMERA SET, TELEVISION	SONY CORP	EVI-D30	173805	JS-1/945	$1,089.00
1653406	CAMERA SET, TELEVISION	SONY CORP	EV1-D30	178065	JS-1/945	$1,127.00
1653441	CONSOLE, RACKMOUNT	DELL COMPUTER CORP F-PC'S LTD	15FP	CH04Y0671296357E1V	JS-17 / 134	$3,943.00
1653465	CAMERA	NIKON INC	F4S	2157302	JS-8/298	$1,722.00
1653482	CAMERA SYSTEM, DIGITAL	KODAK/EASTMAN	DCS760	K760C02229	JS-8/298	$6,295.00
1653483	CAMERA SYSTEM, DIGITAL	KODAK/EASTMAN	DCS760	K760C02232	JS-8/298	$6,295.00
1653484	CAMERA SYSTEM, DIGITAL	KODAK/EASTMAN	DCS760	K760C02325	JS-8/298	$6,295.00
1653485	BACK, CAMERA STILL PICTURE	KODAK/EASTMAN	DCSPRO	DCSPB-1025	JS-8/293	$19,995.00
1653526	FIBER OPTIC SWITCH	GRASS VALLEY GROUP INC THE	SILKWORM2400	DP000009273	JS-8 / 281	$15,262.00
1653544	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LHTI0133746032	JS-8/280	$6,975.00
1653545	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LHTI0133746033	JS-8/280	$6,975.00
1653546	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LHTI0133746031	JS-8/280	$6,975.00
1653547	SYNCHRONIZER, FRAME	LEITCH AND CO	DPS575AV	LHTI0133746030	JS-8/280	$6,975.00
1653555	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	C	TIW5903	JS-8/298	$736.00
1653623	CONSOLE, RACKMOUNT	DELL COMPUTER CORP F-PC'S LTD	15FP	NONE	JS-46 / 300	$3,245.00
1653624	CONSOLE, RACKMOUNT	DELL COMPUTER CORP F-PC'S LTD	15FP	NONE	JS-46 / 300	$2,723.00
1653628	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	CWBJC31	JS-46 / 218	$4,861.00
1653704	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMOP1	HZ4CH31	JS-46 / 218	$3,848.00
1653705	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMOP1	FZ4CH31	JS-46 / 218	$3,848.00
1653706	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	STP	2PLLH31	JS-46 / 218	$1,503.00
1653709	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	STP	7PLLH31	JS-46 / 218	$1,503.00
1653713	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	STP	5PLLH31	JS-46 / 218	$1,503.00
1653716	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	1504H31	JS-46 / 300	$6,147.00
1653717	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	BSQWH31	JS-46 / 300	$6,908.00
1653719	DISPLAY UNIT	MARSHALL ELECTRONICS INC	V-LCD12	03-12000102	JS-8/215BA	$713.00
1653751	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	97Q2L31	JS-46 / 300	$6,049.00
1653757	DETECTOR, NET	NIKSUN INC	NONE	AZSW3280285	JS-46 / 218	$41,393.00
1653760	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	5ML1M31	JS-46 / 300	$6,858.00
1653761	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	JLL1M31	JS-46 / 300	$6,858.00
1653762	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	6ML1M31	JS-46 / 218	$6,858.00
1653767	SERVER, POWEREDGE 2650	DELL COMPUTER CORP F-PC'S LTD	SMP01	694HL31	JS-46 / 218	$8,620.00
1653768	SERVER, POWEREDGE 1750	DELL COMPUTER CORP F-PC'S LTD	IMU	D0KZL31	JS-46 / 300	$4,698.00
1653769	SERVER, POWEREDGE 1750	DELL COMPUTER CORP F-PC'S LTD	IMU	H8MZL31	JS-46 / 300	$4,698.00
1653770	SERVER, POWEREDGE 1750	DELL COMPUTER CORP F-PC'S LTD	IMU	70KZL31	JS-46 / 218	$4,698.00
1653817	REGENERATION TAP, PASSIVE	NET OPTICS INC	96282-8	45282	JS-46 / 300	$5,800.00
1653818	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	GT08B31	JS-46 / 300	$6,336.00
1653822	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	598JC31	JS-46 / 218	$6,336.00
1653823	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	G55J331	JS-46 / 218	$6,336.00
1653830	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	BMXQ931	JS-46 / 300	$4,774.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1653831	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	8MXQ931	JS-46 / 300	$4,774.00
1653832	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7MXQ931	JS-46 / 300	$4,774.00
1667297	ENCODER, PROGRAMMABLE COND	HARMONIC INC	MV50CBR1	66305	JS-8/280	$28,088.00
1667309	ENCODER, PROGRAMMABLE COND	HARMONIC INC	MV50CBR1	56879	JS-8/280	$28,088.00
1733158	TAPE, BACKUP	PERIPHERALS	EXB8505XL	6659792	JS-2S/109	$2,100.00
1733198	CAMERA, CONTROL UNIT	COHU INC ELECTR DV F-KIN TEL	MPCR104/51	262644	JS-8/215A	$2,106.00
1733212	CAMERA, INTERFACE UNIT	COHU INC ELECTR DV F-KIN TEL	ER2986	264801	JS-8/215A	$2,834.00
1733228	RECORDER, BETACAM	SONY CORP	BVV5	18984	JS-2S/109	$12,780.00
1733229	RECORDER, BETACAM	SONY CORP	BVW50	13043	JS-2S/109	$15,050.00
1733230	RECORDER, PLAYBACK UNIT	SONY CORP	VA500	15101	JS-2S/109	$2,761.00
1733232	CAMERA-RECORDING, VIDEO	PANASONIC	PV950	G6WA12044	JS-1322/165	$700.00
1733248	PROJECTOR, LCD	HITACHI DENSHI LTD	CPL540A	G6H000169	JS-1322/C165	$5,077.00
1733249	PROJECTOR, LCD	HITACHI DENSHI LTD	CPL540A	G6H000164	JS-4S/5317	$5,077.00
1738499	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	USHB059498	JS-4S/1718	$1,732.00
1738503	PRINTER, ADP	HEWLETT-PACKARD CO	C3167A	USBG092256	JS-4S/1718	$3,932.00
1744264	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	JPKK013595	JS-45 / 350	$1,667.00
1744816	PRINTER, ADP	HEWLETT-PACKARD CO	C2039A	JPGH041515	JS-45/100	$2,176.00
1846047	PLAYER, COMPACT DISC	TASCOM CORP	CD301MKII	7100050	JS-3/CAFE	$549.00
1846069	PROJECTOR MOTION PICTURE 16MM	ELMO CO LTD	XP550	NONE	JS-1/916	$6,408.00
1846075	MONITOR, TELEVISION	SONY CORP	PVM1220	2003273	JS-1/968	$1,695.00
1846082	RECORDER, VIDEO CASSETTE	SONY CORP	VO-5800	74251	JS-8/208	$4,049.00
1846085	RECORDER CASSETTE AUDIO	TASCOM CORP	112R	360141904	JS-1/968	$2,185.00
1846391	COMPUTER, MICRO	SUN MICROSYSTEMS INC	544	614F02E2	JS-8/104R	$100,707.00
1846392	DISPLAY UNIT	SUN MICROSYSTEMS INC	CDM17E10	0014698-9544FR3715	JS-8/104R	$10,000.00
1846393	SCANNER, ADP	EASTMAN KODAK CO	2000	916	JS-8/182	$36,196.00
1846394	WRITER, CD	EASTMAN KODAK CO	KODAK PCD225	AH079606010494	JS-8/104R	$3,400.00
1846595	SCANNER, ADP	SINGER CO OF CANADA LTD	4050	610	JS-8/104R	$17,500.00
1848773	DIGITAL VOICE RECORDER	EVENTIDE INC	VR204	20010196	JS-2S/210	$7,495.00
1855823	DISPLAY UNIT	SONY CORP	PVM8044Q	2505310	JS-1/916	$1,278.00
1913875	RECORDER, VIDEO DIGITAL	SONY CORP	DSR30	12874	JS-8/273A	$3,790.00
1913891	RECEIVER VIDEO	WEGENER COMMUNICATIONS INC	DRV96	743	JS-T-588/100	$1,735.00
1913892	PLAYER, COMPACT DISC	TASCOM CORP	CD301MKII	7700002973	JS-2S/210	$529.00
1913905	RECORDER, CASSETTE DUAL	MARANTZ CO F-SUPERSCOPE INC	PMD510U	MZ039724480249	JS-2S/210	$742.00
1913906	RECORDER, CASSETTE DUAL	MARANTZ CO F-SUPERSCOPE INC	PMD510U	MZ39718470389	JS-2S/123	$742.00
1914682	PROCESSOR, PAPER COLOR	GRETAG AG S A LTD	LL140/120RA4	40654	JS-8/110	$60,000.00
1914683	TRANSCEIVER, DIGITAL AUDIO	TELOS LABS INC	ZEPHYR	9200FFG4236	JS-2S/210	$4,372.00
1914710	TRANSCEIVER, DIGITAL AUDIO	TELOS LABS INC	ZEPHYR	9200FFG4237	JS-2S/210	$4,372.00
1917690	PROCESSOR, CENTRAL, ADP	INTERGRAPH CORP	V00A01020	H2B7LR	JS-2S/109	$9,093.00
1918275	SERVER, ADP	SUN MICROSYSTEMS INC	600-4719-01	810F00E4	JS-46 / 300	$22,665.00
1918276	SERVER, ADP	SUN MICROSYSTEMS INC	600-4719-01	810F00E5	JS-46 / 300	$20,615.00
1918278	DISPLAY UNIT	SUN MICROSYSTEMS INC	3GM20E20	0010968-9805GI1805	JS-46 / 300	$1,407.00
1921991	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM5010PT	9838KN2294	JS-46 / 300	$1,407.00
1922290	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM5010PT	0014698-9909KN4066	JS-46 / 110A	$1,371.00
1922291	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM5010PT	0014698-9909KN4075	JS-46 / 110A	$1,371.00
1924443	MONITOR, TELEVISION	SONY CORP	BVM14G5U	2000408	JS-8/181B	$4,418.00
1924569	REFLECTOMETER	SEICOR	OTE340	9809-0208	JS-8/215B	$22,850.00
1924571	PLAYER, CASSETTE VIDEO	SONY CORP	UVW1200	14673	JS-423/106	$5,552.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1924572	CAMERA, MOTION PICTURE	SONY CORP	DXC950	103371	JS-425/100B	$4,460.00
1924697	PROJECTOR, VIDEO	SHARP ELECTRONICS CORP	XG-MV6XU	906311287	JS-269/106A	$8,300.00
1924698	PROJECTOR, VIDEO	SHARP ELECTRONICS CORP	XG-NV6XU	906311717	JS-269/107B	$8,300.00
1924699	PROJECTOR, VIDEO	SHARP ELECTRONICS CORP	XG-NV6XU	906311717	JS-225/116	$8,300.00
1924700	CONSOLE, LIGHTING CONTROL	STRAND LIGHTING	64051	520339	JS-2S/201B	$5,609.00
1924701	MIXING CONSOLE, AUDIO	MACKIE DESIGNS INC	SR40-8	AD15985	JS-2S/201B	$5,795.00
1924706	RECORDER, VIDEO CASSETTE	PANASONIC	AG5710P	F9TC00006	JS-2S/201B	$1,439.00
1924711	PROJECTOR, VIDEO	SANYO	PLC9000NL	G9501345	JS-30A/1092	$11,103.00
1924712	SWITCHER, ROUTING VIDEO	PESA INDUSTRIES INC	CG32V	651741B99120293	JS-2S/201B	$8,875.00
1924731	RECORDER, AUDIO CASSETTE	MARANTZ CO F-SUPERSCOPE INC	PMD510U	MZ009848130018	JS-2S/201B	$665.00
1924732	RECORDER, AUDIO CASSETTE	MARANTZ CO F-SUPERSCOPE INC	PMD510U	MZ009848130017	JS-2S/201B	$665.00
1924738	RACK, LIGHTING W/DIMMER	STRAND LIGHTING	CD80SV	M111308-0694	JS-2S/10M2T	$22,403.00
1924739	PROJECTOR, VIDEO	SANYO	PLC9000NL	G9501330	JS-2S/201B	$11,103.00
1924747	PLAYER, CASSETTE VIDEO	SONY CORP	UVW1200	15262	JS-425/100B	$4,360.00
1924750	SWITCHER, ROUTING AUDIO/VIDEO	LEITCH VIDEO LTD	FR-X+2RU	9927619	JS-1/968	$6,605.00
1926800	CAMERA, INTERFACE UNIT	COHU INC ELECTR DV F-KIN TEL	ER2986	309153	JS-8/215A	$4,412.00
1926803	PROJECTER, VIDEO	SANYO	PLC9000NL	G9501366	JS-1322/C165	$10,208.00
1926804	PROJECTOR, VIDEO HDTV	DUKANE CORP AUDIO VISUAL DIV	28A9000	11410030	JS-8/181B	$9,020.00
1926824	RECORDER, BETACAM	SONY CORP	PVW2800P	33993	JS-8/208	$16,600.00
1926825	RECORDER, VIDEO CASSETTE	PANASONIC	AG7350E	K8TC00036	JS-8/208	$3,050.00
1926828	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13001	JS-8 / 281	$38,903.00
1926829	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	12977	JS-8 / 281	$38,903.00
1926836	COMPUTER, MICRO	INTERGRAPH CORP	TDZ2000GL2	H28JCC	JS-2S/109	$3,686.00
1926859	COMPUTER, MICRO	COMPAQ COMPUTER CORP	DESKPRO PII	6846BXH8A877	JS-8/182	$1,438.00
1926872	RECEIVING SET, TELEVISION	SONY CORP	PVM8045Q	2000048	JS-2S/109	$1,202.00
1926877	RECEIVING SET, TELEVISION	SONY CORP	PVM20N5U	6000709	JS-2S/211	$1,001.00
1926878	RECORDER, DIGITAL	TASCOM CORP	DAP1	4100	JS-2S/110	$1,499.00
1926907	RECEIVER, SDI	ARTEL COMMUNICATIONS CORP	ML1290R	0399B335	JS-425/100B	$3,136.00
1926909	RECEIVER, SDI	ARTEL COMMUNICATIONS CORP	ML1290R	0498B050	JS-425/100B	$3,136.00
1926910	TRANSMITTER, SDI	ARTEL COMMUNICATIONS CORP	ML1290T	0399B229	JS-425/100B	$2,864.00
1926911	TRANSMITTER, SDI	ARTEL COMMUNICATIONS CORP	ML1290T	0399B328	JS-425/100B	$2,864.00
1926957	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	INTELLISTATIOI	9909-6	JS-2S/109	$12,987.00
1927012	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	68-89510	5994G8N	JS-2S/205	$12,987.00
1927032	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	INTELLISTATIOI	9909-19	JS-2S/109	$15,664.00
1928197	PRINTER, ADP	HEWLETT PACKARD	C3916A	JPKF016425	JS-8/280	$1,016.00
1928251	CAMERA, MOTION PICTURE	SONY CORP	SSCC370	15884	JS-8/181B	$520.00
1928252	PROJECTOR, VIDEO XVGA	SANYO	PLC9000NA	G9102083	JS-1322/165	$9,499.00
1928254	INTERFACE, SERIAL CONTROL	BTS BRAODCAST TELEVISION SYS	SI3000	8280	JS-8/208	$5,245.00
1928255	INTERFACE, SERIAL CONTROL	BTS BRAODCAST TELEVISION SYS	SI3000	8280875	JS-8 / 281	$5,175.00
1929758	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	12992	JS-8 / 281	$38,903.00
1929764	RECEIVER-RECORDER, VIDEO DIGIT	SONY CORP	DSR80	13152	JS-8/208	$8,632.00
1929845	GENERATOR, DIGITAL	TEKTRONIX INC	TG2000	BO11161	JS-8/280	$23,748.00
1984554	COMPUTER, MICRO	COMPAQ COMPUTER CORP	PROLIANT1600	D937CNJ1A026	JS-46 / 300	$7,242.00
1984555	DISK DRIVE UNIT	COMPAQ COMPUTER CORP	20/40GBDLT	1169952	JS-46 / 300	$2,431.00
1985076	COMPUTER, MICRO	COMPAQ COMPUTER CORP	PROLIANT6000	D910CPD10162	JS-46 / 300	$18,223.00
1985368	SERVER, ADP	SUN MICROSYSTEMS INC	1433632-1	013H3C63	JS-46 / 300	$4,035.00
1985976	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	711	019C2423	JS-46 / 200	$9,049.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1985977	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	711	028C1A26	JS-46 / 200	$3,565.00
1986212	SERVER, ADP	SUN MICROSYSTEMS INC	ENTERPRISE25	034H4243	JS-46 / 300	$3,263.00
1986214	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM5410	0010968-0028LB1631	JS-46 / 110A	$1,143.00
1986215	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM5410	0010968-0028LB2063	JS-46 / 110A	$1,143.00
1986389	RECORDER, VIDEO CASSETTE	PANASONIC	AG7350E	E9TC00120	JS-8/208	$3,050.00
1986390	RECORDER, VIDEO CASSETTE	PANASONIC	AG7350B	E6TC00047	JS-8/208	$2,500.00
1986391	RECORDER, VIDEO CASSETTE	PANASONIC	AG7350E	E6TC00055	JS-8/208	$2,500.00
1986392	RECORDER, VIDEO CASSETTE	PANASONIC	AG7350E	F6TC00223	JS-8/208	$2,500.00
1986396	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13007	JS-8/208	$38,903.00
1986397	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13013	JS-8 / 281	$38,903.00
1986398	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13003	JS-8 / 281	$38,903.00
1986399	SWITCHER, ROUTING DIG VIDEO	PHILLIPS DIGITAL VIDEO SYSTEMS	RF402 64	8090753	JS-425/100B	$29,356.00
1986400	COMPUTER, MICRO	CLONE COMPUTER	NONE	NONE	JS-8/280	$1,525.00
1986403	SWITCHER, ROTATING AUDIO	ARTEL VIDEO SYSTEMS INC	UTAH300	99060493	JS-8/280	$54,210.00
1986434	RECORDER, VIDEO CASSETTE	JVC CO OF AMERICA	SR-W5U	7410065	JS-8/181B	$4,099.00
1986489	SCANNER, ADP	OXBERRY DV OF RICHMARK CAMERA	CINESCAN6400	15721	JS-8/101R	$290,482.00
1986492	DISPLAY UNIT	SILICON GRAPHICS INC	CMNB024B	906KG00447	JS-45/743	$1,609.00
1986498	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKV	706F00583	JS-8/125A	$2,089.00
1986979	RECORDER, VIDEO CASSETTE	SONY CORP	DSR80P	15256	JS-8/208	$11,586.00
1986982	RECORDER, VIDEO CASSETTE	SONY CORP	DSR80P	14848	JS-8/208	$11,586.00
1987080	CAMERA, INTERFACE UNIT	COHU INC	ER2986	323836	JS-8/215A	$4,412.00
1987081	CAMERA, INTERFACE UNIT	COHU INC	ER2986	323845	JS-8/215A	$4,412.00
1987164	CAMERA SET, TELEVISION	SONY CORP	SSC-C370	16025	JS-8/181B	$506.00
1987258	SERVER, VIDEO FILE	GRASS VALLEY GROUP INC THE	PROFILE XP	GV008629	JS-8 / 281	$85,124.00
1987400	TAPE LIBRARY	CYBERNETICS INC	CY8960	01061034A	JS-8 / 281	$63,041.00
1987406	MONITOR, TELEVISION	JVC	BMH1900SU	08610249A	JS-12/154BA	$1,810.00
1987407	COMPUTER, MICRO	IBM	A60	1S683321UAM84D54	JS-9NW/2165	$1,478.00
1987537	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13197	JS-8 / 281	$38,963.00
1987538	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13194	JS-8 / 281	$38,963.00
1987542	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DS555P	A0TC00063	JS-12/154BA	$3,284.00
1987618	MONITOR, AUDIO SWITCHABLE	WOHLER TECHNOLOGIES	AMPA10S	42778	JS-8/286	$1,284.00
1987619	MONITOR, AUDIO SWITCHABLE	WOHLER TECHNOLOGIES	AMP2A105S	42779	JS-8/286	$1,284.00
1987620	CONSOLE, LIGHT CONTROL	JANDS ELECTRONICS	HOG500	25CH260018	JS-2S/201B	$6,850.00
1987840	COMPUTER, LAPTOP	DOLCH COMPUTER SYSTEMS	PAC65	DCS0004078	JS-46 / 218	$8,896.00
1987998	PRINTER, ADP	HEWLETT-PACKARD CO	C3167A	20212	JS-9NW/2170	$3,362.00
1988005	INTERCOM SYSTEM, AUDIO	RTS SYSTEMS	FR-ADAM	42076	JS-8/280	$52,042.00
1988045	GENERATOR SET	STEWART AND STEVENSON SERVICES	4-GD-50	61612	JS-8/OUTSI	$11,845.00
1988734	CUTTER, PAPER	FOTOBA INTERNATIONAL SAS	R3000PSCS	51090	JS-8/110	$9,625.00
1988735	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DS555P	L9TC00135	JS-12/154BA	$3,284.00
1988756	MONITOR, TELEVISION	DATA CHECK CORP	2600	1013	JS-8/211R	$4,450.00
1988788	CAMERA SET, TELEVISION	VCON	VDO00001	9925021	JS-9NW/2170	$800.00
1991130	POWER SUPPLY	DELL COMPUTER CORP F-PC'S LTD	AVM	1GRJK01	JS-46 / 218	$20,000.00
1991224	COMPUTER, LAPTOP	NEC CORP	MOBILEPRO880	OZ100297	JS-12 / 112A	$1,050.00
1991394	VAULT, POWER	DELL COMPUTER CORP F-PC'S LTD	AVM	BNWRN01	JS-46 / 218	$16,236.00
1995556	TAPE LIBRARY	OMNILIB	SCALAR1000	201100788	JS-8 / 125B	$119,137.00
1995580	MONITOR, AUDIO SWITCHABLE	WOHLER TECHNOLOGIES	AMP1A10S	45799	JS-425 /	$1,000.00
1995581	DELAY UNIT, TAPE SPEED COMPENS	SIERRA VIDEO SYSTEMS INC	807110	143	JS-8/280	$10,500.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
1995582	DISPLAY UNIT, LCD	DATA CHECK CORP	2600	1121	JS-8/286	$4,200.00
1995583	DISPLAY UNIT, LCD	DATA CHECK CORP	2600	1122	JS-8/181B	$4,200.00
1995607	BODY, CAMERA	HASSELBLAD A B VICTOR	503CX	11EP22922	JS-8/298	$1,438.00
1995608	CAMERA, STILL PICTURE	HASSELBLAD A B VICTOR	2000FCW	RC1521598	JS-8/298	$1,818.00
1995656	JUKEBOX, OPTICAL DISK	PIONEER ELECTRONIC CORP	DRM7000	UETT000564WL	JS-2S/STAGE	$15,935.00
1995662	MEASUREMENT SET, SERIAL	TEKTRONIX INC	WFM601M	B012997	JS-8/281	$8,405.00
1995663	MEASUREMENT SET, SERIAL	TEKTRONIX INC	WFM601M	B012998	JS-8 / 281	$8,405.00
1995664	MONITOR, WAVEFORM	TEKTRONIX INC	WFM601E	B012897	JS-8 / 281	$6,840.00
1995665	MONITOR, WAVEFORM	TEKTRONIX INC	WFM601E	B012896	JS-8 / 215	$6,840.00
1995666	PROJECTOR	SANYO	PLC-EF10NZL	G0601114	JS-8/215BA	$12,769.00
1995691	BURNER, DVD	PIONEER CO	DVR-S201	TKTT004265WL	JS-2S/110	$5,000.00
1995692	DISK DRIVE UNIT	QUANTUM CORP	DLT4000	1274665	JS-2S/110	$2,500.00
1995708	COMPUTER, MICRO	COMPETITIVE SOLUTIONS INC	NONE	CSI02976	JS-2S/109	$1,870.00
1995709	COMPUTER, MICRO	COMPETITIVE SOLUTIONS INC	SUPERMICRO	CSI02983	JS-2S/109	$7,465.00
1995720	AUDIO INTERFACE	GRASS VALLEY GROUP INC THE	PAC216	GV007929	JS-8 / 281	$5,000.00
