

AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)

RATING
DO-09

PAGE OF
1 1430 PAGES

2. CONTRACT (Proc. Inst. Ident.) NO.
NNS07AB21C

3. EFFECTIVE DATE
07/17/2007

4. REQUISITION/PURCHASE REQUEST/PROJECT NO.
4200210416, 4200171848

5. ISSUED BY CODE BA34

Acquisition Management Office
Attn: Penny S. Parker
John C. Stennis Space Center
Stennis Space Center, MS 39529-6000

6. ADMINISTERED BY (If other than item 5) CODE DO-09

Same as Item 5.

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code)

Jacobs Technology, Inc.
600 William Northern Blvd.
P. O. Box 884
Tullahoma, TN 37388

8. DELIVERY
 FOB ORIGIN OTHER (See below)

9. DISCOUNT FOR PROMPT PAYMENT

10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN ITEM 12

CODE FACILITY CODE

11. SHIP TO/MARK FOR CODE
NASA/Stennis Space Center
Stennis Space Center, MS 39529-6000

12. PAYMENT WILL BE MADE BY CODE
NASA John C. Stennis Space Center, Financial Management Division/BA22
Stennis Space Center, MS 39529-6000

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:

10 USC 2304(c) () 41 USC 253(c) ()

14. ACCOUNTING AND APPROPRIATION DATA

See Schedule

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
1.	Phase-In				\$ 350,000
2.	Basic Period (August 28, 2007 - August 28, 2010) (See Schedule B.2)	1	period		\$180,386,151
		1	period		

15G. TOTAL AMOUNT OF CONTRACT \$ 180,736,151

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X	B	SUPPLIES OR SERVICES AND PRICES/COST		PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH			
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X	F	DELIVERIES OR PERFORMANCE		X	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
X	G	CONTRACT ADMINISTRATION DATA		X	M	EVALUATION FACTORS FOR AWARD	
X	H	SPECIAL CONTRACT REQUIREMENTS					

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18. AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

NAME AND TITLE OF SIGNER (Type or print)

Rogers F. Starr, President

20A. NAME OF CONTRACTING OFFICER

Penny S. Parker, Contracting Officer

19b. NAME OF CONTRACTOR

BY Rogers F. Starr
(Signature of person authorized to sign)

19c. DATE SIGNED

14 May 07

20B. UNITED STATES OF AMERICA

BY Penny S. Parker
(Signature of Contracting Officer)

20c. DATE SIGNED

7/13/07

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
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NAME OF OFFEROR OR CONTRACTOR

BOBS TECHNOLOGY INC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
001	INCO TERMS 1: FOB INCO TERMS 2: DESTINATION FOSC - Phase-In Period Obligated Amount: \$350,000.00 Requisition No: 4200210416 Accounting Info: 64RA00/6100.2540/FC000000/292487.09.09/000/2540/64 /ESAX22007D/CMO Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 292487.09.09 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$350,000.00				350,000.00
002	FOSC - Basic Period Incrementally Funded Amount: \$2,676,001.00 Requisition No: 4200171848, 4200210416 Accounting Info: 64RA20/6100.2540/64/FC000000/992858.18.09/000/2540 /64-CNTRGA/EXCX22006D/CTR/1/2 Cost Center: 64RA20 GI Account: 6100.2540 Order: FC000000 WBS Element1: 992858.18.09 Item Number: 000 Commitment Item: 2540 Funds Center: 64-CNTRGA Fund: EXCX22006D Functional Area: CTR Funded: \$1.00 Accounting Info: 64RA00/6100.2540/64/FC000000/292487.09.09/000/2540 /64/ESAX22007D/CMO/1/43 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 292487.09.09 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$1,100,000.00 Accounting Info: 64RA00/6100.2540/64/FC000000/129985.01.09.03/000/2 540/64/ESAX22007D/CMO/1/84 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 129985.01.09.03 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$1,400,000.00 Accounting Info: 64RA00/6100.2540/64/FC000000/869933.01.09.03/000/2 540/64/ESAX22007D/CMO/1/166 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 869933.01.09.03 Item Number: 000 Continued ...				180,386,151.00

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NAME OF OFFEROR OR CONTRACTOR

COBS TECHNOLOGY INC

LINE NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$80,000.00 Accounting Info: 64RA00/6100.2540/64/FC000000/325288.01.09/000/2540 /64/ESAX22007D/CMO/1/207 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 325288.01.09 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$54,000.00 Accounting Info: 64RA00/6100.2540/64/FC000000/158302.01.09/000/2540 /64/ESAX22007D/CMO/1/248 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 158302.01.09 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$32,000.00 Accounting Info: 64RA00/6100.2540/64/FC000000/299147.01.09/000/2540 /64/ESAX22007D/CMO/1/289 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 299147.01.09 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$5,000.00 Accounting Info: 64RA00/6100.2540/64/FC000000/305311.01.09.02/000/2 540/64/ESAX22007D/CMO/1/330 Cost Center: 64RA00 GI Account: 6100.2540 Order: FC000000 WBS Element1: 305311.01.09.02 Item Number: 000 Commitment Item: 2540 Funds Center: 64 Fund: ESAX22007D Functional Area: CMO Funded: \$5,000.00				
003	FOSC - Option Period 1 Amount: \$55,476,553.00 (Option Line Item) Accounting Info: Funded: \$0.00				\$5,476,553.00
004	FOSC - Option Period 2 Amount: \$52,135,861.00 (Option Line Item) Accounting Info: Funded: \$0.00 Continued ...				\$2,135,861.00

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NAME OF OFFEROR OR CONTRACTOR

COBS TECHNOLOGY INC

LINE NO (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
005	FOSC - Option Period 3 Amount: \$53,042,251.00 (Option Line Item) Accounting Info: Funded: \$0.00				\$3,042,251.00
006	FOSC - Option Period 4 Amount: \$53,733,842.00 (Option Line Item) Accounting Info: Funded: \$0.00				\$3,733,842.00
007	FOSC - Option Period 5 Amount: \$54,533,660.00 (Option Line Item) Accounting Info: Funded: \$0.00				\$4,533,660.00
008	FOSC - Option Period 6 Amount: \$55,384,064.00 (Option Line Item) Accounting Info: Funded: \$0.00				\$5,384,064.00
009	FOSC - Option Period 7 Amount: \$56,380,490.00 (Option Line Item) Accounting Info: Funded: \$0.00				\$6,380,490.00

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Acronyms and Abbreviations

- #'s -

#K – Thousand
#M - Million
2A - Semi-annually
2M - Semi-monthly
3W - Three times weekly
5W- Five times weekly

-A-

A - Annually
AAP - Asbestos Abatement Plan
ABHP - American Board of Health Physics
ABIH - American Board of Industrial Hygiene
ACLS - Advanced Cardiac Life Support
ACM – Asbestos Containing Materials
ACO - Administrative Contracting Officer
AD - As Directed
AED - Automated External Defibrillator
AFCESIC – Air Force Chemical Equilibrium Specific Impulse Code
AHCP - Asbestos Hazard Control Plans
AHU - Air Handler Unit
AIHA - American Industrial Hygiene Association
ALARA - As Low as Reasonably Achievable
AMD – Average Monthly Demand
AN - Annually
ANSI – The American National Standards Institute is the U.S. member body of ISO
ANSI/IEEE - American National Standards Institute is the U.S. member Body of ISO /Institute of Electrical and Electronic Engineering
ANSI/ISO/ASQC/Q9001, 1994 – Quality system model for quality assurance in design, development, production, installation, and service
AP - Associated Press
AR - As Required
ARN – Action and Reply Notice
ASHRAE - American Society of Heating, Refrigeration and Air Conditioning Engineer
ASIPO - Administrative System Implementation Project Office
ASME - American Society of Mechanical Engineers
ASQ - American Society for Quality is U.S. member of ANSI responsible for quality Standards
ASQC – The American Society for Quality Control is the U.S. member of ANSI responsible for quality management and related Standards
AST – Aboveground Storage Tank
AutoCAD - Automatic Computer-Aided Drafting

-B-

BAS - Building Automation Systems

Acronyms and Abbreviations

BCA - Business Case Analysis
BCRN - Biological, Chemical, Radiations, Nuclear
BE - Biennially (Every other year)
BEMS - Base Environmental Management System
BHMA – Building Hardware Manufacture’s Association
Blood Phos - Serum phosphorus
BLS - Basic Life Support
Blue Line - Printer’s proof copy
BM - Bimonthly (Every other month)
BMAR – Backlog of Maintenance and Repair
BOHS – Building Operating Hours Summary
BOSS - Base Operating Service Support
BW - Biweekly (Every other week)

-C-

CAD – Computer Aided Drafting
CADD - Computer-Aided Design Drawing
CAFM - Computer Aided Facilities Management
CAGE – Commercial and Government Entity Code
CAMEO – Computer Aided Management of Emergency Operations
CARs - Corrective Action Reports
CAS - Cost Accounting Standards
CBA - Collective Bargaining Agreement
CBC/Diff – Complete Blood Cell count with differential
CCA - Current (or ending) Contract Amount
CCB – Configuration Control Board
CCBD – Configuration Control Board Directive
CDB – Computer Data Base
CEAP - Certification as an Employee Assistance Professional
CEF – Central Engineering Files
CERCLA – Comprehensive Environmental Response Compensation and Liability Act
CEU – Continuing Education Units
CFC – Chlorofluorocarbons
CFO - Chief Financial Office
CFR – Code of Federal Regulations
Cholinesterase/RBC – Cholinesterase Inhibition by Dibucaine Number
CIF - Earned Cost Incentive Fee
CIH - Certified Industrial Hygienists
CIO - Chief Information Officer
CLI – Contract Line Item
CM – Corrective Maintenance
CMMS – Computerized Maintenance Management System
CO – Contracting Officer
COB- Close of Business
COC – Certificate of Completion
COF- Construction of Facilities

COHN - Certified Occupational Health Nurse
Compliance – Compliance on the part of the contractor can be attained by adequacy demonstrating certain ANI/ISO/ASQC-Q9001, 1994 capabilities such as: documentation, implementation, designing, developing, production, and installations
COD – Center Operations Directorate
COTR – Contract Officers Technical Representative
COTS - Commercial-off-the-shelf
CPIF – Cost Plus Incentive Fee
CPIF/FF – Cost-Plus-Incentive-Fee/Fixed Fee
CR – Change Request
CSBR – Critical Systems Breakdown Report
CWI - Command Work Instruction
CY - Calendar Year or Contract Year
CYLDEM - Cylinder Demurrage

-D-

D - Daily
D7 – Daily, 7 days a week
DAASC - Defense Automatic Addressing System Center
DAMES – Defense Automatic Asynchronous Message Entry System
DCAA - Defense Contract Audit Agency
DCMA - Defense Contract Management Agency
DCMC - Defense Contracts Management Command
DD - Deferred Delivery
DD Form - Department of Defense Form
DDMS - Documentation and Data Management System
DLSC – Defense Logistics Service Center
DM - Documentation Management
DMM – USPS Domestic Mail Manual
DOC – Department of Commerce
DOC - Document
DOD – Department of Defense
DOE - Department of Energy
DOL – Department of Labor
DOT – Department of Transportation
DPD - Data Procurement Document
DPFR - Draft Request for Proposal
DPI - Dots Per Inch
DR - Data Requirement, SSC Forms 166, 167
DRD - Data Requirement Description
DRD - Data Requirements Document
DRFP - Draft Request for Proposal
DRL - Data Requirements List, SSC Form 165

-E-

EAP – Employee Assistance Program
ECD - Engineering Control Drawing
ECN – Equipment Control Number
ECP - Engineering Change Proposals
EDCATS – Education Division Computer Aided Tracking System
EEE - Electrical Electronic, and Electro- mechanical
EFR – Environmental Functional Review
EGFE – Essential Government Furnished Equipment
EHP - Environmental Health Program
EKG – Electrocardiogram
EMCS - Energy Management and Control System
EMI – Engineering Modification Instructions
EMS - Environmental Management System
EMT – Emergency Medical Technician
EO – Environmental Officer or Engineering Orders
EO - Equal Opportunity or Executive Orders
EOQ – Economic Order Quantity
EPA – Environmental Protection Agency
EPACT - Energy Policy Act
EPCRA - Emergency Planning and Community Right to Know Act
EPP - Emergency Preparedness Plan
ERC - Education Resource Center
ERD – Environmental Resources Document
ERP - Enterprise Resource Planning
EXPAINT - Exterior Paint

-F-

FA – Facilities or Fire Alarms
FAA - Federal Aviation Administration
FAMRP - Facilities Assignment and Maintenance Responsibilities Plan
FAR – Federal Acquisition Regulation
FAS - Funds Availability System
FASAB - Federal Accounting Standards Advisory Board
FBS - Fasting Blood Sugar
FBS/2HR PP – Fasting blood sugar, 2 hours postprandial
FCPF – Fluid Component Processing Facility
FCR – Field Change Request
FCS – Federal Catalog System
FDA - Food and Drug Administration
FECA – Federal Employee Compensation Act
FEDX - Federal Express
FEMA – Federal Emergency Management Administration
FEP – Fire Evacuation Plan
FEP - Free Erythrocyte Protoporphyrin
FID – Field Interface Device

FIFO – First In First Out
FIS – Financial Information System
FLIS – Federal Logistics Information System
FMEA - Failure Modes and Effect Analysis
FMD - Financial Management Division
FOB – Free on Board
FOB– Freight on Board
FOS - Facility Operating Service
FOSC - Facility Operating Service Contract
FOSS - Facility and Operations Support Systems
FPMR – Federal Property Management Regulation
FPR - Federal Property Regulation
FRB – Facility Review Board
FRS - Financial Reporting System
FSC - Federal Supply Class
FSR - Facility Service Request (replaced by SWR's)
FTE - Full Time Equivalent
FTR - Federal Travel Regulations
FY - Fiscal Year

-G

G&A - General and Administrative
G6PD – Glucose 6-phosphate dehydrogenase
GA - Operations
GAO - General Accounting Office
GBL – Government Bill of Lading
GEE – Government Essential Equipment
GFE- Government Furnished Equipment
GFP- Government-Furnished Property
GIDEP – Government Industry Data Exchange Program
GIS - Geographic Information System
GLOBE - Global Learning and Observation to Benefit the Environment
GM - General Manager
GMAW – Gas Metal Arc Welding
GOTS - Government-off-the-shelf
GPD – Gallons per Day
GPFCE – Government Proposal FOSC Cost Estimate
GPH – Gallons per Hour
GPM - Gallons per Minute
GPO – Government Printing Office
GRS - General Records Schedules
GSA – General Services Administration
GTAW – Gas Tungsten Arc Welding

-H-

HACCP - Hazard Analysis Critical Control Point
HAZMAT – Hazardous Materials Training
HAZWOPER – Hazardous Waste Operations and Emergency Response
HCT – Hematocrit
HGB – Hemoglobin
HIVOLT - High Voltage 600V
HP – Health Physics
HPG - High Pressure Gas
HQ - Headquarters
HR - Hour
HTL VIII/HIV – Human T-cell Lymphotropic Virus III/Human Immunodeficiency Virus
HTL VIII/HIV NEG – Human T-cell Lymphotropic Virus III/Human Immunodeficiency Virus
HVAC – Heating, Ventilation, and Air Conditioning
HWY- Highway

-I-

IAGP – Installation-Accountable Government Property
IAM - Integrated Asset Management
IATA – International Air Transport Association
IAV – Inventory Adjustment Voucher
IAW - In accordance With
ICAO – International Air Transport Association
ID - Identification
IDA - Interface Definition Agreements
IDIQ - Vol 4 Amendment 4 PG 18
IEMP – Integrated Enterprise Management Program
IFMP - Integrated Financial Management Program
IFMS – Interagency Fleet Management System
IH – Industrial Health or Industrial Hygiene
IM – Inventory Manager or Item Manager
IMM – USPS International Mail Manual
IMO – International Maritime Organization
IPGP - Installation Provided Government Property
IRCET – International Registry for Continuing Education in Training
IRIS – Incident Reporting Information System
IRS- Internal Revenue Service
IRT- In Regards to
ISC – Information Systems Contract
ISO – The International Organization for Standardization is a world-wide federation of national Standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for whom a technical committee has been established has the right to be represented on that committee.
IT – Information Technology

ITD – Inception to Date
ITS - Information Technology Security
IVTEL – Inventory of Vertical Transportation Equipment List

-J-

JCP – Joint Commission on Printing
JFMIP - Joint Financial Management Improvement Program

-K-

Kv - Kilovolt
kWh- Kilowatt-Hour

-L-

LA - Louisiana
LAU – Log Add User
LC - Local Contractor
LCC- Life-Cycle Costs
LCD- Liquid Crystal Display
LDE - Lifting Devices and Equipment
LEED/EB – Leadership in Energy and Environmental Design / Existing Building
LEED/NC – Leadership in Energy and Environmental Design / New Construction
LEPC - Local Emergency Planning Commission
LF - Linear Feet
LLIS – Lessons Learned Information System
LMSO - Lockheed Martin Stennis Operations
LS - Logistics/Support
LWU- Log Withdraw User Management System

-M-

M – Monthly
MA - Program Management
MAA- Mutual Aid Agreement
MAD – Maximum Allowable Deficiencies
MADR - Maximum Allowable Defect Rate
MAS- Management Accounting System
MASS – Management Accounting and Statusing System
MAXIMO- CMMS
MBC – Modular Building Controller
MDEQ – Miss Department of Environmental Quality
MF - Manning and Financial
MI - Maintenance Instructions
MICS - Management Information Control System
MIL/FED – Military/Federal
MIN- Minute
MIVN – Mississippi Interactive Video Network Classroom
MMG- NASA SSC Mail Management Guide

MO - Monthly
MPCo – Mississippi Power Company
MR – Material Request (Form SSC 21)
MRB - Material Review Board
MRO- Maintenance, Repair and Overhaul
MS - Mississippi
MSAAP – Mississippi Army Ammunition Plant
MSDH – Mississippi State Department of Health
MSDS – Material Safety Data Sheet
MSDs - Musculoskeletal Disorders
MT - Mission Oriented Training
MTS- Maintenance Task Sheet
MUP- Master Utility Plan

-N-

NAIS - NASA Acquisition Internet System
NARA - National Archives and Records Administration
NASA – National Aeronautics and Space Administration
NASA MMG – NASA SSC Mail Management Guide
NASA PTD-OI– NASA Propulsion Test Division Operating Instruction
NAVOCEANO – Naval Oceanographic Office
NDBC – National Data Buoy Center
NDE – Non-Destructive Evaluation
NDT – Non-Destructive Testing
NECPA - National Energy Conservation Policy Act
NEEIS – NASA Education Evaluation Information System
NEMS – NASA Equipment Management System
NEPA – National Environmental Policy Act
NETS – NASA Environmental Tracking System
NFPA – National Fire Protection Association
NFS – NASA Far Supplement
NG - Natural Gas
NIOSH - National Institute of Occupational Safety and Health
NIPS - NASA Interactive Planning System
NISPOM – NASA Handbook National Industrial Security Program Operations Manual
NIST/NVLAP - National Institute of Standards and Technology/National Volunteer Laboratory Accreditation Program
NLT- No Later Than
NMI- NASA Management Instruction
NO – New Orleans
NO2- Nitrite
NOSC - NASA On-Line Supply Catalog
NPD – NASA Policy Directives
NPDES – National Pollutant Discharge Elimination System
NPDMs – NASA Property Disposal Management System
NPDS - NASA Property Disposal System

NPG – NASA Procedures and Guidelines
NPR- NASA Procedural Requirements
NPS - Nonconforming Products and/or Services
NRC – National Response Center or Nuclear Regulatory Commission
NRL – Naval Research Laboratory
NRRS – NASA Records Retention Schedules
NSMS – NASA Supply Management System
NSN – National Stock Number
NSO- NASA Safety Office
NTV- NASA Television
NVLAP - National Voluntary Lab Accreditation Program

-O-

O&M – Operations and Maintenance
OAC - Other Accumulated Cost
OCA- Original contract amount
ODC- Other Direct Costs
ODIN - Outsourcing Desktop Initiative
OEM – Original Equipment Manufacturer
OHP - Occupational Health Program
OHS - Occupational Health Services
OJT- On-the-Job-Training
OM – Occupational Medicine
OMB- Office of Management and Budget
OMP - Occupational Medicine Program
ONR- Office of Naval Research
ORD- Observed Defect Rate
OS&D – Overages, Shortages, and Damages
OSH – Occupational Health Services
OSHA - Occupational Safety and Health Administration
OT – Over Time
OWCP - Office of Worker’s Compensation Program

-P-

P&L – Profit and Loss
P&T – Pump and Treat
P2 – Pollution Prevention
PAM – Proactive Maintenance
PAO – Public Affairs Office
PAOM – Public Affair Operations Manual
PBC- Performance-Based Contracting
PC - Per Contract, Personal Computer, or Procurement Contracts
PCB- Polychlorinated Biphenyl
PCBs - Polychlorinated Biphenyls
PCM - Phase Contrast Microscopy
PD - Per Defect

PDF- Portable Document File
PDT- Procurement Development Team
PE - Per Event
PER- as you
PES – Preliminary Environmental Survey
PF - Per Facility
PG - Page
PHOS Urine – Urine phosphorus
PI - Per Equipment End Item
PJ - Per Project
PKLOT - Parking Lot
PL - Per Launch
PLC – Programmable Logic Controller
PLM - Polarized Light Microscopy
PM – Preventive Maintenance
PMA- President’s Management Agenda
PME- Purpose Mobile Equipment
PMP – Project Management Plan
PO – Purchase Order
POC- Point of contact
POL –Petroleum, Oils, and Lubricants
POP - Program Operating Plan
PP&E - Property, Plant, and Equipment
PPE - Personal Protective Equipment
PPD – Purified Protein Derivative Tine Test
PRACA – Problem Reporting and Corrective Action
PRB- Postretirement Benefits
Product – For the purpose of this contract the term “Product” is also used to denote “service”, as appropriate
PRS – Performance Requirement Summary
PS - Per System
PSA- Prostate-Specific Antigen
PT - Per Test
PT&I – Predictive Testing and Inspection
PV - Per Vehicle
PWS- Performance Work Statement

-Q-

Q – Quarterly
QA – Quality Assurance
QASP - Quality Assurance Surveillance Plan
QATAP – Quality Assurance Through Attributes Program for Printing and Binding
QC – Quality Control
QMS – Quality Management System
QU - Quarterly

-R-

R&U – Redistribution and Utilization
RA - Reliability and Quality Assurance
RCM – Reliability Centered Maintenance
RCRA – Resource Conservation and Recovery Act
RD - As Released
REC – Record of Environmental Consideration
RES- Resident Agency
RF - Radio Frequency
RFB- Request for Bid
RFP- Request for Proposal
RFQ- Request for Quote
RM - Room
ROD – Report of Discrepancy
ROI- Replacement of Obsolete Items
ROM- Rough Order Magnitude
ROW – Right-of-Way
RPM- Rounds Per Minute
RPR/Serology – Rapid Plasma Reagin
RS - Remote Sensing
RSO - Radiation Safety Officer
RT - One Time and Revisions
RTQ – Response to Queries

-S-

S – Semi-Annually
S&H – Safety and Health
S&MA - NASA Safety and Mission Assurance
SA - Safety/Health
SA - Semiannually (Every 6 months)
SARA – Super fund Amendments Reauthorizations Act
SB – Small Business or Supply Bulletin
SBA- Small Business Administration
SC - Schedules
SCA- Service Contract Act
SCADA - Supervisory Control and Data Acquisition
SCAR – Stennis Corrective Action Report
SCBA – Self Contained Breathing Apparatus Program
SCD – Specification Control Drawing
SCU – System Control Units
SDB – Small Disadvantaged Business
SDWA – Safe Drinking Water Act
SEB- Source Evaluation Board
SEMO – Supply and Equipment Management Officer
SEWP - Science and Engineering Workstation Procurement
SF - Standard Form

SFM – Simplified File Maintenance
SFUSS – Structures, Facilities, Utilities, Systems/Subsystems
SGR- Statement of General Requirements, SSC Form 164
SHPO – State Historical Preservation Office
SIC- Standard Industrial Classification
SIES - Surveillance, Inspection, Engineering Services
SLP- System Leveling Procedure
SMAW - Shielded Metal Arc Welding
SMJ – Supplemental Medical Jacket
SOMRD – Systems Operations Maintenance Responsibility Database
SOP – Standard Operating Procedure
SORD - Site-wide Oriented Repair Documentation
SPD- SSC Policy Directives
SPECSINTACT- The automated specification processing system used by NASA
SPG- SSC Procedures and Guidelines
SPLC- Self-Pace Learning Center
SPME – Special Purpose Mobile Equipment
SQ - Square Feet
SR&QA - Safety, Reliability and Quality Assurance
SRSC - Space Remote Sensing Center
SSA- Source Selection Authority
SSC- Stennis Space Center
SSME - Space Shuttle Main Engine
STE- Special Test Equipment
SUBTTL- Sub Total
SWALK - Sidewalk
SWPPP - Site Storm Water Pollution Prevention Plans
SWR – Stennis Work Request (Form SSC 704)

-T-

T&M- Time and Material
TBD – To Be Determined
TBDC – To Be Determined by the Contractor
TCP- Total Compensation Plan
TCRS - Training Certification Records System
Tech Doc- Technical Document
TIBC - Iron binding capacity
TIN- Taxpayer Identification Number
TREND - The Technology, Research, Education and Discovery 2000 Center
TRI – Toxic Chemical Release Inventory
TRL – Technical Reference Library
TSCA – Toxic Substance Control Act
TSD- Treatment, Storage and Disposal
TSDF - Treatment, Storage and Disposal Facility
TV - Television
TY - Three Per Year

Type/RH – ABO grouping and Rh factor typing

-U/V

UC – Unitary Controller

UPP – Utility Process Plan

UPS- Uninterruptible Power Supplies

UR - Upon Request

USAI - United Services Associates, Inc.