1995722	COMPUTER SYSTEM, DIGITAL	GRASS VALLEY GROUP INC THE	PFC536	SF20003100581	JS-8 / 281	$74,993.00
1995730	DISPLAY UNIT	PHILIPS CONSUMER ELECTRONICS	RP2UMD	1758	JS-8 / 281	$1,094.00
1995731	DISPLAY UNIT	PHILIPS CONSUMER ELECTRONICS	RP2UMD	1761	JS-8 / 281	$1,094.00
1995732	DISPLAY UNIT	PHILIPS CONSUMER ELECTRONICS	RP2UMD	1759	JS-8 / 281	$1,094.00
1995733	DISPLAY UNIT	PHILIPS CONSUMER ELECTRONICS	RP2UMD	1760	JS-8 / 281	$1,094.00
1995734	DISPLAY UNIT	PHILIPS CONSUMER ELECTRONICS	RP2UMD	1762	JS-8 / 281	$1,094.00
1995802	PRINTER, ADP	DURST SPA	LAMBDA131	B3825	JS-8/172	$229,000.00
1995804	CUTTER, AUTO	DURST SPA	AUTOCUTTER6	P3248	JS-8/174	$45,000.00
1996091	RECEIVER, SYNCHRONIZED IRIG-B	TRUE TIME INC FRMLY KINEMETRIC	XL-AK600-101	3911163	JS-8/280	$2,495.00
1996112	DISPLAY UNIT	SONY CORP	PVM8042Q	2013921	JS-8 / 281	$724.00
1996126	SWITCHER, ROUTING	PHILIPS	VRS4000	13900654	JS-425/100B	$100,808.00
1996127	SWITCHER, ROUTING VIDEO	PHILIPS	VRS4000	13940337	JS-8/280	$89,524.00
1996128	SWITCHER, ROUTING VIDEO	PHILIPS	VRS4000	13940338	JS-8/280	$82,059.00
1996129	SWITCHER, ROUTING AUDIO	PHILIPS	VRS4000	13900673	JS-8/280	$46,005.00
1996168	DISK ARRAY	RORKE DATA INC	MAXARRAY FC	NONE	JS-2S/110	$12,953.00
1996169	RECORDER, VIDEO CASSETTE	SONY CORP	DSR85P	480055	JS-12/154BA	$16,845.00
1996252	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13734	JS-8 / 281	$39,202.00
1996259	PROCESSOR, DIGITAL VIDEO	THOMSON-CSF COMPONENTS CORP	DVP4000	CM022900004	JS-8/280	$14,665.00
1996272	SCANNER, ADP	KRUSS GMBH	CS220P450TL	NONE	JS-8/125A	$106,498.00
1996340	COMPUTER SYSTEM, DIGITAL	SUN ELECTRIC CORP	STOREDGE A10	013H2CEE	JS-46 / 218	$17,403.00
1996361	COMPUTER SYSTEM, DIGITAL	GRASS VALLEY GROUP INC THE	PFC500	21000377	JS-8 / 281	$66,655.00
1996376	CONVERTER, HD DIGITAL HD ANALO	LEITCH AND CO	FR3611	39450	JS-8/226B	$12,857.00
1996381	CONVERTER, HD DIGITAL/HD ANALO	EVERTZ MICROSYSTEMS LTD	7700FR-C	1017518	JS-207/104	$19,168.00
1996439	RECORDER, VIDEO CASSETTE	SONY CORP	SVO5800	15336	JS-8 / 281	$4,424.00
1996545	DISPLAY UNIT, FLAT PANEL	COMPAQ COMPUTER CORP	TFT5000	035BH34PZ904	JS-46 / 218	$1,703.00
1997160	RECORDER, VIDEO CASSETTE	SONY CORP	SVO5800	15301	JS-8 / 281	$4,424.00
2078602	PLAYER, DVD	PIONEER CO	V7400	AGNN015559CC	JS-9NW/2170	$715.00
2078610	CAMERA SET, TELEVISION	SONY CORP	DXC950	106490	JS-30S/2306	$3,029.00
2078611	CAMERA SET, TELEVISION	SONY CORP	DXC950	106486	JS-8/2T3H	$3,029.00
2078613	CAMERA SET, TELEVISION	SONY CORP	DXC950	106463	JS-30S/2306	$3,029.00
2078640	MONITOR, WAVEFORM	TEKTRONIX INC	1750A	B045653	JS-8 / 208	$6,222.00
2078641	MONITOR, WAVEFORM	TEKTRONIX INC	1750A	B045631	JS-2S / 208	$6,222.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2078643	CAMERA, BODY	HASSELBLAD VICTOR INC	555ELD	12SV11602	JS-8/272	$3,296.00
2078654	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13827	JS-8 / 281	$36,665.00
2078655	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	13828	JS-8 / 281	$39,262.00
2078659	TABLE, PHOTOGRAPHIC LIGHT	RICHARDS CORP	MIM47B100	136	JS-12/154	$6,500.00
2078686	RECORDER, CASSETTE VIDEO	JVC CO OF AMERICA	BRS800U	17659087	JS-30A/1092	$2,867.00
2078687	MONITOR, WAVEFORM	TEKTRONIX INC	WFM700A	B010199	JS-8/215B	$16,982.00
2078715	ANTENNA	DH INSTRUMENTS INC	NONE	NONE	JS-T-586/OUISD	$9,322.00
2078716	ANTENNA	DH INSTRUMENTS INC	NONE	NONE	JS-T-586/OUISD	$9,322.00
2078738	PRINTER, ADP	MICROBOARDS INC	5700D	2010800916	JS-2S/103	$1,400.00
2078740	COMPUTER, MICRO	IBM	A40	1S6831GBU78X6318	JS-2S/109	$1,334.00
2078741	PRINTER, ADP	MICROBOARDS INC	5700D	2010800769	JS-2S/208	$1,400.00
2078766	RECORDER, VIDEO CASSETTE	SONY CORP	DSR2000	101489	JS-8 / 281	$12,271.00
2078767	RECORDER, VIDEO CASSETTE	SONY CORP	DSR2000	101486	JS-8 / 281	$11,169.00
2078773	AUDIO DIGITAL SYSTEM	SADIE	ARTEMIS TURN	EX20455/ST39038	JS-2S/123	$16,593.00
2078778	RECORDER, VIDEO CASSETTE	SONY CORP	DSR85	280063	JS-12/154BA	$16,040.00
2079020	PRINTER, ADP	HEWLETT-PACKARD CO	C7780C	SG15121006	JS-46 / 300	$5,947.00
2080012	SERVER, POWEREDGE 8450	DELL COMPUTER CORP F-PC'S LTD	EMX	FZ3V411	JS-46 / 300	$39,746.00
2080013	SERVER, POWEREDGE 8450	DELL COMPUTER CORP F-PC'S LTD	EMX	4TLQ411	JS-46 / 300	$32,535.00
2080051	MONITOR, TELEVISION	JVC	HV-M300VSU	12370045	JS-8/273A	$3,665.00
2080058	COMPUTER, LAPTOP	SONY CORP	PCG881R	R2356778	JS-1/952A	$1,683.00
2080077	CAMERA SET, TELEVISION	CANON CAMERA CO INC	RE350	2431100261	JS-8/2100	$1,383.00
2080131	CAMERA, DIGITAL BROADCAST	IKEGAMI TSUSHINKI CO LTD	HL45AWN	QB1167	JS-2S/109	$16,000.00
2080132	LENS, CAMERA	CANON INC	YJ1BX9BIRS-A	52963	JS-2S/109	$5,918.00
2080135	CAMERA, DIGITAL BROADCAST	IKEGAMI TSUSHINKI CO LTD	HL45AWN	QB1174	JS-2S/109	$16,000.00
2080136	LENS, CAMERA	CANON INC	YJ1BX9BIRS-A	53480	JS-2S/109	$5,918.00
2080143	GENERATOR, CHARACTER	CHYRON CORP	DUETLE	ZAA0126801	JS-2S/109	$17,748.00
2080145	RECORDER, DIGITAL	CHYRON CORP	APRISA250	ANC0137901	JS-2S/109	$63,819.00
2080146	GENERATOR, CHARACTER	CHYRON CORP	DUETLE	ZAA0125801	JS-2S/205	$17,748.00
2080161	PROJECTOR, VIDEO	SANYO	PLC-EF10N	G0801386	JS-36/121	$6,995.00
2080186	SCANNER, ADP	IMATION	KIP2080	7580400034	JS-227/33	$18,853.00
2080187	COMPUTER, MICRO	COMPAQ	AP200	6036FCJ2A039	JS-227/33	$3,213.00
2080188	DISPLAY UNIT	COMPAQ	PE1132	025GD43AA921	JS-227/33	$562.00
2080208	COMPUTER, LAPTOP	APPLE COMPUTER INC	M6497	3902P001	JS-45 / 222	$1,468.00
2080214	MARKING MACHINE	OXBERRY DV OF RICHMARK CAMERA	NONE	NONE	JS-8/101R	$27,500.00
2080218	SCANNER, FILM	OXBERRY DV OF RICHMARK CAMERA	HR500	411	JS-8/101R	$140,142.00
2080312	DISPLAY UNIT	AMX CORP	AXT-MCP	92520P5010829	JS-30A/1092	$1,728.00
2080411	DISK DRIVE UNIT	DELL COMPUTER CORP F-PC'S LTD	LTO	1E72A05045	JS-46 / 110	$6,270.00
2080416	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	SL340	TW-06H507-12961-1C4	JS-46 / 300	$1,317.00
2080434	VAULT, POWER	DELL COMPUTER CORP F-PC'S LTD	AVM	5JHK811	JS-46 / 218	$20,795.00
2080450	VAULT, POWER	DELL COMPUTER CORP F-PC'S LTD	AVM	CGCQ911	JS-46 / 218	$21,000.00
2080535	SERVER, POWEREDGE 8450	DELL COMPUTER CORP F-PC'S LTD	EMX	JCSSB11	JS-46 / 300	$38,519.00
2080536	SERVER, POWEREDGE 8450	DELL COMPUTER CORP F-PC'S LTD	EMX	IDSSB11	JS-46 / 300	$38,519.00
2080562	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SML	7560C11	JS-46 / 300	$20,169.00
2080738	SERVER, ADP	SUN MICROSYSTEMS INC	600-7844-04	216V018	JS-46 / 300	$106,295.00
2080739	DISPLAY UNIT	SUN MICROSYSTEMS INC	GDM5510XU	0014698-0216LX0518	JS-46 / 110A	$876.00
2080755	TAPE DRIVE UNIT	SUN MICROSYSTEMS INC	599-2347-02	215C61BB	JS-46 / 300	$3,942.00
2080758	DISPLAY UNIT	APC	LCD15-1	704810	JS-46 / 300	$2,744.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2080759	SWITCH 8 PORT	APC	KVM8	DA0049094	JS-46 / 110A	$2,225.00
2081038	SERVER, ADP	SUN MICROSYSTEMS INC	600-6952-01	223C690E	JS-46 / 300	$18,392.00
2081039	SERVER, ADP	SUN MICROSYSTEMS INC	600-6952-01	223C6907	JS-46 / 300	$18,392.00
2081040	DISK DRIVE UNIT	SUN MICROSYSTEMS INC	599-2347-02	226C6311	JS-46 / 300	$3,942.00
2081041	DISPLAY UNIT, FLAT	AMERICAN POWER CONVERSION CORP	AR8215BLK	4N0222E02868	JS-46 / 110A	$2,696.00
2081123	DEGAUSSER TAPE	DATA SECURITY INC	HD6000	6089	JS-8/189D	$22,708.00
2081152	TELEPHONE CONFERENCE GROUP	POLYCOM INC	PN4-14XX	02B298	JS-8/2100	$7,375.00
2081154	RECEIVER, VIDEO	AMERICAN FIBERTEK INC	MRR880	199646	JS-2S/207	$2,693.00
2081155	DISPLAY UNIT	BOLAND COMMUNICATIONS	C150AAV	4788	JS-8/2100	$710.00
2081156	MONITOR, LCD PANEL	MARSHALL INDUSTRIES	VR25P	211805973	JS-8/280	$2,645.00
2081223	TELEVISION SET	JVC CO OF AMERICA	BM-H1310SU	9720453	JS-2S / 206	$944.00
2081224	MONITOR, TELEVISION	IKEGAMI TSUSHINKI CO LTD	TM9-1	17605295	JS-2S/109	$680.00
2081264	PROJECTOR, VIDEO	SANYO DENKI CO LTD	PLC-XP30	G2804792	JS-1322/C165	$6,451.00
2081268	PLAYER, CASSETTE VIDEO	SONY CORP	J3	14150	JS-8/225A	$10,030.00
2081269	PROJECTOR, VIDEO	SANYO	PLC-XP41L	G2401112	JS-1322/165	$6,270.00
2081974	SCANNER, STRIP GATE	HALSE SYSTEMS	STRIP 135	20590	JS-8/103R	$5,418.00
2081976	RECORDER, AUDIO	TASCAM	DA45HR	70042	JS-2S/107	$1,531.00
2081998	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	MMT	CK9TN21	JS-8/208A	$1,665.00
2082018	DISPLAY UNIT, LCD	SAMSUNG ELECTRONICS	213T	NB21H4JW705495W	JS-1/952A	$1,443.00
2082019	CAMERA, DOCUMENT	ELMO SEMICONDUCTOR CORP	EV-4400AF	255477	JS-9NW/2170A	$1,943.00
2082031	COMPUTER, LAPTOP	SONY CORP	PCG-481L	28132530-3100762	JS-8/181C	$2,165.00
2082032	RECORDER, VIDEO CASSETTE	PANASONIC	AJHD1700	G3TNA0016	JS-8/273A	$56,147.00
2082042	DISPLAY UNIT, FLAT MOUNTED	BOLAND COMMUNICATIONS	C150A-AV	5942	JS-1/952A	$644.00
2082077	CAMERA SYSTEM, DIGITAL	IKEGAMI TSUSHINKI CO LTD	HL-60W	AA12965	JS-2S/122	$35,251.00
2082078	CAMERA SYSTEM, DIGITAL	IKEGAMI TSUSHINKI CO LTD	HL-60W	AA12951	JS-2S/122	$35,251.00
2082121	MONITOR, LCD PANEL	MARSHALL ELECTRONICS COMPANY	V-R151P	08510 06734	JS-8/280	$1,769.00
2082164	RECORDER, FILM DIGITAL	LASER GRAPHICS INC	MARKIII	ED3-1026	JS-8/121E	$11,569.00
2082165	MONITOR, LCD PANEL	MARSHALL ELECTRONICS COMPANY	V-R151P	08511 06734	JS-8 / 281	$1,769.00
2082167	PROCESSOR, CENTRAL, ADP	MIRANDA TECHNOLOGIES INC.	MW-FRAME-2	040699-13912039	JS-1/952A	$30,755.00
2082204	RECORDER, DVD	OCTAVE	CDVD+R/7	2775-1003	JS-2S/208	$2,992.00
2082205	PRINTER, DUPLICATOR DISC	MICROBOARDS TECHNOLOGY INC	DSR DVD SERIE	307-23810-00410	JS-8/125AB	$2,838.00
2082216	RECORDER RECEIVER, SATELLITE	DISH NETWORK	DISHPVR721	RAEHAN01177E	JS-8/208	$598.00
2082218	RECORDER RECEIVER, SATELLITE	DISH NETWORK	DISHPVR721	RAEHAN00684G	JS-8/208	$598.00
2082221	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	C0DLP31	JS-8 / 281	$10,693.00
2082222	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	F0DLP31	JS-8 / 281	$10,693.00
2082223	MONITOR, LCD PANEL	MARSHALL ELECTRONICS COMPANY	V-R151P	08974 06734	JS-8/280	$1,815.00
2082333	PRINTER, ADP	LEXMARK INTL INC	M412-4045210	3024853	JS-227/30	$550.00
2082336	INTERFACE, SERIAL CONTROL	PHILIPS	S13000C	CM023001013	JS-2S / 208	$5,318.00
2082399	RECORDER, DVD	PIONEER ELECTRONIC CORP	PRV9000	BFTT002229CC	JS-2S/207	$1,620.00
2082401	TELEVISION SET	PANASONIC	CT36SX12	LF22140010	JS-8/2100	$886.00
2082403	FILE SERVER	SUPERMICRO	SC850P4	93	JS-46 / 300	$9,145.00
2082428	RECORDER, VIDEO CASSETTE DIGIB	SONY CORP	DVW-500	13987	JS-8 / 281	$40,841.00
2082434	COMPUTER, MICRO	COMPETITIVE SOLUTIONS INC	NONE	CS03541	JS-2S/210	$2,103.00
2082437	COMPUTER, MICRO	SUN MICROSYSTEMS INC	180	235C5153	JS-46 / 300	$9,416.00
2083944	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	48239	JS-SCH/ERC	$2,479.00
2083945	RECORDER, VIDEO CASSETTE	SONY CORP	SV09500MD	48195	JS-SCH/ERC	$2,479.00
2083950	TELEVISION SET	PANASONIC	CT-36SX12	LE22700184	JS-8/2100	$970.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2084037	DISPLAY UNIT	SONY CORP	CPD-E540	8003795	JS-8 / 281	$591.00
2084039	COMPUTER, MICRO	INCITE NETWORK SOLUTIONS	IC-SWU4U-FCO	NONE	JS-2S/208	$5,817.00
2084040	COMPUTER, MICRO	INCITE NETWORK SOLUTIONS	IC-SWU4U-FCO	NONE	JS-2S/208	$5,817.00
2084042	COMPUTER, MICRO	INCITE NETWORK SOLUTIONS	IC-SWU4U-FCO	NONE	JS-2S/110	$5,817.00
2084043	COMPUTER, MICRO	INCITE NETWORK SOLUTIONS	IC-SWU4U-FCO	NONE	JS-2S/110	$5,817.00
2084044	COMPUTER, MICRO	INCITE NETWORK SOLUTIONS	IC-SWU4U-FCO	NONE	JS-2S/110	$5,817.00
2084046	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	14051	JS-2S/208	$43,683.00
2084047	RECORDER, VIDEO CASSETTE	SONY CORP	DVW500	14055	JS-2S / 208	$43,683.00
2084081	PROJECTOR, VIDEO	SANYO ELECTRIC CO LTD	PLC-XP21N	G2604684	JS-1322/165	$5,310.00
2084154	DISPLAY UNIT, FLAT MOUNTED	BOLAND COMMUNICATIONS	C150A-AV	5267	JS-1/952A	$843.00
2084155	DISPLAY UNIT, FLAT MOUNTED	BOLAND COMMUNICATIONS	C150A-AV	5268	JS-1/952A	$843.00
2084156	SWITCHER, ROUTING VIDEO	SIERRA INSTRUMENTS INC	SIERRA PRO	804086-31-034	JS-1/952A	$17,054.00
2084157	SWITCHER, ROUTING AUDIO	SIERRA INSTRUMENTS INC	SIERRA PRO	8040	JS-1/952A	$8,630.00
2084158	SWITCHER, ROUTING	PESA SWITCHING SYSTEMS INC	CC32VAA/35	2210D02390005	JS-1/952A	$16,526.00
2084159	DISPLAY UNIT, PLASMA SCREEN	PIONEER CO	PDP-433CMX	BGSS003817NJ	JS-1/945	$4,831.00
2084160	DISPLAY UNIT, PLASMA SCREEN	PIONEER CO	PDP-433CMX	BGSS003805NJ	JS-1/945	$4,831.00
2084166	PROJECTOR, VIDEO W/LENS	SANYO DENKI CO LTD	PLCUF-10	G1Y01071	JS-1/952A	$32,278.00
2084167	RECORDER, VIDEO CASSETTE	SONY CORP	SVO-5800	15877	JS-2S / 208	$6,076.00
2084470	DISPLAY UNIT	AMX CORP	AXD-MCP	92540P1820880	JS-30A/1093	$1,728.00
2084660	NETWORK SNIFFER	NETWORK ASSOCIATES CORP	EG2S	36207000979	JS-46 / 218	$27,190.00
2084817	PROCESSOR, CENTRAL, ADP	COMPAQ COMPUTER CORP	PROLIANT ML37	D303LDQ1D094	JS-46 / 300	$2,492.00
2086058	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2K00898	JS-1/945	$1,732.00
2086059	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J00899	JS-1/945	$1,732.00
2086060	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01096	JS-1/945	$1,732.00
2086061	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01045	JS-1/945	$1,732.00
2086062	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01005	JS-1/945	$1,732.00
2086063	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01080	JS-1/945	$1,732.00
2086064	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01004	JS-1/945	$1,732.00
2086065	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01059	JS-1/945	$1,732.00
2086066	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J00970	JS-1/945	$1,732.00
2086067	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01006	JS-1/945	$1,732.00
2086068	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01014	JS-1/945	$1,732.00
2086069	COMPUTER, LAPTOP	ADVANCED DITIGAL SYSTEMS	5600D	NC560D2J01037	JS-1/945	$1,732.00
2086072	COMPUTER, MICRO	DATACO DEREX INC	MT131I	1.74935E+11	JS-1/952A	$1,199.00
2086073	COMPUTER, MICRO	DATACO DEREX INC	MT131I	1.75473E+11	JS-1/952A	$1,177.00
2086074	COMPUTER, MICRO	DATACO DEREX INC	MT131I	1.75473E+11	JS-1/945A	$1,177.00
2086200	COMPUTER SYSTEM, DIGITAL	ROARKE DATA	RS-1600-FC	SHU360480000289	JS-8/273A	$20,027.00
2086201	SERVER, VIDEO CONVERSION	CINE SYSTEM	TVOPS-FLIP	00019-094-215-869	JS-8/273A	$26,208.00
2086202	COMPUTER, MICRO	CINE SYSTEM	TVOPS-ITS1	00019-094-244-216	JS-8/273A	$18,413.00
2086203	COMPUTER, MICRO	CINE SYSTEM	TVOPS-ITS2	00019-094-244-217	JS-8/273A	$15,384.00
2086204	COMPUTER, MICRO	CINE SYSTEM	TVOPS-ITS3	00019-094-244-215	JS-8/273	$18,513.00
2086264	RECORDER, VIDEO CASSETTE	SONY CORP	DSR-1800	111105	JS-2S/208	$8,836.00
2086265	RECORDER, VIDEO CASSETTE	SONY CORP	DSR-1800	110988	JS-2S/109	$8,836.00
2086339	COMPUTER, MICRO	APPLE COMPUTER INC	POWERMAC G4	SG237BETMFX	JS-8/273A	$16,922.00
2086520	COMPUTER, MICRO	AXION CORP	NONE	NONE	JS-8 / 226B	$666.00
2086524	DISPLAY UNIT	SHARK RACK	LCD-17-DIN	0560A00271	JS-46 / 300	$2,933.00
2086527	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	322AD1EF8	JS-46 / 300	$13,038.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2086528	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	322AD1F2D	JS-46 / 300	$13,038.00
2086534	CONTROL UNIT, INTERPRETER'S	BRAHLER ICS	DOL-Z-EW5	171	JS-1/966AA	$5,326.00
2086558	CAMERA SET, TELEVISION	CANON CAMERA CO INC	RE-450X	2660010080	JS-2S/TEAGU	$1,579.00
2086566	TELEPHONE CONFERENCE GROUP	POLYCOM INC	PR4-XXXX	35503	JS-1/952A	$7,294.00
2086567	CAMERA SET, TELEVISION	WOLFVISION	VZ-8PLUS	08 7423	JS-1/945A	$4,047.00
2086610	COMPUTER, MICRO	SUPERMICRO	SC7331-450	SA206927	JS-8/103R	$3,125.00
2086611	COMPUTER, MICRO	SUPERMICRO	SC7331-450	SA206928	JS-8/272	$3,125.00
2086615	PRINTER, CD/DVD	PRIMERA	SIGNATURE IV	2030900833	JS-8/106R	$1,118.00
2086616	PRINTER, CD/DVD	PRIMERA	SIGNATURE IV	2030300301	JS-8/121C	$1,118.00
2086618	DISPLAY UNIT, FLAT	MARSHALL ELECTRONICS	V-R151P	09532 06734	JS-8/208	$1,815.00
2086621	INTERFACE, SERIAL CONTROL	THOMSON	SI-3000C	CM031610038 E	JS-8/208	$6,044.00
2086805	CONSOLE, 3-BAY	BECK ASSOCIATES	NONE	NONE	JS-8 / 281	$7,497.00
2086814	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	32AD1EF7	JS-46 / 300	$13,038.00
2086870	VACUUM, DISTILLATION UNIT	LED SYSTEMS	LEDE1400FF4	43669810	JS-8/OUTSI	$15,531.00
2086871	COMPUTER, MICRO	NVERZION	NONE	NONE	JS-8/208	$3,275.00
2103959	SERVER, ADP	CYCLADES CORP	TS1000	TES034505	JS-46 / 110A	$1,961.00
2119520	COMPUTER, MICRO	SUPERMICRO	NONE	NONE	JS-8/208	$1,116.00
2119521	DISPLAY UNIT, LCD	ELO TOUCH SYSTEMS INC	482392-001	724095695C	JS-8/208	$1,813.00
2119522	COMPUTER, MICRO	DYNAPOWER CORP	NONE	NONE	JS-8/208	$851.00
2119523	DISPLAY UNIT, LCD	ELO TOUCH SYSTEMS INC	482392-001	724095675C	JS-8/208	$1,813.00
2119539	MONITOR SET, TELEVISION	IKEGAMI TSUSHINKI CO LTD	TM-1417RZ	7225	JS-2S/211	$2,270.00
2119604	COMPUTER, MICRO	AXION	NONE	NONE	JS-8/208	$1,381.00
2119620	RECORDER, VIDEO CASSETTE	JVC	HMDH4000U	128V0017	JS-8/208	$672.00
2119621	RECORDER, VIDEO CASSETTE	JVC	HMDH4000U	118V0967	JS-8/208	$672.00
2119646	COMPUTER, MICRO	SOYO TECHNOLOGY	NONE	NONE	JS-8/280	$945.00
2119667	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SCL	2BKM051	JS-46 / 300	$6,868.00
2119668	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SCL	3BKM051	JS-46 / 300	$6,868.00