USEPA - United States Environmental Protection Agency

USF&WS – United States Fish and Wildlife Service

USGS – United States Geological Survey

USM – University of Southern Mississippi

USPS – United States Postal Service

USPS - United States Postal Service USPS DMM- U.S. Postal Service Domestic Mail Manual

USPS IMM- U.S. Postal Service International Mail Manual U.S. Poster 103 Postage Rates, Fees, and Information. Postal Zone Charter U.S. Publication 28, “Postal Addressing Standards”.

UST –Underground Storage Tank

UV - Ultra Violet

VAV – Variable Air Volume

VIP – Very Important Person or Party

VITS - Telecons and Videoteleconferences

VTOC - Volume Table of Contents

-W/X/Y/Z-

W- Weekly

WAR- Weekly Assessment Report or Weekly Activity Report

WBC/Diff- White Blood Cell Count with Differential

WBS- Work Breakdown Structure

WDETI - Workforce Development Education and Training Initiative

WIP- Work in Progress

WK - Weekly

WMD - Weapons of Mass Destruction

WOB- Women-Owned Business

WOSB – Women-Owned Small Business

YOM- Year of Make

ZPP – Lead, Protoporphyrin – Blood lead, free erythrocyte

ZPP - Lead- Zinc Protoporphyrin

PART I – THE SCHEDULE

SECTION B

SUPPLIES OR SERVICES AND PRICE/COSTS

SUPPLIES OR SERVICES AND PRICE/COST**B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED**

(a) The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to provide Facility Operating Services at the John C. Stennis Space Center (Stennis Space Center) in support of the National Aeronautics and Space Administration (NASA) and other Resident Agencies at the Stennis Space Center in accordance with the provisions of the Schedule Article C.1, Scope of Work.

(b) General Information: This is a performance based Cost-Plus-Incentive-Fee, Award Term contract which contains incentive features for cost, performance, as well as incentive features for additional periods of performance or Award Terms (Schedule Articles B.4, B.5 and B.6).

(c) Incentive Fees for Cost and Performance: An incentive fee arrangement will be applied based on actual cost as compared to negotiated target cost. An incentive fee arrangement will be applied for performance, based on performance requirements stated in the Performance Requirement Summary (PRS) identified in each Annex of Section J, Attachment J-1. Performance and cost will be computed for an annual period over the term of the contract in accordance with the Cost and Incentive Fee Plan set forth in Section J, Attachment J-3. The Government reserves the right to unilaterally change the frequency of the measurement periods.

(d) Separately Priced Award Term(s): Pursuant to Schedule Article G.10 titled "Award Term – Terms and Conditions", the Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the services described under Award Term Period(s) 1-7 in accordance with the Schedule Article C.1.

(e) Target Cost: Target cost, as reflected in this contract, includes cost for materials inventory (e.g., stores stock) and equipment. However, any overrun/underrun related to these costs will be excluded from the computation in determining the cost incentive fee.

(End of Clause)

B.2 ESTIMATED COST AND INCENTIVE FEE (NFS 1852.216-84) (OCT. 1996)

PLEASE SEE SUMMARY TABLE BELOW FOR CONTRACT VALUE CHANGES

(a) The total target cost of this contract is \$530,562,511. The total target fee of this contract is (b)(4). The total target cost and target fee, as contemplated by the Target Cost Incentive Fee clause, Schedule Article B.4, of this contract, are (b)(4).

The maximum fee is (b)(4).

The minimum fee is \$ 0.00.

The cost sharing ratios for cost underruns will vary based on percentage of performance incentive fee earned in accordance with the Cost and Performance Incentive Fee Plan, Attachment J-3.

The cost sharing ratio for cost overruns is 80/20.

(b) The breakout of target cost and fee is as follows:

PHASE-IN PERIOD

The total reimbursable cost for the phase-in period shall not exceed \$350,000.

BASIC PERIOD

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
08/28/07 – 08/27/08						\$ _____	\$ <u>65,163,586</u>
08/28/08 – 08/27/09						\$ _____	\$ <u>58,611,413</u>
08/28/09 – 08/27/10						\$ _____	\$ <u>56,611,152</u>
Total						\$ _____	\$ <u>180,386,151</u>

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

TARGET COST AND INCENTIVE FEE APPLICABLE TO EACH AWARD TERM PERIOD:

AWARD TERM PERIOD 1

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
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08/28/10 – 08/27/11 \$ _____ \$ 55,476,553

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

AWARD TERM PERIOD 2

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
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08/28/11 – 08/27/12 \$ _____ \$ 52,135,861

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

AWARD TERM PERIOD 3

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
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08/28/12 – 08/27/13 \$ _____ \$ 53,042,251

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

AWARD TERM PERIOD 4

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
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08/28/13 – 08/27/14 \$ _____ \$ 53,733,842

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

AWARD TERM PERIOD 5

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
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08/28/14 – 08/27/15 \$ _____ \$ 54,533,660

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

AWARD TERM PERIOD 6

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
08/28/15 – 08/27/16						\$ _____	\$ <u>55,384,064</u>

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

AWARD TERM PERIOD 7

<u>Period Covered</u>	<u>Target Cost</u>	<u>Target Cost Incentive Fee</u>	<u>Minimum Cost Fee</u>	<u>Maximum Cost Fee</u>	<u>Performance Incentive Fee</u>	<u>Reimbursements</u>	<u>Total</u>
08/28/16 – 08/27/17						\$ _____	\$ <u>56,380,490</u>

Note: Total = Target Cost + Target Cost Incentive Fee + Performance Incentive Fee - Reimbursements

B.3 CONTRACT FUNDING (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 \$ 2,530,497.40. This allotment is for Facility Operating Services at the John C. Stennis Space Center and covers the following estimated period of performance: August 28, 2007 through September 8, 2007.

(b) An additional amount of \$ (b)(4) is obligated under this contract for payment of Performance Incentive Fee and \$ (b)(4) for Cost Incentive Fee.

(c) Recapitulation of funding is as follows:

	<u>Previous</u>	<u>This Action</u>	<u>Total</u>
Phase in Cost	\$ _____	\$ <u>(b)(4)</u>	\$ <u>(b)(4)</u>
Target Cost	\$ _____	\$ <u>2,530,497.40</u>	\$ <u>2,530,497.40</u>
Provisional Incentive Fee			
Cost	\$ _____	\$ <u>(b)(4)</u>	\$ <u>(b)(4)</u>
Performance	\$ _____	\$ _____	\$ _____
Earned Incentive Fee	\$ _____	\$ _____	\$ _____
Total Sum Allotted	\$ _____	\$ <u>(b)(4)</u>	\$ <u>(b)(4)</u>

B.4 TARGET COST INCENTIVE FEE (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 costs of this contract as initially negotiated, adjusted in accordance with paragraph (d) below.

(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 of (b)(4) increased by (Refer to Cost and Performance Incentive Plan, Section J, Attachment J-3) cents (underruns) for every dollar that the total allowable cost is less than the target cost or decreased by (\$.20) cents (overruns) for every dollar that the total

allowable cost exceeds the target cost. In no event shall the fee be greater than or less than \$ 0 .

(b)(4)

*See Schedule Article B.1. (e)

(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 clauses covered by the Excusable Delays clause to the extent that they are beyond the control and without the fault of 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)

B.5 TARGET PERFORMANCE INCENTIVE FEE

The target Performance Incentive Fee shown in Schedule Article B.2 shall be apportioned among Annexes 1-6 (see Section J, Attachment J-1) according to the following percentages:

Annex 1	20%
Annex 2	15%
Annex 3	20%
Annex 4	10%
Annex 5	25%
Annex 6	10%

The Government retains the right to make equitable adjustments to the weights for each Annex.

(End of Clause)

B.6 PERFORMANCE REQUIREMENTS SUMMARY (PRS) AND PERFORMANCE BASED INCENTIVE FEE COMPUTATION

The purpose of the Performance Requirements Summary (Section J, Attachment J-1) is as follows:

(a) PRS Column 2 list contract requirements for each Annex & PRS Column 3 list applicable weights for contract requirements for each Annex.

(b) PRS Column 4 defines the surveillance methods by which the Government will determine the acceptability of the work performed by the Contractor. Surveillance methods are identified in Schedule Article E.3. When surveillance efforts indicate that the Contractor's observed deficiencies have exceeded the Maximum Allowable Deficiencies (MAD), the Contractor will be notified and shall take appropriate action to ensure that performance returns to the established standard. In addition, fee implications are defined in Attachment J-3, Cost and Performance Incentive Plan.

(c) PRS Column 5 defines the work requirements or performance indicators for each specified contract requirement.

(d) PRS Column 6 specifies the weight attributable to each listed work requirement in Column 5.

(e) PRS Column 7 defines the standard of performance for each specified work requirement.

(f) PRS Column 8 defines the MAD for each work requirement. The MAD reflects the percentage of the work or the number of occurrences that, if found unacceptable during the surveillance period, reflects the point where the Contractor's quality control program becomes unsatisfactory to the Government. Since performance measurements will be computed quarterly, the MAD represents a quarterly percentage or number of occurrences. However, there will be exceptions where some work requirements will require a yearly assessment. The MAD will be annotated as such.

(End of Clause)

B.7 PERFORMANCE AND COST INCENTIVES

The Contractor may earn Performance and Cost Incentive Fees, as identified in Schedule Article B-2, for work outlined in each Annex Performance Requirement Summary of the Performance Work Statement in Section J, Attachment J-1, with overall annual incentive fee payments for performance and cost considerations.

(End of Clause)

B.8 PAYMENT OF FEES

(a) For total Earned Cost and Performance Incentive Fees, the Contractor will be evaluated annually, at the end of the first 12-month period after contract award. The Contracting Officer and the Contracting Officer's Technical Representative will compute the fee amount based on the Contractor's performance in accordance with the Performance Requirements Summary of Section J, Attachment J-1, Performance Work Statement, and Attachment J-3, Cost and Performance Incentive Fee Plan.

(b) The Government will advise the Contractor in writing of the fee computation. The Contractor is required to submit a separate voucher for earned fee in accordance with Schedule Article G.2.

(c) Fee that is not earned in a measurement period cannot be reallocated to future measurement periods.

(d) Up to eighty five percent (85%) of the potential total incentive fee may be provisionally paid to the Contractor in periodic installments based upon the quality of performance and/or percentage of work completed as determined by the Contracting Officer. In the event that the earned incentive fee, as determined by the Contracting Officer and the Contracting Officer's Technical Representative, is less than the provisional payments for the period, the Contractor will reimburse the difference by submitting a separate voucher entitled "Incentive Fee Adjustment" for the amount of such overpayment. In the event that the incentive fee earned is more than the provisional payments, the Contractor may bill in one lump sum the difference between the incentive fee earned and the provisional fee payments made during each contract year by submitting a separate fee voucher.

(e) In the event this contract is terminated prior to a regularly scheduled annual measurement period, the incentive to be paid the Contractor may be an appropriate portion of the potential incentive fee, if any, as may be determined by the Contracting Officer and the Contracting Officer's Technical Representative. Any overpayment in provisional incentive fee will be credited on the next cost voucher submitted.

(f) The amounts of cost and performance incentive fees which have been awarded pursuant to the provisions of this clause and the period to which said fee applies are set forth below:

<u>Incentive Fee Period</u>	<u>Performance Incentive Fee Earned</u>	<u>Cost Incentive Fee Earned</u>	<u>Total Incentive Fee Earned</u>
08/28/07 – 08/27/08	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/08 – 08/27/09	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/09 – 08/27/10	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/10 – 08/27/11	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/11 – 08/27/12	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/12 – 08/27/13	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/13 – 08/27/14	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/14 – 08/27/15	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/15 – 08/27/16	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>
08/28/16 – 08/27/17	\$ <u>TBD</u>	\$ <u>TBD</u>	\$ <u>TBD</u>

(End of Clause)

B.9 SPECIAL COST PROVISIONS

Without otherwise affecting the applicability of the cost principles set forth in FAR Part 31 and pursuant to the terms of the contract clause entitled "Allowable Cost and Payment," the contractor shall be reimbursed for such actual and allowable expenditures incurred in the performance of work required by this contract as may be approved by the Contracting Officer subject to the following limitations and provisions:

(a) Exempt Labor Rates

Subject to the following, the overall Labor rates for Exempt Personnel will not increase during the Basic period and Award Term periods without the prior written approval of the Contracting Officer. For Award Term periods 1 through 7, labor rate increases for Exempt personnel will not exceed three (3) percent per year without prior approval of the Contracting Officer.

(b) Fringe Benefits

The contractor shall inform the Contracting Officer of all proposed changes in fringe benefits which may result in an increased cost to the contract as soon as practicable but, in any event, prior to such changes being implemented. Fringe benefits include, but are not limited to, such items as health insurance, life insurance, pension plans, retiree health care, savings plans, bonus plans, education assistance, and leave policies. Failure to comply with the terms of this clause may result in the disallowance of costs.

(c) Incentive Compensation for Direct/Indirect Employees

Incentive compensation in excess of ~~\$-0-~~ for all Contract Years for all direct and indirect employees, including cash bonuses (excluding suggestion and safety awards), shall not be an allowable direct or indirect costs under this contract. The contractor shall provide a summary of incentive compensation for each contract year to the Contracting Officer and Corporate Administrative Contracting Officer within 60 days after the end of the prior year.

(d) Bonuses to Hourly Employees

As a result of paying “bonuses” to hourly employees, the contractor is required under 29 CFR Section 778.208 of the Fair Labor Standards Act to recalculate base rates for purposes of determining overtime pay for the period covered by the bonus payment. This will result in an additional one time, retroactive payment for overtime worked during the period. Such retroactive payments shall not be considered allowable costs under this contract.

(e) Transfer of Benefits

The successful Offeror shall accept transfer of accrued sick leave hours of personnel hired from the incumbent Contractor at SSC without a break in service in excess of 60 days from the predecessor contract. Additionally, the successor offeror shall recognize the accrued vacation hours, earned through seniority, of personnel hired from the incumbent contractor without a break in service in excess of 60 days from the predecessor contract. Upon conclusion of this contract the successful offeror shall transfer accrued vacation and sick leave hours of personnel hired by successor contractor. Continuous service accumulated with prior SSC/FOS contractors will be counted in determining the amount of vacation for which an employee is eligible. In all other cases, service for vacation purposes will date from the employee’s date of hire by the company.

(f) Premiums for Scheduled Overtime

Pursuant to the clause entitled “Payment for Overtime Premiums,” the amount of overtime premium authorized shall not exceed the amount specified below for the indicated period.

<u>Amount</u>	<u>Period</u> (See Clause I.5)
\$330,365	08/28/07 – 08/27/08
\$342,678	08/28/08 – 08/27/09
\$353,645	08/28/09 – 08/27/10
\$364,606	08/28/10 – 08/27/11
\$369,622	08/28/11 – 08/27/12
\$375,746	08/28/12 – 08/27/13
\$380,141	08/28/13 – 08/27/14
\$385,268	08/28/14 – 08/27/15
\$391,741	08/28/15 – 08/27/16
\$398,297	08/28/16 – 08/27/17

(g) Severance Pay

Severance pay reimbursement shall be in accordance with the provisions of FAR Part 31.205-6(g). However, in no event shall the Government reimburse the Contractor for the cost of severance pay for any individual Contractor employee who voluntarily elects to stay in place and work for a succeeding Contractor. This provision shall apply to any extension of this contract.

(h) Relocation Costs

Reimbursement for relocation costs shall be in accordance with the provisions of FAR Part 31.205-35. It is mutually agreed that upon expiration or termination of this contract, the Contractor shall not be entitled to reimbursement under this contract for cost of relocating employees to their “home” site or any other gaining contracting activity. No relocation costs will be reimbursable under this contract for employees whose residence at time of hiring was within a sixty-(60) mile radius of John C. Stennis Space Center.

(i) Travel Costs

The Contractor shall be reimbursed for reasonable and allowable lodging and subsistence costs incurred for official travel only to the extent that they do not exceed the maximum rates authorized by the Federal Travel Regulations (FTR) at the following web address: <http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8199&channelId=-14863>. Travel shall be by direct air tourist/economy class or private vehicle. Reimbursement for travel costs shall be in accordance with the provisions of FAR 31.205-46 and the Contractor’s travel policies and procedures

(j) Vehicle Costs

General-purpose vehicle cost shall be approved by the SSC Transportation Officer and not exceed GSA lease amounts.

(k) Government Property

(1) Installation Accountable Government Property (IAGP)

The Government will make available IAGP identified in Attachment J-10 – List of Government Property, with class exceptions as identified in Section G, Article G-6.

(2) The estimated dollar value of IAGP Attachment J-10, List 2 – IAGP (Class Exceptions)

	<u>Value of Equipment</u>	<u>Repair Value</u>	<u>Replacement Value</u>
Contract Year 1	\$401,163	\$50,000	\$413,198
Contract Year 2	\$356,163	\$50,000	\$366,848
Contract Year 3	\$311,163	\$50,000	\$320,498
Contract Year 4	\$266,163	\$30,000	\$274,148
Contract Year 5	\$221,163	\$30,000	\$227,798
Contract Year 6	\$176,163	\$30,000	\$181,448
Contract Year 7	\$131,163	\$30,000	\$135,098
Contract Year 8	\$86,163	\$20,000	\$88,748
Contract Year 9	\$41,163	\$20,000	\$42,398
Contract Year 10	\$-	\$-	\$-

B.10 INDIRECT COST CEILING/PROVISIONAL BILLING RATES

(a) Indirect Cost Ceiling Rates

(1) Final payment for Overhead, Fringe, and G&A costs shall be based on the application of the actual DCAA final audited rates, but shall not be in excess of the following ceilings:

Contract Year (CY)	Overhead Ceiling	Overhead Base Description	G&A Ceiling %	G&A Base Description	Fringe Rate	Fringe Base Description
CY1						
CY2						
CY3						
CY4						
CY5						
CY6						
CY7						
CY8						
CY9						
CY10						

(2) The Overhead ceiling rates, G&A ceiling rates and fringe rates combined for contract years 1 through 10 are rates for the total indirect expenses and total contract cost bases for the 10 one-year periods specified. Rates may vary within the individual years.

(3) Increased indirect costs during the term of this contract that result from such items as statute, court decisions and /or written rulings or regulations by the Internal Revenue Service or other taxing authority may be cause for adjustment of the indirect ceiling affected. Any request for an upward adjustment for a ceiling rate will be approved at the sole discretion of the Contracting Officer.

(4) Notwithstanding the above, underruns from one Contract Year shall not be applied to overruns of an other Contract Year. All costs in excess of the said indirect ceilings are not reimbursable under this or any other Government contract.

(5) Specific cost elements (or accounts) that comprise the Overhead or G&A expense pools and cost bases which are subject to the above agreed upon ceiling are itemized and described on Attachment B of this contract. The Contractor shall advise the NASA Contracting Officer of any planned or approved accounting changes that would impact the subject Overhead, G&A, and Fringe Rates and demonstrate how the changes will impact negotiated ceilings. The NASA Contracting Officer at their sole discretion may agree to change the rate ceiling(s), if appropriate. Where accounting changes have the effect of moving costs from one expense pool to another that potentially results in a circumvention of a rate ceiling(s), the NASA Contracting Officer at their sole discretion agree to only those rate changes that either have no effect on or decrease the net effective cost chargeable to the contract.

(b) Provisional Indirect Billing Rates:

(1) For Indirect expenses and G&A expenses, the Contractor may submit interim billings based on actual, cumulative pool costs not to exceed the lesser of the ceiling rates or the cognizant Government auditor-approved provisional billing rates.

(2) To prevent substantial over or under payment (except where a ceiling is reached) the provisional billing rates shall be reviewed at least annually by the Contractor. Whenever actual rates vary by 10% or more of the current billing rate, the Contractor shall propose revisions for the NASA Contracting Officer's approval. Proposed revisions are subject to review by Government auditors.

(c) Contract Adjustments

Under this contract, there will be recurring work that is of an unpredictable nature in terms of the timing of the work. However, this work is included in the baseline requirements. The Government's objective is to have the PWS performed in the most efficient manner possible, consistent with the furnishing of high quality services. One means of achieving this objective is to minimize changes, and thus reduce or eliminate the administrative costs to both parties that are caused by issuing, pricing, and negotiating changes. The Contract adjustment

provision set forth herein is intended to achieve that objective, while at the same time compensating the contractor fairly for the furnishing of services that are within a reasonable range of the baseline work (including workload sizing data and metrics) projected to be performed under the Contract. Therefore, notwithstanding the provisions of the Changes clause of this contract, no change made pursuant to the changes clause shall give rise to an equitable adjustment in the estimated cost or fee when said change causes an increase or decrease of \$100,000 or less in the estimated cost of this contract during the contract year. The parties recognize that several changes may be grouped together in a bilateral contract modification for definitization.

(End of Clause)

PART I – THE SCHEDULE

SECTION C

DESCRIPTION/SPECIFICATION/WORK STATEMENT

DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK**C.1 SCOPE OF WORK**

(a) The Contractor shall furnish the necessary management, labor, facilities, materials, and equipment (except as specified to be furnished by the Government) and do all things required to provide Facility Operating Services to the John C. Stennis Space Center and Resident Agencies as expressly provided in Sections A through J, inclusive, and in the Performance Work Statements (Attachment J-1), attached hereto and hereby made a part of this contract.

(b) The Performance Work Statements (Annexes) are performance-based and stated in specific measurable output. The Contractor's obligations may include resolution of unusual or emergency situations which may occur from time to time throughout the period of performance.

(c) Work will be directed by the Government using Stennis Work Requests in accordance with NASA/SSC Common Work Instruction SCWI – 5100-0001. These services will be considered within the general scope of the contract, and will not constitute nor be construed as a change within the meaning of the clause of this contract entitled "Changes—Cost Reimbursement—Alternate II". However, if any written direction by the Government through Stennis Work Requests (SWRs) is considered by the Contractor to be outside the scope of contractual obligation, the Contractor, before performing any effort pursuant to such Government direction, shall refer such questions to the Contracting Officer for resolution.

(End of Clause)

C.2 GOVERNMENT DIRECTED COST

(a) In performing the services set forth in Attachment J-1, Performance Work Statements, the Government provides directed dollar amounts for the cost categories of material/equipment purchases, construction services, and GSA/leased transportation.

In determining the amounts chargeable to the total "Material/Equipment Purchases", the cost (dollars) is the amount paid for materials and equipment excluding cash discounts and transportation cost on purchases made F.O.B. origin.

In determining the amounts chargeable to the total "Construction Services" of this contract, the cost (dollars) is the total cost for performance of construction work covered in Attachment J-1.

The amounts of chargeable costs to Government-Directed "Material/Equipment Purchases" shall not include relocation, training, tuition reimbursement or severance pay, but does include contract-related travel.

(b) If at any time during the performance of the contract the amounts necessary to perform the work would exceed the dollar amounts of the contract, the Contractor will notify the Contracting Officer and furnish estimates of the additional amounts required. Any claim for an equitable adjustment for such an increase must be submitted within sixty (60) days after notification to the Contracting Officer.

The Government may, at its option, increase or decrease the directed dollar amounts. If the Government desires to increase or decrease these dollar amounts, such an increase or decrease may result in an equitable adjustment in the contract value.

[END OF SECTION]

PART I – THE SCHEDULE

SECTION D

PACKAGING AND MARKING

PACKAGING AND MARKING**D.1 LISTING OF SECTION D CLAUSES INCORPORATED BY REFERENCE**

CLAUSES INCORPORATED BY REFERENCE (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 these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

1852.211-70 PACKAGING, HANDLING, AND TRANSPORTATION

SEPT 2005

(End of Clause)

D.2 PACKAGING AND MARKING

- (a) The Contractor shall pack and mark all hardware deliverables under this contract in accordance with the provisions of 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) Inbound shipments to the Contractor of contractor-acquired equipment and parts from all sources for the account of the Government shall be consigned to and marked as follows:
- Transportation Officer, NASA
FOS Contractor NNS _____
John C. Stennis Space Center
Stennis Space Center, MS 39529-6000
Mark for: * _____
- (c) The Contractor shall develop packaging, handling, and transportation records, if required, from engineering and packaging data. The Contracting Officer's Technical Representative is the approving official of the records and special packaging data in accordance with NPR 6000.1.
- (d) The Contractor's packaging specifications or procedures may be utilized if they are (i) not in conflict with NPR 6000.1 and (ii) approved in writing by the Contracting

Officer. In any conflict between NASA and the Contractor specifications or procedures, NPR 6000.1 shall take precedence.

- (e) The Contractor shall place identical requirements on all subcontracts.

*Contractor to insert the name, code and address of the consignee and, if appropriate, identifying contract or ordering number.

(End of Clause)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION E

INSPECTION AND ACCEPTANCE

INSPECTION AND ACCEPTANCE

E.1 LIST OF SECTION E CLAUSES INCORPORATED BY REFERENCE

CLAUSES INCORPORATED BY REFERENCE (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 these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

52.246-3	INSPECTION OF SUPPLIES – COST REIMBURSEMENT	MAY 2001
52.246-5	INSPECTION OF SERVICES – COST REIMBURSEMENT	APR 1984
52.246-16	RESPONSIBILITY FOR SUPPLIES	APR 1984

NASA FAR SUPPLEMENT (NFS 48 CFR CHAPTER 18)

1852.246-72	MATERIAL INSPECTION AND RECEIVING REPORT (Fill-in <u>3 copies</u> and <u>2 copies</u>)	AUG 2003
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(End of Clause)

E.2 GOVERNMENT CONTRACT QUALITY ASSURANCE FUNCTIONS (NASA FAR SUPPLEMENT 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.

<u>Item</u>	<u>Quality Assurance Function</u>	<u>Location</u>
All Services	Final Inspection	SSC
All Services	Acceptance	SSC

(End of Clause)

E.3 SURVEILLANCE METHODS

The Government may use a wide variety of surveillance methods to evaluate the Contractor's performance. The methods of surveillance that may be used include:

1. Record Review (RR). Plans, Reports and Schedules submitted by the contractor will be reviewed for content to confirm that contractual requirements are planned, scheduled and reported as properly completed. The contractor is also responsible for accurately reporting work that was either rescheduled or not completed. Work reported as not completed will be

recorded as deficiencies and an appropriate percentage of performance incentive earned will be computed.

2. Planned Inspections (PI). The QAE establishes a predetermined plan for inspecting all or part of the work. Determination of a sample size is subjective. The planned approach of inspecting for performance may or may not be shared with the contractor. All observed deficiencies are recorded and an appropriate percentage of performance incentive earned will be computed.
3. Unplanned Inspection (UPI). This method is an unplanned inspection, usually carried out in conjunction with inspections of other Contract Requirements or in an impromptu fashion. Unscheduled inspections may be a supplement to other methods of surveillance or could cover a Contract Requirement if it is a relatively non-critical requirement and does not require inspection immediately upon completion. Observed deficiencies will be recorded and an appropriate percentage of performance incentive earned will be computed.
4. Validated Customer Complaints (VCC). This method consists of customers observing deficiencies in the services they expect to receive and reporting these deficiencies to the QAE using a predetermined procedure. All reported potential deficiencies will be examined at the site by the QAE within a reasonable time (depends on the nature of service) and determined to be a valid deficiencies. All validated deficiencies are recorded and an appropriate percentage of performance incentive earned will be computed.

(End of Clause)

E.4 QUALITY MANAGEMENT SYSTEM/ANSI/ISO/ASQC Q9001-2000

The Contractor shall implement and maintain a NASA Quality Management System (ISO Standard 9001:2000) and SSC Environmental Management System (ISO Standard 14001). The Contractor shall also provide personnel to support the internal audit processes. See Annex 1 for additional ISO requirements.

(End of Clause)

E.5 QUALITY ASSURANCE SURVEILLANCE PLAN

A Quality Assurance Surveillance Plan (QASP) will be developed and implemented by the Contracting Officer's Technical Representative (COTR) as a part of the contract administration and monitoring activities conducted to assure that the Government receives products and services that conform to contract requirements. The nature and extent of quality assurance surveillance contemplated in this plan will be based on the specific content of the contractor's Quality Manual.

(End of Clause)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION F

DELIVERIES OR PERFORMANCE

DELIVERIES OR PERFORMANCE

F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

CLAUSES INCORPORATED BY REFERENCE (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 these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

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

(End of Clause)

F.2 PERIOD OF PERFORMANCE

(a) The basic period of performance of this contract shall be three years from August 28, 2007 through August 27, 2010.

(b) In the event the Contractor earns additional periods of performance pursuant to the terms of this contract (see Award Term Clause G.10, the period of performance for each Term shall be as set forth below:

Award Term Period 1	08/28/10 – 08/27/11
Award Term Period 2	08/28/11 – 08/27/12
Award Term Period 3	08/28/12 – 08/27/13
Award Term Period 4	08/28/13 – 08/27/14
Award Term Period 5	08/28/14 – 08/27/15
Award Term Period 6	08/28/15 – 08/27/16
Award Term Period 7	08/28/16 – 08/27/17

(End of Clause)

F.3 PLACE OF PERFORMANCE

The Contractor shall perform the work under this contract at the John C. Stennis Space Center, Stennis Space Center, Mississippi, and at such other locations as may be approved in writing by the Contracting Officer.

(End of Clause)

PART I – THE SCHEDULE

SECTION G

CONTRACT ADMINISTRATION DATA

CONTRACT ADMINISTRATION DATA

G.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

CLAUSES INCORPORATED BY REFERENCE (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 these addresses:

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NASA FAR SUPPLEMENT (NFS 48 CFR CHAPTER 18)

1852.223-71	FREQUENCY AUTHORIZATION	DEC 1988
1852.227-70	NEW TECHNOLOGY	MAY 2002
1852.242-73	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING	NOV 2004
1852.242-72	OBSERVANCE OF LEGAL HOLIDAYS ALTERNATE I (SEPT 1998) ALTERNATE II (OCT 2000)	AUG 1992
1852.245-70	CONTRACTOR REQUESTS FOR GOVERNMENT – OWNED EQUIPMENT	JULY 1997
1852.245-73	FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS	OCT 2003

(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 John C. Stennis Space Center
Financial Management Division
Stennis Space Center, MS 39529-6000

(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) 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.

DCAA mailing office (for submission of cost vouchers) address:

Mr. John Sack
DCAA Nashville Branch Office
1321 Murfreesboro Pike, Suite 302
Nashville, TN 37217-1337

(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;
- (v) Copy 5 Project Management Office

(3) Contracting Officer may designate other recipients are required.

(d) Public vouchers for payment of fee shall be prepared similarly and be forwarded to:

NASA John C. Stennis Space Center
Attn: Contracting Officer
Stennis Space Center, MS 39529-6000

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/Address (including zip code)
New Technology Representative	Technology Utilization Officer NASA/John C. Stennis Space Center Stennis Space Center, MS 39529-6000
Patent Representative	Chief Counsel NASA/John C. Stennis Space Center Stennis Space Center, MS 39529-6000

(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. Inquiries 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)”, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.375-3 of the NASA FAR Supplement.

(End of Clause)

G.4 RESERVED

G.5 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (NFS 1852.245-71) (NOV 2004)

(a) The Government property described in the clause at NFS 1852.245-77, List of Installation-Accountable Property and Services, shall be made available to the Contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property. This property shall be

utilized only in support of the FOS contract requirements. Under this clause, the Government retains accountability for, and title to, the property, and the Contractor assumes the following user responsibilities:

(1) Reporting any missing or untagged (meeting the criteria for NEMS control as defined in the series 4000, User's Guide for Property Custodians) equipment, transfer, location change, or user change of equipment to the cognizant property custodian.

(2) Notifying the cognizant property custodian, supervisor, and the Installation Security Officer immediately if theft of Government property is suspected.

(3) Ensuring that such equipment and materials are used only in pursuit of this contract. Other uses shall require approval of the Contracting Officer.

(4) In a timely manner, identify idle equipment not being actively used in pursuit of approved NASA programs and projects.

Ensuring that equipment is turned in to the Property Disposal Officer through the cognizant property custodian when no longer needed. Under no circumstances will an employee throw away Government equipment.

(5) At Installations with full-time property custodians, assigned users retain all responsibilities including notifying cognizant property custodian of all activity associated with the user's assigned equipment.

The contractor shall establish and adhere to a system of written procedures for compliance with these user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(6) Store stock materials may only be drawn for use in support of the FOS contract requirements.

(b) (1) The official accountable record keeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;

(ii) The contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area;

(iii) The contractor shall establish a record of the property as required by FAR 45.5 and NFS 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the contractor. The contractor is accountable for all contractor-acquired property until the property is transferred to the Government's accountability;

(iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the contracting officer and notification of the SEMO. The contractor shall assume accountability and financial reporting responsibility for such property. The contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(2) After transfer of accountability to the Government, the contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the contracting officer.

(End of Clause)

G.6 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NFS 1852.245-77) (JULY 1997)

In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space, work area space, and utilities. Government telephones are available for official purposes only; pay telephones are available for contractor employees for unofficial calls.

(b) General and special purpose equipment, including office furniture. (Refer to Article G-7)

(1) Property to be provided is listed in Attachment J-10.

- (i) List 1 – IAGP (No Class Exceptions)
- (ii) List 2 – IAGP (Class Exceptions)
- (iii) List 3 – IAGP Facilities
- (iv) List 4 – IAGP GSA Leased Vehicles
- (v) List 5 – IAGP Property Purchased/Depreciated Equipment

(2) 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 as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(3) 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 or duly authorized representative's prior written approval. The contractor shall not utilize the installation's central receiving station for receipt of Contractor-owned/leased property. The Contractor shall provide on a quarterly basis, a listing of contractor owned/leased property. This listing shall be provided to the Supply and Equipment Management Officer.

- (c) Supplies from stores stock.
- (d) Publications and blank forms stocked by the installation.
- (e) Safety and fire protection for Contractor personnel and facilities.
- (f) IAGP: [See Attachment J-10, List 3 Facilities].
- (g) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.
- (h) Cafeteria privileges for Contractor employees during normal operating hours.
- (i) Building maintenance for facilities occupied by Contractor personnel.
- (j) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.
- (k) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property. They are further defined in the following property management directives and installation supplements to these directives.

(1) Series 4200.1, NASA Equipment Management Manual.

(2) Series 4200.2, NASA Equipment Management System (NEMS) User's Guide for Property Custodians.

(3) Series 4300.1, NASA Personal Property Disposal Manual.

(4) Series 4100.1, NASA Materials Inventory Management Manual. SSC will provide the Contractor with all applicable regulations, handbooks, and other materials that may be required.

(l) Equipment and class of equipment identified in Attachment J-10, List 2 (Class Exceptions) is subject to Section G, Article G-7 and is provided only to the extent as originally provided to the Contractor for use in performance of this contract. Additional equipment or replacement of such equipment or class of equipment shall be Contractor furnished.

(m) Installation services facilities: Duplicating and copying; library, Official Mail Services, General use printers and digital postage meter.

(n) Disposal Services for excess on-site and off-site Contractor-held/Government-owned property.

(o) Fuels, oils, lubricants for vehicle and equipment operation.

(End of Clause)

G.7 REPAIR OR REPLACEMENT OF GOVERNMENT PROPERTY--SPECIAL CONDITIONS

(a) Notwithstanding any other provisions of the contract to the contrary, the Contractor agrees that the Government will not authorize the replacement of any Government property subject to paragraph (e) below or repair costs of any Government property item valued less than \$5,000 subject to paragraph (e) below as a direct reimbursable cost under this contract. Replacement shall be at no cost to the Government except as may be permitted by FAR 31.205-11, "Depreciation." However, the Government may authorize and reimburse the repair of defective Government property as stated in paragraph (b) below. If repair is not approved by the Contracting Officer, the Contractor agrees to replace any defective Government property with Contractor owned/leased property. Such property need not be identical to the replaced property. Further, replacement may be waived by the Contracting Officer provided the Contractor submits a written request and demonstrates to the satisfaction of the Contracting Officer that the capability to perform the contract in an acceptable and efficient manner is not degraded.

(b) In accordance with FAR clause 52.245-5, the Contractor is required to have an approved maintenance/repair program for all Government property. The criteria in this program shall be used to determine when the Contractor is required to request approval from the Contracting Officer for repair or replacement of Government property. The Government may reimburse the reasonable direct cost for the repair of Government property identified in paragraph (e) with a per item value greater than \$5,000.

To establish the end of economical life for items in paragraph (e) valued greater than \$5,000, the Contractor shall include in the maintenance/repair program a not-to-exceed dollar percentage number based on the original unit cost. As a standard, based on cumulative repair costs, upon

reaching the not-exceed percentage number, the Contractor will process the defective Government property for disposal and replace it with Contractor owned/leased property.

The Contractor must submit each repair request to the Contracting Officer until such time as the Contractor's repair/maintenance program has been approved by the Government. When the maintenance program requires the Contractor to inform the Contracting Officer of the need for a repair/replacement decision, the Contractor shall notify the Contracting Officer, in writing, and provide a "not-to-exceed" dollar amount for the repair of the property and a rationale as to why repair is in the best interest of the Government, considering age of the property, the nature of the defect(s), and the criticality of the property to the accomplishment of the contract requirements. If the Contracting Officer agrees that the property is required for contract performance and that repair is in the best interest of the Government, the Contracting Officer may authorize the repair. If the Contracting Officer considers that repair is not in the best interests of the Government, the Contracting Officer shall notify the Contractor. The replacement item shall be provided by the Contractor in accordance with paragraph (a) above. The availability or serviceability of Government property identified in paragraph (e) below shall not be a basis for non-performance of contract requirements.

(c) The Contractor shall maintain complete records of Contractor-owned or leased equipment, which is subject to this clause. Such records shall include item or model number, date of purchase, purchase price, depreciation schedule, and amount of depreciation recorded from time to time. The Contractor shall provide these records to the Contracting Officer promptly upon the latter's request, along with the Contractor's best estimate of the undepreciated balance of each item of equipment.

(d) The Contractor agrees that at the end of the contract performance period, and the Government does not thereafter contract with the same Contractor as the successor Contractor for the same or similar services contemplated by this contract, the Contractor shall, upon request by the Contracting Officer, transfer title of any Contractor owned or leased equipment identified in paragraph (c) above as identified by the Contracting Officer to either (1) the Government or (2) a successor Contractor. If a request for transfer of title to the Government is made, the Government agrees to recognize as allowable costs under the Contract, for identified equipment, so much of the cost of the equipment that has not been depreciated as of the end of the Contract performance period. If a request for transfer of title to a successor Contractor is made, the Contractor agrees to transfer title to identified equipment to the successor Contractor for an amount not to exceed the applicable residual balances, subject to reasonable terms and conditions regarding payment and other matters to be agreed upon by the parties.

(e) This clause (G.7) shall apply to the Installation Accountable Government Property as identified in the Department of the Army Supply Bulletin SB 708-21 "Federal Supply Classification" Part 1, Groups and Classes (January 1998)

Group 23: Class 2330 - Trailers

Class 2340 - Motorcycles, Motor Scooters and Bicycles

Group 24 Class 2420 - Trucks and Truck Tractors, Wheeled

Class 2440 - Tractors, Wheeled

Group 36: Class 3695 – Miscellaneous Special Industry Machinery

Group 37: Class 3710 - Soil Preparation Equipment

Class 3740 - Pest, Disease, and Frost Control Equipment

Class 3750 - Gardening Implements and Tools

Group 38: Class 3825—Road Clearing, Cleaning, and Marking Equipment

Group 42: Class 4210-Fire Fighting Equipment

Group 51: Class 5110 - Hand Tools, Edged, Nonpowered

Class 5120 - Hand Tools, Nonedged, Nonpowered

Class 5130 - Hand Tools, Power Driven

Class 5180 - Hand Tools, Sets, Kits, and Outfits

Group 74: Class 7420 - Accounting and Calculating Machines

Class 7430 - Typewriters and Office Type Composing Machines

Class 7450 - Office Type Sound Recording and Reproducing Machines

Class 7490 - Miscellaneous Office Machines

Group 79: Class 7910 – Floor Polisher and Vacuum Cleaning Equipment

(End of Clause)

G.8 SSC POLICY DIRECTIVES, PROCEDURES, AND GUIDELINES

NASA/SSC maintains a set of SSC Policy Directives (SPD) and SSC Procedures and Guidelines (SPG) and SSC Standards that govern many aspects of activity at SSC. The Contractor shall incorporate the most current provisions of applicable SPD's and SPG's and SSC Standards into all organization and planning for the performance of this contract and shall comply with the most current provisions during the term of the contract.

(End of Clause)

G.9 RESERVED

G.10 AWARD-TERM – TERMS AND CONDITIONS

In order to motivate excellent performance by the contractor, an Award-Term Incentive plan has been included in this contract. This plan will enable the contractor to earn additional period(s) of performance in compensation for achieving desired objectives at a high level of performance.

(a) **Period of Performance** - The basic three-year contract term may be extended on the basis of the Government’s determination of the excellence of the contractor’s performance, resulting in a contract period of performance lasting up to a maximum of ten years. These seven, one-year additional periods of performance, which are referred to herein as “Award-Terms,” are available for possible award to the contractor. As Award-Term(s) are awarded, each year of performance will be added to the end of the period of performance at the time of the Award-Term determination. The contract may end at the basic three-year period of performance if the Government determines that the contractor’s performance does not reflect a level of performance as described in the Award-Term Plan (Attachment J-13).

(b) **Award-Term Evaluation Factors** - Award-Term evaluation factors are defined in the Award-Term Plan. Any changes, deletions, or additions to the evaluation factors for a specific period may be made unilaterally by the Government and will be provided in writing to the contractor prior to the start of the Award-Term period.

The contractor’s performance to the defined Award-Term evaluation factors for the period will be the basis for the Government’s subjective determination of the contractor’s performance for awarding an additional Award-Term, if any. Award of an additional term is contingent upon the contractor meeting the cost gate as outlined in the Award-Term Plan.

(c) **Adjectival Rating** – The following rating system will be used for evaluation of Award Term:

Adjectival Rating	Range of Evaluation Rating	Description
Excellent	(91-100)	Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies 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 and economical manner for the most part; only minor deficiencies.
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, but not substantial, effects on overall performance.
Poor/Unsatisfactory	(less than 61)	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas which adversely affect overall performance.

(d) Cost Gate - The cost gate is a target that the contractor must meet before an additional term may be awarded. The cost gate is based on the negotiated cost baseline, as modified through contract changes, if any. The contractor must meet or under-run cost for the period before an award-term determination can take place. Calculation of the contractor's score to the cost gate is further detailed in the Award-Term Plan.

(e) Award-Term Incentive Distribution - The Contract has a base period of three (3) years with the potential to earn seven (7) one (1) year award terms. Contract Year 1 is a shadow year in that performance is evaluated once a year, but the evaluation does not determine if the contractor has earned an award term period. The shadow year is meant to resolve any transition issues associated with the new contract and/or new technical requirements without prejudice to the contractor.

Contract year 2 begins the award-term evaluations. A contractor must earn a Very Good adjective rating in Contract Year two (2) and an Excellent adjective rating starting year three (3) to earn one additional year, not to exceed a total contract period of performance of ten years. (As an example: the Contractor would earn Contract year four (4) with a Very Good rating of year two (2) performance and Contract year five (5) with an Excellent rating of year three (3) performance etc.

In the event that the Contractor earns a rating less than Very Good in year two or less than an Excellent in Contract years 3 or later, no additional term will be earned and the Government may recompetes the contract at the end of the Contract base period or previously earned Contract year(s). Additionally, in order to allow sufficient time for the Government to reprocure the FOSC services, the Government may require continued performance of any services within the limits and at the rates specified in the Contract for a period not to exceed 6 months from the end of the Contract base period or previously earned contract year(s).

(f) Award-Term Determinations - The Government will determine the contractor's adjective rating for the award-term period based on the contractor's performance against the Award-Term evaluation factors. At the end of each one year Award-Term evaluation, the Performance Evaluation Board (PEB) will make a recommendation to the Term Determination Official (TDO). The TDO will make the final Award-Term Determination in accordance with the Award-Term Plan. The contractor will be awarded Award-Term period of contract performance only if the following conditions are met:

- (1) The Contractor has met the cost gate;
- (2) The Government determines that the Contractor meets the performance criteria;
- (3) The Government has a continuing need for the requirement to be met;
- (4) Funds are available.

(g) Declining Earned Award-Term - Should the Contractor choose to decline an award-term period, notification shall be given to the Contracting Officer in writing no less than 18 months prior to the end of the contract's earned period of performance. The Contractor shall continue to perform to the required standards of the contract during this 18-month period.

(h) Contract Termination - The Government may terminate the contract for convenience or default in accordance with FAR 52.249-6, Termination (Cost Reimbursement), clause included in Section I, and nothing herein shall be considered in derogation of the Government's rights under that, or any other clause of this contract.

(i) Review Process - The Contractor may request a review of an annual award term decision. The request shall be submitted in writing to the Contracting Officer within 15 days after notification of the award term decision. The SSC Center Director will conduct any award term decision reviews.

(End of Clause)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION H

SPECIAL CONTRACT REQUIREMENTS

SPECIAL CONTRACT REQUIREMENTS

H.1 LISTING OF SECTION H CLAUSES INCORPORATED BY REFERENCE

CLAUSES INCORPORATED BY REFERENCE (FEB 1998):

This contract incorporated one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es)”

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES:

<u>Clause Number</u>	<u>Title</u>	<u>Date</u>
1852.208-81	RESTRICTIONS ON PRINTING AND DUPLICATING	NOV 2004
1852.223-70	SAFETY AND HEALTH	APR 2002
1852.223-75	MAJOR BREACH OF SAFETY OR SECURITY	FEB 2002
1852.225-70	EXPORT LICENSES	FEB 2000

(End of Clause)

H.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)

H.3 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

This contract incorporates Section K, Representations, Certifications, and Other Statements of Offerors, as set forth in the Contractor's signed proposal, by reference, with the same force and effect as if it were given in full text.

(End of Clause)

H.4 SMALL BUSINESS SUBCONTRACTING PLAN

(a) NASA's objective is to ensure the execution of a vigorous program at the prime contract and subcontract levels which will optimize the opportunity for subcontract participation of small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as defined in FAR 52.219-8.

(b) Pursuant to FAR clause 52.219-9 entitled "Small Business Subcontracting Plan," an approved subcontracting plan is incorporated in Attachment J-6. Changes to the plan will be authorized only by contract modification. The contractor shall exert its best effort to operate in accordance with this plan, and this shall be a factor in determining incentive fee under this contract in accordance with Section J, Attachment J-1, Annex 1, and the Performance Requirements Summary (PRS). A subcontracting plan must be submitted on a yearly basis.

(c) Each subcontracting goal shall equal or exceed the following percentage of total contract value for each contract year:

1. Small Business	38%
2. Small Disadvantaged Business (SDB)	10%
3. Women-Owned Small Business (WOSB)	5%
4. Historically Underutilized Business Zone HUBZone	1%
5. Veteran owned Small Business (VOSB)	1%
6. Service Disabled Veteran Owned Small Business (SDVOSB)	1%

The 38% goal is totally small business, which includes the SDB goal, the WOSB goal, the HUBZone goal, the VOSB goal, and the SDVOSB goal. However, each of these six (6) goals are separate goals that are individually calculated against total contract value.

(End of Clause)

H.5 RESERVED**H.6 DOCUMENTATION REQUIREMENTS**

(a) Data Requirements: Requirements for technical or management information are imposed on the contractor through the use of the Data Procurement Document (DPD), included as Attachment J-2 in Section J. The DPD describes, defines and specifies the information required and lists the technical or management information to be produced and/or delivered as required by NASA/SSC to administer the contract.

(b) Contractor Data Management: The contractor shall establish a system of management or utilize the contractor's existing data management function for the data called for in the Performance Work Statement. The data management system shall be capable of providing appropriate internal procedures for the control of collection, preparation, publication, quality,

assessment, distribution, and maintenance of authorized data. Such control shall apply to data acquired from subcontractors by the contractor.

(c) **Data Reviews:** The contractor, upon request, shall participate in periodic reviews of contract data requirements for maintaining current Contract DPD. This assistance shall include identification of additional data items and recommendations for deletions considered appropriate in consonance with facility operating services required at SSC.

(d) **Changes in Distribution:** When changes to the original distribution requirements are required by the contracting officer, the contractor shall act upon such changes upon receipt of an approved Request for Data or upon revision to the distribution part of the DPD provided such changes do not incur additional costs. In the event that additional cost is involved, an equitable adjustment shall be negotiated.

(End of Clause)

H.7 LIMITATION OF FUTURE CONTRACTING (NASA 1852.209-71)(DEC 1988)

(a) The contracting officer has determined that this acquisition may give rise to potential organizational conflicts of interest. Accordingly, the attention of prospective offerors is invited to FAR Subpart 9.5--Organizational Conflicts of Interest. The term "contractor," as used in this article, includes the prime contractor, subcontractor, and/or the individual members of a joint venture, if applicable.

(b) The nature of these conflicts include: (1) an unfair competitive advantage; and (2) the existence of conflicting roles that might bias the contractor's judgement.

(c) The restrictions upon future contracting are described below:

(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 to be incorporated into a solicitation, the contractor shall be ineligible to perform the work described within the solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. Such restrictions shall remain in effect for a reasonable time, as agreed to by the contracting officer and the contractor, sufficient to avoid the circumstances of unfair competitive advantage or potential bias; but, usually for a period no less than when the first contract using the contractor's specifications or work statement is awarded. It is further agreed that NASA will not unilaterally require the contractor to prepare such specification or work statements 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, the contractor must agree with each company to protect such data from unauthorized use or disclosure so long as it remains proprietary, and shall furnish a copy of such company-to-company agreement to the contracting officer. The contractor shall not be permitted to utilize the data in supplying the systems, or

components thereof, procured either by formal advertising or negotiation, as a direct result of that study or advice. In addition, the contractor shall not be permitted to utilize the proprietary data in performing, for NASA, any competitively obtained contract for any additional study or studies in the same or a closely related field.

(3) The contractor must thoroughly indoctrinate its employees, through formal training in company policies and procedures, in the philosophy of FAR Subpart 9.5. They must be disciplined in the absolute necessity of refraining from divulging proprietary data, trade secrets, confidential information, or restricted data from other companies received in connection with work under this contract to any unauthorized person.

(d) The limitation on the contractor's performance is described below:

(1) The contractor shall not be given nor perform any task the result of which may place it in a conflicting role with regard to any contract held by the contractor, such that the contractor's judgement might be biased.

(2) The contractor, therefore, shall review all work requests and notify the contracting officer of any requirements which, in the contractor's opinion, may cause a conflict of interest prior to performing any work.

(3) Upon such notification, the contracting officer will determine whether or not a potential conflict of interest exist and determine how the work will be accomplished.

(e) The contractor's Conflict of Interest Avoidance Plan is a deliverable of Data Requirement 1-MA03 and is incorporated as part of the contract (Attachment J-12).

(End of Clause)

H.8 LIMITATION ON EXECUTIVE COMPENSATION

The Office of Federal Procurement Policy (OFPP) Administrator issued a memorandum, dated May 3, 2003, revising the benchmark limitation on executive compensation under Government contracts for fiscal year 2003 from \$387,783 to \$405,273. The \$405,273 amount is to be used for Contractor fiscal year 2003 and any subsequent Contractor fiscal years unless and until revised by OFPP. The limitation applies to the five most highly compensated employees at each home office and segment of a Contractor. The limitation amount applies to contract costs incurred after January 1, 2003, under defense and civilian agency contracts, whether or not the contract was previously subject to a statutory limitation on compensation. Compensation in excess of the benchmark limitation is unallowable.

(End of Clause)

H.9 CONTRACTOR REPRESENTATIVE(S)

The contractor shall designate one of its personnel at SSC to act as manager, and delegate to this person the complete authority to decide all matters connected with this contract. The contractor shall further designate a second employee at SSC as alternate with the authority to act as and on upon behalf of the manager in the event of the absence or incapacity of the designated manager. The contractor shall advise the Contracting Officer in writing of the persons so designated.