2119669	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SCL	4BKM051	JS-46 / 300	$6,868.00
2119670	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SCL	5BKM051	JS-46 / 300	$6,868.00
2119716	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SCL	7BKM05	JS-46 / 300	$5,960.00
2119717	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	4U132	0PB1	JS-46 / 300	$1,100.00
2119723	MODULE, CONTROL	EUPHONIX INC	CM408	D5871	JS-2S/210	$15,505.00
2119724	MODULE, CONTROL	EUPHONIX INC	CM408	D5873	JS-2S/210	$15,505.00
2119725	MODULE, CONTROL	EUPHONIX INC	CM401	D5868	JS-2S/210	$16,816.00
2119741	COMPUTER, MICRO	EUPHONIX INC	PC253D	D5257	JS-2S/208	$7,688.00
2119742	COMPUTER, MICRO	EUPHONIX INC	PC253D	D5256	JS-2S/208	$7,688.00
2119743	COMPUTER, MICRO	EUPHONIX INC	PC2531	D4997	JS-2S/208	$7,688.00
2119748	MIC/LINE INPUTS	EUPHONIX INC	ML530-24	D5249	JS-2S/210	$7,574.00
2119749	MIC/LINE INPUTS	EUPHONIX INC	ML530-24	D5250	JS-2S/210	$7,574.00
2119750	HUB, STUDIO W/THOMPSON	EUPHONIX INC	SH612	R5499	JS-2S/208	$10,989.00
2119751	HUB, STUDIO W/THOMPSON	EUPHONIX INC	SH612	R5498	JS-2S/208	$8,393.00
2119752	MONITORING SYSTEM/POWER SUPPLY	EUPHONIX INC	MC524	D5198	JS-2S/208	$8,729.00
2119768	LEGS/MODULE	EUPHONIX INC	NONE	NONE	JS-2S/210	$17,452.00
2119770	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	336AD16AF	JS-46 / 300	$12,762.00
2119771	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	336AD16B0	JS-46 / 300	$12,762.00
2119772	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	336AD16B1	JS-46 / 300	$12,762.00
2119773	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	336AD185C	JS-46 / 300	$12,762.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2119774	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	336AD1408	JS-46 / 300	$12,762.00
2119775	SERVER, ADP	SUN MICROSYSTEMS INC	602-2425-01	336AD1409	JS-46 / 300	$12,762.00
2119793	MONITOR, LCD PANEL RACK MOUNT	ROSE ELECTRONICS	RV1-KVM17	NONE	JS-46 / 300	$4,305.00
2119847	RECORDER, CASSETTE	DICTAPHONE	2750	561023	JS-227/1	$542.00
2119848	RECORDER, CASSETTE	DICTAPHONE	2750	561021	JS-227/1	$542.00
2119861	CAMERA SET, TELEVISION	ELMO CO LTD	EV-2000AF	409620	JS-9NW/2170	$1,588.00
2119947	MONITOR, TELEVISION	SONY CORP	PVM-14L2	2103465	JS-2S/112	$1,283.00
2119952	RECORDER, VIDEO CASSETTE	SONY CORP	UVW1800	19869	JS-8/208	$8,499.00
2119966	INTERFACE, SERIAL CONTROL	BTS BRAODCAST TELEVISION SYS	VM3000	8050336	JS-8/280	$5,175.00
2120010	SERVER, ADP	SUPERMICRO	NONE	NONE	JS-8 / 125B	$12,085.00
2120044	DISPLAY UNIT	HYUNDAI ELECTRONICS INDUSTRIES	LTI12SA	HLT37000945	JS-2S/109	$830.00
2120252	PROCESSOR, IMAGE	FUJI OPTICAL CO	LP2000SG	NONEX	JS-8/169	$74,482.00
2120253	DISPLAY UNIT	SONY CORP	CPD-E100	4066267	JS-8/169	$4,827.00
2120256	SCANNER, ADP	FUJI OPTICAL CO	SP2000	NONEX	JS-8/169	$74,482.00
2120264	DUPLICATOR	MEDIAFORM INC	CD-11	800915	JS-8/125AB	$975.00
2120267	VIEWING STATION, COLOR	GRAPHICLITE	CVX-1	NONEX	JS-8/174	$2,211.00
2120268	VIEWING STATION, COLOR	GRAPHICLITE	CVX-1	NONEX	JS-8/125A	$2,211.00
2120269	VIEWING STATION, COLOR	GRAPHICLITE	CVX-2	NONEX	JS-8/125	$3,969.00
2120270	DENSITOMETER	X-RITE INC	X-RITE 890	2073	JS-8/185	$2,706.00
2120272	SCANNER, FILM	KODAK CANADA LTD	HR 500	323	JS-8/103R	$5,683.00
2120273	PROCESSOR	ILFORD INC	MG2650	0100-70100	JS-8/108R	$14,044.00
2120274	VIEWING STATION, COLOR	GRAPHIC TECHNOLOGY INC	SOFV-1	2521	JS-8/103R	$1,672.00
2120275	SPLICER, MICRO FUSION	SIECOR CORP	X77-0SM-T-H	7242	JS-8/2M4	$24,045.00
2120287	RECORDER, DV DOCKABLE	SONY CORP	DSRI	11858	JS-8/298	$5,909.00
2120288	CAMERA SYSTEM, DIGITAL	SONY CORP	DXC-D30	17913	JS-8/298	$8,994.00
2120289	RECORDER, DV DOCKABLE	SONY CORP	DSRI	11854	JS-8/298	$5,909.00
2120290	CAMERA SYSTEM, DIGITAL	SONY CORP	DXC-D30	17916	JS-8/298	$8,994.00
2120291	RECORDER, VIDEO CASSETTE	SONY CORP	DSR-V10	11353	JS-8/226B	$1,985.00
2120292	RECORDER, VIDEO CASSETTE	SONY CORP	DSR-V10	11345	JS-8/226B	$1,985.00
2120293	MIXER, AUDIO PORTABLE	SHURE BROS INC	FP33	CAN-001187837	JS-8/298	$1,245.00
2120294	HARMONIZER, AUDIO	EVENTIDE INC	DSP4500	NONEX	JS-1322/C165	$5,980.00
2120315	CAMCORDER	SONY CORP	HVR-Z1U	1112704	JS-2S / 109	$4,295.00
2120316	CAMCORDER	SONY CORP	HVR-Z1U	1112750	JS-2S / 109	$4,295.00
2120317	CAMCORDER	SONY CORP	HVR-Z1U	1112823	JS-2S / 109	$4,295.00
2120318	RECORDER, DIGITAL	SONY CORP	HVR-M10U	1111189	JS-2S / 204	$2,990.00
2120326	TRIPOD SYSTEM	SACHTLER GMBH	VIDEO 20P	20P2927	JS-2S / 109	$7,950.00
2120327	TRIPOD SYSTEM	SACHTLER GMBH	VIDEO 20P	20P7929	JS-2S / 109	$7,950.00
2120328	CONVERTER, DIGITAL	EVERTZ MICROSYSTEMS LTD	7700 FR-C	411390007	JS-8 / 181B	$14,324.00
2120329	CONVERTER, DIGITAL	EVERTZ MICROSYSTEMS LTD	7700 FR-C	411390005	JS-8 / 181B	$12,434.00
2120330	CONVERTER, DIGITAL	EVERTZ MICROSYSTEMS LTD	7700 FR-C	411390019	JS-8 / 281	$12,434.00
2120357	CAMERA-RECORDING, VIDEO	THOMSON BROADCAST CO	KALYPSO-3DUC	GV037558	JS-2S / 110	$140,682.00
2120359	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	4	JS-8/286	$698.00
2120360	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	2	JS-8/280	$698.00
2120361	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	3	JS-8/286	$698.00
2120362	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	5	JS-12/154	$698.00
2120363	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	6	JS-8/225B	$698.00
2120364	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	7	JS-8/286	$698.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2120365	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	8	JS-8/286	$698.00
2120366	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	9	JS-LMIT/144	$698.00
2120367	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	22	JS-8/286	$1,650.00
2120368	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	23	JS-8/286	$1,650.00
2120369	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	24	JS-8/286	$1,650.00
2120370	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	25	JS-8/286	$1,650.00
2120371	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	26	JS-8/286	$1,650.00
2120372	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	27	JS-8/286	$1,650.00
2120376	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	1	JS-8/281	$698.00
2120381	MODULE, MAIN	D-COMMAND	9100-12900-00	XV00409REVB2	JS-2S/107	$14,957.00
2120383	WORKSTATION	CINESYS	NONE	5A340C782C0	JS-2S/102	$26,714.00
2120384	WORKSTATION	CINESYS	NONE	5A340C78300	JS-2S/212	$26,714.00
2120387	SYSTEM, SPECTRUM	NVERZION	NR2-RD	200317981	JS-8 / 281	$31,920.00
2138700	COMPUTER, MICRO	COMPUTIZE	BTO-DUAL-P3-1	A1020000125794	JS-2S/123	$2,100.00
2139253	PRINTER, ADP	PRIMERA	SIGNATURE IV	2021001449	JS-8/195	$1,136.00
2139257	PRINTER, ADP	KODAK CANADA LTD	ML-500	ML5000241004	JS-30M/212	$20,359.00
2139258	COMPUTER SYSTEM, DIGITAL	INCITE NETWORK SOLUTIONS	GALAXY-5FT	708270036	JS-2S/110	$7,558.00
2139259	TAPE BACKUP UNIT	PEA INDUSTRIPRODUCTER	16 PAK	216000103LDZ	JS-2S/110	$10,075.00
2139271	PRINTER, ADP	PRIMERA TECHNOLOGY INC	SIGNATURE IV	2021201886	JS-8/125AB	$1,080.00
2139272	PRINTER, ADP	PRIMERA TECHNOLOGY INC	SIGNATURE*IV	2021201639	JS-8/125AB	$1,080.00
2139273	PRINTER, ADP	PRIMERA TECHNOLOGY INC	SIGNATURE IV	2021201643	JS-8/125AB	$1,080.00
2139275	PRINTER, ADP	PRIMERA TECHNOLOGY INC	SIGNATURE IV	2021201386	JS-8/121E	$1,080.00
2139276	PRINTER, ADP	PRIMERA	SIGNATURE IV	2021200065	JS-8 / 208A	$1,088.00
2139277	PRINTER, ADP	PRIMERA	SIGNATURE IV	2021200063	JS-8/21392	$1,088.00
2139278	PRINTER, ADP	PRIMERA	SIGNATURE IV	2021201883	JS-8/21392	$1,088.00
2139410	VIRTUAL, EXTRANET INSTANT	NEOTERIS INC	ACCESS 5000	0329FCN01064	JS-46 / 300	$73,472.00
2139508	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE280R	327AD1647	JS-46 / 204	$13,645.00
2139769	TAPE DRIVE UNIT	DELL COMPUTER CORP F-PC'S LTD	DLTVS80	PHD3H03491	JS-46 / 138	$1,246.00
2140173	RECEIVING SET, TELEVISION	SONY CORP	KV27FS210	4025621	JS-425/100B	$579.00
2140174	POWER SUPPLY, UNINTERRUPTIBLE	LIEBERT CORP	N212S0912600	0330201009BU17L4	JS-8 / 281	$17,932.00
2140175	SERVER, ADP	SUPERMICRO	CSE-942-600B	NONE	JS-8 / 125B	$16,689.00
2140223	DISPLAY UNIT	NEC CORP	LCD 4000-BK	3Y000425YA	JS-8 / 281	$548.00
2140231	DISPLAY UNIT, LCD	MASS ENGINEERED DESIGN INC	C18	18133311071	JS-46 / 138	$999.00
2140263	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	WHL	5ZLXL31	JS-46 / 200	$3,013.00
2140331	SWITCH, FIBRE CHANNEL	DELL COMPUTER CORP F-PC'S LTD	NONE	25GY911	JS-46 / 300	$6,737.00
2140335	PROCESSOR, ENCLOSURE	DELL COMPUTER CORP F-PC'S LTD	CX400DE	APM00033702548	JS-46 / 218	$69,310.00
2140336	ENCLOSURE, DISK ARRAY	DELL COMPUTER CORP F-PC'S LTD	XEMC	717GP21	JS-46 / 218	$16,378.00
2140347	PROCESSOR, ENCLOSURE	DELL COMPUTER CORP F-PC'S LTD	CX400DE	APM00033702549	JS-46 / 218	$61,178.00
2140358	SERVER, ADP	SAMSUNG ELECTRONICS	NONE	318063	JS-46 / 300	$7,958.00
2140499	DISPLAY UNIT, LCD	MASS ENGINEERED DESIGN INC	C18	18133311069	JS-46 / 138	$999.00
2140535	PRINTER, ADP	HEWLETT-PACKARD CO	C9692A	JPGMB49259	JS-8/293	$2,441.00
2140542	COMPUTER, LAPTOP	TOSHIBA TEC CORPORATION	SATALITE P15-S	Y3393811K	JS-8/2T5	$1,721.00
2140653	COMPUTER, LAPTOP	TOSHIBA TEC CORPORATION	P25-S670	44314058K	JS-8/272	$3,275.00
2140672	FRAME, DIGITAL W/POWER SUPPLY	EUPHONIX INC	DF-64	D5859	JS-2S/208	$142,142.00
2140673	FRAME, DIGITAL W/POWER SUPPLY	EUPHONIX INC	DF-64	D5848	JS-2S/208	$45,434.00
2140674	MODULE, CONTROL	EUPHONIX INC	CM408	D5872	JS-2S/210	$15,505.00
2140675	MODULE, CONTROL	EUPHONIX INC	CM408	D5875	JS-2S/210	$15,505.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2140676	MODULE, CONTROL	EUPHONIX INC	CM408	D5877	JS-2S/210	$15,505.00
2140677	MODULE, CONTROL	EUPHONIX INC	CM408	D5876	JS-2S/210	$15,505.00
2140678	MODULE, CONTROL	EUPHONIX INC	CM408	D5870	JS-2S/210	$15,505.00
2140679	MODULE, CONTROL	EUPHONIX INC	CM408	D5869	JS-2S/210	$15,505.00
2140696	RECORDER, VIDEO CASSETTE	JVC	HM-DH40000U	128U0465	JS-8/273A	$672.00
2140700	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	DP-2070SB-BK	301104773	JS-8/103R	$867.00
2140708	NETWORK SNIFFER	NETWORK ASSOCIATES CORP	EG2S	47207001513P	JS-46 / 218	$27,190.00
2140718	COMPUTER, MICRO	LEADMAN ELECTRONICS	ATXMID	NONE	JS-8/208A	$939.00
2140723	DISPLAY UNIT	SAMPO	KM-870T	T7240123MS00037	JS-8/208A	$555.00
2140725	MONITOR SET, TELEVISION	IKEGAMI TSUSHINKI CO LTD	TM-1417RZ	7158	JS-2S/211	$2,215.00
2140726	RECORDER, DVD	PIONEER ELECTRONIC CORP	PRV-LX1	CJTT001093CC	JS-8/208	$7,281.00
2140727	RECORDER, DVD	PIONEER ELECTRONIC CORP	PRV-LX1	CITT000987CC	JS-8 / 273A	$7,281.00
2143323	RECORDER, DVD	PIONEER CO	PRV-LX1	CJTT001848CC	JS-8/273A	$6,714.00
2143324	RECORDER, DVD	PIONEER CO	PRV-LX1	CJTT001525CC	JS-8 / 281	$6,714.00
2143383	RECORDER, VIDEO CASSETTE	JVC	BR-DV3000U	8934684	JS-8/208	$1,891.00
2143409	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300000993	JS-8/280	$8,395.00
2143410	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300000995	JS-8/280	$8,395.00
2143412	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300000998	JS-8/280	$8,395.00
2143414	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300001005	JS-8/280	$8,395.00
2143415	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300001241	JS-8/280	$8,395.00
2143416	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300001302	JS-8/280	$8,395.00
2145281	COMPOSER, MEDIA	AVID TECHNOLOGY	ADRENALINE	YQJ434146	JS-2S / 112	$29,915.00
2145292	DISPLAY UNIT	HEWLETT-PACKARD CO	L1925	CNB4210D50	JS-2S / 204	$1,008.00
2145293	DISPLAY UNIT	HEWLETT-PACKARD CO	L1925	CNB4210D4G	JS-2S / 204	$1,008.00
2145295	DISPLAY UNIT	HEWLETT-PACKARD CO	L1925	CNB4210D4K	JS-2S / 112	$1,008.00
2145303	DISPLAY UNIT	HEWLETT-PACKARD CO	L1925	CNB4220K25	JS-2S / 206	$1,008.00
2145304	COMPOSER, MEDIA	AVID TECHNOLOGY	ADRENALINE	YQJ434045	JS-2S / 205	$29,915.00
2145307	DISPLAY UNIT	HEWLETT-PACKARD CO	L1925	CNB4220K49	JS-2S / 205	$1,008.00
2145309	MICROFILM, READER/SCANNER	CANON CAMERA CO INC	MS-800	BY300533	JS-45/222	$14,293.00
2145312	SCANNER, MICROFILM	CANON CAMERA CO INC	M31021	BY300247	JS-227/34	$14,293.00
2145348	PROJECTOR, VIDEO	SANYO DENKI CO LTD	PLC-XF10NL	G9Z01101	JS-8/298H	$9,840.00
2145391	RECORDER, VIDEO CASSETTE	SONY CORP	PVW2800	32949	JS-2S / 208	$19,437.00
2145398	RACK ASSEMBLY	ROSE ELECTRONICS	RV1-KVM17B	NONE	JS-46 / 300	$4,447.00
2145536	RECORDER, VIDEO CASSETTE	JVC	BR-S800U	13959774	JS-2S / 104	$2,971.00
2145537	RECORDER, VIDEO CASSETTE	JVC	BR-S800U	14959800	JS-2S / 208	$2,971.00
2145538	RECORDER, VIDEO CASSETTE	JVC	BR-S800U	13959766	JS-2S / 208	$2,971.00
2145539	RECORDER, VIDEO CASSETTE	JVC	BR-S800U	14959803	JS-2S / 104	$2,971.00
2145553	RECORDER, VIDEO CASSETTE	SONY CORP	PVV-3	18096	JS-2S / 109	$19,437.00
2145556	SWITCHER, ROUTING DIGITAL	N VISIONS INC	FR5128	NONE	JS-2S / 208	$56,073.00
2145620	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DS555	H4TA00014	JS-8 / 181B	$3,669.00
2145623	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DS555	I4TA00005	JS-8 / 181B	$3,669.00
2145645	COMPUTER, MICRO	CHIEFTEC	NONE	NONE	JS-8 / 281	$6,775.00
2145681	CAMERA SET, TELEVISION	SONY CORP	EVI-D100	120583	JS-36/121	$881.00
2145739	COMPUTER, MICRO	HEWLETT-PACKARD CO	DA-75CAA-AW	AY45101934	JS-8/172A	$8,920.00
2145775	RECORDER, VIDEO	DISH NETWORK	DVR921	WAEHEP5089FG	JS-8/208	$555.00
2145784	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	49U	KP/AB195	JS-8/169	$18,816.00
2146011	CAMERA-RECORDING, VIDEO	SONY CORP	BVP-550	15426	JS-2S/109	$27,958.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2146035	SERVER, ADP	SUPER O	370DL3	SR519789	JS-46 / 300	$13,894.00
2146107	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	PH0031	JS-30M/212	$1,937.00
2146108	COMPUTER, MICRO	SPACE CENTER SYSTEMS	NONE	PH0032	JS-30M/212	$1,937.00
2146109	MICROPRINTER	CANON CAMERA CO INC	M32043	AR302035	JS-37/201A	$6,218.00
2146124	COMPUTER, MICRO	SPACE CENTER SYSTEMS	LM740	ACR0001	JS-2S/123	$698.00
2146152	INTERFACE, VIDEO	AVID TECHNOLOGY	0020-03439-01	YQZ4400006	JS-2S/107	$12,595.00
2146153	COMPUTER, MICRO	HEWLETT-PACKARD CO	PE316UA	2UA5380L8F	JS-2S/107	$4,829.00
2146163	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1200AP	15TNA0679	JS-2S / 204	$21,322.00
2146334	RECORDER, VIDEO CASSETTE	SONY CORP	HVR-M10U	1111000	JS-8/273A	$3,255.00
2146353	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	XT6U	JMRN171	JS-46 / 300	$42,918.00
2146366	DISPLAY UNIT, RACKMOUNT	MIDDLE ATLANTIC PRODUCTS	BRT-K21151U	2.31E+11	JS-2S / 208	$1,261.00
2146367	DISPLAY UNIT, RACKMOUNT	MIDDLE ATLANTIC PRODUCTS	BRT-K21151U	2.31E+11	JS-2S / 109	$1,261.00
2146496	RECORDER, VIDEO	360 SYSTEMS	V2000B-250	V2BD50742	JS-9NW/2170	$12,763.00
2146511	PRINTER, ADP	PRIMERA TECHNOLOGY INC	SIGNATURE Z6	2050501516	JS-8/103R	$1,044.00
2146512	PRINTER, ADP	PRIMERA TECHNOLOGY INC	SIGNATURE Z6	2050501511	JS-8/172A	$1,044.00
2146552	LOGGER, DIGITAL	EVENTIDE INC	VR778-48-1	90000181	JS-2S/210	$20,822.00
2146662	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SC100	5YMWV71	JS-46 / 300	$47,105.00
2146680	RECORDER, DVD	PIONEER CO	PRV-LXI-DW	EDNN100148CC	JS-8/208	$8,060.00
2146681	DISPLAY UNIT	MIRANDA TECHNOLOGIES INC.	K2	022999-13507030	JS-2S / 110	$28,952.00
2146706	PROJECTOR, LCD	INFOCUS CORP	C460	APUH51300011	JS-2S/TEAGU	$5,936.00
2146711	COMPOSER, MEDIA	AVID TECHNOLOGY	ADRENALINE	YQJ435103	JS-2S / 206	$29,915.00
2146712	COMPOSER, MEDIA	AVID TECHNOLOGY	ADRENALINE	YQJ434033	JS-2S / 204	$31,325.00
2146716	DISK DRIVE UNIT	AVID TECHNOLOGY	00203343-01	MBL429078	JS-2S / 212	$906.00
2146717	DISK DRIVE UNIT	AVID TECHNOLOGY	0020-03332-02R	YQJ425570	JS-2S / 212	$15,642.00
2146718	DISK DRIVE UNIT	AVID TECHNOLOGY	00203343-01	MBL429067	JS-2S / 212	$906.00
2146719	DISK DRIVE UNIT	AVID TECHNOLOGY	00203343-01	MBL429080	JS-2S / 212	$906.00
2146720	DISK DRIVE UNIT	AVID TECHNOLOGY	00203343-01	MBL429049	JS-2S / 212	$906.00
2146735	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DS555	I4TA00009	JS-8/208	$3,669.00
2146736	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DS555	H4TA00015	JS-8/208	$3,669.00
2146737	RECORDER, VIDEO CASSETTE	SONY CORP	PVW2800	16815	JS-8/208	$13,830.00
2146738	RECORDER, VIDEO CASSETTE	SONY CORP	PVW2800	16864	JS-8/208	$13,830.00
2146739	RECORDER, VIDEO CASSETTE	SONY CORP	PVW2800	26165	JS-8/208	$18,332.00
2146745	DISPLAY UNIT	WACOM CO LTD	PL-800-02	4JFP00079	JS-227/1	$2,558.00
2146776	TAPE LIBRARY, VIRTUAL	COPAN SYSTEMS INC	8814-XXX	CAB10033	JS-46 / 300	$183,888.00
2147373	PROJECTOR, LCD	EIKI INDUSTRIAL CO	LC-SX6	G51A1013	JS-2S/201B	$13,942.00
2147380	COMPUTER, MICRO	CINESYS	NONE	NONE	JS-8/273A	$13,205.00
2147383	CONVERTER, ANALOG	DECKLINK	DECKLINK MUL	32258	JS-8/273A	$19,953.00
2147927	WORKSTATION	CINESYS	NONE	5A310C739B2	JS-2S/203	$26,714.00
2148111	SERVER, ADP	VBRICK SYSTEMS INC	9110-4300-0002	4300000997	JS-8/280	$8,395.00
2148116	CHASSIS, MULTI-CARD	PROME IMAGE	10X11	1941	JS-9NW/2170	$10,876.00
2148117	CHASSIS, MULTI-CARD	PROME IMAGE	10X11	1940	JS-9NW/2170	$9,667.00
2148118	FILTRATION UNIT	OSMONICS	E4-4400-DLX-60	05-4355374A-01	JS-8/OUTSI	$8,316.00
2148128	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DMC	3CHR481	JS-9NW/2170	$919.00
2148129	SERVER, ADP	MIDDLE ATLANTIC PRODUCTS	BRT-K21151U	2.31161E+11	JS-8/280	$1,396.00
2148134	PROJECTOR, VIDEO	DIGITAL PROJECTION INC	MERCURY 5000	DP04026	JS-2S/109	$29,779.00
2148149	COMPUTER SYSTEM, AUTOMATION	NVERZION	NR2-PD	200317926	JS-8 / 281	$2,750.00
2148157	RECORDER, VIDEO CASSETTE	SONY CORP	HVR-M10U	1112979	JS-8/273A	$3,255.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2148163	RECORDER, DIGITAL	SONY CORP	DVW-M2000	10993	JS-8/208	$38,440.00
2148164	RECORDER, DIGITAL	SONY CORP	DVW-M2000	10995	JS-8/273A	$38,440.00
2148165	DISPLAY UNIT	TOSHIBA HOSHASEN CO LTD	P42LSA	HHATXLD570004	JS-2S / 205	$3,985.00
2148187	RECORDER, DVD	PIONEER TECHNOLOGIES CROUP INC	PRV-LX1DW	EDNN100049CC	JS-2S / 208	$5,200.00
2148262	DETECTOR, INTRUSION	JUNIPER NETWORKS	NS-IDP 200 600	1.50082E+14	JS-46 / 300	$20,475.00
2148263	DETECTOR, INTRUSION	JUNIPER NETWORKS	NS-IDP 200 600	1.50082E+14	JS-46 / 300	$20,475.00
2148264	MODULE, INPUT/OUTPUT	JUNIPER NETWORKS	NS-ISG-2000-SK	7.9032E+14	JS-46 / 300	$4,862.00
2148265	DETECTOR, INTRUSION	JUNIPER NETWORKS	NS-IDP 200 600	1.48062E+14	JS-46 / 300	$20,475.00
2148268	DISPLAY UNIT	NEC CORP	LCD 2335 WXM	53202066TA	JS-8/286	$1,022.00
2148269	DISPLAY UNIT	NEC CORP	LCD 2335 WXM	53201948TA	JS-8/286	$1,022.00
2148289	MONITOR, TELEVISION LCD	NEC CORP	LCD4010-BK	57101513YA	JS-2S / LOBBY	$4,032.00
2148290	MONITOR, TELEVISION LCD	NEC CORP	LCD4010-BK	57101496YA	JS-2S / LOBBY	$4,032.00
2148293	MONITOR, TELEVISION LCD	NEC CORP	LCD4010-BK	57101515YA	JS-SPACEPK / 212	$4,032.00
2148294	MONITOR, TELEVISION LCD	NEC CORP	LCD4010-BK	57101495YA	JS-2S / 212	$4,032.00
2148295	SERVER, ADP	SILICON GRAPHICS INC	SGI ALTIX 350	R2100069	JS-46 / 300	$226,751.00
2148306	ANALYZER	FLUKE CORP	OPV-LA/HD	B050100176	JS-46 / 300	$21,285.00
2148307	ANALYZER	FLUKE CORP	OPV-LA/HD	B050100177	JS-46 / 300	$21,285.00
2148327	TAPE LIBRARY	STORAGETEK-OEM F-DOCUMENTATION	L700E	4.8E+11	JS-46 / 300	$98,673.00
2148329	SWITCHER, MULTIFORMAT ROUTING	NVISION	NV5128	217041693	JS-2S / 104	$42,240.00
2148351	SERVER, ADP	JUNIPER NETWORKS	NS-IDP-200	1.46052E+14	JS-46 / 218	$11,970.00
2148354	SERVER, ADP	JUNIPER NETWORKS	NS-IDP-600F	1.48052E+15	JS-46 / 300	$30,240.00
2148398	DISPLAY UNIT	TOSHIBA HOSHASEN CO LTD	P42LSA	HHATXLD580004	JS-2S / 206	$5,409.00
2148399	DISPLAY UNIT	TOSHIBA HOSHASEN CO LTD	P42LSA	HHATXLD590010	JS-2S / 112	$5,409.00
2148400	DISPLAY UNIT	TOSHIBA HOSHASEN CO LTD	P42LSA	HHATXLD590013	JS-2S / 205	$5,409.00
2148401	DISPLAY UNIT	TOSHIBA HOSHASEN CO LTD	P42LSA	HHATXLD590014	JS-2S / 206	$5,409.00
2148407	COMPUTER, MICRO	MIRANDA TECHNOLOGIES	KALEIDO K2	NONE	JS-2S / LOBBY	$14,825.00
2148408	COMPUTER, MICRO	MIRANDA TECHNOLOGIES	KALEIDO K2	NONE	JS-2S / 206	$14,825.00
2148409	COMPUTER, MICRO	MIRANDA TECHNOLOGIES	KALEIDO K2	NONE	JS-2S / 205	$14,825.00
2148606	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	80180306	JS-30M/231	$7,864.00
2148607	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	80160306	JS-30M/231	$7,864.00
2148608	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	80200306	JS-30M/231	$7,864.00
2148609	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	80170306	JS-30S/2306	$7,864.00
2148610	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	60200205	JS-30S/2306	$7,864.00
2148611	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	80190306	JS-30S/2306	$7,864.00
2148650	DISPLAY UNIT	TV LOGIC	LVM-170WG	LM17GV31081	JS-2S / 204	$3,638.00
2148675	COMPUTER SYSTEM, DIGITAL	SGI	TP9300-BASE-2	448061602	JS-46 / 300	$43,448.00
2148734	COMPUTER, MICRO	ASUS COMPUTER INTL INC	ECECE4252	NONEX	JS-8/226B	$3,969.00
2148747	DUPLICATOR, DVD	RIMAGE CORP	RAS7	U050244	JS-8/208A	$34,683.00
2148778	AUTOLOADER, TAPE DRIVE	DELL COMPUTER CORP F-PC'S LTD	XTBU	H4X6Z91	JS-46 / 300A	$7,571.00
2148812	MONITOR, LCD	TV LOGIC	LVM-170W	LM17GF31078	JS-2S / 211	$3,638.00
2148841	DISPLAY UNIT	LISTEC VIDEO CORP	T-2015P	275963	JS-2S/109	$5,222.00
2148842	DISPLAY UNIT	LISTEC VIDEO CORP	T-2015P	275964	JS-2S/109	$5,222.00
2148843	DISPLAY UNIT	LISTEC VIDEO CORP	T-2015CCD	276066	JS-2S/109	$5,463.00
2148846	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-03A	JS-46 / 300	$10,050.00
2148848	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-01D	JS-46 / 300	$10,050.00
2148849	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-02C	JS-46 / 300	$10,050.00
2148850	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-02D	JS-46 / 300	$10,050.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2148851	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-02A	JS-46 / 300	$10,050.00
2148852	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-03D	JS-46 / 300	$10,050.00
2148853	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-03B	JS-46 / 300	$10,050.00
2148854	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-01B	JS-46 / 300	$10,050.00
2148855	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-01A	JS-46 / 300	$10,050.00
2148857	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B642-02E	JS-46 / 300	$10,050.00
2148858	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-01C	JS-46 / 300	$10,050.00
2148859	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-03C	JS-46 / 300	$10,050.00
2148860	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	M15212PP1A050	17B0642-01E	JS-46 / 300	$10,050.00
2148881	RECORDER, VIDEO CASSETTE	SONY CORP	HDW-D2000	18035	JS-2S / 204	$52,211.00
2148894	POWER DISTRIBUTION UNIT	POWER DISTRIBUTION	RPP-01-1-441-G	180-0583-1	JS-46 / 300	$5,808.00
2148895	POWER DISTRIBUTION UNIT	POWER DISTRIBUTION	RPP-01-1-441-G	180-0583-2	JS-46 / 300	$5,808.00
2148937	PRINTER, ADP	XEROX CORP F-XEROX DATA SYS	5500DN	RET570227	JS-227/1	$3,354.00
2148943	PRINTER, ADP	HEWLETT-PACKARD CO	Q3716A	JPFC5C800M	JS-8/224	$5,415.00
2148986	SWITCHER, PRODUCTION	ECHOLAB INC	MUS9-1W	NONEX	JS-9NW/2170	$29,469.00
2149125	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-X300	12014	JS-30S/2306	$14,840.00
2149126	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-X300	12017	JS-2S/104	$14,840.00
2149127	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-X300	12015	JS-30M/231	$14,840.00
2149128	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-X300	12016	JS-30S/2306	$14,840.00
2149129	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-X300	12021	JS-30S/2306	$14,840.00
2150618	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DHM	83BG521	JS-8/280	$840.00
2151550	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DHM	1YJOY21	JS-T-588/100	$999.00
2152049	TAPE DRIVE UNIT	SUN MICROSYSTEMS INC	595-5365-02	228C520F	JS-46 / 300	$3,942.00
2152302	SERVER, ADP	SUN MICROSYSTEMS INC	602-2557-01	0437AM0285	JS-46 / 300	$37,915.00
2152304	SERVER, ADP	SUN MICROSYSTEMS INC	602-2557-01	0433AM002D	JS-46 / 300	$37,915.00
2152314	MONITOR, TELEVISION	JVC	TM-910SU	7008734	JS-9NW/2170	$634.00
2152318	MONITOR, TELEVISION	JVC	TM-910SU	7008704	JS-9NW/2170	$634.00
2152319	TRANSMITTER HEAD UNIT	RF TECHNOLOGIES INC	RF2305	9734/9737	JS-32/ROOF	$9,600.00
2152323	DISPLAY UNIT, TOUCH SCREEN	AMX	FG5924-20	NONEX	JS-30A/1093	$2,237.00
2152339	MONITOR, TELEVISION	JVC	TM-910SU	6008611	JS-9NW/2170	$634.00
2152351	MONITOR, TELEVISION	JVC	TM-910SU	6008631	JS-9NW/2170	$634.00
2152352	MONITOR, TELEVISION	JVC	TM-910SU	6008588	JS-9NW/2170	$634.00
2152378	TRUSS SYSTEM	MILOS AMERICA	NONE	NONE	JS-90C/RCKPK	$45,148.00
2152430	MONITOR, TELEVISION	JVC	TM-910SU	6008636	JS-9NW/2170	$634.00
2152431	MONITOR, TELEVISION	JVC	TM-910SU	6008630	JS-9NW/2170	$634.00
2152432	MONITOR, TELEVISION	JVC	TM-910SU	6008617	JS-9NW/2170	$634.00
2152433	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-H150CGU	17901293	JS-9NW/2170	$617.00
2152434	MONITOR, TELEVISION	JVC	TM-910SU	6008612	JS-9NW/2170	$634.00
2152435	MONITOR, TELEVISION	JVC	TM-910SU	7008714	JS-9NW/2170	$634.00
2152436	MONITOR, TELEVISION	JVC	TM-910SU	7008706	JS-9NW/2170	$634.00
2152437	MONITOR, TELEVISION	JVC CO OF AMERICA	TM-H150CGU	17901266	JS-9NW/2170	$617.00
2152438	MONITOR, TELEVISION	JVC	TM-910SU	7008737	JS-9NW/2170	$634.00
2152439	MONITOR, TELEVISION	JVC	TM-910SU	7008719	JS-9NW/2170	$634.00
2154279	VIDEO CONFERENCE SYSTEM EDUCAT	TANDBERG DATA A/S	TAM	T2652	JS-9NW/2165	$34,038.00
2154294	DISPLAY UNIT	HEWLETT-PACKARD CO	HSTND-2B05	CNK60705TM	JS-8/273	$735.00
2154295	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-300	12018	JS-30M/231	$13,095.00
2154296	CAMERA-RECORDING, VIDEO	SONY CORP	HDC-X300	12019	JS-30M/231	$14,840.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2154363	COMPUTER, MICRO	ADVANCED COMPUTER SYSTEMS	NONE	4C-4063-CAC9	JS-2S/201B	$1,296.00
2154455	RECORDER, VIDEO CASSETTE	JVC	BR-HD50U	15030403	JS-8/273A	$2,704.00
2154456	PRESS, ROTARY	POTDEVIN MACHINE CO	W-30	W30-06-101	JS-8/181	$5,662.00
2154535	MONITOR, LCD	MARSHALL ELECTRONICS	V-R44DP-SDI	47734 10419	JS-8 / 281	$2,438.00
2154536	MONITOR, LCD	MARSHALL ELECTRONICS	V-R44DP-SDI	48844 10419	JS-8 / 281	$2,438.00
2154537	MONITOR, LCD	MARSHALL ELECTRONICS	V-R44DP-SDI	48853 10419	JS-8 / 281	$2,438.00
2154538	MONITOR, LCD	MARSHALL ELECTRONICS	V-R44DP-SDI	48845 10419	JS-8 / 281	$2,438.00
2154570	CONTROL PANEL	TELEMETRICS INC	CP-D-3A	80291206	JS-2S / 211	$7,607.00
2154571	COMPUTER CONTROL SYSTEM	TELEMETRICS INC	NONE	NONE	JS-2S / 211	$11,286.00
2154593	PRINTER, ADP	FUJITSU LTD	103	5000685275	JS-8/169	$102,726.00
2154594	CONTROLLER, COMPUTER SYSTEM	INTERNATIONAL BUSINESS MACHINE	105	5000685276	JS-8/169	$13,000.00
2154617	HARD DRIVE, ASSEMBLY	COPAN SYSTEMS INC	REVOLUTION 2	SRE63900014	JS-46 / 300	$117,794.00
2154618	HARD DRIVE, ASSEMBLY	COPAN SYSTEMS INC	REVOLUTION 2	SRE63900011	JS-46 / 300	$117,794.00
2154635	ANALYZER, POWER QUALITY	DRANETZ TECHNOLOGIES F-DRANETZ	PX5-XFAST	PX50BA086	JS-46 / 108	$12,340.00
2154666	RECORDER, VIDEO CASSETTE	SONY CORP	SEZ16103406-8	1002	JS-8/298	$2,886.00
2154690	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	ULTRASCAN P9	MX094WRF4774118K3	JS-46 / 204	$650.00
2154694	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	WHL	51ZXT01	JS-46 / 204	$3,033.00
2154820	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCDO	6PVKNB1	JS-46 / 200	$3,790.00
2154821	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCDO	DPVKNB1	JS-46 / 138	$3,790.00
2154822	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCDO	FPVKNB1	JS-46 / 204	$3,790.00
2154823	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCDO	GPVKNB1	JS-46 / 200	$3,790.00
2154850	COMPACT PLAYER	SONY CORP	J30SDI	16052	JS-8/225B	$12,732.00
2154885	INTERCOM BASE STATION	TELEX COMM F-RADIANT F-SINGER	ZEUSII	82509	JS-2S/TEAG	$6,812.00
2155389	PRINTER, ADP	HEWLETT-PACKARD CO	5550DN	JPGC6820088	JS-8/261C	$3,209.00
2155392	SWITCHER, ROUTING	N VISIONS INC	FR512B	NONEX	JS-8/280	$21,867.00
2155393	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400P	I6TNA0110	JS-8 / 273A	$22,076.00
2155394	RECORDER, PLAYER/EDITING	PANASONIC	AJ-HD1400	I6TNA0136	JS-8/273A	$22,076.00
2155471	TELEVISON, LCD	SAMSUNG ELECTRONICS	LNS2641DX	1161	JS-9NW/2170	$1,161.00
2155472	TELEVISON, LCD	SAMSUNG ELECTRONICS	LNS2641DX	AEHV3CLL602501	JS-9NW/2170	$1,161.00
2155483	RECORDER RECEIVER, SATELLITE	DISH NETWORK	DISHPVR721	WAEHANBDEEAA	JS-8/208	$598.00
2155491	RECORDER, DVD	PIONEER CO	PRV-LX1DW	FINN100823CC	JS-9NW/2170	$5,630.00
2155493	RECORDER, DVC	SONY CORP	HVR-M25U	1112230	JS-8/273A	$3,389.00
2155494	RECORDER, DVC	SONY CORP	HVR-M25U	1112221	JS-8/208	$3,389.00
2155495	RECORDER, DVC	SONY CORP	HVR-M25U	112222	JS-8/208	$3,389.00
2155496	RECORDER, DVC	SONY CORP	HVR-M25U	1111959	JS-8/273A	$3,389.00
2155497	DISPLAY UNIT, LCD	TV LOGIC	LVM-170W	LM17GF51191	JS-2S / 206	$3,638.00
2155499	DISPLAY UNIT, LCD	TV LOGIC	LVM-170W	LM17GF51192	JS-8/280	$3,920.00
2155542	DISPLAY UNIT	PHILLIPS	23PF5320	BZ-4A0647485551	JS-2S/109A	$839.00
2155612	TAPE LIBRARY W/OPTS	SUN MICROSYSTEMS INC	L1400	4.8E+11	JS-46 / 300	$103,757.00
2155684	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	690	6PZ1TB1	JS-46 / 218	$5,047.00
2157855	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	ESM	JT6N481	JS-46 / 218	$2,358.00
2197843	RECEIVER/DECODER, SATELLITE	WEGENER COMMUNICATIONS INC	UNITY4600	261901	JS-8/280	$9,617.00
2197849	RECEIVER/DECODER, SATELLITE	WEGENER COMMUNICATIONS INC	UNITY4600	261051	JS-8/280	$9,617.00
2197852	RECEIVER/DECODER, SATELLITE	WEGENER COMMUNICATIONS INC	UNITY4600	261324	JS-8/280	$9,617.00
2198039	DISPLAY, TOUCH SCREEN	AMX CORP	AXT-CV10	95040P4300637	JS-8/273B	$3,850.00
2198040	DISPLAY, TOUCH SCREEN	AMX CORP	AXT-CV10	95040P3300190	JS-8/273B	$3,850.00
2198041	DISPLAY, TOUCH SCREEN	AMX CORP	AXT-CV10	95040P4300595	JS-8/273B	$3,850.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2200196	RACK, UNIT MODULAR SYSTEM	EVERTZ MICROSYSTEMS LTD. 3465	7700FR-C	430600068	JS-8/280	$2,313.00
2200641	MONITOR, TELEVISION	JVC CO OF AMERICA	TM910SU	13009670	JS-17/119	$680.00
2223734	INTERCOM, DIGITAL MATRIX	TELEX COMMUNICATIONS INC	90007731000	87172	JS-9NW/2170	$7,016.00
2223915	MONITOR, TELEVISION	WESTINGHOUSE	LVM-42W2	W4202DET061004277	JS-8/273A	$2,615.00
2223982	SERVER, ADP	JUNIPER NETWORKS	NS-IDP-1100F	1.50072E+14	JS-46 / 300	$40,950.00
2223997	MONITOR, TOUCH PANEL	AMX	NXT-CV12	225011XP4160022	JS-9NW/2170A	$4,371.00
2223999	MONITOR, TOUCH PANEL	AMX	NXT-CV12	225011XP3660050	JS-9NW/2170	$4,371.00
2224003	TELEVISION SET	LG ELECTRONICS INC	50PM1M-UC	605RMLM076792	JS-9NW/2170A	$4,031.00
2224071	TELEVISION SET	SAMSUNG	HLS6187W	B19L3CKL80111W	JS-9NW/2170	$2,966.00
2224211	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	BO12474	JS-8/215A	$9,170.00
2224226	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2001514	JS-SPCPK/170	$925.00
2224228	RECORDER, DIGITAL	SONY CORP	HVR-M10U	1111190	JS-2S / 110	$2,990.00
2224229	PLAYER, DIGITAL CASSETTE	SONY CORP	J-30SDI	12942	JS-SPACEPK / 240	$12,000.00
2224230	PLAYER, DIGITAL CASSETTE	SONY CORP	J-30SDI	12954	JS-2 / 110	$12,000.00
2224232	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2007007	JS-SPACEPK / 240	$919.00
2224261	CAMERA-RECORDING, VIDEO	SONY CORP	EVI-HD1	100279	JS-8/187A	$3,718.00
2224280	TELEVISION SET	PANASONIC	TH-50PH9UK	LB70460010	JS-1/360	$1,987.00
2224281	TELEVISION SET	PANASONIC	TH-50PH9UK	LB70460102	JS-1/360	$1,987.00
2224296	TELEVISION SET	PANASONIC	TH-65PF9UK	PG71350126	JS-1/360	$8,212.00
2224297	TELEVISION SET	PANASONIC	TH-65PF9UK	PG71350147	JS-1/360	$8,212.00
2224409	DISPLAY UNIT	SAMSUNG ELECTRONICS	LN-S2352WS	AEZ63CJLB02752H	JS-2S / LOBBY	$583.00
2224563	SCANNER, ADP	HASSELBLAD A B VICTOR	X5	FX07089019	JS-8/103R	$18,208.00
2224565	PRINTER, ADP	HEWLETT-PACKARD CO	Q1252V	SG718C400B	JS-227/4	$10,905.00
2224566	PRINTER, ADP	HEWLETT-PACKARD CO	Q1253V	SG6BDC400F	JS-227/4	$17,278.00
2224605	ANALYZER, OPTIVIEW LINK	FLUKE NETWORKS	OPV-LAII/HD	C061200182	JS-46 / 300	$22,326.00
2224626	TELEVISION SET	TOSHIBA HOSHASEN CO LTD	23HLV87	5723424	JS-8/254A	$636.00
2224627	TELEVISION SET	TOSHIBA HOSHASEN CO LTD	23HLV87	5722641	JS-8 / 261D	$636.00
2224633	PRINTER, ADP	HEWLETT-PACKARD CO	CB368A	CNBJL37689	JS-8 / 208A	$801.00
2224634	PRINTER, ADP	HEWLETT-PACKARD CO	CB368A	CNBJL37688	JS-8 / 284	$801.00
2224648	STORAGE AREA NETWORK	NETWORK APPLIANCE INC.	FAS3040-R5	JWM-040537	JS-46 / 300	$528,557.00
2224655	STATION, ANYCAST	SONY CORP	AWSG 500	13768	JS-2S / 109	$16,524.00
2224663	RECORDER, DVD	JVC CO OF AMERICA	SR-DVM700U	092C0194	JS-8 / 281	$1,369.00
2224664	RECORDER, DVD	JVC CO OF AMERICA	SR-DVM700U	092C0193	JS-8 / 281	$1,369.00
2224665	RECORDER, DVD	JVC CO OF AMERICA	SR-DVM700U	092C0070	JS-8 / 281	$1,369.00
2224666	RECORDER, DVD	JVC CO OF AMERICA	SR-DVM700U	092C0202	JS-8 / 281	$1,369.00
2224671	RECORDER, VIDEO CASSETTE HD	SONY CORP	HDW-1800	10659	JS-8 / 281	$33,407.00
2224687	VACUUM, DISTILLATION UNIT	LED ITALIA	LED1400FF4	44659905	JS-8/OUTSI	$17,740.00
2224689	DUPLICATOR, DVD	ALL PRO SOLUTIONS INC	M255 SERIES	100114	JS-8/208	$1,767.00
2225942	STORAGE UNIT	DELL COMPUTER CORP F-PC'S LTD	POWER VAULT	6ZJ0PD1	JS-46 / 300	$9,735.00
2225954	COMPUTER, MICRO	ASUS	ASUSP5N32-SL	C5AB43501-MSS1RG-	JS-8/101R	$1,352.00
2225983	DRIVE, RAID	INFOTREND INC	ESS12F-G1420	TW2S000A0718000058	JS-8/273A	$8,033.00
2225984	DRIVE, RAID	INFOTREND INC	ESS12F-G1420	TW2S000A0718000055	JS-8/273A	$8,033.00
2225985	DRIVE, RAID	INFOTREND INC	ESS12F-G1420	TW2S000A0715000148	JS-8/273A	$8,033.00
2225986	DRIVE, RAID	INFOTREND INC	ESS12F-G1420	TW2S000A0718000056	JS-8/273A	$8,033.00
2225987	DISPLAY UNIT	APPLE COMPUTER INC	CINEMA HD	2A729ZLLXMN	JS-8/273A	$955.00
2225988	DISPLAY UNIT	APPLE COMPUTER INC	CINEMA HD	2A7292LPXMN	JS-8/273A	$955.00
2225989	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	2407WFP	CNOCC3024663366SZ	JS-8/273	$711.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2225990	SWITCH, FIBRE CHANNEL	QLOGIC	SANBOX 5600	O732C02046	JS-8/273A	$7,288.00
2225991	SWITCH, FIBRE CHANNEL	QLOGIC	SANBOX 5600	0731C00238	JS-8/273A	$7,288.00
2225993	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	2407WFP	CNOCC3024663366SZ	JS-8/273A	$711.00
2225994	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	2407WFP	CNOCC3024663366S3	JS-8/273A	$711.00