(End of Clause)

H.10 OBSERVANCE OF LAWS AND REGULATIONS

(a) The contractor shall procure and keep effective necessary business and professional permits and licenses required in performance of the work. Generally, NASA will execute the necessary environmental permits.

(b) Inasmuch as various departments and agencies of the government, several contractors and other tenants jointly occupy the John C. Stennis Space Center and are confronted with certain common conditions and problems resulting from this co-occupancy, certain uniform policies, regulations, and procedures will be issued, as required, by the government (NASA/SSC), and will be applicable to all personnel working at SSC. The contractor shall adhere to these policies and procedures insofar as such policies and procedures are in conformity with the terms of this contract.

(c) All employees of the contractor assigned to perform the work under this contract shall be under the control of the contractor during the performance of such assignment. The contractor shall be responsible for satisfactory standards of employee competency, conduct and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary.

(d) The above provisions of this Section shall be made equally applicable by the contractor to employees other than those of the contractor to the extent that they may be assigned work under this contract notwithstanding the basis of the assignment, e.g., subcontract.

(End of Clause)

H.11 MOTOR VEHICLE MANAGEMENT

(a) Acquisition of Motor Vehicles: The contractor shall operate and manage GSA and commercially Leased motor Vehicles as necessary to support the performance of the contract. Such needed vehicles are to be operated and managed in the manner most efficient and economical to the government. If deemed necessary, additional vehicles may be obtained from the GSA Interagency Motor Pool and/or leased from commercial sources subject to approval and authorization by the SSC Transportation Officer. When the acquisition of commercially leased vehicles is deemed appropriate, such acquisition shall be authorized by the SSC Transportation Officer and approved in advance by the contracting officer.

The contractor shall assure that all operators of government-owned vehicles possess valid state licenses. The contractor will furnish GSA and the Contracting Officer a copy of their third part automobile liability insurance policy, as defined in NFS 1852.228-75 entitled "Minimum Insurance Coverage," covering any and all leased GSA motor vehicles.

(b) Advance Understanding Concerning Damage to GSA and Commercially Leased Motor Vehicles:

(1) The parties agree that the provision set forth below shall be applicable with respect to reimbursement to the contractor for expenses incidental to loss or damage of GSA vehicles acquired by the contractor for performance under this contract.

PROVISION

The government holds the contractor harmless for loss and damage arising out of the performance of this contract, with respect to any government-owned property or facilities, including property in which the government has an interest. Specifically excluded from the provision of this clause are:

- (i) property owned by the contractor;
- (ii) loss or damage compensated by insurance or otherwise;
- (iii) loss or damage to property for which the contractor has failed to insure or maintain insurance as required by the contracting officer; or
- (iv) loss or damage as a result of unlawful misconduct, or lack of good faith on the part of contractor personnel as described in (e)(3)(i)(ii) & (iii) of the clause entitled "Insurance - Liability to Third Persons" in FAR Clause No. 52.228-7.

(2) The parties further agree that, with respect to any commercially leased motor vehicles authorized for use in performance under this contract, the lease costs, which may include therein applicable costs of collision and comprehensive insurance, shall be considered allowable costs to the extent that they are reasonable and allocable to this contract. Upon commercial lease of a motor vehicle(s), the contractor shall give written notice to the contracting officer as to the insurance coverage provided by such lease agreement.

(End of Clause)

H.12 REGISTER OF WAGE DETERMINATION UNDER THE SERVICE CONTRACT ACT

The FAR Clause 52.222-44, Service Contract Act of 1965, as amended, shall apply to the contract. The contractor and subcontractors (if applicable) will be required to compensate the employees engaged in performance of this contract at wage rates (including fringe benefits) at least equal to the rates prescribed in the attached Department of Labor, SCA Wage Determination (See Section J, Attachment J-4).

(End of Clause)

H.13 NATIONAL LABOR RELATIONS ACT

(a) The selected contractor shall be required to comply with the requirements of the National Labor Relations Act. Some of the service employees are represented by the following collective bargaining representative (Union):

International Association of Machinists and Aerospace Workers
Local No. 2249
AFL/CIO

(b) As a government contracting activity, SSC recognizes the rights afforded these individuals by the National Labor Relations Act. Therefore, the successful contractor agrees to maintain practices that are in compliance with these mandatory provisions of law.

(End of Clause)

H.14 RESERVED**H.15 SECURITY CONTROLS**

(a) Security Requirements. Performance of this contract requires reproduction of classified information. Contractor personnel will also be required to obtain access to classified information or to enter areas where classified documents are kept. Personnel security clearances required or requested for work assignments on this contract will be limited strictly to those required to perform the assigned function. The contractor will be guided by Section III of the Industrial Security Manual, DoD 5220.22-M and will comply with Attachment J-7, Contract Security Classification Specification.

The contractor shall require each employee engaged on the work site to display government furnished identification badges and special access badges at all times. The contractor shall upon termination of an employee, immediately deliver badges and/or passes issued to the employee to the Security Officer.

(b) Access to Secure Areas. Portions of the work under the contract are performed in secure areas, needing specific access requirements. These secure controlled/restricted areas are

normally surrounded by fencing and have an entrance gate monitored by a guard or monitoring device. Access into such areas is categorized into "escorted" and "unescorted" access. All persons requiring unescorted access to a secure area shall be the subject of a favorable security investigation (security clearance) required for access to that area or, in most cases, will be escorted by an approved escort official. The contractor is responsible for providing escort services for any of his employees and/or any subcontractor employees who are not eligible for unescorted access. Personnel requiring access to areas containing classified information or material shall have the appropriate security clearance as approved by Defense Investigative Security Clearance Office.

(c) Interfaces. The contractor shall comply with controlled/restricted area procedures and instructions, to include proper security clearances. Contractor personnel working in controlled/restricted areas, such as the test complex area, and computer rooms, may be required to sign in and out, state the nature of business at the entrance desk, and display a unique user provided badge. All work in controlled/restricted areas shall be coordinated with the respective unit or organization in accordance with local agency security procedures.

(End of Clause)

H.16 PROTECTION AND SAFEGUARDING OF INFORMATION AND DATA

(a) Except as specifically authorized by this contract, or as otherwise approved in writing by the contracting officer, all information and data developed, acquired, or furnished by or to the contractor in the performance of this contract, shall be used only in connection with the work under this contract, and shall be protected by the contractor from unauthorized use, release, duplication, or disclosures.

(b) The contractor shall take appropriate measures to assure that its personnel, who have or might reasonably have access to such information and data referred to in paragraph A above, agree to honor the contractor's commitment and safeguard such information and data.

(c) It is further anticipated that in performance of this contract the contractor may also have access to, be furnished, use, or generate the following types of data (recorded information):

(1) Data of third parties bearing limited rights or restricted rights notices submitted either to the government or directly to the contractor;

(2) Other data of third parties which the government has agreed to handle under protective arrangements; or

(3) Data, generated by the government or the contractor for third parties, for which the government intends to control the use and dissemination until delivered to the third parties.

(d) In order to protect the interests of the government, the owners, and the intended recipients of the data described in paragraph (c), the contractor further agrees, with respect to such data described in subparagraph (c)(1) and, when so identified by the contracting officer or designated representative, with respect to data described in subparagraphs (c)(2) and (c)(3), to:

(1) Use and disclose such data only to the extent necessary to perform work required under this contract, with particular emphasis on restricting the data to employees having a "need to know";

(2) Preclude disclosure of such data outside contractor's organization performing work under this contract without written consent of the contracting officer; and

(3) Return or dispose of such data as directed by the contracting officer or designated representative when such data is no longer needed for contract performance.

(e) Nothing contained in this special contract requirement or elsewhere in this contract shall be construed as altering the definition of "technical data" for the purpose of applying the requirements of the clause herein entitled FAR 52.227-14, "Rights in Data--General."

(End of Clause)

H.17 GOVERNMENT/CONTRACTOR FURNISHED PROPERTY

(a) Government Furnished Property: Attachment J-10 is a listing of property which the government will make available to the contractor for performance of this contract. The final list of government furnished property will be incorporated into the contract by reference. If the Government fails to provide the property or services specified in Clause 1852.245-77, List of Installation-Accountable Property and Services, and that failure adversely affects the Contractor's ability to perform the contract, the Contracting Officer shall, upon timely written request from the Contractor, (1) make a determination of the effect on the Contractor, and (2) equitably adjust the contract in accordance with the procedures provided in the Changes clause of this contract. Equitable adjustments made pursuant to this clause, however, shall not include adjustments in fee.

(b) Government Replaced: Government property in Attachment J-10, List 1 (No Class Exceptions) provided to the contractor as serviceable government property in accordance with FAR 52.245-5 shall be at the determination of the government and shall remain government owned property.

(c) Contractor Replaced: Government property in Attachment J-10, List 2 (Class Exceptions) specifies existing government property made available to the contractor on an "as-is" basis in accordance with FAR 52.245-19. The Contractor shall provide any necessary replacements as Contractor owned/leased property. The Government makes no warranty whatsoever with respect to property made available "as-is" except that the property is in the same condition, less fair wear and tear, when placed at the delivery point as when inspected or made

available for inspection by the contractor. Upon reaching the end of its useful life, it will be processed for disposal in accordance with Government procedures. Replacement and maintenance costs (excluding fuel, oil, and lubricants) of Contractor owned/leased property will be at Contractor's expense.

If there is any change in the condition of Government property from the time inspected or made available for inspection to the time of issuance to the Contractor, and such change will adversely affect the Contractor, the Contractor shall, upon receipt of the property, immediately notify the CO detailing the facts and, as directed by the CO, either (1) return such property for disposal or (2) effect repairs to return the property to its condition, less fair wear and tear, when inspected or made available for inspection. The Contractor will be allowed a cutoff period of 60 days from commencement of the contract on August 28, 2007, during which time a claim may be made. After completing the directed action and upon written request of the Contractor, the CO shall equitably adjust the contract. The foregoing provisions for adjustment are the exclusive remedy available to the Contractor, and the Government shall not be otherwise liable for any delivery of Government property other than that in which it was originally offered.

In the event the Government makes available additional IAGP (Class Exceptions) not initially provided in Attachment J-10, List 2, and the Contractor accepts it for use in support of the contract, the CO shall equitably adjust the contract.

At Contractor's expense, in accordance with Section G, the Contractor may repair or modify any property or the Contractor's may substitute Contractor-owned property to perform the scope of work requirements. Modifications to property may only be made with the written permission of the CO. Any repair or modification to IAGP shall not affect the title of the Government. The Contractor shall maintain maintenance, repair, and modification records on Government property specifically identified in Attachment J-10, List 2.

(End of Clause)

H.18 CAPITALIZATION OF CONTRACTOR OWNED EQUIPMENT

(a) **Capitalization:** The Contractor may purchase equipment for the purpose of performing the work described in the PWS. The capital equipment will be capitalized and depreciated in accordance with the Contractor's established cost accounting practices and procedures, as follows:

Equipment Type	Cost	Minimum Useful Life	Depreciation Method
TBDC	TBDC	TBDC	TBDC

(b) **Contractor Records:** The Contractor agrees to maintain complete records of capital equipment that is subject to this clause, including date of purchase, estimated service life,

purchase price, depreciated base, method, and schedule, and amount of depreciation recorded to date.

(c) Right to Purchase: If upon expiration or termination of this contract the Government does not thereafter contract with the contractor for the performance of the same, or substantially the same services contemplated by this contract, the contractor shall, upon request by the successor contractor(s), transfer title to any prime contractor dedicated equipment identified in the records referenced above, to the successor contractor(s) at net book value, subject to reasonable terms and conditions regarding payment and other matters to be agreed upon by the contractor and successor contractors.

(End of Clause)

H.19 NASA RECORDS MANAGEMENT

The contractor shall create, maintain, preserve, and dispose of NASA records in accordance with NPG 1441.1 "NASA Records Retention Schedule" (refer to Attachment J-1, Annex 1).

(End of Clause)

H.20 SAFETY AND HEALTH PLAN

The contractor's Safety and Health Plan is incorporated into the contract in Attachment J-8.

(End of Clause)

H.21 ASBESTOS AND LEAD

During performance of this contract, Contractor personnel performing work in SSC buildings may come in contact with materials containing asbestos. Portions of SSC buildings 1000, 1100, 1200, 2101, and 2201 contain asbestos spray applied insulation. Other buildings may contain asbestos around pipes, ducts, boilers and tanks. The contractor shall be responsible for ensuring all applicable codes, standards and regulations are adhered to and enforced, including OSHA Standard 29 CFR 1910.1001, OSHA Standard 29 CFR 1926.58 and USEPA 40 CFR 61, Subpart M. Prior to disturbing suspected asbestos in any manner, the contractor shall notify the NASA Environmental Officer, who serves as Asbestos Program Manager, for guidance. The contractor shall be responsible for ensuring all contractor personnel working on site are made aware of and comply with this clause.

SSC has an Asbestos Hazard Control Plan which addresses procedures for work involving potential asbestos exposure. The contractor will be required to comply with the provisions of this plan whenever his work involves the potential for exposure to asbestos. The SSC Asbestos Hazard Control Plan and the Lead Hazard Control Plan are located in the CEF.

In addition to asbestos, contractor personnel at SSC may come in contact with lead based paints. The locations of lead based paint has been documented on facility drawings to the extent possible. Other areas may require sampling and analysis if lead based paints are suspected. SSC has Lead Hazard Control Plan which addresses procedures for work involving potential lead exposure.

(End of Clause)

H.22 ENVIRONMENTAL PLANNING

During performance of this contract, the contractor or its subcontractor(s) may be required to design projects or perform projects that will potentially impact the environment. To guide the contractor in what needs to be considered in project designs and planning, the contractor shall reference the SSC Environmental Resources Document (ERD). The development and submission to the NASA Environmental Office of the Environmental Study form (SSC # 696M) is required for all construction projects and for all activities that have any potential for impacting the environment. The NASA Environmental Office will determine if the project will require evaluation under the National Environmental Policy Act and what environmental permits will be needed prior to proceeding with the project.

(End of Clause)

H.23 HAZARDOUS MATERIAL AND HAZARDOUS WASTE MANAGEMENT

During the performance of this contract, the contractor or subcontractor may be required to requisition, handle and manage hazardous materials in support of specific projects. The contractor may also be collecting waste generated by SSC activities including those of its tenants, for ultimate disposal by NASA. In the performance of these activities, the contractor shall abide by Stennis Procedures and Guidelines (SPG) 4130.2B "Hazardous Materials, Hazardous Waste and Solid Waste Management Plan" SPG 4130.3C, "SSC Integrated Contingency Plan" and SPG 8715.1, "Stennis Space Center Safety and Health Procedures and Guidelines".

(End of Clause)

H.24 LABOR STANDARDS AND PROVISIONS FOR CONSTRUCTION

(a) In the event any portion of work to be performed under the contract is deemed by the contractor to fall within the "construction" category, as defined in FAR Part 22, Subpart 22.4, the contractor's employees may perform such work up to \$300,000.00 per project, including labor and materials. This type of Davis-Bacon work under \$300,000.00 may also be subcontracted out using competitive acquisition practices. Construction work estimated greater than \$300,000.00 per project, including labor and materials, shall be subcontracted. The Contractor shall immediately upon receipt of an authorized and funded SWR prepare or obtain specifications and drawings adequate for best value fixed-price procurements and proceed to place a subcontract on a competitive basis, if appropriate.

(b) The Contractor shall include the most current U.S. Department of Labor General Wage Determination applicable to "construction" in solicitations and for use in-house when Davis-Bacon work is performed by contractor employees in accordance with paragraph (a) of this contract article. The applicability of the appropriate Davis Bacon wage determination will be dependent upon the type of work performed by the contractor or its subcontractors (see www.dol.gov).

(c) As applicable, the minimum Labor Standard Provisions for any "construction" work performed by the contractor's own employees or under subcontract are identified as set forth below. Additions, deletions, and updates of these labor standard provisions are the responsibility of the contractor.

52.236-19	ORGANIZATION AND DIRECTION WORK	APR	1984
52.202-1	DEFINITIONS	JUL	2004
52.204-2	SECURITY REQUIREMENTS (ALTERNATE II) (APR. 1984)	AUG	1996
52.222-6	DAVIS-BACON ACT	JUL	2005
52.222-7	WITHHOLDING OF FUNDS	FEB	1988
52.222-8	PAYROLLS AND BASIC RECORDS	FEB	1988
52.222-9	APPRENTICES AND TRAINEES	JUL	2005
52.222-10	COMPLIANCE WITH COPELAND ACT REQUIREMENTS	FEB	1988
52.222-11	SUBCONTRACTS (LABOR STANDARDS)	JUL	2005
52.222-12	CONTRACT TERMINATION-DEBARMENT	FEB	1988
52.222-13	COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS	FEB	1988
52.222-14	DISPUTES CONCERNING LABOR STANDARDS	FEB	1988
52.222-15	CERTIFICATION OF ELIGIBILITY	FEB	1988
52.222-16	APPROVAL OF WAGE RATES	FEB	1988
52.222-27	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION	FEB	1999
52.225-9	BUY AMERICAN ACT-CONSTRUCTION MATERIALS	JAN	2005
52.228-2	ADDITIONAL BOND SECURITY	OCT	1997
52.243-2	CHANGES-COST REIMBURSEMENT (ALTERNATE 3) (APR. 1984)	AUG	1987
52.249-6	TERMINATION (COST REIMBURSEMENT) (ALTERNATE 1)(SEPT 1996)	MAY	2004

(End of Clause)

H.25 BONDS

(a) If any construction, alteration or repair work on any public building or public work to which the provisions of the Miller Act (40 U.S.C. 270a-270e) apply is performed or is to be performed hereunder by the contractor or subcontractor, the contractor shall furnish or require the subcontractor to furnish payment and performance bonds in accordance with the terms of said Miller Act. Performance and Payment Bonds, submitted in connection herewith, shall comply fully with the requirements stipulated herein, provided that any such Payment Bond so furnished by the subcontractor(s) shall be considered the bond required by the Miller Act if such bond identifies the United States of America and the contractor as co-obligee thereunder and, provided further, that any such Performance Bond so furnished by the contractor or by subcontractor(s) shall be considered the bond required by the Miller Act if such bond provides for assignment of the bond to the United States of America, and/or a Department or Agency thereof. The contractor and the government agree that the contractor shall, upon demand of the government assign to the United States of America (or a department of an agency thereof) the contractor's rights under such Performance Bond(s) and that such assignment shall be made in a manner without invalidating or qualifying the bond instrument.

(b) These bonds, on forms authorized by the FAR shall be obtained by the contractor on or before the effective dates of the work to which they pertain.

(End of Clause)

H.26 CUSTOMER GUIDE OF SERVICES

The government has a requirement for a Customer Guide of Services (refer to Data Requirement 1-GA02) to facilitate planning, budgeting and billing processes. The contractor shall develop, deliver and maintain a Customer Guide of the services provided under this contract. The specific services shall be developed in cooperation with the government and its customers. The Customer Guide's pricing shall include loaded costs, including government surcharges for each type of service, and fee profit. The pricing methodology shall be reviewed with the Contracting Officer, COTR, and Chief Financial Officer prior to delivery of the guide. The initial guide shall be delivered to the government no later than 60 days after contract award and updated every contract year.

(End of Clause)

H.27 PERFORMANCE METRICS

A key component of FOS contract will be the ability to effectively provide management visibility into efficiency and productivity of the contract. This requirement necessitates the creation of a meaningful set of performance measures and metrics that drive corrective action and continuous process improvement. The creation and evolution of contract metrics will be achieved through a government/contractor partnership that will determine appropriate measures based on contract objectives and performance standards. This partnering shall continue

throughout the life of the contract to ensure the metrics remain valid and relevant to government priorities and contractor performance. The contractor will submit metrics to the government as required by Data Requirement 1-MA07 and in accordance with its own performance measurement system.

(End of Clause)

H.28 PRIORITIES

The contractor will be expected to provide support to customers with conflicting requirements. On a day-to-day basis, the priorities of these customers will change and vary. The contractor is empowered to negotiate with these customers and prioritize required support. The government provides general guidance under which the contractor prioritizes work. Priority must be given to ensuring the success of our primary missions and the missions of our customers while ensuring the safety and health of personnel and our resources. Support and maintenance of the infrastructure are also very important and must be accomplished around the more dynamic mission priorities. The contractor shall develop management processes and systems that shall balance the requirements of the contract.

(End of Clause)

H.29 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (NOVEMBER 2004 [DEVIATION])

(a) The Contractor shall be responsible for information and information technology (IT) security when 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 where 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, 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 and the NASA Security Operations Center.

(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 all individuals who perform tasks as a system administrator, or have authority to perform tasks normally performed by a system administrator, demonstrate knowledge appropriate to those tasks. Knowledge is demonstrated through the NASA System Administrator Security Certification Program. A system administrator is one who provides IT services, network services, files storage, and/or web services, to someone else other than themselves and takes or assumes the responsibility for the security and administrative controls of that service. Within 30 days after contract award, the Contractor shall provide to the Contracting Officer a list of all system administrator positions and personnel filling those positions, along with a schedule that ensures certification of all personnel within 90 days after contract award. Additionally, the Contractor should report all personnel changes which impact

system administrator positions within 5 days of the personnel change and ensure these individuals obtain System Administrator certification within 90 days after the change.

(7) 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) The Contractor shall insert this clause, including this paragraph (f), in all subcontracts when the subcontractor is required to --

(1) Have physical or electronic access to NASA's computer systems, networks, or IT infrastructure; or

(2) Use information systems to generate, store, 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)

H.30 CONTACTOR INITIATIVES

(b)(4)

(b)(4)

[END OF SECTION]

PART II – CONTRACT CLAUSES

SECTION I

CONTRACT CLAUSES

PART II- CONTRACT CLAUSES
SECTION I- CONTRACT CLAUSES

I.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

CLAUSES INCORPORATED BY REFERENCE (FEB 1998):

This contract incorporated one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es)”

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

<u>CLAUSE NO.</u>	A. Federal Acquisition Regulation (48 CFR Chapter 1) Clauses TITLE	DATE
52.202-1	DEFINITIONS	JULY 2004
52.203-3	GRATUITIES	APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	APR 1984
52.203-6	RESTRICTION ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEPT 2006
52.203-7	ANTI-KICKBACK PROCEDURES	JULY 1995
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	SEP 2005
52.204-2	SECURITY REQUIREMENTS	AUG 1996
52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	AUG 2000
52.204-7	CENTRAL CONTRACTOR REGISTRATION	JULY 2006
52.204-9	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL	NOV 2006
52.208-9	CONTRACTOR USE OF MANDATORY SOURCES OF SUPPLY	JUN 2006
52.209-6	PROTECTING THE GOVERNMENT’S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	SEPT 2006
52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEPT 1990
52.215-2	AUDIT AND RECORDS—NEGOTIATION	JUN 1999
52.215-8	ORDER OF PRECEDENCE- UNIFORM CONTRACT FORMAT	OCT 1997
52.215-11	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA- MODIFICATIONS	OCT 1997
52.215-13	SUBCONTRACTOR COST OR PRICING DATA-MODIFICATIONS	OCT 1997
52.215-14	INTEGRITY OF UNIT PRICES	OCT 1997

52.215-15	PENSION ADJUSTMENTS AND ASSET REVISIONS	OCT 2004
52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY	OCT 1997
52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS OTHER THAN PENSIONS (PRB)	JULY 2005
52.215-19	NOTIFICATION OF OWNERSHIP CHANGES	OCT 1997
52.215-21	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA-MODIFICATIONS	OCT 1997
52.216-7	ALLOWABLE COST AND PAYMENT	DEC 2002
52.217-8	OPTION TO EXTEND SERVICES (INSERT: 30 DAYS)	NOV 1999
52.219-4	NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (INSERT: ___ OFFER ELECTS TO WAIVE THE EVALUATION PREFERENCE)	JULY 2005
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	MAY 2004
52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN (ALTERNATE II) (OCT 2001)	SEPT 2006
52.219-16	LIQUIDATED DAMAGES-SUBCONTRACTING PLAN	JAN 1999
52.219-23	NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS CONCERNS (INSERT: 10%, ___OFFER ELECTS TO WAIVE THE EVALUATION PREFERENCE)	SEPT 2005
52.219-25	SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM- DISADVANTAGED STATUS AND REPORTING (PARAGRAPH A MODIFIED BY ADDENDUM TO FAC 97-07 PURSUANT TO FEDERAL REGISTER VOLUME 63, NUMBER 249, DATED DECEMBER 29, 1998, PAGE 71721-71723)	OCT 1999
52.222-1	NOTICE TO GOVERNMENT OF LABOR DISPUTES	FEB 1997
52.222-2	PAYMENT FOR OVERTIME PREMIUMS (INSERT: <u>\$1,026,688</u>)	JULY 1990
52.222-3	CONVICT LABOR	JUNE 2003
52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT- OVERTIME COMPENSATION	JULY 2005
52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB 1999
52.222-26	EQUAL OPPORTUNITY	MAR 2007
52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	SEPT 2006
52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN 1998
52.222-37	EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	SEPT 2006
52.222-41	SERVICE CONTRACT ACT OF 1965, AS AMENDED	JUL 2005
52.222-42	STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (REFER TO ATTACHMENT J-9)	MAY 1989
52.223-3	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA	JAN 1997
52.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION	AUG 2003
52.223-6	DRUG-FREE WORKPLACE	MAY 2001
52.223-7	NOTICE OF RADIOACTIVE MATERIAL	JAN 1997
52.223-9	ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA DESIGNATED PRODUCTS (INSERT: SUBMIT THIS ESTIMATE TO: NASA ACQUISITION MANAGEMENT OFFICE, ATTN: CONTRACTING OFFICER, JOHN C. STENNIS SPACE CENTER, MS. 39529 AND 1 COPY TO: SSC ENVIRONMENTAL OFFICE, SSC ENVIRONMENTAL OFFICER,	AUG 2000