2226012	DISPLAY UNIT	TV LOGIC	LVM-170WG	LM17GF51547	JS-8 / 281	$2,970.00
2226013	DISPLAY UNIT	TV LOGIC	LVM-170WG	LM17GF51546	JS-8/280	$2,970.00
2226106	RECORDER, VIDEO CASSETTE	SONY CORP	DVW-M2000	12096	JS-8 / 281	$44,837.00
2226107	RECORDER, VIDEO CASSETTE	SONY CORP	DVW-M2000	12099	JS-8 / 281	$44,837.00
2226117	SYSTEM, CONFERENCING AUDIO	FORUM COMMUNICATIONS SYS	CONFER III	11445	JS-2S/210	$9,672.00
2226131	MONITOR, TELEVISION LCD	NEC CORP	LCD4010-BK	5Z104900YA	JS-2S/107	$4,032.00
2226184	SCANNER, ADP	CALCOMP	GV67D	GV67D76012T	JS-45/222	$11,452.00
2226313	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	TL4000	HQYC0D1	JS-46 / 218	$14,082.00
2226314	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	TL4000	CQYCOD1	JS-46 / 218	$14,082.00
2226342	MONITOR SET, TELEVISION	PANASONIC	BT-LH1700WP	H7TWB5784	JS-8/298	$2,105.00
2226376	PAN AND TILT ASSEMBLY, CAMERA	TELEMETRICS INC	PT-HP-S2	61001042	JS-8/181B	$8,029.00
2226379	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400	H7TNB1113	JS-8 / 273A	$18,888.00
2226380	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400P	H7TNB1123	JS-8 / 273A	$18,888.00
2226381	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400P	H7TNB1122	JS-8 / 273A	$18,888.00
2226384	PLAYER, CASSETTE VIDEO	SONY CORP	J-H3	11996	JS-8/208	$21,689.00
2226385	PRINTER, CD/DVD	GLOBAL DISCWARE INC	FLASHJET 4800	39397	JS-8 / 284	$1,036.00
2226398	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCNE	H75FPDI	JS-425/100B	$1,001.00
2226403	DUPLICATOR DVD/CD	DISK MAKERS	COPY MASTER	DUP80231629	JS-8/125AB	$5,264.00
2226406	PRINTER, ADP	PRIMERA	BRAVOII	2070801075	JS-8/273A	$1,163.00
2226407	PRINTER, ADP	PRIMERA	BRAVOII	2070801078	JS-8/226B	$1,163.00
2226938	COMPUTER, MICRO	APPLE COMPUTER INC	POWER MAC G	G86450X3UQ2	JS-8/273A	$5,880.00
2227869	ENCLOSURE, DUAL BAY	SEAGATE	C7380-00830	HUL3FQ1096	JS-46 / 300	$2,438.00
2227920	RECORDER, CD	DENON AMERICA INC	DN-C550R	4011504504	JS-1322/C165	$654.00
2259976	MONITOR, VIDEO, TELEVISION	MARSHALL ELECTRONICS	V-R102DP-HDSI	99488103515	JS-8 / 281	$2,828.00
2259977	MONITOR, VIDEO, TELEVISION	MARSHALL ELECTRONICS	V-R102DP-HDSI	99489103514	JS-8 / 281	$2,828.00
2260054	SCANNER, MICROFICHE	WICKS AND WILSON LIMITED	FS300	8101125	JS-227/D1	$63,873.00
2260055	MONITOR, AUDIO	WOHLER TECHNOLOGIES	AMP2-V2DA	11986	JS-8 / 281	$2,411.00
2260058	RECORDER, VIDEO CASSETTE	SONY CORP	HVR-MI5AU	110064	JS-8/261C	$2,347.00
2260060	RECORDER, VIDEO CASSETTE	SONY CORP	SRW-5000	12492	JS-8/261C	$89,642.00
2260061	RECORDER, VIDEO CASSETTE	SONY CORP	DVW-2000	10639	JS-8/261C	$39,323.00
2260065	SYSTEM, SPECTRUM	NVERZION	NR2-C2D	200319405	JS-8 / 261C	$31,864.00
2260155	SCANNER, CARD	WICKS AND WILSON LIMITED	C-250	796170	JS-227/D-1	$19,897.00
2260156	SCANNER, ADP	PANASONIC	KV-S3105C	8077YMB1511	JS-227/D-1	$19,922.00
2260157	SCANNER, ADP	PANASONIC	KV-S3105C	80786MB1304	JS-227/D-1	$19,922.00
2260158	SCANNER, ADP	PANASONIC	KV-S3105C	80786MB.1314	JS-227/D-1	$19,922.00
2260159	SCANNER, ADP	PANASONIC	KV-S7065C	72387MB1112	JS-227/D-1	$5,586.00
2260166	TELEVISION SET	LG TWIN TOWERS	LG37LG30-UD	807MXRF5G142	JS-8/218	$983.00
2260167	TELEVISION SET	LG TWIN TOWERS	LG37LG30-UD	807MXMT5G395	JS-8/218	$983.00
2260193	SWITCHER	BROADCAST PIX, INC.	SLATE 1000	BPP072508.0462	JS-8 / 212	$22,122.00
2260195	TAPE LIBRARY	SUN MICROSYSTEMS INC	SL3000	DRVSL3G4000490	JS-46 / 300	$91,807.00
2260198	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1800P	G8TNA0215	JS-8 / 281	$44,829.00
2260199	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1800P	G8TNA0218	JS-8 / 281	$44,829.00
2260200	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1800P	G8TNA0219	JS-8 / 281	$44,829.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2260201	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1800P	G8TNA0217	JS-8 / 281	$44,829.00
2260202	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1800P	G8TNA0214	JS-8 / 281	$44,829.00
2260203	RECEIVER, RADIO	SONY CORP	BDP-S500	1032696	JS-8/261C	$584.00
2260205	DISPLAY UNIT	LG TWIN TOWERS	22LG30-UA	804AMTW0X185	JS-8/261C	$510.00
2260226	DISK ARRAY	AVID TECHNOLOGY	7020-20084-XX	YBBZ831069	JS-2S / 106	$8,558.00
2260227	DISK ARRAY	AVID TECHNOLOGY	7020-20084-XX	YBBZ832345	JS-2S / 106	$8,558.00
2260228	DISK ARRAY	AVID TECHNOLOGY	7020-20084-XX	YBBZ532346	JS-2S / 106	$8,558.00
2260229	DISK ARRAY	AVID TECHNOLOGY	7020-20084-XX	YBBZ832349	JS-2S / 106	$8,558.00
2260231	COMPUTER, MICRO	HEWLETT-PACKARD CO	XW8600	2UA8130VLX	JS-2S / 106	$7,109.00
2260232	COMPUTER, MICRO	HEWLETT-PACKARD CO	XW8600	2UA8130VP2	JS-2S / 106	$7,109.00
2260233	COMPUTER, MICRO	HEWLETT-PACKARD CO	XW8600	2UA8130VP4	JS-2S / 106	$7,109.00
2260235	COMPUTER, MICRO	HEWLETT-PACKARD CO	XW8600	2UA8130VNM	JS-2S / 106	$7,109.00
2260241	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMM	FC7KCH1	JS-46 / 138	$15,807.00
2260242	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMM	HC7KCH1	JS-46 / 138	$15,807.00
2260243	DVD, READER/WRITER	MF DIGITAL	BRI-5906	080834-OC	JS-8/261C	$4,515.00
2260250	RECORDER, VIDEO	PANASONIC	AJ-HD1400P	H8TNB1876	JS-8/261D	$19,015.00
2260251	SCANNER	EPSCO INC	X5	FX08199015	JS-8/181C	$16,997.00
2260252	SCANNER	EPSCO INC	X5	FX08189007	JS-8/181C	$16,997.00
2260253	RECORDER VIDEO CASSETTE	SONY CORP	SWR-5000	12499	JS-8 / 261C	$89,377.00
2260254	RECORDER, VIDEO CASSETTE	SONY CORP	SWR-5000	12496	JS-8 / 261C	$89,377.00
2260331	PROJECTOR	SENCORE INC	OTC1000	20004	JS-8/JS-261C	$7,431.00
2260332	SWITCHER, VIDEO	GRASS VALLEY GROUP INC THE	610111200	A1616HR-P	JS-8/261C	$8,113.00
2260393	DISK ARRAY	AVID TECHNOLOGY	7020-20084-XX	YBB2836903	JS-2S / 206	$8,558.00
2260465	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	6889-510	5594GBP	JS-2S/109	$14,662.00
2260996	CAMERA, HIGH SPEED	VISION RESEARCH INC	VRI-V7-4096MM	VR3093773M	JS-8/298	$93,260.00
2260997	CAMERA, HIGH SPEED	VISION RESEARCH INC	NONE	VR4023832V71M	JS-8/298	$87,460.00
2260998	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PP01X	27653321017	JS-8/298	$3,600.00
2260999	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PP01X	QDS-BRCM1007	JS-8/298	$3,600.00
2261003	TAPE, SOUND RECORDING	MAGNA-TECH ELECTRONIC CO INC	636B	6651	JS-39B/100A	$42,438.00
2261013	MONITOR, VIDEO	CINE-TAL SYSTEMS INC	CINEMAGE	0808-316514	JS-39B/100	$24,423.00
2261014	COMPUTER, MICRO	HEWLETT-PACKARD CO	XW8600	2UA8290RLK	JS-2S / 112	$7,109.00
2261054	SERVER	SUN MICROSYSTEMS INC	SEFPCDBIZ	BEF082452D	JS-46 / 204	$143,842.00
2261055	SERVER	SUN MICROSYSTEMS INC	SEFPCDBIZ	BEF082663D	JS-46 / 204	$143,842.00
2261062	RECORDER, DIGITAL	SONY CORP	DVW-2000	10645	JS-8 / 208	$39,111.00
2261062	RECORDER, DIGITAL	SONY CORP	DVW-2000	10645	JS-8/208	$39,111.00
2261064	RECORDER, MEMORY	SONY CORP	PMW-EX30	100643	JS-2S / 110	$4,356.00
2261072	SCANNER, ADP	DURST SPA	SIGMA PLUS	B5457	JS-8/181C	$49,604.00
2261074	COMPUTER	HEWLETT-PACKARD CO	DC7800	CZC8274D9X	JS-8/181C	$1,147.00
2261075	PRINTER	DURST SPA	THETA76R	B7895	JS-8/178	$81,925.00
2261079	RECORDER, VIDEO CASSETTE	SONY CORP	HVR-M35U	110431	JS-2S / 106	$4,725.00
2261113	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021M	JS-8/286	$87,957.00
2261114	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021H	JS-8/286	$87,957.00
2261115	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021F	JS-8/286	$65,054.00
2261116	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021G	JS-8/286	$39,873.00
2261117	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021J	JS-8/286	$26,013.00
2261118	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021B	JS-8/286	$26,013.00
2261119	COMPUTER, MICRO	HEWLETT-PACKARD CO	HPXW8600	2UA830021K	JS-8/286	$26,014.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2261137	DISPLAY UNIT	MIDDLE ATLANTIC PRODUCTS	RM-KB-LCD-17	NONE	JS-8 / 261B	$1,642.00
2261150	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA006669	JS-425/100B	$1,196.00
2261151	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA006821	JS-425/100B	$1,196.00
2261152	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA006658	JS-425/100B	$1,196.00
2261153	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA007913	JS-425/100B	$1,196.00
2261154	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA007514	JS-425/100B	$1,196.00
2261156	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA006655	JS-425/100B	$1,196.00
2261157	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA007912	JS-425/100B	$1,196.00
2261158	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA006792	JS-425/100B	$1,196.00
2261159	DISPLAY UNIT	INSIGNIA LTD	NS-LCD47HD-09	J7889DA011285	JS-425/100B	$1,196.00
2261188	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	X1504263C	NONE	JS-46 / 300	$10,050.00
2261189	POWER DISTRIBUTION UNIT	POWERWARE CORP F-EXIDE ELECTR	X1504263C	NONE	JS-46 / 300	$10,050.00
2261211	DISPLAY UNIT	CUSTOM POWER INC	LM-170A	063T0001	JS-8/280	$970.00
2261248	RECORDER, BETACAM	SANYO DENKI CO LTD	J-30SDI	20586	JS-8/208	$13,645.00
2261269	DISPLAY UNIT	MARSHALL ELECTRONICS INC.	V-R151DP-AFHD	10024 11231	JS-8 / 187A	$1,673.00
2261292	RECEIVER, SATELLITE	DISH NETWORK	DISHDVR522	WBEGEQE1PSZB	JS-8/208	$672.00
2261681	TEST SYSTEM, MPEG	TEKTRONIX	MTS430	B030380	JS-8/215B	$66,275.00
2261682	TELECINE	FILMSYS	NOVA-TELECIN	06-4000-0047	JS-39B/100A	$624,097.00
2261683	MONITOR, DISPLAY, DIGITAL	CINE-TAL SYSTEMS INC	CINEMAGE	0808-316533	JS-39B/100	$19,918.00
2261684	CONTROL PANEL, TELECINE	TANGENT COMPUTER INC	CP200-TSRC	120912	JS-39B/100	$4,568.00
2261685	CONTROL PANEL, TELECINE	TANGENT COMPUTER INC	CP200-BKRC	91278	JS-39B/100	$9,242.00
2261686	CONTROL PANEL, TELECINE	TANGENT COMPUTER INC	CP200-KRC	170714	JS-39B/100	$5,524.00
2261687	CONTROL PANEL, TELECINE	TANGENT COMPUTER INC	CP200-SRC	80627	JS-39B/100	$5,205.00
2261688	MONITOR, DISPLAY	EIZO CORPORATION	CG241W	34268058	JS-39B/100A	$2,125.00
2261689	COMPUTER, MICRO	HEWLETT-PACKARD CO	XW8600	2UA8340ZX4	JS-39B/100A	$107,000.00
2261690	RAID ARRAY, NEARLINE	BRIGHT SYSTEM, INC.	80811-05	SHU80811000275C	JS-39B/100A	$42,492.00
2261695	SERVER, ADP	JUNIPER NETWORKS	ISG2000	7.9032E+13	JS-46 / 300	$80,586.00
2261696	SERVER, ADP	JUNIPER NETWORKS	ISG2000	7.9062E+13	JS-17 / 134	$80,586.00
2263708	DISPLAY UNIT	APPLE COMPUTER INC	A1082	2A7321LWXMN	JS-8 / 281	$847.00
2263723	COMPUTER, MICRO	APPLE COMPUTER INC	A1186	407450660GP	JS-8 / 212	$7,987.00
2503301	SERVER, ADP	SUN MICROSYSTEMS INC	V240	HN33215919	JS-46 / 218	$5,781.00
2503302	SERVER, ADP	SUN MICROSYSTEMS INC	V240	HN33215993	JS-46 / 110A	$5,781.00
2512457	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	IMU	7HQ8K51	JS-46 / 300	$8,359.00
2512646	WAVEFORM MONITOR	TEKTRONIX INC	WVR611A	B011970	JS-2S/208	$8,195.00
2512647	GENERATOR, DIGITAL SYNC	TEKTRONIX INC	SPG422	B048284	JS-2S / 208	$8,170.00
2512648	GENERATOR, DIGITAL SYNC	TEKTRONIX INC	SPG422	B048285	JS-2S / 208	$8,170.00
2512687	ENCODER, PROGRAMMABLE COND	EVERTZ MICROSYSTEMS LTD	8084	426970004	JS-8/280	$5,067.00
2512736	MONITOR, WAVEFORM	TEKTRONIX INC	WFM700A	B025816	JS-2S / 211	$16,432.00
2512737	MONITOR, WAVEFORM	TEKTRONIX INC	WFM700M	B025805	JS-8/280	$21,053.00
2512738	MONITOR, WAVEFORM	TEKTRONIX INC	WFM700A	B052821	JS-2S / 204	$16,432.00
2512747	MONITOR, LCD	MARSHALL ELECTRONICS	V-R18P-SDI	S428909053	JS-8 / 281	$2,835.00
2512752	MONITOR, LCD	MARSHALL ELECTRONICS	V-R25P-SDI	4162608533	JS-8 / 261C	$3,397.00
2512757	MONITOR, LCD	TRIPP LITE	B020-008	9450AZB0200800218	JS-8 / 281	$1,801.00
2512810	SERVER, ADP	AVID TECHNOLOGY INC	SR2400	BZDR60952942	JS-2S / 110	$11,157.00
2512812	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306396	JS-2S/203	$538.00
2512813	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306561	JS-2S/106	$538.00
2512814	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306395	JS-2S / 102	$538.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2512815	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306558	JS-2S / 110	$538.00
2512816	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306560	JS-2S/102	$538.00
2512817	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306556	JS-2S/212	$538.00
2512818	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306546	JS-2S/102	$538.00
2512819	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306557	JS-2S/212	$538.00
2512821	DISPLAY UNIT	SAMSUNG ELECTRONICS	204T	BR20HCHL306545	JS-2S/205	$538.00
2512881	MONITOR, LCD 8	MARSHALL ELECTRONICS INC	V-R18P	56242-08969	JS-8/212	$1,700.00
2512882	MONITOR, LCD 8	MARSHALL ELECTRONICS INC	V-R18P	56248-08969	JS-8/212	$1,700.00
2512883	MONITOR, LCD 10	MARSHALL ELECTRONICS INC	V-R102D-2SD1	46645-10128	JS-8/212	$2,655.00
2512886	DISPLAY UNIT	SONY CORP	SDM-S205F	016705481H	JS-8/172A	$557.00
2512889	RECORDER, DIGITAL	SONY CORP	DVW-M2000	11643	JS-8 / 281	$42,763.00
2512890	RECORDER, DIGITAL	SONY CORP	DVW-M2000	11663	JS-8 / 281	$42,763.00
2512908	RACK MOUNT FRAME	AJA VIDEO	AJA-FR2D	G49237	JS-8/280	$6,124.00
2512935	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 6	2148MB1	JS-46 / 300	$21,319.00
2512936	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	C6RVLB1	JS-46 / 300	$10,691.00
2512937	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	4SROMB1	JS-46 / 300	$10,691.00
2512938	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	7SROMB1	JS-46 / 300	$10,691.00
2512939	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	BSROMB1	JS-46 / 300	$10,691.00
2512941	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 6	53M6MB1	JS-46 / 300	$18,504.00
2512942	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 6	2P15MB1	JS-46 / 300	$18,504.00
2512943	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 6	GKLXLB1	JS-46 / 300	$18,504.00
2512944	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 6	5LLXLB1	JS-46 / 300	$18,504.00
2512948	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6YK8MB1	JS-46 / 300	$5,839.00
2512949	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9YK8MB1	JS-46 / 300	$5,839.00
2512958	EDITOR, VIDEO FILES	DIGIDESIGN INC	DIGI 002	TB2846900G	JS-9NW/2170	$5,074.00
2512959	COMPUTER, MICRO	HEWLETT-PACKARD CO	EYD62UC#ABA	2UA610JV16	JS-9NW/2170	$5,501.00
2512960	DISK DRIVE UNIT	AVID TECHNOLOGY	QUIET DRIVE	MSU613009	JS-9NW/2170	$1,169.00
2512961	DISK DRIVE UNIT	AVID TECHNOLOGY	QUIET DRIVE	MSU611004	JS-9NW/2170	$1,169.00
2512962	DISPLAY UNIT	HEWLETT-PACKARD CO	HSTND-2802	CNK6171L5R	JS-9NW/2170	$2,116.00
2512963	DISPLAY UNIT	HEWLETT-PACKARD CO	HSTND-2802	CNK6171L5F	JS-9NW/2170	$2,116.00
2512964	STORAGE ARRAY	EMC CORP	CX3-40	APM00062402746	JS-46 / 300	$103,080.00
2512967	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMSO1	8R3KMB1	JS-17 / 134	$8,163.00
2512968	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMSO1	9R3KMB1	JS-46 / 300	$8,163.00
2513177	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	C96WGB1	JS-46 / 218	$3,710.00
2513178	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	1B6WGB1	JS-46 / 218	$3,710.00
2513179	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	5P8VGB1	JS-46 / 300	$5,337.00
2521608	SERVER, ADP	INTERNATIONAL BUSINESS MACHINE	86701-L1X	KP-VXMLO	JS-46 / 218	$36,945.00
2521632	VIEWSTATION, POLYCOM	POLYCOM INC	PN4-14XX	04484B	JS-8/211R	$7,584.00
2521633	VIEWSTATION, POLYCOM	POLYCOM INC	PN4-14XX	44713	JS-8/211R	$7,584.00
2521662	CAMCORDER, VIDEO	PANASONIC	AJ-HDC27FP	H4THB0096	JS-2S/109	$53,118.00
2521663	CAMCORDER, MINI-DV	PANASONIC	AG-DVX100AP	I4TD00042	JS-2S/109A	$3,665.00
2521680	LENS, INTERNAL FOCUS	CANON CAMERA CO INC	YJ12X6.5B41RS	60112545	JS-2S/109	$6,735.00
2521706	RECORDER, CASSETTE VIDEO	SONY CORP	DSR-50	12224	JS-2S / 109	$4,693.00
2521710	REGENERATION TAP	NET OPTICS INC	96282-8	58984	JS-46 / 300	$5,802.00
2521725	CAMERA, VIDEO DIGITAL	SONY CORP	DXC-D50WS	100774	JS-2S / 109	$23,509.00
2521767	MONITOR, LCD	MARSHALL ELECTRONICS INC	VR44P	2597707187	JS-2S/208	$1,208.00
2521768	MONITOR, LCD	MARSHALL ELECTRONICS INC	VR44P	2598007187	JS-2S/208	$1,208.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2521825	RECORDER, TIME LAPSE	MITSUBISHI ELECTRIC CORP	HS-9960U	001953M	JS-8/208	$735.00
2521884	DISK DRIVE UNIT	GIGA INC	GIGA VU PRO	GIG003449	JS-8/251	$593.00
2521890	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	GWQL071	JS-46 / 300	$6,500.00
2521891	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	CWQL071	JS-46 / 300	$6,500.00
2521892	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	540F071	JS-46 / 300	$7,000.00
2521897	SWITCHER	FOLSOM RESEARCH INC	PS2001	1418	JS-1322/165	$5,036.00
2521898	RECORDER, VIDEO DISK, DIGITAL	AVID TECHNOLOGY	0500-3722-01	MCU512004	JS-2S / 208	$38,845.00
2521917	DISPLAY UNIT	HEWLETT-PACKARD CO	PE1230	CNB42805LN	JS-2S / 112	$1,008.00
2521946	MONITOR, WAVEFORM	TEKTRONIX INC	WVR610A	B011633	JS-2S / 205	$7,666.00
2521955	CAMERA SYSTEM, DIGITAL	NIKON INC	D2X	5019812	JS-8/251	$4,469.00
2521986	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	25LTN71	JS-46 / 300	$8,007.00
2521987	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	55LTN71	JS-46 / 300	$8,007.00