	JOHN C. STENNIS SPACE CENTER, MS 39529)	
52.223-10	WASTE REDUCTION PROGRAM	AUG 2000
52.223-11	OZONE-DEPLETING SUBSTANCES	MAY 2001
52.223-12	REFRIGERATION EQUIPMENT AND AIR CONDITIONERS	MAY 1995
52.223-14	TOXIC CHEMICAL RELEASE REPORTING	AUG 2003
52.224-1	PRIVACY ACT NOTIFICATION	APR 1984
52.224-2	PRIVACY ACT	APR 1984
52.225-1	BUY AMERICAN ACT – SUPPLIES	JUN 2003
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	FEB 2006
52.227-1	AUTHORIZATION AND CONSENT	JUL 1995
52.227-2	NOTICE & ASSISTANCE REGARDING PATENT & COPYRIGHT INFRINGEMENT	AUG 1996
52.227-10	FILING OF PATENT APPLICATIONS CLASSIFIED SUBJECT MATTER	APR 1984
52.227-11	PATENT RIGHTS - RETENTION BY THE CONTRACTOR (SHORT FORM)	JUN 1997
52.227-14	RIGHTS IN DATA-GENERAL (AS MODIFIED BY NFS 1852.227-14)	JUN 1987
52.227-16	ADDITIONAL DATA REQUIREMENTS	JUN 1987
52.228-7	INSURANCE - LIABILITY TO THIRD PERSONS	MAR 1996
52.228-8	LIABILITY AND INSURANCE – LEASED MOTOR VEHICLES	MAY 1999
52.229-3	FEDERAL, STATE, AND LOCAL TAXES	APR 2003
52.230-2	COST ACCOUNTING STANDARDS	APR. 1998
52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS	APR. 2005
52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR. 1984
52.232-17	INTEREST	JUN. 1996
52.232-20	LIMITATION OF COST	APR. 1984
	OR	
52.232-22	LIMITATION OF FUNDS (REFER TO SCHEDULE ARTICLE B.3)	APR. 1984
52.232-23	ASSIGNMENT OF CLAIMS	JAN. 1986
52.232-25	PROMPT PAYMENT	OCT. 2003
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER— CENTRAL CONTRACTOR REGISTRATION	OCT 2003
52.233-1	DISPUTES – ALTERNATE I (DEC. 1991)	JULY 2002
52.233-3	PROTEST AFTER AWARD	AUG. 1996
52.237-2	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT AND VEGETATION	APR. 1984
52.237-3	CONTINUITY OF SERVICES	JAN. 1991
52.237-7	INDEMNIFICATION AND MEDICAL LIABILITY INSURANCE (REFER TO SCHEDULE ARTICLE I-7)	JAN. 1997
52.239-1	PRIVACY OR SECURITY SAFEGUARDS	AUG. 1996
52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS	JAN 1997
52.242-13	BANKRUPTCY	JUL. 1995
52.243-2	CHANGES-COST REIMBURSEMENT- ALTERNATE II (APR. 1984)	AUG. 1987
52.244-2	SUBCONTRACTS - WITH (ALTERNATE I (JAN 2006)	AUG. 1998
52.244-5	COMPETITION IN SUBCONTRACTING	DEC. 1996
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS	MAR 2007
52.245-5	GOVERNMENT PROPERTY (COST REIMBURSEMENT, TIME AND MATERIALS, OR LABOR-HOUR CONTRACTS)	MAY 2004
52.245-19	GOVERNMENT PROPERTY FURNISHED “AS IS”	APR 1984
52.246-23	LIMITATION OF LIABILITY	FEB 1997
52.246-25	LIMITATION OF LIABILITY-SERVICES	FEB. 1997
52.247-1	COMMERCIAL BILL OF LADING NOTATIONS	FEB. 2006
52.248-1	VALUE ENGINEERING	FEB. 2000
52.249-6	TERMINATION (COST REIMBURSEMENT)	MAY 2004

52.249-14	EXCUSABLE DELAYS	APR. 1984
52.251-1	GOVERNMENT SUPPLY SOURCES	APR. 1984
52.251-2	INTERAGENCY FLEET MANAGEMENT SYSTEM (IFMS) VEHICLES AND RELATED SERVICES	JAN. 1991
52.253-1	COMPUTER GENERATED FORMS	JAN. 1991

B. NASA/FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
1852.203-70	DISPLAY OF INSPECTOR GENERAL HOTLINE POSTERS	JUN 2001
1852.204-76	SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION	NOV 2004
1852.209-72	COMPOSITION OF THE CONTRACTOR	DEC 1988
1852.216-89	ASSIGNMENT AND RELEASE FORMS	JUL. 1997
1852.219-74	USE OF RURAL AREA SMALL BUSINESSES	SEP. 1990
1852.219-75	SMALL BUSINESS SUBCONTRACTING REPORTING	MAY 1999
1852.219-76	NASA 8 PERCENT GOAL	JUL 1997
1852.223-74	DRUG- AND ALCOHOL-FREE WORKPLACE	MAR 1996
1852.236-73	HURRICANE PLAN	DEC 1988
1852.237-70	EMERGENCY EVACUATION PROCEDURES	DEC 1988
1852.237-72	ACCESS TO SENSITIVE INFORMATION	JUN 2005
1852.237-73	RELEASE OF SENSITIVE INFORMATION	JUN 2005
1852.242-70	TECHNICAL DIRECTION	SEP 1993
1852.242-71	TRAVEL OUTSIDE THE UNITED STATES	DEC 1988
1852.242-78	EMERGENCY MEDICAL SERVICES AND EVACUATION	APR 2001
1852.243-71	SHARED SAVINGS	MAR 1997

I.2 ALTERATIONS IN CONTRACT (FAR 52.252-4) (APR 1984)

Portions of this contract are altered as follows:

In FAR Clause 52.243-2, Changes- Cost-Reimbursement - Alternate II (Apr. 1984), (Aug. 1987) Paragraph C, substitute "60 days" in lieu of "30 days."

(End of Clause)

I.3 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.
- (b) The use in this solicitation or contract of any NASA FAR Supplement (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.4 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-7.

(End of Clause)

I.5 PRECONTRACT COSTS (NFS 1852.231-70) (JUNE 1995)

The Contractor shall be entitled to reimbursement for costs incurred for the Phase-In Period in an amount not to exceed \$ **TBDC** that, if incurred after this contract had been entered into, would have been reimbursable under this contract.

I.6 OMBUDSMAN (NFS 1852.215-84) (OCT 2003)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from Offerors, potential Offerors, and Contractors during the pre-award and post-award 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, Arthur (Gene) E Goldman, Deputy Director, John C. Stennis Space Center, MS. 39529, Phone: (228) 688-2123, FAX: (228) 688-3240, e-mail: Arthur.E.Goldman@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.

(End of Clause)

I.7 MINIMUM INSURANCE COVERAGE (NFS 1852.228-75)(OCT 1988)

The Contractor shall obtain and maintain insurance coverage as follows for the performance of this contract:

(a) Worker's compensation and employer's liability insurance as required by applicable Federal and state workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with the Contractor's commercial operations that it would not be practical. The employer's liability coverage shall be at least \$100,000, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) Comprehensive general (bodily injury) liability insurance of at least \$500,000 per occurrence.

(c) Motor vehicle liability insurance written on the comprehensive form of policy which provides for bodily injury and property damage liability covering the operation of all motor vehicles used in connection with performing the contract. Policies covering motor vehicles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury liability and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirement of the locality and sufficient to meet normal and customary claims.

(d) Comprehensive general and motor vehicle liability policies shall contain a provision worded as follows:

“The insurance company waives any right of subrogation against the United States of America which may arise by reason of any payment under the policy.”

(e) Comprehensive general marine insurance.

(f) Comprehensive medical malpractice insurance at \$1,000,000 per each medical incident.

(g) Prior to the commencement of work hereunder, evidence of insurance shall be furnished in a form satisfactory to the contracting officer. In addition, the contractor shall furnish evidence of a commitment by the insurance company to notify the contracting officer in writing of any material change, expiration, or cancellation of any of the insurance policies required hereunder not less than thirty (30) days before such change, expiration, or cancellation.

(End of Clause)

[END OF SECTION]

PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J

LIST OF ATTACHMENTS

<u>Attachments</u>	<u>Title</u>
J-1	Performance Work Statement
J-2	Data Procurement Document
J-3	Cost and Performance Incentive Fee Plan
J-4	Service Contract Act (SCA) Wage Determination\ Collective Bargaining Agreement
J-5	Davis-Bacon Wage Determinations
J-6	Subcontracting Plan
J-7	Contract Security Classification Specification DD Form 254
J-8	Safety and Health Plan
J-9	U.S. Government Comparable Rates
J-10	List of Government-Furnished Property
J-11	List of Applicable Manuals, Regulations and Procedures
J-12	Conflict of Interest Avoidance Plan
J-13	Award Term Plan
J-14	Personal Identity Verification of Contractor Personnel <u>PIV Card Issuance Procedures (NASA Procurement Information Circular (PIC) 06-01)</u>
J-15	Professional Level Employee Classifications

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1.1 GENERAL INFORMATION

1.1.1 Annex Description

This Annex identifies the Administrative Services that cannot be identified with a single Annex or may be related to the performance of services throughout this Contract. Even though this Annex contains certain guidelines, the Contractor has the responsibility to establish a management program, which is innovative and uses to full advantage the facilities and equipment provided by the Government. The Contractor shall respond to changing service requirements and prioritize tasks to best accomplish the requirements of the contract in terms of mission support, multi-agency initiatives at SSC, and customer service.

For each Annex, the Contractor shall furnish all necessary management, labor, facilities, materials and equipment (except as specified to be furnished by the Government). This shall include a full range of management duties, including project management, configuration management, planning, scheduling, work control, report preparation, safety and quality control.

The contractor is required to comply with Agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive -12 (HSPD -12), Office of Management and Budget (OMB) Guidance M-05-24), and Federal Information Processing Standards Publication (FIPS PUB) Number 201. See FAR Clause 52.204-9.

1.1.2 Facilities, Utilities, and Information Technology

The Government will provide facilities and utilities to the Contractor as defined below for performance of work defined in this Contract.

1.1.2.1 Facilities

Government facilities or portions thereof to be made available to the Contractor are identified in **Attachment J-10, List 3**.

1.1.2.2 Utilities

The Government will provide all utilities for Government facilities assigned to the Contractor for the performance of services identified in this Contract. The Contractor shall exercise reasonable efforts to conserve energy and comply with the requirements of the National Energy Conservation Policy Act, EO 12759, Federal Energy Management, E012902, Energy Efficiency and Water Conservation at Federal Facilities, and Energy Policy Act of 2005.

1.1.2.3 Information Technology (IT)

The Government shall provide to the Contractor desktop computers, telecommunications, network connectivity, and allied services required in the performance of services covered by this Contract as the Contractor may reasonably request. This does not include the computer services required for the Contractor's internal operations such as corporate accounting or other Contract accounting.

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The SSC Chief Information Officer (CIO) has responsibility for ensuring that NASA's information resources are acquired and managed consistent with federal policies, procedures, and legislation. Accordingly, the requirements identified in this Annex are required for all applicable contracts and statements of work. In addition, the Center CIO must be in the review chain for purchase requests for contracts and modifications with IT elements or implications.

1.1.2.4 IT and Communication Security

1. The Contractor shall use the existing assigned radio frequencies for the respective Annex functions, and shall be responsible for providing efficient communications on these frequencies. These frequencies are jointly used by the SSC Civil Service Work Force. Routine and emergency communications shall be effectively established and professionally accomplished.
2. There should be no expectation of privacy for contractor specific data utilizing the center's networks and telecommunications systems. Additionally, server systems supporting the contractor's IT resource requirements may be supported by other NASA contractors.
3. Security of IT resources shall be in adherence to the SSC IT Security standards as outlined in the SPD

2810.1 and NPR 2810.1. The Contractor shall implement and provide evidence of an IT Security Plan and Procedure and all owned, maintained, or operated IT components. All interfaces to government furnished equipment must be addressed by the Contractor's IT Security Plan. An annual audit of the Contractor's IT Security Plan will be conducted by the Government.

4. NASA IT security personnel shall have the authority to conduct security reviews at all contractor locations that possess or use NASA data/information, or that operate, use, or have access to, NASA information systems on behalf of NASA. These responsibilities shall extend to equipment that is acquired by a NASA contractor incidental to a NASA contract. All computer systems must have virus protection and regular vulnerability scanning. IT security vulnerabilities must be appropriately identified and remediated. The contractor shall assist the Government in maintaining a level of security that minimizes the threat of unauthorized access to IT resources and the destruction of Government data. The contractor shall provide reports, plans, guidance, and support to meet the security requirements for IT at SSC as required by the National Security Act, NASA Headquarters, and the Stennis Space Center Information Technology Security Manager (ITSM). IT security incidents must be properly reported.
5. Office automation support software and services, documents, data-sets, and/or data exchange formats

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being used by the Contractor to support the SSC mission shall be reviewed and approved by the Contracting Officer. Electronic data and information submitted by the Contractor to the government will be submitted in the applicable agency standard interoperability formats and protocols that are in effect at the time.

6. Development, implementation and/or maintenance of equipment, supplies, and hardware and software systems shall be in compliance with NASA/SSC ISO Instruction SWI-2800-001. All IT acquisitions shall comply with Section 508 of the Rehabilitation Act.

1.1.2.4.1 “Desktop Hardware/Software”

The desktop IT hardware and software required to support the Facilities Operating Services (FOS) Contractor will be provided by the Outsourcing Desktop Initiative (ODIN) Contractor or subsequent contractor if the ODIN Contract should expire prior to completion of the FOS Contract. Access to the Government provided IT resources must be available to the NASA IT support contractor (i.e. ODIN) as needed for repair, inventory control, and/or configuration management.

1.1.2.4.2 Contractor Financial Hardware/Software

The contractor is required to furnish all hardware and software necessary to meet human resources, corporate accounting, or other contract accounting functions necessary to execute the scope of the FOS Contract. These systems must meet the IT

Security requirements defined above. Additionally, these systems must adhere to the following systems administration requirements.

1.1.2.4.3 System Administrator Security Certification

In addition to any other requirements of this Contract, all individuals who perform tasks as a system administrator or have authority to perform tasks normally performed by system administrator shall be required to demonstrate knowledge appropriate to those tasks. This demonstration, referred to as the NASA System Administrator Security Certification, is a NASA funded two-tier assessment to verify that system administrators are able to:

1. Administrative Services

- a. Demonstrate knowledge in system administration for the operating systems for which they have responsibility.
- b. Demonstrate knowledge in the understanding and application of network and internet security.
- c. Certification is granted upon achieving a score above the certification level on both an Operating System test and the Network and Internet Security Test. The Certification earned under this process will be valid for three years. The criteria for these skills assessment has been established by the NASA Chief Information Officer. The objectives and

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procedures for this certification can be obtained by contacting the IT Security Awareness and Training Center. A system administrator is one who provides IT services, network services, files storage, web services, etc. to someone else other than themselves and takes or assumes the responsibility for the security and administrative contracts of that service or machine. A lead system administrator has responsibility for information technology security (ITS) for multiple computers or network devices represented within a system; ensuring all devices assigned to them are kept in a secure configuration (patched/mitigated); and ensuring that all other system administrators under their lead understand and perform ITS duties. An individual that has full access or arbitrate rights on a system or machine that is only servicing themselves does not constitute a “system administrator” since they are only providing or accepting responsibility for their system. An individual that is only servicing themselves is not required to obtain a System Administrator Certification.

1.1.2.5.1 SSC Facility and Operations Support Systems (FOSS)

- a. SSC Facility and Operations Support Systems (FOSS) include all software/hardware required to successfully execute the scope of the FOS Contract with the exception of human resources, corporate accounting, or other Contract accounting function

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systems. These applications shall be hosted on systems that reside in the Stennis Data Center located in building 1110.

- b. The FOS contractor shall be responsible for application and database’ design, development, implementation, and maintenance of the SSC FOSS products. The FOS contractor shall implement configuration management of the ‘application and database’ components of SSC FOSS products. The Information Technology Services (ITS) Contractor, or subsequent contractor if the ITS contract should expire prior to completion of the FOS contract, will provide the ‘systems administration’ and configuration management support for SSC FOSS hardware.
- c. The FOS contractor shall ensure that contractor human resources and financial applications are not hosted on the same hardware as SSC FOSS products. Interfaces between FOS contractor systems and SSC FOSS products shall be documented in Interface Definition Agreements (IDA).
- d. IDAs shall be reviewed and approved by the Contracting Officers Technical Representative (COTR).
- e. The Contractor shall submit annual IT Services forecasts to the Contracting Officer (CO) and shall

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submit timely written requests to the Contracting Officer (CO) for such services in accordance with such forecasts.

1.1.3 Definitions, Acronyms, and Abbreviations

Acronyms and Abbreviations are located on Acronyms and Abbreviations Tab of this contract. Definitions are located in the back of this Annex 1.1.3.1. The latest edition of Webster's New Collegiate Dictionary will be used for defining words not specifically addressed.

1.1.4 Contractor Personnel

The Government's minimum requirements, qualifications, training, certifications, and other requirements are identified in the applicable Annex. These minimum requirements do not relieve the Contractor of the responsibility of complying with all Federal, State, SSC, and Local laws regarding licenses, certifications, training, etc., of employees performing the specified services.

1. Contractor personnel shall conduct themselves in a proper, courteous, and business-like manner.
2. Contractor personnel shall wear attire which is neat, clean, and suited to the work or situation being performed.
3. Contractor personnel shall be uniformed per applicable Annex.

4. Contractor personnel operating automotive, weight handling, material handling, or miscellaneous equipment shall be properly qualified, trained and licensed.

1.1.5 Directives

1. SSC will issue and enforce directives, manuals and instructions intended to establish policies and guidelines for organizations and persons on site or utilizing site facilities/services. **Attachment J-8** incorporates a list of applicable manuals directives, etc. All Contractor personnel shall comply with all such directives, manuals and instructions. When two or more directives or instructions apply, Contractor personnel shall comply with the more stringent of the directives or instructions.

1.1.6 Restrictions, Limitations, and Special Conditions

1. The Government may undertake or award other contracts for additional work at or near the site of the work under this Contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performance of the work under this Contract to accommodate the additional work, subject to direction that may be provided by the CO.

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2. The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the CO. Temporary buildings (e.g.; storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the CO and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at the Contractor's expense upon completion of the work. With the written consent of the CO, the buildings and utilities may be abandoned and need not be removed.

3. The Contractor shall use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the CO. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair any damaged curbs, sidewalks, or roads.

1.1.6.1 Contractor Vehicles

Use of Contractor and Contractor employee vehicles on SSC shall be subject to State of Mississippi and SSC Vehicle Regulations. Road worthy vehicles must be state registered & licensed.

1.1.6.2 Hazardous Materials.

The Contractor shall immediately bring to the attention of the CO any material suspected of being hazardous which is encountered during execution of the work. A determination will be made by the CO as to whether the Contractor shall perform tests to determine if the material is hazardous and the CO will direct any follow-on action.

1.1.6.3 Observance of Legal Holidays

The Contractor shall observe legal holidays as specified in NFS Clause 1852.242-72.

Note: Any holiday falling on a Saturday will be observed on the preceding Friday; holidays falling on a Sunday will be observed on the following Monday.

1.1.6.4 Logos

The Contractor shall correctly represent the NASA logo and other resident agency logos and insignia in all exhibits, materials, and publications in accordance with established agency standards.

1.1.7 Installation Accountable Government Property (IAGP) For On-site Use

The Government property identified in **Attachment J-10, List 1** is provided to the Contractor pursuant to the FAR Clause

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52.245-5. This equipment may be replaced and repaired as a direct charge to the Government. The Contractor is responsible for operation, maintenance and repair of the equipment as specified in applicable Annexes.

IAGP identified in **Attachment J-10, List 2**, will be made available to the Contractor on a “as is” basis. If there is any change in the condition of such Government property from the time inspected or made available for inspection to the time of issuance to the contractor, and such change will adversely affect the contractor, the contractor shall notify the CO, detailing the facts, within 60 days from commencement of the contract. The Installation Accountable Government Property (IAGP) Facilities are identified in **Attachment J-10, List 3**. Refer to **NFS 1852.245-71 (Schedule Article G.5)**, **NFS 1852.245-77 (Schedule Article G.6)**, and **Schedule Articles G-7, H-17, and H-18**

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1.1.8	GOVERNMENT-FURNISHED FACILITIES			
1.1.8.1	Keep Government-furnished facilities in a clean and safe condition and exercise reasonable care, security, and protection of same	<p>Government-furnished facilities are identified in Attachment J-10, List 3.</p> <p>When occupied or utilized, comply with all energy and water conservation directives.</p> <p>NOTE: Custodial services are covered in Annex 4 and facilities maintenance is covered in Annex 5.</p>	Nothing additional	No instances of safety violation, fire protection discrepancy, or energy or water conservation regulation violation
1.1.8.2	Maintain physical security of all assigned facilities and provide key control	The Government will issue keys for assigned facilities upon award of Contract.	Nothing additional	No instances of loss of key control
1.1.8.3	Maintain Facilities Utilization Records by indicating on drawings contract functions, personnel and use of Government Furnished Facilities	Provide and maintain floor plans showing accurate locations of contract functions in the various Government-furnished facilities. Contract functions should be identified by Annex and sub-Annex level on drawings.		
1.1.8.4	Authorized Access to SSC Propulsion and Test Support Areas	Designate personnel who will be authorized to grant access for FOS contractor & subcontractor personnel to test complex area in accordance with NASA SOI-8080-0040 (Test Access Control Test) & SOI-8080-0029 (Contractor Interface/Access.) .	1 Listing	Listing due with first week of contract award

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1.1.9 SAFETY PROGRAM & ISO-9001

1.1.9.1 Scope of Work

1. The contractor shall pursue and obtain, within two years, third party certification of their performance-based, managed safety and health system, or an equivalent occupational safety certification program.
2. The Contractor shall be responsible for providing a quality management system in compliance with the provisions of “ANSI/ISO/ASQ Q9001-2000, “Quality Management Systems – Requirements” throughout. The Contractor Quality Manual (DR 1-RA01) shall define the activities and systems requiring quality systems surveillance. Once the Contractor’s Quality Manual has been approved by NASA, it will become the governing quality systems document for the Contractor.
3. The scope of the NASA SSC ISO-9001 registration at SSC currently includes Propulsion Testing and Applied Science programs, but will be expanded to include all SSC activities.

1.1.9.2 General Requirements

1. The contractor shall pursue and obtain, within two years, third party certification of their performance-based, managed safety and health system, or an equivalent occupational safety certification program.

2. The Contractor must be compliant to ISO 9001 within 6 months after contract award.
3. The Contractor will be required to develop work instructions necessary to implement SSC’s Management System. Examples of areas requiring work instructions include but not limited to: engineering, purchasing, fluid component processing facility, source and receiving inspections, welding, nondestructive testing.
4. SSC utilizes a distributed document management system with a design that allows for management of all types of documents. This Technical Documentation System provides for electronic revision control of approved documents and has a centralized search engine. All Level 1 and 2 documents are currently maintained in Tech Doc, and Level 3 documents will be added during the life of the contract. This system will be used by the FOOSC. Documentation on this system is included in the TRL.
5. Contractor management is expected to participate as a member of the SSC Safety Management Review. This group, chaired by the SSC Center Director or his designee, is comprised of senior managers from NASA and its major support contractors. The contractor is expected to participate as a member of the Stennis Management System (SMS) working group that meets as required, typically 4 times a year.

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6. The Contractor is required to participate in the SSC internal audit program which is designed to maintain the Stennis Management System. The recent frequency of internal audits can be obtained from the SSC's Annual Audit Plan located in the TRL. The frequency of internal audits is anticipated to be four times a year. The duration of each audit including audit preparation through final closeout is approximately two weeks. The recent level of FOOSC employee participation in the SSC internal audits is indicated in the Annual Audit Plan located in the TRL.

7. The Contractor is expected to conduct FOOSC internal audits in accordance with ANSI/ISO/ASQC Q9001-2000. Under NASA/SSC and the contractor internal audit program, duplicate audits will not normally be performed. The SSC internal audit plan will be adjusted based on the successful performance of the contractor internal audit program.

8. Implementing documents, such as ANSI/ISO/ASQC Q9001-2000, can be obtained by writing or calling ASQC, 611 East Wisconsin Avenue, P. O. Box 3005, Milwaukee, Wisconsin 53201-3005, Telephone No. (414) 272-8575 or 1-800-248-1946, Fax No. (414) 272-1734.

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1.1.9.3	Provide for a Quality Management System (QMS) in compliance with ISO ANSI/ISO/ASQC Q9001-2000 and DR1-RA01	<p>Provide, implement and maintain a Quality Management System that has sufficient authority and organizational freedom to identify quality problems as well as to initiate, recommend, or provide corrective and preventative actions.</p> <p>Management measures must provide for checking, auditing, or otherwise verifying that an activity has been correctly performed, independent of the individual or groups directly responsible for performing the specific activity.</p>	1 QMS	Implement a QMS that identifies and corrects problems in an independent and unbiased fashion, provides timely strategies to manage potential problems.
		The Contractor shall be in compliance with ANSI/ISO/ASQC Q9001-2000 within six (6) months, after contract award.		Perform all activities in compliance with ANSI/ISO/ASQC Q9001-2000.
		Perform all activities in compliance with established procedures.		

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1.1.9.4	Quality Manual (DR 1-RA01)	<p>Develop Quality Manual in compliance with ANSI/ISO/ASQC Q 9001-2000.</p> <p>The Contractor quality management system must be defined in a Quality Manual.</p> <p>The Quality Manual must define the type, levels, and inter-relationships of the documentation that defines the organization quality system. A “tree” diagram showing various types of policies, plans, procedures and work instructions related to one another could be used.</p>	1 Quality Manual	<p>Quality Manual submitted with offeror’s proposal.</p> <p>Conformance with DR</p> <p>The Quality Manual and associated operating procedures must be in compliance with ANSI/ ISO /ASQC Q 9001, 2000, and consistent with the Contractor documented Quality Policy and objectives.</p>
1.1.10	PERSONNEL REQUIREMENTS			
1.1.10.1	Furnish a Sufficient Number of Competent and Qualified Personnel to Accomplish the Services	<p>Personnel must be properly trained and qualified to perform the types of work requiring specific knowledge and skills as identified in all Annexes.</p> <p>Contractor personnel assigned to operate either Government-owned or Contractor-owned/leased motor vehicles/equipment in the performance of this Contract shall be certified by the Contractor as being fully</p>	Contractor determined	No incident of an unqualified person, lapsed certification or license.