2521994	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DV2500	A5A7252JV3	JS-9NW/2170	$1,704.00
2521995	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DV2500	A5A7353JV3	JS-9NW/2170	$1,704.00
2521999	JUNIPER SYSTEM	APOLLO INFORMATION SYSTEMS	NS5200	4.0032E+13	JS-46 / 204	$62,700.00
2522000	JUNIPER SYSTEM	APOLLO INFORMATION SYSTEMS	NS5200	4.0032E+13	JS-46 / 218	$62,700.00
2522002	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	FMZ4T71	JS-46 / 300	$8,974.00
2522003	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	HMZ4T71	JS-46 / 300	$8,974.00
2522004	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	JMZ4T71	JS-46 / 300	$8,974.00
2522028	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52620111	JS-46 / 300	$9,667.00
2522029	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52620105	JS-46 / 300	$9,667.00
2522030	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52620120	JS-46 / 300	$9,667.00
2522031	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52610166	JS-46 / 300	$9,667.00
2522032	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52460144	JS-46 / 300	$9,667.00
2522033	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52610196	JS-46 / 300	$9,667.00
2522034	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52620123	JS-46 / 300	$9,667.00
2522035	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52620114	JS-46 / 300	$9,667.00
2522036	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN52620124	JS-46 / 300	$9,667.00
2522038	GENERATOR SYSTEM	AVC GRAPHICS	NONE	CGR/0705/147	JS-9NW/2170	$6,566.00
2522039	RECORDER, HARD DISK	FOCUS ENHANCEMENTS INC	FS-4	3539	JS-8/273A	$1,375.00
2522078	RECORDER, HARD DISK	FOCUS ENHANCEMENTS INC	FS-4	5100	JS-8/273A	$1,375.00
2522080	CAMERA	PANASONIC	AW-E350P	F4TYA0002	JS-9NW/2170	$2,741.00
2522081	CAMERA	PANASONIC	AW-E350P	J4TYA008	JS-9NW/2170	$2,741.00
2522082	CAMERA	PANASONIC	AW-E350P	D4TYA0020	JS-9NW/2170	$2,741.00
2522083	CAMERA	PANASONIC	AW-E350P	14TYA0021	JS-9NW/2170	$2,741.00
2522084	CAMERA	PANASONIC	AW-E350P	14TYA009	JS-9NW/2170	$2,741.00
2522103	CAMCORDER	SONY CORP	HVR-Z1U	1118427	JS-8/298	$4,620.00
2522122	DISPLAY UNIT	PANASONIC	TC7WMS1	FAS150160	JS-8/298	$514.00
2522123	DISPLAY UNIT	PANASONIC	TC7WMS1	FA5150171	JS-8/298	$514.00
2522134	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	G7BWF81	JS-46 / 300	$11,333.00
2522135	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	H7BWF81	JS-46 / 300	$11,333.00
2522136	SERVER, POWEREDGE 6850	DELL COMPUTER CORP F-PC'S LTD	EMM	CKM4D81	JS-46 / 300	$13,534.00
2522137	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	HZ3CB81	JS-46 / 300	$6,118.00
2522138	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	JZ3CB81	JS-46 / 300	$6,118.00
2522139	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	104CB81	JS-46 / 300	$6,118.00
2522140	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	1TNBB81	JS-46 / 300A	$7,979.00
2522141	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	XTBU	H8GML41	JS-46 / 300A	$12,824.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2522142	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	6LL6B81	JS-46 / 300	$6,263.00
2522143	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	CLL6B81	JS-46 / 300	$6,263.00
2522144	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	GLL6B81	JS-46 / 300	$6,263.00
2522183	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	5X3TC81	JS-46 / 300	$5,762.00
2522184	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	73KSC81	JS-46 / 300	$6,366.00
2522185	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS	93KSC81	JS-46 / 300	$6,366.00
2522186	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	B7TWC81	JS-46 / 300	$6,836.00
2522188	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	BT-LH900P	A5TWA0604	JS-2S / 109	$5,452.00
2522195	MONITOR, TELEVISION	PANASONIC	LCD-17-S8P	0578A00523	JS-46 / 300	$2,673.00
2522306	DISPLAY UNIT	SHARK RACK	D2X	5041361	JS-8/293	$4,620.00
2522308	CAMERA SYSTEM, DIGITAL	NIKON INC	D2X	5041473	JS-8/251	$4,620.00
2522309	CAMERA SYSTEM, DIGITAL	NIKON INC	V-R151P	3656306734	JS-8/280	$1,675.00
2522347	DISPLAY UNIT, LCD	MARSHALL ELECTRONICS INC	PE1230	CNB44403VY	JS-2S / 206	$1,008.00
2522348	DISPLAY UNIT	HEWLETT-PACKARD CO	NONE	SMX360480000154	JS-8/273A	$26,659.00
2522367	COMPUTER SYSTEM, DIGITAL	CINESYS	FS-4	5110	JS-8/273A	$1,365.00
2522377	RECORDER, PORTABLE	FOCUS ENHANCEMENTS INC	SUNFIRE V240	FN533320051	JS-46 / 300	$10,365.00
2522380	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN61330412	JS-46 / 300	$10,365.00
2522381	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN61230314	JS-46 / 300	$10,365.00
2522387	SERVER, ADP	SUN MICROSYSTEMS INC	KAVAK-DD-1	GV030846	JS-2S / 205	$38,313.00
2522389	SWITCHER	THOMSON	FS-4	5109	JS-8/273A	$1,365.00
2522391	RECORDER, PORTABLE	FOCUS ENHANCEMENTS INC	GIGAVUE 8	12	JS-46 / 300	$33,409.00
2522393	DATA ACQUISITION SYSTEM	GIGAMON SYSTEMS	GIGAVUE 8	121	JS-46 / 300	$33,409.00
2522394	DATA ACQUISITION SYSTEM	GIGAMON SYSTEMS	CN00717A00	HPE00000083	JS-46 / 300	$73,578.00
2522424	TAPE LIBRARY, VIRTUAL	COPAN SYSTEMS INC	CN00717A00	HPE00000095	JS-46 / 300	$73,578.00
2522425	TAPE LIBRARY, VIRTUAL	COPAN SYSTEMS INC	CSCCRA264A46	NONE	JS-8/280	$987.00
2522437	COMPUTER, MICRO	AXION	SC261	D4947	JS-2S/208	$5,606.00
2522440	COMPUTER, MICRO	EUPHONIX INC	SUNFIRE V240	FN53240004	JS-46 / 300	$10,345.00
2522443	TAPE DRIVE UNIT	SUN MICROSYSTEMS INC	SUNFIRE V240	FN53240092	JS-46 / 300	$10,345.00
2522444	TAPE DRIVE UNIT	SUN MICROSYSTEMS INC	HSS18X5.5BMD	416820	JS-30S/2306	$7,778.00
2522457	LENS, ZOOM	FUJINON INC	HSS18X5.5BMD	416911	JS-30M/231	$7,778.00
2522458	LENS, ZOOM	FUJINON INC	HSS18X5.5BMD	417194	JS-30M/231	$7,778.00
2522459	LENS, ZOOM	FUJINON INC	HSS18X5.5BMD	416233	JS-30S/2306	$7,778.00
2522460	LENS, ZOOM	FUJINON INC	HSS18X5.5BMD	416881	JS-30M/231	$7,778.00
2522461	LENS, ZOOM	FUJINON INC	HSS18X5.5BMD	416986	JS-30S/2306	$7,778.00
2522462	LENS, ZOOM	FUJINON INC	96286-8	73649	JS-46 / 300	$7,900.00
2522464	SERVER, ADP	NET OPTICS INC	96286-8	73648	JS-17 / 134	$7,900.00
2522465	SERVER, ADP	NET OPTICS INC	M675	33129431	JS-8/261D	$3,561.00
2522481	COMPUTER, LAPTOP	GATEWAY COMPANIES INC	PMD510	MZ030343250051	JS-2S/107	$871.00
2522829	RECORDER, AUDIO CASSETTE	MARANTZ CO INC	V-R25P	124241 059730	JS-8/208	$2,517.00
2522840	MONITOR, CLUSTER LCD	MARSHALL ELECTRONICS COMPANY	DMXLIA	NONEX	JS-2S/109	$3,799.00
2522846	CAMCORDER	CANON CAMERA CO INC	TM14-17R	6329	JS-8/280	$2,000.00
2522860	MONITOR, TELEVISION	IKEGAMI TSUSHINKI CO LTD	TM14-17R	6331	JS-8/280	$2,000.00
2522861	MONITOR, TELEVISION	IKEGAMI TSUSHINKI CO LTD	MIP-1003A	053608D605724	JS-8 / 281	$8,400.00
2522905	SWITCH	OMNEON	MIP-1003A	053808D605767	JS-8 / 281	$8,400.00
2522906	SWITCH	OMNEON	MIP-1003A	053308D605733	JS-8 / 281	$8,400.00
2522913	SWITCH	OMNEON	MCP 2100	053117B001209	JS-8 / 281	$18,638.00
2522914	SERVER, MEDIA SYSTEM	OMNEON				

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2522915	SWITCH	OMNEON	MIP-1003A	053308D605683	JS-8 / 281	$8,400.00
2522916	SERVER, MEDIA	OMNEON	MSC-4272C-US	SUH455950004164	JS-8 / 281	$36,406.00
2522917	SWITCH	OMNEON	MIP-1003A	053308D605691	JS-8 / 281	$8,400.00
2522919	SWITCH	OMNEON	MIP-1003A	053808D605716	JS-8 / 281	$8,400.00
2522920	SWITCH	OMNEON	MIP-1003A	053608D605754	JS-8 / 281	$8,400.00
2522922	SWITCH	OMNEON	MIP-1003A	053808D605864	JS-8 / 281	$8,400.00
2522923	SWITCH	OMNEON	MIP-1003A	053308D605673	JS-8 / 281	$8,400.00
2522924	SWITCH	OMNEON	MIP-1003A	053308D605666	JS-8 / 281	$8,400.00
2522926	SWITCH	OMNEON	MIP-1003A	053808D605770	JS-8 / 281	$8,400.00
2522927	SWITCH	OMNEON	MIP-1003A	053308D605704	JS-8 / 281	$8,400.00
2522928	SWITCH	OMNEON	MIP-1003A	053808D605852	JS-8 / 281	$8,400.00
2522929	SWITCH	OMNEON	MIP-1003A	5.33081E+11	JS-8 / 281	$8,400.00
2522930	SWITCH	OMNEON	MIP-1003A	053608D605713	JS-8 / 281	$8,400.00
2522932	SWITCH	OMNEON	MIP-1003A	053808D605858	JS-8 / 281	$8,400.00
2522944	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	6FWCP81	JS-46 / 300	$7,292.00
2522966	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	9JK3281	JS-46 / 300	$7,292.00
2522975	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	8DXK391	JS-46 / 300	$7,292.00
2522977	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU	CXTKL81	JS-46 / 300	$7,292.00
2523003	INTERFACE, SERIAL CONTROL	BTS BRAODCAST TELEVISION SYS	SI3000	8280222	JS-8 / 281	$5,175.00
2523229	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	3268NB1	JS-46 / 300	$7,805.00
2523230	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	4268NB1	JS-46 / 300	$7,805.00
2523231	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6268NB1	JS-46 / 300	$7,805.00
2523232	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7268NB1	JS-46 / 300	$7,805.00
2523233	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9268NB1	JS-17 / 134	$7,805.00
2523235	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	5368NB1	JS-46 / 300	$5,985.00
2523236	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7368NB1	JS-46 / 300	$5,985.00
2523238	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9368NB1	JS-46 / 300	$5,985.00
2523239	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	B368NB1	JS-46 / 300	$5,985.00
2523240	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	DZ58NB1	JS-46 / 300	$5,476.00
2523241	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	FZ58NB1	JS-46 / 300	$5,476.00
2523242	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	GZ58NB1	JS-46 / 300	$5,476.00
2523243	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	HZ58NB1	JS-46 / 300	$5,476.00
2523244	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	2068NB1	JS-46 / 300	$5,476.00
2523245	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	FX58NB1	JS-46 / 300	$7,081.00
2523246	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	HX58NB1	JS-46 / 300	$7,081.00
2523247	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	2X58NB1	JS-46 / 300	$6,524.00
2523248	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	4X58NB1	JS-46 / 300	$6,524.00
2523249	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	FKKLNB1	JS-46 / 218	$5,005.00
2523250	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	JKKLNB1	JS-46 / 300	$5,005.00
2523251	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	2LKLNB1	JS-46 / 218	$5,005.00
2523252	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	1JHMNB1	JS-46 / 300	$5,082.00
2523253	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	5JHMNB1	JS-46 / 300	$5,082.00
2523254	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6JHMNB1	JS-46 / 300	$5,082.00
2523255	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	C3TPNB1	JS-46 / 300	$5,005.00
2523256	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	F3TPNB1	JS-46 / 300	$5,005.00
2523257	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	G3TPNB1	JS-46 / 300	$5,005.00
2523258	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7LKLNB1	JS-46 / 300	$5,005.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2523259	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9LKLNB1	JS-46 / 300	$5,005.00
2523260	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	DLKNB1	JS-46 / 300	$5,005.00
2523261	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	1PKLNB1	JS-46 / 300	$5,723.00
2523262	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	4PKLNB1	JS-46 / 300	$5,723.00
2523263	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	5PKLNB1	JS-46 / 300	$5,723.00
2523264	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6PKLNB1	JS-46 / 218	$5,723.00
2523265	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	GMKLNB1	JS-46 / 218	$5,082.00
2523266	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	JMKLNB1	JS-46 / 218	$5,082.00
2523267	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	2NKLNB1	JS-46 / 218	$5,082.00
2523268	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	4NKLNB1	JS-46 / 218	$5,082.00
2523269	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6MRLNB1	JS-46 / 300	$5,082.00
2523270	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	CTKLNB1	JS-46 / 204	$5,005.00
2523271	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7TKLNB1	JS-46 / 300	$5,082.00
2523274	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	8KKLNB1	JS-46 / 300	$5,723.00
2523275	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9KKLNB1	JS-46 / 300	$5,723.00
2523282	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	HLKLNB1	JS-46 / 300	$5,005.00
2523283	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	5MKLNB1	JS-46 / 300	$5,005.00
2523284	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7MKLNB1	JS-46 / 300	$5,005.00
2523285	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9MKLNB1	JS-46 / 300	$5,005.00
2523286	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	7NKLNB1	JS-46 / 218	$5,723.00
2523287	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	9NKLNB1	JS-46 / 218	$5,723.00
2523288	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	CNKLNB1	JS-46 / 218	$5,723.00
2523289	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	DNKLNB1	JS-46 / 218	$5,723.00
2523290	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6GBPNB1	JS-46 / 300	$5,723.00
2523291	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	8GBPNB1	JS-46 / 300	$5,723.00
2523292	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	513MNB1	JS-46 / 300	$5,082.00
2523293	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	713MNB1	JS-46 / 300	$5,082.00
2523294	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	813MNB1	JS-46 / 300	$5,082.00
2523295	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	913MNB1	JS-46 / 300	$5,082.00
2523296	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	14TPNB1	JS-46 / 300A	$5,723.00
2523297	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	24TPNB1	JS-46 / 300A	$5,723.00
2523298	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	34TPNB1	JS-46 / 300A	$5,723.00
2523299	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	44TPNB1	JS-46 / 300A	$5,723.00
2523315	DISPLAY UNIT	MARSHALL ELECTRONICS INC	V-R102DP-HDSI	5510610351	JS-8 / 281	$2,858.00
2523318	CAMERA SYSTEM, DIGITAL	NIKON INC	D2XS	6009606	JS-8/251	$4,344.00
2523325	SWITCH, GIGAVIEW	GIGAMON SYSTEMS	GIGAVUE	305	JS-46 / 300	$17,817.00
2523329	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	BZ2MNB1	JS-46 / 300	$5,082.00
2523330	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	DZ2MNB1	JS-46 / 300	$5,082.00
2523331	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	FZ2MNB1	JS-46 / 300	$5,082.00
2523352	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	HNFNPB1	JS-46 / 300	$5,005.00
2523353	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	JNFNPB1	JS-46 / 300	$5,005.00
2523354	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	3PFNPB1	JS-46 / 300	$5,005.00
2523355	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	6PFNPB1	JS-46 / 300	$5,005.00
2523356	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	XTBU	CT07Z91	JS-46 / 218	$7,571.00
2523363	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	83CCQB1	JS-46 / 218	$5,723.00
2523364	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	93CCQB1	JS-46 / 218	$5,723.00
2523365	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	B3CCQB1	JS-46 / 218	$5,723.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2523366	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	C3CCQB1	JS-46 / 300	$5,723.00
2523369	CAMERA SYSTEM, DIGITAL	NIKON INC	D2XS	6009587	JS-8/251A	$4,673.00
2523380	SERVER, ADP	GOVERNMENT MICRO RESOURCES INC	LX2000	L017901B6171266	JS-46 / 300	$80,345.00
2523383	SERVER, ADP	GOVERNMENT MICRO RESOURCES INC	LX2000	L017901B6170377	JS-46 / 300	$80,345.00
2523385	LOGLOGIC LOG ANALYSIS	GOVERNMENT MICRO RESOURCES INC	LX1000	00E0815C9CFB	JS-46 / 218	$34,351.00
2523392	ANALYZER, SPECTRUM	RHODE & SCHWARZ - POLARAD INC	FSP-38	100355	JS-8/261B	$28,834.00
2523393	SERVER, ADP	INTERNATIONAL BUSINESS MACHINE	8840 (1RU)	99BCRFP	JS-46 / 300	$40,760.00
2523394	SERVER, ADP	INTERNATIONAL BUSINESS MACHINE	8840 (1RU)	KQX2838	JS-46 / 300	$40,760.00
2523476	COMPUTER, LAPTOP	HEWLETT-PACKARD CO	NX6125	CND6302172	JS-2S/109	$955.00
2523481	RECORDER, BETACAM	SONY CORP	J-30SDI	16194	JS-8/286	$12,944.00
2523482	RECORDER, BETACAM	SONY CORP	J-30SDI	16190	JS-8/218	$12,944.00
2523483	RECORDER, BETACAM	SONY CORP	J-30SDI	16172	JS-8/218	$12,944.00
2523484	RECORDER, BETACAM	SONY CORP	J-30SDI	16173	JS-8/208	$12,944.00
2523485	RECORDER, DIGITAL VIDEO CASS	SONY CORP	GV-800	40652	JS-8/273A	$730.00
2523486	RECEIVER, SATELLITE	STANDARD COMMUNICATIONS	422C1-X	61U080001	JS-425/100B	$2,796.00
2523487	RECEIVER, SATELLITE	STANDARD COMMUNICATIONS	422C1-X	61U080068	JS-425/100B	$2,796.00
2523488	RECEIVER, SATELLITE	STANDARD COMMUNICATIONS	422C1-X	61U080017	JS-425/100B	$2,796.00
2523490	COMPUTER, LAPTOP	HEWLETT-PACKARD CO	DV5000Z	CND6371W9Y	JS-8/2T5	$1,181.00
2523491	COMPUTER, LAPTOP	HEWLETT-PACKARD CO	DV5000Z	CND6371V2D	JS-8/2T5	$1,181.00