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1.1.10.1	Continuation Furnish a Sufficient Number of Competent and Qualified Personnel to Accomplish the Services	<p>qualified to operate the vehicles/equipment to which they are assigned and be licensed as required by State and local Governments.</p> <p>The Contractor shall use Industry Standards and Federal, State, SSC, and local qualifications for licensing or certifications, or as otherwise may be required in specific Annexes. Training is updated and maintained current for activities that require periodic re-certification. Employee shall not be allowed to perform a task for which the certification is not current.</p>		
1.1.10.2	Maintain Personnel Records	<p>Records shall be maintained on certifications and licenses of required trades personnel. The Contractor is responsible for the operation of a system of records on the medical history of individuals at SSC in accordance with the Privacy Act of 1974, Public Law 93-579 (5 U.S.C.552a). Refer to Annex 2.3, Occupational Health Services</p>	Contractor determined	Personnel records are accurate and complete. No instances of violation of Privacy Act.

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1.1.10.3	Certified Operators	<p>Operators shall be trained and certified for systems equipment and process they operate. The Contractor shall document all operator training and certification and provide adequate drills and exercises in conjunction with the Contractor Quality Control (QC).</p> <p>Program that confirms operator's knowledge, skills, safety, and understanding of operational requirements. Drills, certification, testing, and scheduling shall be Contractors responsibility.</p> <p>Operators shall exercise due care while operating equipment and accomplish appropriate pre-operational inspections of the equipment.</p>	Nothing additional.	No incident or occurrence of unqualified operators or operational errors.
1.1.11	EMERGENCY MANAGEMENT			

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1.1.11.1	Plan, Develop, Comply With, Manage, and Accomplish Contractor Supporting Procedures of the SSC Emergency Preparedness Plan	<p>Establish and Implement an Emergency Management Program to ensure compliance with SSC NASA/SSC Emergency Preparedness Plan, SPN-1040-0003</p> <p>Manage and comply with NASA/SSC Emergency Preparedness Plan across all contract functions.</p> <p>The FOS Emergency Preparedness Plan shall be inclusive of all required Emergency Plan Annexes, Appendices, and Procedures that support overall NASA/SSC Emergency Preparedness Plan. Update and maintain Contractor's Plan annually. Accomplish plan per DR 1-GA03.</p>	1 plan (annually).	<p>No Instanced with Noncompliance</p> <p>Conformance to DR</p>
1.1.12	Functional Metrics	<p>The Contractor shall develop, acquire, maintain, record and report all metrics' requirements for designated functional requirements. These metric and reporting requirements are in addition to other metrics, on-line electronic data, reports, and submittals that are required in the various Annexes of Attachment J-1. The planning and implementation of these contract metrics will be achieved through a government/contractor partnership that will continue</p>	<p>Monthly Report. 12 Reports</p>	<p>Metrics reports to be received by the 10TH of each month and per dates required in DR-MA07.</p>

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1.1.12	Continuation Functional Metrics	throughout the life of the contract. The contractor shall report the various metrics, as further defined in DR 1-MA07 .		

SSC's ISO 9001 Level 1 and 2 documents can be found in the Technical Reference Library (TRL).

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1.1.3.1 Definitions/Acronyms

Annually - Service is accomplished 1 time during each 12-month period of the contract, at intervals of 11 to 13 months.

Architectural - Includes (interior/exterior): doors; windows; flooring (coatings and coverings); stairs and stairwells; interior walls, ceilings, and partitions.

As-Built - Updating the master facility drawings to accurately depict existing conditions in the field.

Augmentation - The Contractor shall define the method to be used to augment the core work force to handle additional work for each sub-Annex.

Backlog of Maintenance and Repair (BMAR) - The unfunded facilities maintenance work required to bring facilities and collateral equipment to a condition that meets acceptable facilities maintenance standards.

Biannually - Also called 2-year Frequency. Activities accomplished 1 time during each 24 month period of the contract, at intervals of 23 to 25 months. 50% of the Biennial Tasks shall be completed each year under any given task sheet.

Buffer Zone - An area of 125,071 acres surrounding the fee area. All activities within all portions of this zone are subject to specific easement provisions. These provisions specify that habitable buildings cannot be erected, however, farming

livestock raising, pulpwood and timber operations, and mining activities are allowed.

Building Specialty - Includes: installed equipment within the facility such as food service and processing equipment; appliances; elevators; automatic doors; roll-up doors; blast doors; vehicle gates; waste disposal equipment; shop equipment and hoists.

Capital Equipment - An item of equipment with an acquisition cost of \$5,000 or more that has an estimated service life of 2 years or more, which will not be consumed in an experiment, and which most generally will be identified as an independently operable item.

Collateral Equipment - See NPR 8831.2D, Facilities Maintenance Management and NPR 8820.2E Facility Project Implementation Guide.

Common Use Areas - Facilities and/or portions of facilities, to which access is afforded and which are constructed, maintained and operated specifically for, but not incidental to, the benefit of all SSC residents. Common use areas include entry and hallways, stairs and stairwells, rest rooms, and vending areas within dedicated facilities. Access restrictions, for security or other reasons, do not alter this definition.

Computerized Maintenance Management System (CMMS) – A CMMS is a set of computer software modules and equipment data bases containing facility utilities and structures data with the capability to process the data for Public Works

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Maintenance Management Functions. These maintenance-related functions typically include, but not limited to:

- Facility/Equipment Inventory
- Facility/Equipment History
- Work Input Control
- Job Estimating
- Work Scheduling and Tracking
- Building Operations and Maintenance (including the normal CMMS functions)
- Preventive Maintenance
- Predictive Maintenance
- Facility Inspection and Assessment
- Material Management
- Utilities Management

Construction - Any and all field work for the purpose of constructing new facilities, and modifying, rehabilitating, or repairing existing facilities.

Contracting Officer (CO) - “Contracting Officer” means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer. For the purpose of this contract, when the Contracting Officer is referred to, it shall be understood as the Contracting Officer or a designated technical representative.

Contracting Officer's Technical Representative (COTR) - A Government employee with technical training and experience appointed by the Contracting Officer to assist in the following functions:

- a. Ensuring services under the terms and conditions of this contract are accomplished as defined.
- b. Providing technical clarification of work requirements specified in their functional Annex. The COTR serves as the central point of contact between the customer, Contractor, and the Contracting Officer.

Consumables - Expendable material and/or supplies used on a recurring basis.

Core Hours - For purposes of this contract, core hours are 7:00 a.m. to 4:30 p.m., Monday through Friday excluding Federal holidays.

Contract Year (CY)

Daily (D) - Service is accomplished 1 time a day, Monday through Friday (excluding holidays), during each 12-month period of the contract, at intervals of 22 to 26 hours (not including Saturday and Sunday).

Daily, 7 days a week (D7) - Service is accomplished 1 time a day, Monday through Sunday, during each 12-month period of the contract, at intervals of 22 to 26 hours.

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Day - For purposes of this contract, a day is defined as 1 calendar day unless specified differently in the Annexes.

Debris - Debris is defined as any trash, wastepaper, gum, limbs, leaves or other matter lying scattered about which is foreign to its surroundings; e.g., leaves/rocks in equipment areas, or other items not placed or intended for the given location.

Delinquent Orders - Items or services not received or performed by the due date or completion date.

Demand Services - Services provided by the contractor for which the requesting agency fully reimburses NASA SSC on a case-by-case basis. Services provided on a demand basis are within the scope of the contract but are rendered for a specified purpose and timeframe as designated on a Stennis Work Request (SWR).

Direct Buy - Purchase in response to MRs for supplies and services other than replenishment of stock and inventory.

Electrical - Includes: electrical wiring and lighting, hardware, and panels; power for equipment up to the point of disconnect, grounding or lightning arresting systems; alarm systems and communication equipment (excluding telephones).

Energy Management and Control System (EMCS) - A computerized system for monitoring and controlling systems and equipment through an integrated network of microprocessor based controls.

Equipment - For purposes of this Annex equipment is defined to mean collateral equipment.

Facilities - A facility is an enclosed structure to protect personnel, material or equipment from the elements and provide associated work or storage space. For purposes of this contract, a facility includes the utility systems inside the facility and extends five feet from the facility or as otherwise defined.

- (1) Architectural. Includes (interior/exterior): doors; windows; flooring (coatings and coverings); stairs and stairwells; interior walls, ceilings, and partitions
- (2) Structural. Includes foundation; structural system; building shell; roof; external attachments (e.g. walkway covers, overhangs, loading docks, etc); and facilities water collection and drainage system.
- (3) Electrical. Includes: electrical wiring and lighting, hardware, and panels; power for equipment up to the point of disconnect, grounding or lightning arresting systems; alarm systems and communication equipment (excluding telephones).
- (4) Mechanical. Includes all equipment, components and controls associated with the following systems as well as components located outside the facility: HVAC; plumbing; compressed air; steam; fire suppression; gas; boilers, furnaces; and generators.

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(5) **Building Specialty.** Includes: installed equipment within the facility such as food service and processing equipment; appliances; elevators; automatic doors; roll-up doors; blast doors; vehicle gates; waste disposal equipment; shop equipment and hoists.

Fee Area - An area of approximately 25 square miles (13,800 acres) of government-owned land. The property was acquired in "Fee Simple" and includes the underlying mineral rights. It is within this area that NASA and the other resident agencies have constructed the test facilities, laboratories and office and support buildings necessary for conducting their operations.

Fiscal Year - An accounting period of 12 months. NASA fiscal year extends from October 1 through September 30 of the following year.

Government Property - All property owned or leased by the Government or acquired by the Government under the terms of the contract.

Holidays - Federal holidays include: New Year's Day; Martin Luther King, Jr. Day; Presidents' Day; Memorial Day; Independence Day; Labor Day; Columbus Day; Veterans' Day; Thanksgiving Day; and Christmas Day.

Immediate/Immediately - For purposes of this contract, immediately means with no interval of time or delay.

In-House - For purposes of this contract, "in-house" labor includes all labor performed by prime Contractor employees or employees of subcontractors.

Institution or Base - For purposes of this contract Institution and Base are used interchangeably. Institution refers to those facilities and equipment that are in the fee area, west of a line parallel to and 1000 feet west of D road and excludes all Test Complex structures, facilities and utilities, and the Army Complex.

Integrated Pest Management - The utilization of control measures coordinated for overall environmental protection so as to reduce pest numbers to a controlled level without adverse effects to the surroundings.

IAGP - Installation Accountable Government Property in the possession of, or directly acquired by the Government and subsequently made available to the contractor for use in the performance of work related to this contract.

Inception to Date (ITD)

Location - The Contractor shall define the location where each type of work will be performed (or location based out of).

Maintenance - Includes day-to-day periodic, scheduled or unscheduled work required to preserve or restore a piece of equipment, a system, or utility to such a condition that it may be effectively utilized for its intended purpose, output, redundancy and availability.

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Maintenance Level - A designation used to specify the frequency of services and type of grounds maintenance required.

MAXIMO - The MAXIMO Equipment Database identifies numbered equipment items and gives criticality for each. Definitions for Criticality levels are provided in Annex 5.1.

Mechanical - Includes all equipment, components and controls associated with the following systems as well as components located outside the facility: HVAC; plumbing; compressed air; steam; fire suppression; gas; boilers, furnaces; and generators.

Monitor and Inspect - These terms are used in conjunction with “Operate” to delineate system activities other than actual operations which require periodic staffing. The Government requires that these activities would be accomplished by trained personnel with ability to recognize abnormal conditions and evidence of potential problems.

Monthly (M) - Service is accomplished 12 times during each 12-month period of the contract, at intervals of 28 to 32 days.

Mowing - Includes cutting and trimming, within the designated area, all grasses, weeds and other vegetation, which is 1 inch, or less in diameter (at ground level).

Non-reimbursable Customers - A customer who is funded by NASA direct appropriations.

Occupied Period - Hours in which a facility is in use, to house personnel or other activities which require utility support (may include working and non-working hours).

Operate - This term is used for systems that require periodic operational activities but not continuous staffing. Personnel may be available for other contract activities. Operations include the first hour of trouble-shooting/ investigation of a malfunction or availability loss (**See Table 5.5-4**) for response time), and also includes operational support for planned outages required for Utility PM’s.

Outage - The planned or unintentional interruption or termination of a utility service such as electricity, water, sanitary sewage, EMCS control, or natural gas.

Planned Maintenance - Planned maintenance projects: A project which is approved and funded for a fiscal year as a result of the comprehensive inspection process (**See 5.7.3.2 - 5.7.8**) or as designated by the CO.

Predictive Testing and Inspection (PT&I) - The use of testing techniques (primarily non-intrusive), visual inspection, and performance data to assess equipment condition. Continuing analysis of equipment condition is used to replace arbitrarily timed maintenance tasks with maintenance that is scheduled based on equipment condition.

Preventive Maintenance (PM) - Also called time-based maintenance. PM is the planned, scheduled periodic inspection, adjustment, cleaning, lubrication, parts replacement

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and calibration of components, equipment and systems. Also frequently called time-based, but in the broad sense is extended to include PT&I.

Proactive Maintenance - Maintenance which seeks to reduce maintenance costs through better design, construction/ installation, specifications, maintenance procedures, workmanship, and scheduling. Proactive Maintenance employs techniques such as specification of new/rebuilt equipment, precision build/installation, failed part analysis, root-cause failure analysis, reliability engineering, rebuild certification/ verification, age exploration and recurrence control.

Pruning - Pruning is selectively removing unwanted growth to make a plant or tree grow or respond in a desired manner. Pruning differs from 'shearing'. Pruning involves selection and judgment. 'Shearing' means clipping all growth on a plant at a uniform distance and shape.

Project Management Plan (PMP) - Detail of a specific scope of work relating to design and study services and deliverables.

Quarterly (Q) - Service is accomplished 4 times during each 12 month period of the contract, at intervals of 80 to 100 days.

Quinquennially - Also called 5-year Frequency. Activities accomplished 1 time during each 60 month period of the contract, at intervals of 58 to 62 months. 20% of the Quinquennial Tasks shall be completed each year under any given task sheet.

Raster Master Drawings - Master facility drawings that have been scanned into electronic format.

RCM Criticality Levels -

Level I - Safety and/or Environmental Impact

Level II - Mission Operational Impact

Level III - Significant Operational Impact (replacement cost)

Level IV - Personnel Costs (loss of facility use)

Level V - Non-Critical

Ready-for-Issue - In usable condition and available for immediate use.

Recurring Work - Work which is performed under the contract which is not a part of the Scheduled Maintenance and Repair Program and is required an undetermined number of times during the year, but is required at least once. This work will be accomplished as required. An example is implementation of the Hurricane Plan which will be performed (partially) once per year at the start of hurricane season with the resumption and completion of the plan carried out dependent on the number of storms which threaten the Mississippi Gulf Coast.

Redline Drawing - A drawing which has had approved modifications/ changes not incorporated in the controlled official archives.

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Reimbursable Customers - A government or non-government customer who provides funding under a reimbursable agreement for goods and/or services received from NASA and/or its contractors. Reimbursable customers must have sufficient funding registered with NASA before costs can be incurred on their behalf. All services must be requested on a Stennis Work Request and must cite the funding authorization that will provide the reimbursement.

Reliability Centered Maintenance (RCM) - An on-going structured process which determines the optimum mix of reactive, preventive, PT&I and proactive maintenance practices in order to provide the required reliability at the minimum cost.

Responsiveness - The Contractor shall define the philosophy and method to be used to assure responsiveness to customers' requirements. Communication between the customers and the Contractor must be clear.

Selected - Records, reports, and submittals that are further defined by a DR.

Semi-Annually (S) - Service is accomplished 2 times during each 12-month period of the contract, at intervals of 160 to 200 days.

Shift - The period of time defined as one third of a 24-hour day.

Site Wide Oriented Repair Documentation (SORD)

Drawings - Master facility drawings, hard/electronic, acts as official record of site facilities.

Six-Year Frequency - Activities accomplished 1 time during each 72 month period of the contract, at intervals of 70 to 74 months. 1/6 of the Six-Year tasks shall be completed each year under any given task sheet.

Specification Control Drawings (SCD) - Detailed drawings showing parts and specifications of individual elements of a component or system such as valve, controllers, expansion joints and pipe fittings.

Staff and Operate - This term is used for systems that require continuous staffing during the operational period. Personnel may also operate other systems within the immediate vicinity.

Standard Operating Procedure (SOP) - This is a standing procedure that provides step-by-step instructions to operate systems. It is used for activities that commonly occur. The SOP requires Contracting Officer (CO) review and shall be maintained in electronic format easily accessible to the Government. Documents shall become Government property and shall be stored at CEF. (See DR 5-GA09)

Standing Work - Work which is performed under the contract which is not a part of the Scheduled Maintenance and Repair Program and is required a pre-determined number of times during the year. The schedule can be specifically called out as in, once per hour or may be left to the Contractor, as in, once

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annually. An example is implementation of the Fall/Winter Setback Plan which always occurs once per year during the fall of the year.

Structural - Includes foundation; structural system; building shell; roof; external attachments (e.g. walkway covers, overhangs, loading docks, etc); and facilities water collection and drainage system.

Structures - A structure is a constructed unit established for a designated objective. Structures are part of or inside a facility are included with the facility. For purposes of this contract, structures are generally described as:

1. Allowing pedestrian and vehicular transportation. Includes roads and parking areas, paved or gravel surfaces, curbs, shoulders, guard rails, medians, wheel stops, walkways, bridges, sidewalks, and hardware.
2. Preventing access and maintaining privacy. Includes fences, gates, barbed wire, planters, bollards, chains, hardware and attachments.
3. Retaining or directing natural elements. Includes culverts, drainage systems, gravity storm water systems, retaining wall, bulkheads, landscaped borders, head walls, rip rapped areas, retention/detention ponds, spillways, canals, navigational lock, catch basins, and oil/water separators.
4. Providing information. Includes signs, pavement markings, flag poles, displays, historical markers, monuments and associated equipment.

5. Other. Boat ramps, docks, landfill, and associated equipment. Test Complex: Test complex: For the purpose of this contract, all facilities, equipment and land east of a line parallel to and nominally 1,000 feet west of D road extended to the ARMY complex.

Test Complex – For the purpose of this contract, all facilities, equipment, and land east of line parallel to and nominally 1,000 feet west of D road extended to the ARMY complex.

Training/Certification - The Contractor shall define the methods to train and certify new and existing employees in areas that require certification and address how the contractor will handle attrition.

Transaction - Single purchase action of material/equipment to a single source (vendor) regardless of the number of line items on an order.

Utilities - For purposes of Annex 5, consist of 13.8KV Electrical System, Potable Water System, Sanitary Sewage System, EMCS System, and the Natural Gas System as defined and described in Table 5.5-1.

Utility Process Plan (UPP) - This is a one time per operation. Contractor generated, document that provides step-by-step instructions that establish responsibility and control system configuration changes. It provides details such as lockout/tag-out, switch operation, valve operation, coordination, etc. Documents shall become Government property. (See DR 5-FA05).

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Utility Systems - A utility is a system for collecting or distributing services between a common point and specific locations both above and below ground. See Annex 5.1, Table 5.5-1, for descriptions of utility systems.

Work Control Center - The central organizational point for receipt, tracking, and management of work generated from all sources.

Yearly - Service is accomplished one time during each 12-month period of the contract, at intervals of 11 to 13 month.

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1.2	WORK CONTROL			
1.2.1	Establish and Implement a Work Management Program	Collect, receive, manage, track, account for, Performance Work Statement (PWS) work services and maintain identification and status for all contract work, including work from resident agencies. Ensure that service and equipment requests are initiated by authorized requesters. The Government will provide listings of authorized requesters. Work management includes all work requirements in this contract.	Contractor determined.	Services are easily accessible and identifiable. Ensure the program is capable of separating/identifying work by Annex, sub-Annex and item Number.
1.2.2	Customer Guide	Develop a customer guide to Facility Operating Services at SSC for SSC customers. Refer to DR1-GA02	One Guide	In conformance with DR

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1.2.3	Provide work control center(s) for receiving, scheduling, tracking and reporting all work services.	<p>The Contractor shall ensure the number of work control center(s), location(s), and access by customers allows for easy use by the customer with minimal impact.</p> <p>Work control center(s) location and phone number(s) shall be published or otherwise made available to all customers receiving Contract Services.</p> <p>Minimum work control requirements are identified in each functional Annex.</p>	Nothing additional	Operate center(s) with individuals who are knowledgeable of the services(s) being requested and capable of answering questions and initiating proper action. No instance of work reception delays.
1.2.3.1	Establish a work order numbering system for easy identification and tracking of all Contract Services.	<p>Ensure the numbering system for SSC work orders can be distinguished from and does not duplicate or contradict any other Government established numbering systems. The Material Request (MR) and SSC Stennis Work Request (SWR) numbering and documents control procedures are included on the forms.</p> <p>Minimum requirements are identified in each of the functional Annexes.</p>	Nothing additional	All work can be accounted for and a complete audit trail exists.

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1.2.4	Work Scheduling and Coordination	<p>The Contractor shall incorporate into work performance-scheduling controls that support SSC's Missions and Goals. As such, the Contractor's scheduling of work shall accommodate SSC's Programs, SSC's Customer Work Schedule, and Mission-related restrictions and limitations. The contractor shall employ Resource Loading Practices to ensure that labor commitments are commensurate with on board staffing.</p> <p>Coordinate work with all customers and Program Managers.</p>	Nothing additional	Ensure work is scheduled in a timely manner within cost estimate, and with minimal impact on the customers and their mission. Ensure notification of and coordination with all customers and Program Managers.

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1.2.4	Continuation Work Scheduling and Coordination	<p>The Contractor shall be flexible in accommodating schedule requirements which only allow for access outside core hours, periodic “shut down”, etc.; access limitations, restrictions, or constraints imposed by the customer’s employee work schedules; and other conditions which may limit access to their areas.</p> <p>Unresolved scheduling conflicts shall be forwarded to the Contracting Officer (CO).</p> <p>Includes coordination and scheduling of any associated Quality Assurance (QA) Inspections, Inventories, audits, follow-up, reworks, etc.</p>		<p>Customers shall be notified in writing and by telephone when the actual cost of the work request has reached 85% on SWRs funded for \$500.00 or more. At no time will the estimated funds be exceeded without written approval of the customer.</p>
1.2.6	Mission and Site Critical Work	<p>Notify the Program Manager prior to beginning scheduled work/inspection of Mission Critical Work and of and uncompleted work, pending systems and return dates and times before leaving the area.</p>	Nothing additional	<p>No instances of Mission Critical Work until proper notification of affected program manager are performed.</p>

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1.2.6.1	Schedule Work to be Accomplished in Mission Critical and Site Critical Areas, with the Applicable Program Manager	Due to the strict access controls in the Test Complex Area, the Contractor should expect some delays in obtaining access. See NASA SOI-8080-0040 (Test Area Access Control) and SOI-8080-0029 (Contractor Interface/Access) .		
1.2.7	Work Completion/Acceptance/Complete Notification	Provide notification of completed work to customers.	Nothing additional	Work shall not be considered complete until notification, inspection, and acceptance are completed.

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FINANCIAL MANAGEMENT**

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1.3 Financial Management

1.3.1 General Requirements

The contractor shall operate within the negotiated contract value while also adhering to the approved fiscal operating budget and be responsible for providing financial services to comply with the SSC financial systems to satisfy the reporting requirements of NASA/SSC management, resident agencies, commercial tenants, SSC contractors and others in the management of NASA/SSC resources.

1.3.2 Funds Availability

The contractor shall process and maintain reimbursable work orders upon receipt and provide estimates into the FAS and obtain FAS acceptance and reservation of funds before work begins. The contractor shall update the FAS when work orders are amended and as cost is incurred. The contractor shall not exceed the estimated cost on the work order without obtaining prior written approval from the requestor and NASA COTR and an amended work order.

1.3.3 Cost Reporting

The contractor's system shall interface with NASA SSC Other Accumulated Cost (OAC) system to provide financial reports to comply with the NASA SSC financial reporting requirements. NASA SSC management, resident agencies, commercial tenants, other NASA SSC contractors, as well as others in the management organization of SSC define financial

reporting requirements. Cost shall be distributed based on the functional definition specified in FMR Volume 7, Chapter 8, (reference http://www.nasa.gov/offices/ocfo/references/ocfo_fmr_detail.html). The cost shall be provided weekly for inclusion in SSC Other Accumulated Cost in an electronic flat file format (reference **DR 1-MF03**.) The contractor shall provide a monthly accrual for the period from the end of the SSC fiscal month through the last day of the calendar month. The contractor's system shall distribute cost to the work order that describes the actual work performed. The contractor's cost shall be consolidated monthly for inclusion in the SSC Other Accumulated Cost. The cost data is due by COB Tuesday following the end of each fiscal week. (SSC's fiscal year calendar is published before the beginning of each fiscal year by the NASA SSC Financial Management Division. A copy will be provided to the contractor before October 1 of each year.) The contractor's system shall be capable of allocating non-contract costs (NASA SSC surcharges) to the total cost of a work order. These surcharges shall be developed by a cooperative effort between the contractor and the government. The contractor's system shall calculate indirect cost rates for NASA approval and also have the capability to distribute these indirect costs against an element of cost. The contractor's system shall provide workforce data at the same level as cost is reported. The contractor's system shall be required to provide the capability to distribute non-contract costs with no impact to the contract (i.e., monthly occupancy distribution.)

1.3.4 Budget Development Support

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The contractor shall respond to requests for support to development of the annual budget, annual phasing plans, and other special budget exercises as required.

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1.3.5	FINANCIAL OPERATIONS			
1.3.5.1	Contractor Financial Management	Report cost and workforce data. Per DR 1-MF01 .	1 ITD Monthly 1 CY Monthly Quarterly	Accurate data delivered on time.
1.3.5.2	Work Order Status Report	Cost data on open work orders that are at least 85% complete. Per DR1-MF02 .	1 Monthly Report	Accurate data due by 3 rd Monday after each fiscal month-end
1.3.5.3	Electronic Weekly Detail Cost Data	Electronic flat file containing work hours and cost for current fiscal week. Per DR 1-MF03 .	1 data file per SSC fiscal week	File format compatible to match Other Accumulated Cost (OAC) parameters and delivered no later than close of business on the Tuesday following close of the SSC fiscal week
1.3.5.4	Contract Monthly Operating Status	Status of contractor's monthly and fiscal year-to-date cost and workforce as compared to the fiscal year operating plan. Per DR1-MF04 .	1 monthly	Accurate data provided on due date providing mutually understandable explanations of deviations from plan

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1.3.5.5	Occupancy Report	Cost data by NASA budget line item and Stennis work order to aid in the development of the yearly occupancy rate based on SSC's prior fiscal year cost for the contract. Per DR1-MF05	1 Annual Report	Accurate data due on November 15 or 30 days after end of contract. Provide explanation of variances from prior year.

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DOCUMENTATION AND RECORD MANAGEMENT

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1.4 Documentation and Record Management

1.4.1 GENERAL INFORMATION

1. The contractor shall provide a comprehensive records and files management program that will provide for the appropriate filing, storage, retrieval, and disposition of records to include photographic and audiovisual materials. A plan for operation of the program shall be developed by the contractor and submitted to NASA as specified in **DR 1-DM01**. The documentation plan shall be prepared to comply with established records management regulations and guidelines:
2. The contractor shall follow record management rules in accordance with NASA Records Management, NPD 1440.6; NASA Records Retention Schedules (NRRS), NPR 1441.1; General Records Schedules (GRS); 36 CFR – Chapter XII, Subchapter B, Records Management; and applicable supplemental guidelines from the National Archives and Records Administration (NARA), the NASA Records Officer, or the SSC Records Management Officer. The contractor shall utilize and maintain existing SSC Repositories for photographs and audio visual materials created at SSC to be maintained and archived per NASA and NARA.
3. Documentation, which includes plans, manuals, reports, and procedures conforming to NASA standards, shall be maintained, archived and stored in the SSC repository appropriate to the type of documentation.

Repositories include Central Engineering Files (CEF), electronic documentation systems (NASA/SSC Technical Documentation System (TechDoc), Design and Data Management System (DDMS), and the SSC Records Archive. Documents containing detailed facilities and facilities maintenance and operations related information such as engineering drawings, schematics, specifications, reports, cost estimates, etc. shall be stored in CEF.

4. The contractor shall utilize to the maximum extent possible existing SSC documentation. The contractor shall develop and utilize necessary documentation such as operating plans and procedures, maintenance and operating instructions, and other types of work instructions. All procedures shall be maintained electronically in the Technical Document system to provide a complete index of contractor procedures. Documentation and the document index shall be developed, managed, and maintained in accordance with SPR 1400.1, Document Preparation, Numbering, and Management Guidelines and Standards and SSLP-1410-0001, Documentation and Data Control. The contractor shall officially record and house documentation in the SSC Technical Documentation System document repository.

1.4.2 Records, Reports & Submittals

The Government via Data Requirements (DRs) requires records, reports, and submittals. Submittals may include but

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DOCUMENTATION AND RECORD MANAGEMENT

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are not limited to plans, procedures, Standard Operating Procedures (SOPs) and are identified in the applicable Annexes. Other records, reports, and submittals are further defined as:

1.4.2.1 Records

For the purpose of this Contract, required databases are considered as records. All logs, records, files, databases, and workload data identified in the Annexes shall be maintained throughout the life of the Contract and as otherwise may be required by law or regulatory authority. Records shall be available for review by the CO, or designated technical representative and auditors, and upon termination of the Contract, all NASA owned, contractor held records shall be turned over to the Government. All records shall contain documentation to provide a complete audit trail. A Records Master List/Files Index shall be developed and maintained by the contractor as required in **DR 1-DM04**. Records shall be maintained according to established regulations and guidelines: NASA Records Management, NPD 1440.6; NASA Records Retention Schedules (NRRS), NPR 1441.1; General Records Schedules (GRS); 36 CFR – Chapter XII, Subchapter B, Records Management; and applicable supplemental guidelines from the National Archives and Records Administration (NARA), the NASA Records Officer, or the SSC Records Management Officer.

1.4.2.2 Reports

Selected reports and outline instructions for the development of the format are contained on individual DRs in Attachment J-2. All DR numbers are preceded by the number of the applicable Annex. Due dates are specified for each report.

1.4.2.3 Submittals

Detailed plans, manufacturer's installation, testing and product data, and other submittals which are required on an infrequent or one-time basis are identified in the applicable Annexes. Typically, the required submittals require the Contractor to propose or define his plan or methodology of providing a specified service. Updates are required whenever changes to the stated plan occur. Selected submittals and outline instructions for the development of the format are contained on **individual DRs in Attachment J-2**. Due dates are specified for each separate submittal. When the due date falls on a Saturday, Sunday, or holiday, the submittal is due by 8:00AM. Monday, or the day following the holiday.

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PROJECT MANAGEMENT
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DOCUMENTATION AND RECORD MANAGEMENT				
1.4.2.4	RECORDS, REPORTS, AND SUBMITTALS	The following additional data requirements (DRS) are required by the government and included in attachment J-2 of this contract: 1-DM01, 1-DM02, 1-DM03, 1-DM04, 1-GA01, 1-GA02, 1-MA01, 1-MA03, 1-MA04, 1-PC01, 1-PC02, 1-PC03	Per DRS	In compliance with DRS
1.4.2.5	CONFIGURATION MANAGEMENT PLAN	Provide a plan to assure proper configuration identification, control and accounting as related to the SSC facilities, documentation, records, and equipment for FOS in accordance with DR 1-CM01.	1 Plan	Submit plan timely in accordance with DR.

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PROJECT MANAGEMENT
ACQUISITION MANAGEMENT

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1.5 ACQUISITION MANAGEMENT

The Contractor shall manage acquisition services at John C. Stennis Space Center in support of NASA and other resident agencies. The Contractor shall provide a sound subcontracting management program that supports NASA's commitment to providing maximum practicable opportunities to small, small disadvantaged, and women-owned small business concerns.

1.5.1 GENERAL REQUIREMENTS

The Contractor shall be knowledgeable of Federal Acquisition Regulations (FAR) and be experienced in the acquisition and management of supplies and services in support of the Government. The Contractor shall maintain a single point of contact to manage the acquisition activities. The Contractor shall establish and ensure continuous certification of a Government approved purchasing system for John C. Stennis Space Center in accordance with the FAR and the NASA FAR Supplement.

1.5.1.1 Subcontracted Construction Services

In accordance with FAR Part 12, the Contractor and its subcontractors at all tiers shall incorporate, to the maximum extent practicable, commercial items or non-developmental items as components of items supplied to NASA and its resident agencies.

The Contractor may perform with its own employees work falling within the "Construction" category, as defined in FAR

Part 22, Subpart 22.4 up to \$300,000 per project including labor and materials. This type of Davis-Bacon work under \$300,000 may also be subcontracted out using competitive acquisition practices. Davis-Bacon work over \$300,000 per project shall be sub-contracted out. Locally approved NASA construction projects, valued at less than \$500,000.00, may be forwarded to the Contractor for subcontract services at the discretion of the NASA/SSC Facilities Functional Office. Other Minor Construction Projects, valued between, \$1,000,000.00 to \$5,000,000.00 maybe forwarded periodically to the Contractor for subcontract action. On rare occasions, major construction projects (discrete projects) may be forwarded to the Contractor for subcontract action. The preponderance of subcontracted construction services will fall within the locally approved construction projects. The Contractor will be reimbursed for the actual cost of subcontracted construction services without the addition of any burden, handling, or other charges in accordance with the cost principles and procedures set forth in FAR Part 31. Refer to Section B of the contract for special cost provisions. The Contractor will initiate a subcontract construction acquisition upon receipt of a funded Stennis Work Request (SWR) through the NASA Access Request System (ARS) System. As authorized by the CO and NASA Facilities Functional Office.

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ACQUISITION MANAGEMENT**

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
1.5.2	Contractor Purchasing System	The Contractor shall establish and ensure continuous certification of a Government approved purchasing system. The cognizant Defense Contract Management Command Office will be delegated by the CO to conduct an initial Contractor Purchasing System Review (DCMAO) with the first year of contract performance to determine adequacy of the Contractor's Purchasing System.	Nothing Additional	Approved Purchasing System NLT 1 year after contract award. No instances of lapsed certification thereafter.
		The Contractor shall develop a Purchasing Manual or Purchasing Procedures that covers all aspects of an acquisition, including pre-solicitation planning, solicitation, negotiable, award, administration, and close-out of acquisition documents. The Purchasing Manual shall be updated on a regular basis to adhere to changes the FAR. The Purchasing Manual shall be submitted to the Contracting Officer for informational purposes.	1 Manual	In accordance with FAR, NFS. Purchasing Manual or Procedures submitted NLT 90 days after contract award.
1.5.3	Subcontract Management	The Contractor shall, to the maximum practicable extent, provide small business concerns and small disadvantaged business (SDB), Small Disabled Veteran Owned Small Business (SDVOSB), Veteran Owned Small Business (VOSB), Hub Zone, and Women-Owned Small Business concerns the maximum practicable opportunity to receive a fair portion of subcontract awards in accordance with a negotiated Subcontracting Plan for Small Business, SDB, Small Disabled Veteran	Approximately 40 sub contracts and 40 sub contract modification annually	Meet Small Business subcontracting plan requirement /goals.

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PROJECT MANAGEMENT
ACQUISITION MANAGEMENT**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
		Owned Small Business (SDVOSB), Veteran Owned Small Business (VOSB), Hub Zone, and Women-Owned Small Business which is incorporated in Section J-6 .		

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PROJECT MANAGEMENT
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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
1.5.3.1	Advance Subcontract Notification	The Contractor shall provide the CO with advance notification of proposed subcontracts in excess of \$25,000 in accordance with DR 1-PC04 .	Contractor Determined	2 weeks advance notification prior to placement of subcontract in conformance to DR 1-PC04 .
1.5.3.2	Consent-to-Placement of Subcontracts	The Contractor shall submit consent to place file documentation for all subcontracts and purchase orders in excess of \$100,000.00 or on a cost reimbursement type, T&M, or labor hours basis in accordance with FAR 52.244-2 (b) and (e). No instances of subcontracts awarded without consent of CO unless advanced verbal approval given by CO with subsequent ratification file to follow.	Contractor Determined	File Documentation complete in accordance with FAR 52.244-2. Ratification file submitted to CO NLT 2 weeks after advanced verbal approval. No instances of subcontracts awarded without consent of CO unless advanced verbal approval given by CO with subsequent ratification file to follow.

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PROJECT MANAGEMENT
ACQUISITION MANAGEMENT**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
1.5.3.3	Davis-Bacon Act Work	All Davis Bacon work over \$300,000 per project including labor and materials shall not be performed by prime contract employees except at the discretion and specifically written direction by the Contracting Officer. The Contractor may perform Davis-Bacon work under \$300,000 per project subject to payment of Davis-Bacon wages and adherence to Davis-Bacon provisions.	Approximately 20 construction contracts annually	No instances of Prime Contractor employees performing construction work over \$300,000 per project.
		Historically, during the past 3 fiscal years, the prime contractor's Davis-Bacon construction subcontracts were as follows: a. 6 per year <\$25,000 b. 5 per year \$25,000 - \$50,000 c. 5 per year \$50,000 - \$100,000 d. 10 per year >\$100,000		Subcontract placed in timely manner per SWR requirements.
		The Contractor shall conduct Davis-Bacon compliance reviews. The Contractor shall ensure that appropriate wage determinations are utilized and weekly-certified Davis-Bacon Payroll Records obtained.	Nothing Additional	No instances of Davis-Bacon violations.
		The Contractor shall submit Davis-Bacon Reports in accordance with DR 1-PC06 .	Quarterly & Semi-Annual (Total 6 reports)	Conformance with DR 1-PC06 .

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PROJECT MANAGEMENT
ACQUISITION MANAGEMENT**

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
1.5.3.4	Participate in Small Business Outreach Activities	The Contractor shall attend 4 small business/industry conferences or Industry Trade Shows annually. Attendance at these conferences shall be coordinated with the NASA/SSC Small Business Specialist. Contractor may be required to set up a company display/exhibit booth at each event and have personnel man the booth during the duration of the event. Historically, these Small Business Conferences and Fairs have been held in different congressional districts, e.g. Baton Rouge, LA, Los Angeles, CA or Little Rock, AR., or may be sponsored by Government organizations in an attempt to foster Small Business Outreach and Opportunities.	4 Conferences or Industry Trade Shows Annually Examples of conferences are: - Jackson County Industrial Trade Show (Pascagoula, MS) (2-days) - Annual Gulf Coast Business & Marketing Fair - (Pass Christian, MS) (1-day)	Active participation within the dates and times specified. Booths staffed at all times.
1.5.4	Reports and Submittals			
1.5.4.1	Geographic Economic Impact	The Contractor shall submit a report covering all acquisitions placed by the Contractor and the related geographic impact of these acquisitions in accordance with DR 1-PC07 .	Annual 1 Report	Conformance to DR 1-PC07 .
1.5.4.2	Purchasing and Subcontracting Metrics	The Contractor shall provide two separate metrics reports for all acquisition activity and the use of consolidated contracts in accordance with DR 1-PC08 .	Quarterly (8 Reports)	Conformance to DR 1-PC08 .
1.5.4.3	Subcontract Reporting	The Contractor shall electronically submit four separate subcontract reports using SBA eSRS. DR 1-PC05 .	Annual; Semi-Annually	Conformance to DR 1-PC05 .

**Annex 1.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 1.0 (ADMINISTRATIVE SERVICES)

1	PROJECT MANAGEMENT	80%	RR, UPI, VCC	<p>(a) Ensure contract compliance with Public Laws, Executive Orders, FAR, and NFS contract clauses. Ensure that all work is conducted within cost, on schedule, and a high quality manner and safe environment. Establish and implement an effective Emergency Management Program.</p> <p>(b) Provide necessary personnel and resources, except those government-furnished, to accomplish work and comply with all other terms and conditions of the contract</p> <p>(c) Responsiveness to multiple customers; Maintain flexibility in management operating systems and controls for changing service requirements and prioritizing tasks to accommodate competing demands</p>		<p>No violations or non-compliances of Public Laws, Executive Orders, FAR/NFS contract clauses promulgated by public laws and Executive Orders; no OSHA citations or EPA violations.</p> <p>Retention of qualified personnel and resources to accomplish work; no instances of non-compliance with other contract terms and conditions</p> <p>No disrupted services to any customers; work management program accessible to customers and identifies work by Annex and work authorization; no instances of costs funding exceeding SWR without customer approval</p>	5*
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**Annex 1.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 1.0 (ADMINISTRATIVE SERVICES)

1	Project Management Continued	80%	PI, UPI, RR	(d) Establishment and continuous certification, of a Government-approved purchasing system (e) Adherence to a Government approved purchasing system (f) Small Business Subcontracting: Goals, Targets, and Outreach Activities		Minimum Standards under Annex 1.5.2 Minimum Standards under Annex 1.5.2; no instances of system non-compliance Subcontracting goals are met and exceeded for Small Businesses (SB), Targeted Small Disadvantaged Businesses (SDB); and Women-Owned Small Businesses; Active Outreached Participation within dates and times specified. Annual assessment.	
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*Denotes # of occurrences (quarterly)

**Annex 1.0
PERFORMANCE REQUIREMENTS
SUMMARY**

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CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 1.0 (ADMINISTRATIVE SERVICES)

2	FINANCIAL MANAGEMENT (Documentation and Reporting Requirements)	20%	RR, PI, UPI	Satisfy SSC Reporting Requirements to allow reporting to NASA Headquarters by: (1) maintaining documentation with respect to all financial operations and (2) developing and maintaining a comprehensive record and file management program.		Comply with SSC Other Accumulated Cost (OAC) with no instance of late or inaccurate reports; comply with all established regulations and guidelines identified in Annex 1.3.	5*
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*Denotes # of occurrences (quarterly)

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LIFE SUPPORT SERVICES
GENERAL REQUIREMENTS**

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2.2	ENVIRONMENTAL SERVICES
2.3	OCCUPATIONAL HEALTH SERVICES
2.4	QUALITY AND RELIABILTY
2.5	SAFETY

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LIFE SUPPORT SERVICES
GENERAL REQUIREMENTS**

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2.0.1.1	Annex Description
2.0.1.2	Scope of Work
2.0.1.3	Location of Services
2.0.1.4	Limitations, Restrictions, or Other Exceptions
2.0.1.5	Workload Data
2.0.1.6	Communications

**ANNEX 2.0
LIFE SUPPORT SERVICES
GENERAL REQUIREMENTS**

2.0 LIFE SUPPORT SERVICES

2.0.1 GENERAL INFORMATION/REQUIREMENTS

2.0.1.1 Annex Description

The activities detailed in this section are cross cutting activities which cover the entire scope of activities performed under the statement of work. These provide the foundation for the success of the work force's safety and health program. This Annex identifies the following services:

Annex 2.1 Fire Protection
Annex 2.2 Environmental
Annex 2.3 Occupational Health
Annex 2.4 Quality and Reliability
Annex 2.5 Safety

Even though specific guidelines, regulations, and minimum performance standards have been established, the services to be performed will rely heavily on knowledgeable and experienced individuals who are innovative and resourceful in their approach.

2.0.1.2 Scope of Work

The Contractor shall furnish all personnel, supervision, management, equipment, materials, tools, transportation, supplies, and other items or services necessary to provide support services in this Annex and Annex 4.1.2.

During the performance of the contract, the Contractor shall respond to requirements of an unforeseen nature which cannot be precisely estimated in terms of labor or materials. These requirements are closely related to other elements of the scope of work.

The Government will provide, without cost to the Contractor, equipment and materials listed in Attachment J-10, List 1 and 2. The Government Furnished Equipment (GFE) shall be maintained and managed in accordance with the guidelines set forth in Annex 1.

The listing of GFE shall not be construed as being sufficient or adequate to meet the requirements of this Annex; the Contractor shall make recommendations for any additional or state of the art equipment and materials that may be required to properly perform the requirements of this Annex.

2.0.1.3 Location of Services

Facilities covered by this Annex are found in the Master Facility Plan in Central Engineering Files, Building 2104.

2.0.1.4 Limitations, Restrictions, or Other Exceptions

The Contractor shall ensure that all services protect the integrity of the Government's property and supplies. Contractor employee's private vehicles shall not be used to transport Government property and supplies.

2.0.1.5 Workload Data

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LIFE SUPPORT SERVICES
GENERAL REQUIREMENTS

The Contractor shall maintain records for workload data given in this Annex to include monthly actual and average workload data for the current fiscal year. The data shall be electronically available by Annex by the tenth day of the following month.

2.0.1.6 Communications

Any employee whose job requires contact with occupants of facilities at SSC must be able to communicate in the English language.

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

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2.1.5	ALARM RESPONSE
2.1.6	EQUIPMENT TESTING AND INSPECTION
2.1.7	EQUIPMENT MAINTENANCE
2.1.8	ISSUE FLAME PERMITS AND PROVIDE STANDBYS
2.1.9	TRAINING AND EDUCATION
2.1.10	PARTICIPATE IN DESIGN REVIEWS AND CONFERENCES
2.1.11	REPORTS AND SCHEDULES

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

2.1.1 GENERAL REQUIREMENTS

2.1.1.1 Ambulance Services

Ambulance services are required by this Annex and will necessitate the staffing of the fire department with a minimum of two Emergency Medical Technicians (EMT) per shift.

2.1.1.2 Reference and Technical Documents

The Contractor shall comply with all referenced requirements in official publications listed in National Fire Protection Association NASA STD – 8719.11, and SPR 8715.1 as they apply to the services covered by this specification. All references shall be acquired and maintained in a fire department ready reference library for day-to-day use by the fire protection personnel as needed.

2.1.1.3 Self Contained Breathing Apparatus (SCBA) Program

The Contractor shall develop and operate a Breathing Air Program, including the test and maintenance of all related equipment, supplies, air quality, and filling of SCBAs.

2.1.2 WORK SCHEDULE

2.1.2.1 Routine

Fire protection services shall be provided on a 24 hour per day, 7 days per week, 52 weeks per year basis, including

holidays. The initial work schedule for applicable routine tasks shall be submitted to the CO for approval no later than 7 days after the contract award.

Once approved, all work shall be performed in strict compliance with the work schedule to facilitate the Government’s inspection of the work. If any changes with respect to the initial work schedule occur, resubmit a revised schedule to NASA for approval.

2.1.2.2 Shift Work

It is the intention of NASA to minimize work performed at night in order to meet federally mandated energy conservation goals, except as may otherwise be specified. All work shall be performed between the hours of 7:00 a.m. and 4:30 p.m. However, to minimize inconvenience to both the customers and NASA personnel, some discrete projects, such as testing of some systems, may be performed outside of the normal work hours. Such project work may be accomplished after 4:30 p.m. on weekdays or on weekends. It should be noted that access to certain offices and buildings may be restricted outside the normal “core hours” of 7:00 a.m. and 4:30 p.m. When such access is restricted, security personnel will have to be notified by the Contractor in advance to provide that access for routine services.

2.1.2.3 Staffing

The Contractor shall at all times be fully staffed with qualified personnel in accordance with NFPA, NASA STD

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

– 8719.11, and SPR 8715.1 as applicable. The minimum staffing of qualified personnel shall be such that two engine companies will respond to each alarm and safely operate concurrently.

2.1.3 GOVERNMENT – FURNISHED PROPERTY AND MATERIAL

2.1.3.1 Government Furnished Equipment

The Government will provide equipment and materials identified in paragraph 2.1.6.1. Government furnished equipment shall be maintained and managed in accordance with paragraph 2.1.7.1.

2.1.3.2 Service Area

The Contractor shall perform preventative maintenance on fire fighting equipment (i.e. hoses, nozzles, etc.) as well as personal equipment (consumables such as boots, pants, helmets, etc.) The Contractor shall be responsible for all levels of preventative maintenance to maintain all equipment in a safe, serviceable/operable condition and to repair or identify for replacement as required.

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
2.1.4	FIRE PREVENTION			
2.1.4.1	Inspect Buildings	Conduct an inspection of all buildings and maintain a file of all inspections. Report findings to the responsible party(s) for resolution or record discrepancies in the Facility Manager Program System as applicable.	Monthly 47 Quarterly 135 Biannual 257 Annual	NFPA Standard 1231 NASA STD – 8719.11, SPR 8715.1
2.1.4.2	Inspect and Conduct Flow Test	Conduct flow test of the potable water distribution system, including all hydrants. Report the deficiencies in delivery of water throughout the system to the CO within 24 hours. Coordinate with Plumbing Shop.	Biannual 206	NFPA Standard 291
2.1.4.3	Inspect and Test Sprinklers	All sprinkler systems to be inspected and tested.	Quarterly 97	Conduct 2” mini drain test NFPA Standard 13
2.1.4.4	Perform Fire Drills	Contractor shall conduct fire drill that demonstrates the fire system and egress through exits for all facilities.	Quarterly Annually	NASA STD – 8719.11 NFPA Standard
2.1.4.5	Inspect and Test Extinguishers	Perform inspection and test of all portable fire extinguishers, including those on vehicles. Maintain fire extinguishers in fully operational mode.	Monthly 2300 Extinguishers	NFPA Standard 10 NASA STD – 8719.11

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
2.1.4.6	Recharge, Repair, and Replace Extinguishers	All defective extinguishers shall be repaired, recharged, or replaced by Contractor in order to keep them fully operational.	As needed	NFPA Standard 10
2.1.4.7	Test and Recharge Special Systems	Special systems (i.e. Halon, Co2, Dry Chemical, FM200, etc.) shall be inspected and tested to assure operational readiness. Specialized installed systems shall be tested. Recharging in accordance with manufacture's specifications.	Annually 1 Co2 1 FM200 3 Wet Chemicals Annually	NFPA Standard 12 NASA STD 8719.11
2.1.4.8	Develop and Update Pre-Fire Plans	Develop and update pre-fire plans for each building.	As needed	NFPA Standard 1 NASA STD – 8719.11
2.1.4.9	Issue Small Appliance Permits	Review request for small appliances and issue permits as appropriate.	400 per year	SPR 8715.1
2.1.4.10	Issue Flammable Storage Cabinets Permits	Review request for flammable storage cabinets and issue permits as appropriate.	20 per year	NFPA Standard NASA STD – 8719.11 SPR 8715.1
2.1.5	ALARM RESPONSE			Initiate all responses within 2.0 minutes of alarm receipt.