2523492	RECORDER, HDCAM	SONY CORP	HDWM2000	18629	JS-8 / 273A	$56,621.00
2523493	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PP17L	53L9TB1	JS-8/261C	$849.00
2523496	CAMERA SYSTEM, DIGITAL	NIKON INC	D2XS	6006026	JS-8/251	$4,451.00
2523497	CAMERA SYSTEM, DIGITAL	NIKON INC	D2XS	6006025	JS-8/298	$4,451.00
2523498	CAMERA SYSTEM, DIGITAL	NIKON INC	D2XS	6006022	JS-8/251	$4,451.00
2523499	CAMERA SYSTEM, DIGITAL	NIKON INC	D2XS	6006027	JS-8/298	$4,451.00
2523547	SERVER, ADP	AVID TECHNOLOGY	SR2400	BZDR62656210	JS-2S / 110	$22,945.00
2523548	SERVER, ADP	AVID TECHNOLOGY	SR2400	BZDR62001919	JS-2S / 208	$27,787.00
2523551	PROJECTOR, VIDEO	PROXIMA	C460	APUH632R0016	JS-2S/122	$6,236.00
2523552	PROJECTOR, VIDEO	PROXIMA	C460	APUH632R0012	JS-2S/TEAGU	$6,236.00
2523581	RECORDER, DVC	SONY CORP	HVR-M25U	1112689-E	JS-59/100	$3,059.00
2523585	RECORDER, VIDEO CASSETTE	JVC CO OF AMERICA	BR-HD50U	17100030	JS-8/272	$2,900.00
2523629	ENCODER, DIGITAL VIDEO	HARMONIC INC	MV30CBRI	73407	JS-8/280	$11,040.00
2523653	GENERATOR, OZONE	ABSOLUTE RESOLUTIONS CORP	AE12M	70370.26	JS-8/OUTSI	$6,479.00
2523697	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWER VAULT	B4NXSB1	JS-46 / 300	$7,498.00
2523736	ETHERNET, SUPERVISOR	CISCO SYSTEMS INC	WS-SUP720-3B	CNUCAFLAAA	JS-46 / 218	$16,727.00
2523737	ETHERNET, GIGE	CISCO SYSTEMS INC	WS-X6516A-GB	CNUASLAAA	JS-46 / 218	$8,961.00
2523738	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63650105	JS-46 / 300	$14,933.00
2523739	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63710117	JS-46 / 218	$15,077.00
2523740	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63640211	JS-46 / 300	$15,077.00
2523741	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63650294	JS-46 / 300	$14,718.00
2523742	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63650094	JS-46 / 300	$14,718.00
2523743	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63710120	JS-46 / 300	$14,718.00
2523744	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63650298	JS-46 / 218	$15,029.00
2523745	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V240	FN63710108	JS-46 / 300	$15,029.00
2523746	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V440	0624BD06ED	JS-46 / 300	$31,417.00
2523747	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V440	0624BD0ADA	JS-46 / 300	$31,417.00
2523772	TRANSMITTER	F. FORCE INC	2804TH-SCSP/0	606026	JS-8/280	$4,276.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2523773	TRANSMITTER	F. FORCE INC	2804TH-SCSP/0	411027	JS-425/100B	$4,276.00
2523774	RECEIVER	F. FORCE INC	2807NA-SFSP	446076	JS-425/100B	$953.00
2523776	SWITCHER, ROUTING AUDIO	PESA SWITCHING SYSTEMS INC	CHEETAH DRS	652695A06390019	JS-8/280	$14,596.00
2523777	SWITCHER, ROUTING AUDIO	PESA SWITCHING SYSTEMS INC	CHEETAH DRS	652695A06390018	JS-8/280	$14,596.00
2523781	PLAYER, CINEMA	GALAXY COMPUTERS INC	NONE	EV10610352	JS-8 / 273A	$5,628.00
2523787	COMPUTER, LAPTOP	HEWLETT-PACKARD CO	PZ901UA#ABA	CNV64004P2	JS-2S / 110	$1,486.00
2523791	DISPLAY UNIT	AMX	NXT-CV10	225901XAP1960064	JS-8/261C	$3,086.00
2523793	CAMERA SYSTEM, DIGITAL	HASSELBLAD A B VICTOR	HD2	1X76044035	JS-8/272	$23,345.00
2523794	CAMERA, DIGITAL KIT	HASSELBLAD A B VICTOR	H2D	10278	JS-8/272	$3,200.00
2523806	PROCESSOR, CENTRAL, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 8	58411C1	JS-8 / 281	$1,214.00
2523807	PROCESSOR, CENTRAL, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 8	48411C1	JS-8 / 281	$1,214.00
2523817	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	5GR03C1	JS-46 / 300A	$6,804.00
2523818	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	6GR03C1	JS-46 / 300A	$6,804.00
2523819	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	7GR03C1	JS-46 / 218	$6,804.00
2523824	RECORDER, DIGITAL	AVID TECHNOLOGY	0020-03460-01	MCU450078	JS-2S / 208	$15,539.00
2523825	MONITOR, LCD	MARSHALL ELECTRONICS	V-R18P-SDI	5248809053	JS-8 / 281	$2,835.00
2523856	LOGLOGIC LOG AGGREGATION	GOVERNMENT MICRO RESOURCES INC	ST3000	00E081456A8C	JS-46 / 300	$119,560.00
2523857	LOGLOGIC LOG AGGREGATION	GOVERNMENT MICRO RESOURCES INC	ST3000	00E08144F876	JS-46 / 300	$119,560.00
2523874	DISPLAY UNIT	VARIZOOM	NONE	10R022392	JS-8/298	$1,442.00
2523878	DISPLAY UNIT	JVC CO OF AMERICA	TM-1011	11120823	JS-8/273B	$659.00
2523879	DISPLAY UNIT	JVC CO OF AMERICA	TM-1011	11120739	JS-8/273B	$659.00
2523889	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	73J3JC1	JS-46 / 300	$5,985.00
2523968	MONITOR, TELEVISION	WESTINGHOUSE DIGITAL ELECTRONI	LVM-37W3	A3703WSN065100184	JS-8/272	$1,486.00
2524249	DISK ARRAY	AVID TECHNOLOGY	7090-20009-01	ZATR721002	JS-2S / 110	$21,402.00
2524250	DISK ARRAY	AVID TECHNOLOGY	7090-20009-01	ZATR712010	JS-2S / 110	$21,402.00
2524251	DISK ARRAY	AVID TECHNOLOGY	7090-20009-01	ZATR721007	JS-2S / 110	$21,402.00
2524252	DISK ARRAY	AVID TECHNOLOGY	7090-20009-01	ZATR721016	JS-2S / 110	$21,402.00
2524255	GENERATOR, COMBO	EVERTZ MICROSYSTEMS LTD	5600MSC	1627290042	JS-8/298	$11,880.00
2524256	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCNE	79G6GD1	JS-8 / 208A	$688.00
2524257	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	DCNE	49G6GD1	JS-8 / 284	$688.00
2524357	RECORDER, VIDEO CASSETTE	SONY CORP	HDW-1800	12018	JS-8 / 281	$33,407.00
2524359	GENERATOR, CHARACTER	AVID TECHNOLOGY	DEKO	ABAUA715004	JS-2S / 208	$37,356.00
2524360	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	J444HD1	JS-46 / 300	$7,207.00
2524361	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU01	HML5HD1	JS-46 / 300	$5,184.00
2524362	RECORDER, VIDEO CASSETTE	SONY CORP	HDW-1800	10553	JS-8/273A	$33,407.00
2524371	JUNCTION BOX	VISION RESEARCH INC.	VRIJBETH	VR07077126JB	JS-8/298	$9,242.00
2524372	RECEIVER	SENNHEISER ELECTRONIC	3241-A	101895	JS-8/298	$1,657.00
2524373	RECEIVER	SENNHEISER ELECTRONIC	3241-A	101892	JS-8/298	$1,657.00
2524403	GENERATOR, PULSE	EVERTZ MICROSYSTEMS LTD. 3465	5600MSC	476310064	JS-2S / 208	$8,089.00
2524404	LENS, CAMERA, WIDE ANGLE, HD	FUJINON INC	HA13X4.5ERD	441099	JS-2S/109	$25,469.00
2524405	DISPLAY UNIT	NEC CORP	LCD1990SX1-BX	61101047YA	JS-2S/201B	$763.00
2524423	DISPLAY UNIT	NEC CORP	LCD2335WXM	63206340TA	JS-8/286	$1,222.00
2524455	CAMERA-RECORDING, VIDEO	SONY CORP	EVI-D100	133948	JS-1/360	$979.00
2524456	CAMERA-RECORDING, VIDEO	SONY CORP	EVI-D100	133949	JS-1/360	$979.00
2524457	CAMERA-RECORDING, VIDEO	SONY CORP	EVI-D100	133946	JS-1/360	$979.00
2524503	RECORDER, DVD	PIONEER ELECTRONIC CORP	PRV-LX1DW	GENN101473CC	JS-8 / 281	$7,348.00
2524506	INTRUSION DETECTION SENSOR	CISCO SYSTEMS INC	CISCOIDS-4200	88808300426	JS-46 / 300	$7,076.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2524507	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	69LS4D1	JS-46 / 300	$6,761.00
2524555	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU01	3PT82D1	JS-LM / 105E	$6,750.00
2524556	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU01	9PT82D1	JS-46 / 300	$6,750.00
2524559	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMU01	7PT82D1	JS-30A / 3069B	$6,750.00
2524561	SWITCH	OMNEON	MEDIAPORT	07171008C009843	JS-8 / 281	$9,073.00
2524562	SWITCH	OMNEON	MEDIAPORT	07171008C009823	JS-8 / 281	$9,073.00
2524563	SWITCH	OMNEON	MEDIAPORT	07161008C009704	JS-8 / 281	$9,073.00
2524564	SWITCH	OMNEON	MEDIAPORT	07161008C009682	JS-8 / 281	$9,073.00
2524565	SERVER, MEDIA	OMNEON	MSC4272C	SHU463320091B1	JS-8 / 281	$40,206.00
2524620	SWITCH, ACESS	GIGAMON SYSTEMS	GVS-132	624	JS-46 / 300	$17,229.00
2524621	SWITCH, ACESS	GIGAMON SYSTEMS	GVS-132	642	JS-46 / 300	$17,229.00
2524628	RECEIVER, FIBER OPTIC	FORCE INCORPORATED	2807NA-SFSP	462650	JS-425/100B	$953.00
2524629	RECEIVER, FIBER OPTIC	FORCE INCORPORATED	2807NA-SFSP	462649	JS-425/100B	$953.00
2524675	ANALYZER, SPECTRUM	ROHDE AND SCHWARZ NEDERLAND BV	FSH3-TV	100416	JS-8/261B	$17,580.00
2524724	SWITCHER	CISCO SYSTEMS INC	CATALYST 3750	FD01131Z5NK	JS-46 / 218	$7,169.00
2524725	SWITCHER	CISCO SYSTEMS INC	CATALYST 3750	FD01131Z5NM	JS-46 / 218	$7,169.00
2524726	SWITCHER	CISCO SYSTEMS INC	CATALYST 3560	F0C1130Y5F4	JS-46 / 218	$8,066.00
2524775	CAMERA-RECORDING, VIDEO SYSTEM	ICONIX VIDEO INC	HD-RHI	C78708	JS-8/251A	$13,771.00
2524776	CAMERA-RECORDING, VIDEO SYSTEM	ICONIX VIDEO INC	HD-RHI	C78694	JS-8/251A	$13,771.00
2524777	CAMERA-RECORDING, VIDEO SYSTEM	ICONIX VIDEO INC	HD-RHI	C78701	JS-8/251A	$13,771.00
2524778	CAMERA-RECORDING, VIDEO SYSTEM	ICONIX VIDEO INC	HD-RHI	C78709	JS-8/251A	$13,771.00
2524789	DISPLAY UNIT	SAMSUNG ELECTRONICS	245BW	HU24HCJP703447	JS-8/261C	$602.00
2524801	DISPLAY UNIT	VIEWSONICS INC	VS10773	PSD072300558	JS-8/125AB	$637.00
2524841	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V490	0723SC0093	JS-46 / 300	$33,220.00
2524842	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V490	0723SC009B	JS-46 / 300	$33,220.00
2524843	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V490	0723SC0090	JS-46 / 300	$33,220.00
2524844	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V490	0733AM0112	JS-46 / 300	$33,220.00
2524845	SERVER, ADP	SUN MICROSYSTEMS INC	SUNFIRE V490	0733AM0109	JS-46 / 300	$33,220.00
2524863	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HDX900P	G7THB0998	JS-8/251	$32,107.00
2524864	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HDX900P	G7THB0985	JS-8/251	$32,107.00
2524865	MONITOR, LCD	PANASONIC	BT-LH900AP	H7TWA0991	JS-8/298	$3,394.00
2524866	MONITOR, LCD	PANASONIC	BT-LH900AP	F7TWA0930 R	JS-8/298	$3,394.00
2524867	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400PJ	H7TNB1092	JS-8/298	$18,888.00
2524868	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400PJ	H7TNB1101	JS-8/298	$18,888.00
2524869	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400PJ	H7TNB1110	JS-8/298	$18,888.00
2524870	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400PJ	H7TNB1104	JS-8/298	$18,888.00
2524871	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400PJ	H7TNB1106	JS-8/272	$18,888.00
2524872	RECORDER, VIDEO CASSETTE	PANASONIC	AJ-HD1400PJ	H7TNB1047	JS-8/298	$18,888.00
2524904	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DV2500P	H7E2072JV3R	JS-8 / 281	$1,647.00
2524905	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DV2500P	HTE2128JV3R	JS-8 / 281	$1,647.00
2524906	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DV2500P	H7E2066JV3R	JS-8 / 281	$1,647.00
2524907	RECORDER, VIDEO CASSETTE	PANASONIC	AG-DV2500P	H7E2067JV3R	JS-8 / 281	$1,647.00
2524940	DISPLAY UNIT	LACIE LTD	L215GV	79203876XW	JS-8/293	$1,774.00
2524941	DISPLAY UNIT	LACIE LTD	L215GV	79203877YW	JS-8/272	$1,774.00
2524943	DISPLAY UNIT	LACIE LTD	L215GV	79203979YW	JS-8/293	$1,774.00
2524944	DISPLAY UNIT	LACIE LTD	L215GV	79204054YW	JS-8/293	$1,774.00
2524957	MONITOR SET, TELEVISION	MARSHALL ELECTRONICS	V-R102DP-2C	8953610127	JS-8 / 281	$2,219.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2524958	MONITOR SET, TELEVISION	MARSHALL ELECTRONICS	V-R102DP-2C	8953710127	JS-8 / 261C	$2,219.00
2524962	DISPLAY UNIT	LACIE LTD	L215GV	79204090YW	JS-8/298	$1,774.00
2524965	SERVER, ADP	GOVERNMENT MICRO RESOURCES INC	LX2000	C020354917	JS-46 / 300	$80,345.00
2524967	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	CNB4CF1	JS-30L / 3118A	$7,242.00
2524970	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	9NB4CF1	JS-30L / 3118A	$7,242.00
2524972	TRANSMITTER	F. FORCE INC	2804TH-SCSP/0	466437	JS-425/100B	$4,319.00
2524989	SWITCHER,ROUTING DIGITAL VIDEO	PESA SWITCHING SYSTEMS INC	CHEETAH 10	652795B06380001	JS-8/280	$324,242.00
2525030	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	AMP01	FSR0MB1	JS-46 / 300	$10,691.00
2525053	DISK ARRAY	AVID TECHNOLOGY	709-20008-01 RE	ZATP821038	JS-2S / 100	$29,265.00
2525338	SERVER, ADP	BLUE COAT SYSTEMS INC	SG8100C	2107115075	JS-46 / 300	$96,919.00
2525356	SERVER, ADP	BLUE COAT SYSTEMS INC	SG8100C	2507117011	JS-17 / 134	$96,919.00
2525357	SERVER, ADP	BLUE COAT SYSTEMS INC	SG8100A	2507717145	JS-46 / 218	$48,594.00
2525358	SERVER, ADP	BLUE COAT SYSTEMS INC	SG8100A	2507117082	JS-46 / 218	$48,594.00
2525359	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	JFY4PD1	JS-46 / 300	$9,670.00
2525360	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	5GY4PD1	JS-46 / 300	$9,670.00
2525361	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	B006PD1	JS-46 / 218	$9,460.00
2525362	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	D006PD1	JS-46 / 218	$9,460.00
2525365	DISK STORAGE ARRAY	EMC CORP	CX3-80	FCNBD073017716	JS-46 / 300	$19,737.00
2525366	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073616841	JS-46 / 300	$19,737.00
2525367	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073615570	JS-46 / 300	$19,737.00
2525368	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073615448	JS-46 / 300	$19,737.00
2525369	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073615435	JS-46 / 300	$19,737.00
2525370	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073521006	JS-46 / 300	$19,737.00
2525371	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073615291	JS-46 / 300	$19,737.00
2525372	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073614913	JS-46 / 300	$19,737.00
2525373	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073613734	JS-46 / 300	$19,737.00
2525374	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073616900	JS-46 / 300	$19,737.00
2525375	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073616543	JS-46 / 300	$19,737.00
2525376	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073615010	JS-46 / 300	$19,737.00
2525377	DISK ARRAY	EMC CORP	CX-4PDAE	FCNBD073614870	JS-46 / 300	$19,737.00
2525595	CODEC, VTC	TANDBERG DATA A/S	TTC6-08	25A45471	JS-9NW/2170	$19,891.00
2525598	CAMERA-RECORDING, VIDEO	TANDBERG DATA A/S	WAVE II	19A45353	JS-9NW/2170A	$2,762.00
2525600	CAMERA-RECORDING, VIDEO	TANDBERG DATA A/S	WAVE II	19A46885	JS-9NW/2170A	$2,762.00
2525601	CODEC, VTC	TANDBERG DATA A/S	TTC6-08	25A45238	JS-9NW/2165	$21,622.00
2525603	TELEPHONE CONFERENCE GROUP	TANDBERG DATA A/S	CODEC 6000	25A45153	JS-9NW/2170A	$21,622.00
2525647	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	1W03JD1	JS-30L / 3118A	$7,522.00
2525648	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	DV03JD1	JS-30L / 3118A	$7,522.00
2525649	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	HV03JD1	JS-46 / 300	$7,522.00
2525650	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 2	JV03JD1	JS-46 / 300	$7,522.00
2525651	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	7MH7JD1	JS-30L / 3118A	$6,774.00
2525652	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	CMH7JD1	JS-30L / 3118A	$6,774.00
2525653	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	FMHJD1	JS-30L / 3118A	$6,774.00
2525654	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	HMH7JD1	JS-30L / 3118A	$6,774.00
2525655	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	6MH7JD1	JS-46 / 300	$6,774.00
2525656	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	4MH7JD1	JS-46 / 300	$6,774.00
2525657	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	DMH7JD1	JS-46 / 300	$6,774.00
2525658	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	8MH7JD1	JS-46 / 300	$6,774.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2525659	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	9MH7JD1	JS-46 / 300	$6,774.00
2525660	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	POWEREDGE 1	5MH7JD1	JS-46 / 300	$6,774.00
2525666	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950	G513JD1	JS-46 / 300	$7,522.00
2525669	SERVER, ADP	JUNIPER NETWORKS	SA 6000 FIPS	1.82052E+14	JS-46 / 200	$17,280.00
2525670	SERVER, ADP	JUNIPER NETWORKS	SA 4000 FIPS	1.82052E+14	JS-46 / 204	$8,640.00
2525671	SERVER, ADP	JUNIPER NETWORKS	SA 6000 FIPS	1.82052E+14	JS-46 / 200	$17,280.00
2525672	SERVER, ADP	JUNIPER NETWORKS	SA 6000 FIPS	1.82052E+14	JS-46 / 204	$17,280.00
2525675	SERVER, ADP	FOUNDRY NETWORKS INC.	S1350	SA26075036	JS-46 / 300	$12,184.00
2525676	SERVER, ADP	FOUNDRY NETWORKS INC.	S1350	SA26075025	JS-46 / 300	$12,184.00
2525680	CAMERA, INFARED	FLIR SYSTEMS INC	EX320	25201835	JS-46 / 300B	$12,670.00
2527327	TELEVISION SET	MARSHALL ELECTRONICS INC	V-LCD15-TV	07-15R01015	JS-8/218	$955.00
2527347	TELEVISION SET	SHARP	LC-52D64U	802873380	JS-46/218	$2,762.00
2527351	ANALYZER, SPECTRUM	TRILITHIC	8821Q	860119	JS-8/280	$15,962.00
2527837	MANAGER, DIGITAL CONTENT	SCIENTIFIC ATLANTA	D9900	AAVTHNR	JS-425/100B	$15,691.00
2527838	ENCODER	SCIENTIFIC ATLANTA	D9032	AAVTHDS	JS-425/100B	$10,248.00
2527839	ENCODER	SCIENTIFIC ATLANTA	D9032	AAVTHDM	JS-425/100B	$10,248.00
2527840	ENCODER	SCIENTIFIC ATLANTA	D9032	AAVTHDO	JS-425/100B	$10,248.00
2527841	ENCODER	SCIENTIFIC ATLANTA	D9032	AAVTHDN	JS-425/100B	$10,248.00
2527842	ENCODER	SCIENTIFIC ATLANTA	D9032	AAVTHDU	JS-425/100B	$10,248.00
2527843	ENCODER	SCIENTIFIC ATLANTA	D9032	AAVTHDP	JS-425/100B	$10,248.00
2527844	ENCODER	SCIENTIFIC ATLANTA	D9050	5992468	JS-425/100B	$29,026.00
2527845	ENCODER	SCIENTIFIC ATLANTA	D9050	5992467	JS-425/100B	$29,026.00
2527846	ENCODER	SCIENTIFIC ATLANTA	D9050	5992464	JS-425/100B	$29,026.00
2527847	ENCODER	SCIENTIFIC ATLANTA	D9050	5992462	JS-425/100B	$29,026.00
2527848	ENCODER	SCIENTIFIC ATLANTA	D9050	5992466	JS-425/100B	$29,026.00
2527849	ENCODER	SCIENTIFIC ATLANTA	D9050	5992465	JS-425/100B	$29,026.00
2528821	SYSTEM, CAMERA STABILIZER	VARIZOOM	VZ BLACKHAWK	NONE	JS-8/251	$6,386.00
2528823	PRINTER, CD/DVD	GLOBAL DISCWARE INC	FLASHJET 4800	39628	JS-8/208	$930.00
2528824	PRINTER, CD/DVD	GLOBAL DISCWARE INC	FLASHJET 4800	39349	JS-8/273	$930.00
2528872	RECORDER RECEIVER	DISH NETWORK	DISHPVR721	WAEHANBDKKZC	JS-8/208	$598.00
2528891	SWITCHER, ROUTING AUDIO	QUSTREAM GROUP	DRS 128 10 FRN	6527 09C 080 70049	JS-8/261C	$19,402.00
2528892	SWITCHER, ROUTING AUDIO	QUSTREAM GROUP	CHEETAH DRS	652695B08130084	JS-8/261C	$19,402.00
2528893	SWITCHER, ROUTING AUDIO	QUSTREAM GROUP	DRS DXE CONT	652695C07380053	JS-8/261C	$19,402.00
2528894	RECORDER RECEIVER, SATELLITE	DISH NETWORK	DISHPVR721	WAEHANBDKLMH	JS-8/208	$598.00
2528915	MONITOR, TELEVISION	MARSHALL ELECTRONICS	V-R171P-AFHD	99325102633	JS-8/218	$2,486.00
2528948	SERVER, ADP	RORKE DATA, INC	7370S-8U4D	TW2S000A0810000067	JS-8 / 273A	$39,100.00
2528949	CAMERA, DIGITAL	NIKON INC	D3	2058079	JS-8/251	$4,621.00
2528950	CAMERA, DIGITAL	NIKON INC	D3	2058080	JS-8/251A	$4,621.00
2528951	CAMERA, DIGITAL	NIKON INC	D3	2058078	JS-8/251A	$4,621.00
2528952	CAMERA, DIGITAL	NIKON INC	D3	2058186	JS-8/251	$4,621.00
2528953	CAMERA, DIGITAL	NIKON INC	D3	2058166	JS-8/251	$4,621.00
2528954	CAMERA, DIGITAL	NIKON INC	D3	2058165	JS-8/251	$4,621.00
2528955	CAMERA, DIGITAL	NIKON INC	D3	2058187	JS-8/251A	$4,621.00
2529049	BLURAY TOWER, RECORDER	CD DIMENSIONS	NONE	108065093	JS-2S / 208	$4,658.00
2529075	GENERATOR, SYNC.	EVERTZ MICROSYSTEMS LTD	5600MSC	1788730025	JS-8/261C	$11,911.00
2529093	MONITOR, TELEVISION	MARSHALL ELECTRONICS	V-R171P-AFHD	493610263	JS-8 / 281	$2,528.00
2529094	RECORDER, VIDEO	SONY CORP	HVR-M25U	111272	JS-8 / 281	$3,288.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2529095	RECORDER, VIDEO	SONY CORP	HVR-M25U	111078	JS-8 / 281	$3,288.00
2529096	RECORDER, VIDEO	SONY CORP	HVR-M25U	111270	JS-8 / 281	$3,288.00
2529097	RECORDER, VIDEO	SONY CORP	HVR-M25U	111170	JS-8 / 281	$3,288.00
2529098	LENS, CAMERA	NIKON INC	AF-S NIKKOR 6(	200194	JS-8/251A	$8,578.00
2529246	RECEIVER/DECODER, SATELLITE	WEGENER COMMUNICATIONS INC	UNITY4600	271659	JS-8/280	$9,617.00
2529265	RECEIVER/DECODER, SATELLITE	WEGENER COMMUNICATIONS INC	UNITY4600	271654	JS-8/280	$9,617.00
2536824	DECODER, IRD	WEGENER COMMUNICATIONS INC	4650-011	276088	JS-8/280	$4,357.00
2536858	CONVERTER, IP/ASI	TANDBERG A/S F-RADIOFABRIKK	26431-16	9850	JS-8/280	$7,954.00
2536859	CONVERTER, IP/ASI	TANDBERG A/S F-RADIOFABRIKK	26431-16	9851	JS-8/280	$7,954.00
2536861	ENCODER, PROGRAMMABLE COND	HARMONIC INC	MV-50CBR	72536	JS-8/280	$23,843.00
2536862	ENCODER, PROGRAMMABLE COND	HARMONIC INC	MV-50CBR	72520	JS-8/280	$23,843.00
2543116	DECODER, VIDEO	SENCORE INC	MRD3187A	6808881	JS-8/280	$9,057.00
2566459	MONITOR, VIDEO, TELEVISION	MARSHALL ELECTRONICS	V-R102DP-HDSI	9853810351	JS-8 / 261C	$2,951.00
2566467	MONITOR, WAVEFORM	TEKTRONIX INC	WVR7120	B041420	JS-8 / 281	$15,892.00
2566501	ENCODER	VBRICK SYSTEMS INC	9190-4300-000	1080800165	JS-8/280	$6,193.00
2566502	ENCODER	VBRICK SYSTEMS INC	9190-4300-000	1080800169	JS-8/280	$6,193.00
2566503	ENCODER	VBRICK SYSTEMS INC	9110-5300-000	1070800209	JS-8/280	$6,193.00
2566504	ENCODER	VBRICK SYSTEMS INC	9110-5300-000	1070800208	JS-8/280	$6,193.00
2566505	ENCODER	VBRICK SYSTEMS INC	9110-4200-000	1070800019	JS-8/226B	$6,193.00
2566507	DISPLAY UNIT	IKAN CORPORATION	V8000HD	HDV80000097	JS-8/298	$791.00
2566508	DISPLAY UNIT	IKAN CORPORATION	V8000HD	HDV80000359	JS-8/298	$791.00
2566509	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	9CTHCH1	JS-46 / 138	$6,891.00
2566510	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	BCTHCH1	JS-46 / 138	$6,891.00
2566511	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	4HQJCH1	JS-46 / 138	$6,891.00
2566512	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	45QJCH1	JS-46 / 138	$6,890.00
2566531	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	43QJCH1	JS-46 / 138	$10,338.00
2566532	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	63QJCH1	JS-46 / 138	$10,338.00
2566533	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	EMS01	93QJCH1	JS-46 / 138	$10,338.00
2566535	ENCODER, DIGITAL VIDEO	HARMONIC INC	MV500	78984	JS-8/280	$32,475.00
2566550	MONITOR, LCD PANEL	MARSHALL ELECTRONICS	V-R70P-HD-SDI-	7857	JS-8/251	$1,801.00
2566551	MONITOR, LCD PANEL	MARSHALL ELECTRONICS	V-R70P-HD-SDI-	V-R70P-HD-SDI-AB	JS-8/251	$1,801.00
2566560	DATA STORAGE UNIT	NETAPP	RA-1402	SHU89767002BA52	JS-46 / 204	$33,000.00
2566561	DATA STORAGE UNIT	NETAPP	RA-1402	SHU89767002BA9F	JS-46 / 204	$33,000.00
2566562	DATA STORAGE UNIT	NETAPP	RA-1402	SHU89767002BA79	JS-46 / 204	$33,000.00
2566563	DATA STORAGE UNIT	NETAPP	RA-1402	SHU89767002BA8A	JS-46 / 204	$33,000.00
2566564	DATA STORAGE UNIT	NETAPP	RA-1402	SHU89767002BBC3	JS-46 / 204	$33,000.00
2566578	PLAYER, BETACAM	SONY CORP	J-30	13552	JS-8 / 218	$12,102.00
2566579	PLAYER, CASSETTE VIDEO	SONY CORP	J-H3	12517	JS-8 / 261D	$20,545.00
2566593	MONITOR, LCD	SAMSUNG ELECTRONICS	2443BWX	MY24HVZQ700629R	JS-8/261C	$1,018.00
2566594	MONITOR, LCD	SAMSUNG ELECTRONICS	2443BWX	MY24HVZQ700810T	JS-8/261C	$1,018.00
2566595	MONITOR, LCD	SAMSUNG ELECTRONICS	2443BWX	MY24HVZQ700576W	JS-8/261C	$1,018.00
2566596	MONITOR, LCD	SAMSUNG ELECTRONICS	2443BWX	MY24HVZQ700878N	JS-8/261C	$1,018.00
2566597	MONITOR, LCD	SAMSUNG ELECTRONICS	2443BWX	MY24HVZQ701127Z	JS-8/261C	$1,018.00
2566598	MONITOR, LCD	SAMSUNG ELECTRONICS	2443BWX	MY24HVZQ701038Y	JS-8/261C	$1,018.00
2566599	ENCODER SYSTEMS, VIDEO SERVER	INTEL CORP	SR1560SFHS	BZSD80300322	JS-8/261C	$36,591.00
2566612	CAMERA	NIKON INC	D300	3159364	JS-8/251A	$1,734.00
2566613	CAMCORDER, SHOULDER MOUNT	SONY CORP	PMW-EX3	102332	JS-2S/106	$8,817.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2566630	MONITOR/GENERATOR, HANDHELD	HAMLET VIDEO INTERNATIONAL	MICROFLEX	MF0006134	JS-8/215BA	$4,472.00
2566631	MONITOR/GENERATOR, HANDHELD	HAMLET VIDEO INTERNATIONAL	MICROFLEX	MF000G133	JS-8/215B	$4,472.00
2566632	MONITOR/GENERATOR, HANDHELD	HAMLET VIDEO INTERNATIONAL	MICROFLEX	MF0006141	JS-8/215B	$4,472.00
2566637	MONITOR	HEWLETT-PACKARD CO	LP1965	CNK8160N5R	JS-8/181C	$659.00
2566666	DISK ARRAY	AVID TECHNOLOGY INC	MEDIARRAY XT	ZATR840004	JS-2S / 110	$29,967.00
2566667	DISK ARRAY	AVID TECHNOLOGY INC	MEDIARRAY XT	ZATR840003	JS-2S / 110	$29,967.00
2566668	DISK ARRAY	AVID TECHNOLOGY INC	MEDIARRAY XT	ZATR840006	JS-2S / 110	$29,967.00
2566669	SERVER, ADP	HEWLETT-PACKARD CO	DL360G5	MXQ828A7N0	JS-8/286	$194,510.00
2566670	SERVER, ADP	HEWLETT-PACKARD CO	DL360G5	MXQ834A2LG	JS-8/286	$38,858.00
2566671	SERVER, ADP	HEWLETT-PACKARD CO	DL360G5	MXQ834A2M4	JS-8/286	$38,858.00
2566672	SERVER, ADP	HEWLETT-PACKARD CO	DL360G5	MXQ828A7N8	JS-8/286	$22,882.00
2566673	SERVER, ADP	HEWLETT-PACKARD CO	DL360G5	2UX8330454	JS-8/286	$54,796.00
2566674	DISPLAY UNIT	ELO TOUCHSYSTEMS, INC.	ET171SL-7CWA	E08C203967	JS-8/286	$691.00
2566675	DISPLAY UNIT	ELO TOUCHSYSTEMS, INC.	ET171SL-7CWA	G08C008S12	JS-8/286	$691.00
2566676	DISPLAY UNIT	ELO TOUCHSYSTEMS, INC.	ET171SL-7CWA	E08C203955	JS-8/286	$691.00
2566702	BASE STATION, REPEATER	TELEX COMMUNICATIONS INC	BTR-800	7192800	JS-8 / 261B	$4,273.00
2566749	SERVER, ADP	GOVERNMENT MICRO RESOURCES INC	LX2000	C0103621001	JS-46 / 300	$80,345.00
2566750	DISK DRIVE UNIT	EMC2 CORP	MPE	APM00085002438	JS-46 / 204	$25,503.00
2566751	DISK DRIVE UNIT	EMC2 CORP	CAE	APM00085001965	JS-46 / 204	$15,242.00
2566768	SWITCHER, ROUTING	SIERRA VIDEO SYSTEMS INC	16X2 HDS	08G015	JS-8 / 187A	$5,204.21
2567142	RECIEVER, DECODER, MODULAR	SENCORE INC	MRD3187A	6835204	JS-8/280	$5,495.00
2567143	RECIEVER, DECODER, MODULAR	SENCORE INC	MRD3187A	6835199	JS-8/280	$5,495.00
2567144	RASTERIZER, WAVEFORM	TEKTRONIX	WVR7120	B041491	JS-8/280	$24,199.00
2567145	SWITCH, FIBRE	QLOGIC	SB5600Q	0823C01002	JS-39B/100A	$7,901.00
2567146	SWITCH, FIBRE	QLOGIC	SB5600Q	0823C01004	JS-39B/100A	$7,901.00
2567147	SERVER, NAS GATEWAY	INTEL CORP	SR1560SFHS	BZSD75200490	JS-39B/100A	$4,704.00
2567148	SERVER, SAN	BRIGHT SYSTEM, INC.	BDS-PRO2	2100001B32117873	JS-39B/100A	$27,758.00
2567149	SERVER, SAN	BRIGHT SYSTEM, INC.	BDS-HA	2100001B320900CO	JS-39B/100A	$11,685.00
2567150	SERVER, SAN	INTEL CORP	NONE	NONE	JS-39B/100A	$16,476.00
2567151	SERVER, SAN	INTEL CORP	NONE	NONE	JS-39B/100A	$16,476.00
2567152	SERVER, VIDEO	SPECTSOFT	BRAVO DDR	72	JS-39B/100A	$16,199.00
2567153	SERVER, VIDEO	SPECTSOFT	BRAVO DDR	73	JS-39B/100A	$16,199.00
2567154	WAVEFORM/VECTOR/RASTERIZE	TEKTRONIX INC	WVR7020	B041511	JS-39B/100A	$7,436.00
2567155	RAID, FIBRE CHANNEL	BRIGHT SYSTEM, INC.	RT4-700F-300G	0836FG00016	JS-39B/100A	$27,620.00
2567156	RAID, FIBRE CHANNEL	BRIGHT SYSTEM, INC.	RT4-700F-300G	0836FG00020	JS-39B/100A	$27,620.00
2567157	RAID, FIBRE CHANNEL	BRIGHT SYSTEM, INC.	RT4-700F-300G	0836FG00019	JS-39B/100A	$27,620.00
2567159	FIREWALL APPLIANCE	JUNIPER NETWORKS	SSG-550M-SH	JN10AC845ADB	JS-46 / 300	$6,825.00
2567160	FIREWALL APPLIANCE	JUNIPER NETWORKS	SSG-550M-SH	JN10AC5CCABD	JS-17 / 134	$6,825.00
2567165	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE1950	793MHH1	JS-46 / 204	$6,412.00
2567166	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950	G0C5HH1	JS-46 / 204	$9,011.00
2567167	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950	J0C5HH1	JS-46 / 204	$9,011.00
2567168	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950	21C5HH1	JS-46 / 204	$9,011.00
2567170	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950III	H7V7GH1	JS-46 / 300	$16,131.00
2567178	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	R805	3FBJJH1	JS-46 / 300	$8,125.00
2567179	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	R805	4FBJJH1	JS-46 / 300	$8,125.00
2567180	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950	5V2NJH1	JS-46 / 300	$8,415.00
2567181	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	PE2950	G6P4KH1	JS-46 / 300	$6,779.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
2567182	SERVER, ADP	TECHNICA LTD	M SERIES	A5267092008	JS-46 / 204	$13,717.00
2567183	SERVER, ADP	TECHNICA LTD	E SERIES	BZDS81500759	JS-46 / 204	$36,312.00
2567184	SERVER, ADP	TECHNICA LTD	E SERIES	BZDS82500236	JS-46 / 204	$36,312.00
2567185	SWITCH, MULTIPORT	JUNIPER NETWORKS	NS-ISG-2000	7.9012E+13	JS-46 / 204	$47,188.00
2567186	SWITCH, MULTIPORT	JUNIPER NETWORKS	NS-ISG-2000	7.9112E+13	JS-46 / 204	$47,188.00
3024743	VIDEO TELECONFERENCING UNIT	POLYCOM	VS4000	820053010EA0AD	JS-8/280	$6,695.00
3024744	VIDEO TELECONFERENCING UNIT	POLYCOM	VS4000	COAAD	JS-8/280	$5,757.00
3024746	VIDEO TELECONFERENCING UNIT	POLYCOM	VS4000	8400360104A4AD	JS-8/280	$8,599.00
3028707	VIDEO MIXER	CORE MICROSYSTEMS	TRICASTER PP(	P1A116793588271	JS-9NW/2170A	$6,085.00
3040893	SWITCH, POWER CONNECT	DELL COMPUTER CORP F-PC'S LTD	5224	US05X7737011136600(	JS-46 / 300	$1,945.00
3050864	MEDIA SYSTEM, VIDEO/AUDIO	TELESTREAM INC	CP1A	CP1A01099	JS-8 / 212	$13,541.00
G017275	MONITOR, CLUSTER 5	SONY CORP	PVM5310	5000446	JS-30S/2334A	$1,887.00
G017460	MONITOR, TELEVISION	PANASONIC	BT-S1300N	FA8630016	JS-2S/109	$628.00
G017486	MONITOR, TELEVISION	SONY CORP	PVM5300	5000483	JS-1/968	$1,875.00
G017526	RECORDER, VIDEO CASSETTE	PANASONIC	F9TC00164	F9TC00248	JS-2S/104	$5,402.00
G017529	MONITOR, TELEVISION	SONY CORP	PVM411	1657	JS-T-588/100	$1,035.00
G017565	POWER SUPPLY, UNINTERRUPTIBLE	EMERGENCY POWER ENGINEERING	UPS4125T480-4	15479-00	JS-46 / 1M1T	$48,990.00
G017567	CABINET, BATTERY	EMERGENCY POWER ENGINEERING	2CE4-6880-408	87-714	JS-46 / 1M1T	$8,400.00
G017568	CABINET, BATTERY	EMERGENCY POWER ENGINEERING	2CE4-6880-408	87-714	JS-46 / 1M1T	$8,400.00
G017915	CAMERA, IMAGE MAKER	KODAK CANADA LTD	5060B	5060B000297	JS-8/108R	$4,985.00
G018512	RECORDER, CASSETE VIDEO	SONY CORP	EV09800	10072	JS-8/208	$3,810.00
G018548	CAMERA, STILL PICTURE	TOSHIBA HOSHASEN CO LTD	1K-T30A	75510112	JS-PARII/SIMLB	$6,700.00
G018552	DECODER	FAROUDJA LABORATORIES INC	CFD-N	3016-09089	JS-2S/104	$6,625.00
G019651	FILE UNIT MOBILE SYSTEM	TAB PRODUCTS CO	5238LFI	NONE	JS-12/154BA	$8,744.00
G019653	FILE UNIT MOBILE SYSTEM	TAB PRODUCTS CO	NONE	NONE	JS-12/160	$25,544.00
G019654	FILE UNIT MOBILE SYSTEM	TAB PRODUCTS CO	NONE	NONE	JS-12/160	$25,544.00
G019657	GENERATOR, SIGNAL	MAGNI SYSTEMS INC	1510A	A020011	JS-8/215BA	$5,300.00
G019762	PLAYER, CASSETTE VIDEO	SONY CORP	VP7020	18131	JS-2S/103	$1,262.00
G019765	MONITOR, TELEVISION	JVC CO OF AMERICA	VMR190SU	10360311	JS-2S/HALL	$1,995.00
G019766	MONITOR, TELEVISION	JVC CO OF AMERICA	VMR190SU	10360293	JS-2S/109	$1,995.00
G020533	MONITOR, TELEVISION	SONY CORP	PVM1220	2004628	JS-2S / 208	$1,731.00
G020574	CAMERA SET, TELEVISION	SONY CORP	DXC3000A	63680	JS-1/916	$5,072.00
G020594	ENCODER, PROGRAMMABLE COND	GRASS VALLEY GROUP INC THE	EDE1N	240431	JS-2S/104	$9,950.00
G097561	RECORDER, VIDEO	SONY CORP	EVO9800	10778	JS-425/100B	$3,484.00
G097612	CAMERA, STILL PICTURE	PARON CAMERA	WIDELUX	620508	JS-8/298	$3,500.00
G097626	CORRECTOR, TIME BASE	DIGITAL VIDEO SYSTEMS INC	DPS275	9006750349	JS-8 / 281	$5,895.00
G097639	RECORDER/PLAYER STILL VIDEO	SONY CORP	MVR5600	10602	JS-1322/C165	$3,213.00
G097640	RECORDER/PLAYER STILL VIDEO	SONY CORP	MVR5600	10620	JS-2S/201A	$3,213.00
G097713	CAMERA, MOTION PICTURE	TOSHIBA HOSHASEN CO LTD	IKM31	50130814	JS-PARII/HMFLB	$3,280.00
G097727	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2001502	JS-30S/2312	$925.00
G097728	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2001516	JS-2S/104	$925.00
G097734	MEASUREMENT SET, VIDEO	TEKTRONIX INC	1780R	B012058	JS-8/280	$9,100.00
G097786	MONITOR, TELEVISION	SONY CORP	PVM1220	2005066	JS-2S/104	$1,875.00
G097800	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2001226	JS-2S/109	$925.00
G097812	PLAYER, CASSETTE VIDEO	SONY CORP	VP7020	80010	JS-8/218	$1,258.00
G097871	CAMERA-RECORDING, VIDEO	FUJI OPTICAL CO	G617	6041197	JS-8/298	$2,650.00
G097872	LENS, CAMERA	NIKON CORP	400MM F2.8IF E	201569	JS-8/298	$5,674.00

ECN	Item Name	Manufacturer	Model No	Serial No	Building/Room	Acquisition Cost
G097936	LENS, CAMERA TELEVISION	CANON CAMERA CO INC	B222471001	012009K	JS-2S/109	$11,500.00
G097958	RECEIVING SET, TELEVISION	RCA CP GVMT & COMMERCIAL SYS	F271807	50226239	JS-REGIII/201B	$584.00
G097976	MONITOR, TELEVISION	SONY CORP	PVM5300	5001263	JS-8/280	$1,876.00
G097977	MONITOR, TELEVISION	SONY CORP	PVM5300	5001245	JS-8 / 281	$1,876.00
G098005	MONITOR, CLUSTER 5	SONY CORP	PVM5310	5001264	JS-8 / 281	$1,876.00
G098027	ANTENNA	SCIENTIFIC ATLANTA	8305	1001608	JS-T-586/OUISD	$7,306.00
G098028	ANTENNA	SCIENTIFIC ATLANTA	8305	1001617	JS-T-586/OUISD	$8,294.00
G098029	RECEIVER, SATELLITE, KU-BAND	SCIENTIFIC ATLANTA	7530	ABCL11260	JS-T-588/100	$4,180.00
G098030	RECEIVER, SATELLITE, KU-BAND	SCIENTIFIC ATLANTA	7530	ABCL11258	JS-T-588/100	$4,180.00
G098031	RECEIVER, SATELLITE, KU-BAND	SCIENTIFIC ATLANTA	7530	AACL11246	JS-T-588/100	$4,180.00
G098032	RECEIVER, SATELLITE, KU-BAND	SCIENTIFIC ATLANTA	7530	AACL11248	JS-T-588/100	$4,180.00
G098136	MONITOR, TELEVISION	SONY CORP	PVM411	17970	JS-2S/201B	$1,113.00
G098139	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2002075	JS-2S / 205	$923.00
G098142	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2001708	JS-8/273A	$923.00
G098143	RECEIVING SET, TELEVISION	SONY CORP	PVM1344Q	2001609	JS-8 / 208	$923.00
G098167	CAMERA, VIDEO RECORDER	CANON CAMERA CO INC	A1MARKII	2220301160	JS-1322/C165	$1,982.00
G098168	RECORDER TIME LAPSE	PANASONIC	AG6720A	B1TA00101	JS-2S/104	$1,767.00
G098198	FORMATTER, ANALOG DIGITAL	REDLAKE IMAGING CORP	13-0201	102	JS-8/298	$5,000.00
G098293	MONITOR, TELEVISION	SONY CORP	PVM1342Q	2011827	JS-2S/104	$900.00
G098294	MONITOR, TELEVISION	SONY CORP	PVM1342Q	2011598	JS-2S/210	$900.00
G098296	MONITOR, TELEVISION	SONY CORP	PVM1342Q	2011834	JS-8/226B	$900.00
G098306	CLEANER RACK ULTRASONIC	PHOTOSONIC INC	IT412H23	82751-0991	JS-8/187	$12,815.00
G098415	RECORDER, VIDEO D2	SONY CORP	DVR20	10446	JS-425/100B	$41,600.00
G098416	RECORDER, VIDEO D2	SONY CORP	DVR20	10470	JS-2S / 112	$41,600.00
G098417	RECORDER, VIDEO D2	SONY CORP	DVR20	10439	JS-8 / 208	$41,600.00
G098418	RECORDER, VIDEO D2	SONY CORP	DVR20	10445	JS-8 / 281	$41,600.00
G098419	RECORDER, VIDEO D2	SONY CORP	DVR20	10450	JS-8/208	$41,600.00
G098420	RECORDER, VIDEO D2	SONY CORP	DVR20	10419	JS-425/100B	$41,600.00
G098421	RECORDER, VIDEO D2	SONY CORP	DVR20	10404	JS-2S / 104	$41,600.00
G098422	RECORDER, VIDEO D2	SONY CORP	DVR20	10355	JS-425/100B	$41,600.00
G098423	RECORDER, VIDEO D2	SONY CORP	DVR20	10334	JS-2S / 104	$41,600.00
G098424	RECORDER, VIDEO D2	SONY CORP	DVR20	10311	JS-8/273A	$41,600.00
G098425	RECORDER, VIDEO D2	SONY CORP	DVR20	10340	JS-8/225B	$41,600.00
G098426	RECORDER, VIDEO D2	SONY CORP	DVR20	10487	JS-425/100B	$41,600.00
G098427	RECORDER, VIDEO D2	SONY CORP	DVR20	10426	JS-2S / 208	$41,600.00
G098429	RECORDER, VIDEO D2	SONY CORP	DVR20	10621	JS-2S/104	$41,600.00

$27,055,338.21