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
2.1.5.1	Fire Alarm Response	Respond to all fire alarms with the minimum required personnel and appropriate fire apparatus, equipment, and supplies to accomplish rescue, fire fighting, containment, and protection of explosives. After completion of response, clean, and place all fire fighting equipment back into condition of readiness.	24 hours per day 180 Annual	NFPA Standard 1202, 1500 NASA STD 8719.11
2.1.5.2	Ambulance Response	Respond to medical emergencies with EMT certified firefighting personnel. Establish and maintain contact with the SSC Medical Clinic and local hospital emergency room personnel when in route with a patient to that facility.	24 hours per day 85 Annual	NFPA Standard 1004 NASA STD – 8719.11
2.1.5.3	Emergency Response	Contractor shall provide emergency response that is not fire related; such as vehicle accidents, extractions, confined space entries, and hazardous chemical spills. Records will be logged and maintained of all responses.	24 hours per day 50 Annual	NFPA Standard 472 NASA STD – 8719.11
2.1.5.4	Mutual Aid	Respond to offsite alarms in accordance with paragraph 2.1.5.1, 2.1.5.2, and 2.1.5.3. At least one company of fire responders shall remain at SSC at all times. Mutual aid, the act of responding to the local communities with emergency support as part of a reciprocal agreement, will be given in accordance with mutual aid agreements. Copies of mutual aid	24 hours per day 5 Annual	NFPA Standard 1202,1500 NASA STD -8719.11

**ANNEX 2.1
LIFE SUPPORT SERVICES
FIRE PROTECTION**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
2.1.5.4	Continuation Mutual Aid	agreements will be maintained on file in the fire department		
2.1.6	EQUIPMENT TESTING AND INSPECTIONS			
2.1.6.1	Inspect and Test Motorized Apparatus	All motorized fire fighting apparatus shall be inspected and test to assure operability. Log apparatus checklist and keep on file in fire department. The washing of apparatus shall be conducted at the designated vehicle washing facilities, Building 2105, and Building 2401.	Daily 3 Pumpers; 1 Rescue Truck; 1 Aerial; 2 Ambulances; 2 - 25Hp Boats; 2 GSA Trucks	NFPA Standard 1002,1911 NASA STD - 8719.11 No apparatus shall be out for more than 24 hours without backup plan.
2.1.6.2	Inspect and Test Hose	Contractor shall inspect and test and maintain all hoses by removing and pressurizing. Test results shall be maintained on file in the fire department.	Annual	NFPA Standard 1961
2.1.6.3	Test Pumps and Ladders	Conduct flow test of all flow apparatus pumps and conduct test of all ladders to assure compliance with manufacturer's specifications. Test results shall be maintained on file in the fire department.	Annual 14 Ladders 3 Pumps	NFPA Standard 1931
2.1.7	EQUIPMENT MAINTENANCE			

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2.1.7.1	Maintain Collateral Equipment	Preventative maintenance shall be performed on all collateral equipment. Collateral equipment refers to all tools, accessory equipment, hoses, and adapters.	Daily	NFPA Standard 1201 NASA STD – 8719.11
2.1.7.2	Maintain Personal Gear	Contractor shall perform preventative maintenance on personal equipment (i.e. boots, helmets, breathing apparatus). All equipment shall be maintained in a safe, operable condition, and replaced as necessary.	Daily	NFPA Standard 1971
2.1.7.3	Maintain Hazardous Chemical Response Trailer Inventory	Contractor shall assure that the minimum inventory of materials and equipment is available for response actions under 2.1.5.3.	Continuous	Inventory must be replenished within 24 hours. 19 CFR 1926.1200
2.1.8	ISSUE FLAME PERMITS AND PROVIDE STANDBYS			
2.1.8.1	Flame Permit Issuance	Administer a flame permit program that is responsive to the multi-task goals of SSC.	Annual 2500	NASA STD – 8719.11 SPR 8715.1
2.1.8.2	Standby Operations and Site Support	Provide standby operations as required for SSC organizations. Standby personnel that are not dedicated will leave standby post in case of fire alarm.	Annual 50	NASA STD – 8719.11 SPR 8715.1

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2.1.9	TRAINING AND EDUCATION			
2.1.9.1	Provide Site-Wide Training and Education	Provider site-wide training and education by developing and teaching classes in CPR/First Aid, AED, Fire Extinguisher Training, and the development and distribution of flyers associated with fire safety, especially around holidays.	As required	Identify, schedule, and conduct training DR2-SA15 and DR2-RA01.
2.1.9.2	Provide Mutual Aid and Familiarization	Participants to become familiar with the fire fighting capabilities, facility layout, and possible areas of support by each local department.	Annual	NFPA Standard 1201,550 NASA STD – 8719.11
2.1.9.3	National Fire Prevention Week	Develop and conduct training for both in-house use and site-wide training use that is consistent with the current theme of National Fire Prevention Week.	Annual	Must be in compliance with NFPA Fire Prevention Week and Presidential Proclamation Activities. See DR2-SA15 and DR2-SA09.
2.1.10	PARTICIPATE IN DESIGN REVIEWS AND CONFERENCES			

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2.1.10.1	Design Review Participation	Fire Chief is considered the resident expert in fire safety matters in shall participate in construction design reviews for new construction and major renovation.	Continuous	Participate in Design Review Process
2.1.10.2	Conference Participation	Fire Chief will attend 1 national level conference each year as designated by NASA.	Annual	Share information with interested parties within 7 days of return.
2.1.11	REPORTS AND SCHEDULES			
2.1.11.1	Fire Alarm Report	Develop a report of all activity surrounding the response, containment, and investigation of an alarm. Conformance with DR 2-SA01	Monthly	DR 2-SA01 SPR 8715.1
2.1.11.2	Ambulance Report	Develop and report all activities with regard to each medical emergency response. Conformance with DR 2-SA01	Per response	DR 2-SA01
2.1.11.3	Fire Damage and HAZ-MAT Report	Develop a report of all fires that result in a loss, as well as all hazardous spill incidents. Conformance with DR 2-SA01	Per incident	DR 2-SA01
2.1.11.4	Equipment Testing Maintenance Schedule	Develop an inspection and testing schedule for all equipment, apparatus, and systems. Conformance with DR 2-SA03	Continuous	DR 2-SA03

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2.1.11.5	Training Schedule	Develop training schedule for classes. Conformance with DR 2-MT01	Monthly	DR 2- MT01
2.1.11.6	Emergency Response	Develop a report of all emergencies requiring response. Conformance with DR 2-SA01	Per response	DR 2- SA01 NASA STANDARD 8719.11
2.1.11.7	Monthly Report	Develop a report of significant activities accomplished during the month. Conformance with DR 2- SA01	Monthly	DR 2- SA01
2.1.11.8	Personnel Qualifications Report	Develop a report of qualifications of all personnel. Conformance with DR 2- MT01	Annual	DR 2- MT01
2.1.11.9	Mississippi Army Ammunition Plant (MSAAP) Fire Activities	Develop a report of all fire activities at the MSAAP.	Quarterly	DR 2- SA04
2.1.11.10	Woodlands Fire Plan	Develop a woodlands fire fighting plan in accordance with DR 2- SA02	Annually	DR 2- SA02

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2.2.1 SCOPE OF WORK

This Annex identifies the Environmental Services required to be provided by the Contractor at the John C. Stennis Space Center (SSC).

2.2.2 GENERAL REQUIREMENTS

2.2.2.1 Management and General Requirements

The Contractor shall furnish all resources as specified in Annex 1.

2.2.2.2 General Limitations and Clarifications

Work shall be in compliance with all applicable Federal, State, and Local laws, permits and permit conditions, Presidential Executive Orders, National Aeronautics and Space Administration (NASA) Policy Directives, and NASA SSC Procedural Requirements. Personnel conducting the work must hold proper training certifications. Maintenance and operations of some environmental systems and equipment are covered in other Annexes of this contract.

All regulated environmental media originated, generated, or handled by the Contractor through services performed under this contract is subject to the terms and conditions of all SSC permits, NASA Policy Directives, NASA/Stennis Procedural Requirements, and this contract.

Except where otherwise specified, all environmental samples collected as a requirement of this contract shall be submitted to the Environmental Laboratory at SSC for analysis. The Contractor shall also ensure that all waste that is handled off site, as well as on site, is properly characterized with an appropriate waste stream number assigned.

The Director, NASA SSC, is the generator of services covered by this contract and, as such, retains the responsibility for the establishment and accomplishment of the SSC Environmental Program. Exceptions to this are individual resident agencies and their Contractors who must serve as the generator for agency and program specific activities.

The contractor shall establish and accomplish a program that ensures all necessary environmental regulatory specifications and criteria are met throughout the contract and that waste generated is minimized. Due to the high potential of unforeseen circumstances occurring over the course of this contract, the contractor must have at least one environmental professional on staff and available each work day, unless approved by the Contracting Officer (CO).

The Contractor shall comply with the terms and conditions of all environmental permit requirements and other authorizing documents held by the Government, NASA. The Contractor shall immediately address any questions, concerns, or problems, which prevent compliance with the applicable permits or any terms of this Annex to the CO.

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2.2.2.3 Documentation

All submittals, documents, logs, records, analytical results, Operational & Maintenance (O&M) manuals, and procedures developed in accordance with this Annex's requirements or which demonstrate compliance with laws and regulations shall be prepared using the SSC Office Automation computer software suite of programs (i.e., Microsoft Word, Excel, Access, PowerPoint, etc.) and will become the property of the Government. All legal and regulatory documentation are to be maintained in the official NASA files in accordance with the latest version of the NASA SSC Environmental File Plan. Several databases and applications are mentioned and used in the execution of the tasks listed in this Annex. In other cases, deliverables include the update of databases and the electronic storage of documents. These databases, applications, and documents are to be maintained on the FOS Contractor Shared Drive that is accessible by NASA personnel.

2.2.2.4 Facilities and Equipment

The Contractor, in addition to office space secured as part of this contract, will be responsible for operations in the Hazardous Waste Handling Facility (Building 2210), four (4) Pump and Treat Facilities (Buildings 2208, 2211, 2418, and 3308), and the Drum Staging and Recycling Facility (Building 7021). A key to these facilities will be maintained in the NASA Environmental staff offices and the right of entry will be provided to the NASA Environmental Officer, or designee, at any time without required notice. Connection to the SSC Network will be provided.

2.2.3 Definition and Acronyms

AFCESIC – Air Force Chemical Equilibrium Specific Impulse Code
AST – Aboveground Storage Tank
BEMS - Base Environmental Management System
CARs - Corrective Action Reports
CERCLA – Comprehensive Environmental Response Compensation and Liability Act
CFC – Chlorofluorocarbons
EFR – Environmental Functional Review
EMS - Environmental Management System
EO – Environmental Officer or Executive Order
EPA – Environmental Protection Agency
EMS - Environmental Management System
EPCRA - Emergency Planning and Community Right to Know Act
HAZMAT – Hazardous Materials Training
HAZWOPER – Hazardous Waste Operations and Emergency Response
LEPC – Local Emergency Planning Commission
MDEQ – Mississippi Department of Environmental Quality
MSDS – Material Safety Data Sheet
NAVOCEANO – Naval Oceanographic Office
NDBC – National Data Buoy Center
NEPA – National Environmental Policy Act
NETS – NASA Environmental Tracking System
NPDES – National Pollutant Discharge Elimination System
NRC – National Response Center
NRL – Naval Research Laboratory

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P2 – Pollution Prevention
PCBs - Polychlorinated Biphenyls
POL – Petroleum, Oils, and Lubricants
P&T – Pump & Treat
PES – Preliminary Environmental Survey
RCRA – Resource Conservation and Recovery Act
REC – Record of Environmental Consideration
SARA - Superfund Amendments Reauthorization Act
SDWA – Safe Drinking Water Act
SHPO – State Historical Preservation Office
TRI – Toxic Chemical Release Inventory
TSCA – Toxic Substance Control Act
TSD – Treatment, Storage, and Disposal Facility
USF&WS – United States Fish and Wildlife Services
USGS – United States Geological Survey
USM – University of Southern Mississippi
UST – Underground Storage Tank

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2.2.4	Environmental Services			
2.2.4.1	Title V Air Permit State Summary Fee Report (DR2-GA13)	Maintain monthly air emissions inventory database and prepare Title V State Summary Fee Report per DR2-GA13. Maintain DR requirements on the Facility Operating Service (FOS) Webpage. The inventory data will be maintained on the computer of a FOS Environmental engineer.	Annual Reports and there are approximately 200 emission points	Conformance with Data Requirement (DR).
2.2.4.2	Title V Operating Permit Report (DR2-GA14)	Prepare the Title V Semi-Annual Compliance and the annual Certification of Compliance Report per DR2-GA14.	3 Reports (2 semi-annual and 1 annual report)	Conformance with DR.
2.2.4.3	Air Program	Provide overall coordination of the SSC air compliance program, which includes staying current with federal and state air regulations and trends, provide overall strategic guidance in the maintenance of current and the acquisition of new air permits with a focus of maximum flexibility for Center operations. The Contractor shall also be expected to provide input to regulatory officials on issues that could potentially affect NASA's ability to test current and future propulsion systems and to perform other required operations at the Center. The Contractor shall evaluate and recommend environmentally compliant facility designs, modifications, operations, activities, systems, and	2,000 hours per contract year. Ensure that environmental personnel are available to run air models per requirements.	Maintain capability to adhere to federal and state requirements to ensure current and future propulsion testing.

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2.2.4.3	Continuation Air Program	<p>equipment for SSC programs.</p> <p>The Contractor shall also maintain capability to conduct modeling for air emission permits using the following programs: CALPUFF, ISCST Version 3, AERMOD, NASA/Lewis, Chemical Equilibrium Program Version September 4, 1997, and Air Force Chemical Equilibrium Specific Impulse Code (AFCESIC). The modeling shall be conducted to maintain the Title V operating permit for SSC. The data from the modeling shall be utilized to develop a permit application for new air emission sources when required.</p>		
2.2.4.4	PCB Management Status Report (DR2-GA26)	Maintain the facility PCB Inventory and submit an annual report per DR2-GA26.	Annual Report	Conformance with DR.
2.2.4.5	RCRA 3016 Report (DR2-GA19)	Prepare the annual RCRA 3016 Report per DR2-GA19.	Annual Report	Conformance with DR.
2.2.4.6	Quarterly Surveillance Inspections of Logtown and Gainesville (DR2-GA28).	Conduct quarterly surveillance inspections of NASA owned property in the Historic areas of Gainesville and Logtown, MS, in accordance with the SSC Historic Preservation Program Plan. Use form in the Historic Preservation Program Plan per DR2-GA28.	Quarterly Surveillance Inspections of 2 historic locations	Conformance with DR.

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2.2.4.7	Annual Cultural Resources Activity (DR2-GA30).	Provide to the NASA Historic Preservation Officer pictures of the historical facilities for incorporation into the update of the Historic Preservation Program that will be updated every 2 years per DR2-GA30.	Annual Requirement 2 historic locations and 3 Test Stands (A1, A2, and B1/B2)	Conformance with DR.
2.2.4.8	Annual Hazardous Material Inventory (DR2-GA31)	Provide an annual hazardous material inventory for NASA and its contractors and compile the annual hazardous material inventories for all companies and agencies at SSC per DR2-GA31.	Annual Report	Conformance with DR.
2.2.4.9	SARA Report (Tier II) (DR2-GA31)	Prepare the annual EPCRA Section 312 Tier II Report per DR2-GA31.	Annual Report	Conformance with DR.
2.2.4.10	Toxic Chemical Release Inventory Report (TRI) (DR2-GA02)	Prepare the annual EPCRA Section 313 Toxic Chemical Release Inventory Report per DR2-GA02.	Annual Report	Conformance with DR.
2.2.4.11	Spill Incident Report (DR2-GA36)	Provide copies of completed Spill Incident Report to the EO, which incorporates information from personnel responsible for the area of the spill within 3 working days following the incident. Annual spill incident input should consist of the information required in NETS per DR2-GA36.	As Needed/ Historically, 2 major and 6 minor spills per year.	Conformance with DR.

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2.2.4.12	Environmental Facility Inspection Implementation Report (DR2-GA23)	Conduct weekly inspections of the Hazardous Waste Handling Facility (Building 2210) and other facilities in the Inspection Plan as approved by the NASA Environmental Officer. Immediate notification is required for non-compliant areas. Provide documentation of these inspections on a quarterly basis, per DR2-GA23.	Weekly Inspections Quarterly Report	Conformance with DR.
2.2.4.13	Annual Hazardous Waste Activities Report (DR2-GA32)	Prepare and submit for NASA Environmental Officer, or designee, approval per DR2-GA32.	Annual Report	Conformance with DR.
2.2.4.14	Annual Non-Hazardous Solid Waste Survey and Report (DR2-GA04)	Provide an annual report per DR2-GA04.	Annual Report	Conformance with DR.
2.2.4.15	Landfill Inspections and Report (DR2-GA21)	Perform inspections of the storm water system at the SSC Non-hazardous Solid Waste Landfill and prepare the report per DR2-GA21.	Annual Report	Conformance with DR.
2.2.4.16	Groundwater Usage Report (DR2-GA01)	Prepare report per DR2-GA01.	Quarterly Report	Conformance with DR.
2.2.4.17	Public Health Water Supply Report (DR2-GA03)	Prepare reports per DR2-GA03.	Annual Reports	Conformance with DR.

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2.2.4.18	Water System Survey/Industrial and Potable (DR2-GA06)	Prepare report per DR2-GA06.	Annual Report	Conformance with DR.
2.2.4.19	Federal Facility Compliance, Inspections Report, and Profile (DR2-GA08)	Prepare Federal Facility Compliance and Inspection reports on a semi-annual basis and prepare the Federal Facility Compliance Profile per DR2-GA08.	Semi-annual Inspection Annual Report	Conformance with DR.
2.2.4.20	Hazardous Waste Collection Shipments and Disposal Activities (DR2-GA24)	Collect NASA and NASA contractor hazardous waste and petroleum, oil, and lubricant (POL) wastes year round from up to 30 Satellite Accumulation Points and transport to the Hazardous Waste Handling Facility or the drum staging facility, as appropriate. All waste must be properly characterized with an accompanying Waste Stream #. The package should have lab analyses, Material Safety Data Sheets, place of generation all of which can also be associated with personnel knowledge of a process. Arrange for hazardous waste and non-usable hazardous material disposal at facilities pre-approved by NASA. Submit Hazardous Waste Manifest to the NASA Environmental Officer for signature. Shipments must be coordinated with the Environmental Officer to assure availability for signature. Work requests from resident agencies will be handled under separate work orders. Provide quarterly report per DR2-GA24.	30 satellite areas, seventy 70 pick-ups per year. The government shall furnish a like container for the replacements. 6 shipments per year.	Pick-ups and storage shall be conducted in accordance with applicable federal and state requirements at all times. Actual pick-ups of hazardous waste should be within 3 work days after receipt of written notification. No hazardous waste to exceed 90-day accumulation time.

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2.2.4.21	TSD Audit Reports (DR2-GA20)	Perform, attend and/or conduct audits of off site Treatment, Storage and Disposal (TSD) Facilities and medical waste facility per DR2-GA20.	1 of each requirement per year.	Conformance with DR.
2.2.4.22	Plans, Applications, Procedures, Reports, and Notifications	<ul style="list-style-type: none"> a) CFC/Halon Management and Phase Out Plan per DR2-GA11; b) Integrated Contingency Plan per DR2-GA07; Environmental Resource Document per DR2-GA05; c) Hazardous Materials, Hazardous Waste, and Solid Waste Management Plan per DR2-GA09; d) Pollution Prevention Plan per DR2-GA22; e) Section 7.0 Consultations per DR2-GA10; f) EPCRA Notifications and Submissions DR2-GA27; g) Records of Environmental Consideration per DR2-GA15; h) and Environmental Operations & Implementation Plan DR2-GA12. 	At least 1 of each requirement per year or as deemed necessary per project or activity. Conformance with DRs, applicable laws, regulations, or customer specifications	Conformance with DRs, applicable laws, regulations, or customer specifications.

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2.2.4.22	Continuation Plans, Applications, Procedures, Reports, and Notifications	There shall also be inspections of the Non-Hazardous Solid Waste and Class II Rubbish Landfills per DR2-GA25 and Solid Waste and Rubbish Landfill Report per DR2-GA35, maintain NEPA Documentation per DR2-GA29, design reviews, regulatory inspections, and information gathering and provide regulatory advice and maintain expertise in areas covered in the U.S. Army Construction Engineering Research Laboratory Generic Protocol For Federal Facilities or other documents required to meet regulatory compliance in all environmental media areas.		
2.2.4.23	Permits and Waivers (DR2-GA33)	Develop permit applications for environmental media or waivers per DR2-GA33.	At least 2 of these requirements per year.	Conformance with DR.
2.2.4.24	CERCLA Oversight and System Operations (DR2-GA34)	Provide the environmental oversight and operation of 4 Pump & Treat (P&T) facilities at the clean up areas in accordance with DR2-GA34. Additionally, provide operational and maintenance activities for these P&T systems in accordance with the operational manuals. The Contractor should also provide safety support when performing operations at and around CERCLA areas. Provide quarterly status reports per DR2-GA34.	1,000 hours per each year of the contract and provide 4 quarterly reports. Pump and Treat Operations 4,160 hours per year.	Conformance with DR and the Long Term Monitoring Plan.

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2.2.4.25	Environmental Management System and NASA Environmental Tracking System (NETS) (DR2-GA36)	Provide input into NETS for the following: <ul style="list-style-type: none"> a) Pollution Prevention Activities; b) Spills, Inspection Activities, Non-Compliance; c) Hazardous Waste, Permit Status, Staffing Data; d) Recycling, Affirmative Procurement, CFC/Halon Consumption Report; e) Non-Hazardous Solid Waste, RCRA Reporting, NEPA, Performance Track, etc. per DR2-GA36. 	Per NASA HQs Data Call requirements	Conformance with DR.
2.2.4.26	Environmental Management System Requirements	Contractor shall comply with all applicable Federal Laws, Executive Orders (EO), and requirements of the Council on Federal Recycling and Procurement Policy. The Contractor shall continue to monitor and implement plans and procedures to assure that the Environmental Management System requirements of EO 13101 are met.	2,000 hours each year of the contract for the first 2 years. Follow on years will be contractor determined.	Continue to integrate environmental accountability into the centers day to day operations and long-term planning processes in accordance with EO 13101.

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2.2.4.27	Environmental Management System (EMS) & Compliance Audits (DR2-GA16)	Plan and participate in EMS audits and assessments internal or external at least twice per year for NASA and its contractors. Perform similar task as noted above for an annual compliance audit of the SSC Resident Agencies per DR2-GA16.	2 annual (1 internal and 1 external) EMS audits and compliance, 6 resident agencies and minimum 15 other NASA/SSC Facilities.	Conformance with DR.
2.2.4.28	EMS Corrective Action Report (DR2-GA16)	Provide Corrective Action Reports (CARs) that are managed in the Base Environmental Management System (BEMS) to the NASA Audit Manager for review at least once a month after each EMS audits. Follow up Status Reports should be provided until all CARs are implemented and closed per DR2-GA16.	At least 2 official reports data will be maintained in BEMS.	Conformance with DR.
2.2.4.29	NASA Environmental Functional Review (EFR) and Corrective Action Report (DR2-GA17 and DR2-GA18)	Prepare and participate in the EFR. Input the results of corrective and preventive actions into the BEMS and track progress. Provide data to NASA Environmental Officer for transmittal to NASA HQs per HQs timeline. Follow up with a Status Report until all CARs are closed per DR requirements.	At least 2 official reports and data will be maintained in BEMS.	Conformance with DR.

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2.2.4.30	Spill Response	Respond to Hazardous Material and Hazardous Waste Spills; provide advice on all aspects of clean up in accordance with SSC plans and applicable regulations. Notify the NASA Environmental Officer, or designee. Provide data needed to the NASA Environmental Officer, or designee, for NASA's official notification of EPA's National Response Center (NRC) and Mississippi Emergency Management Agency within 24 hours of an incident. If the NASA Environmental Officer, or designee, is not available, provide notification of both regulatory parties and provide documentation of the notification details and the NRC Call Number that is assigned to the incident. The number of spills will be maintained in NETS per DR2-GA36.	Historically, 2 major and 6 minor spills per year.	Spill response for POLs and chemicals within 30 minutes of call by the Fire Department or Environmental Officer, or designee. Regulatory notifications within required time frame if Environmental Officer, or designee, is not available for notifications.
2.2.4.31	Construction Stormwater Inspection and Certification (DR2-GA37)	Prepare construction notice of intent permit applications for NASA and its Contractor's construction efforts, conduct required inspections, and submit reports in accordance with permit and per DR2-GA37 requirements.	At least 2 permits per year and 2 sites still being inspected before submission of a notice to terminate a construction permit.	Conformance with DR.

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2.2.4.32	Environmental Training	Contractor will provide training using in-house or outside trainers to fulfill the requirements of this Annex as well as the operations of environmental systems in other portions of this contract. Training opportunities must also be made available to NASA and other SSC resident agencies or companies.	Contractor determined. Historically, 25 attendees to training on HAZMAT, HAZWOPER, and Asbestos Supervisor. Includes NASA, Contractor, and resident agency personnel.	Certified personnel are available to implement environmental programs or requirements during normal working hours or as required by specific contract line items.

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to 7:00 p.m., Monday through Friday, staffed by a minimum of one attendant trained in physical education or exercise physiology.

2.3.1 SCOPE OF WORK

The Contractor shall provide a professional Occupational Health Services (OHS) program as defined in this Annex at the John C. Stennis Space Center. The 4 major areas of services to be provided are medical services, EAP Services, Wellness and Physical Fitness Program, and Environmental Health (Industrial Health and Health Physics).

The noted schedules are exclusive of recognized federal holidays and any other day designated by Federal Statute or Executive Order.

2.3.2 GENERAL REQUIREMENTS

The Contractor's OHS Medical Director shall be the head of the SSC Occupational Health Program at Stennis Space Center. Medical service shall be provided under the supervision of a physician with occupational medicine experience. Physicians, nurses, x-ray technicians, laboratory technician, EAP Coordinator, and medical service personnel must meet the credential standards established by the State of Mississippi and comply with required Department of Defense standards identified by Stennis Space Center Resident Agencies.

2.3.2.1 PURPOSE

The Contractor shall provide professional medical and administrative personnel necessary to operate an OHS Clinic on a 5-day per week basis and fulfill the overall mission of providing an Occupational Medicine Program, Employee Assistance Program (EAP), and Wellness and Fitness Program in support of Stennis Space Center personnel.

Physician services are to be provided from 8:00 a.m. to 4:30 p.m., Monday through Friday.

2.3.2.2 Staffing and Schedule

The OHS program shall be operated under the direction of the Contractor's OHS Medical Director. The OHS program shall include clinic operations and EAP services from 8:00 a.m. to 4:30 p.m., Monday through Friday, with access to EAP 24 hours a day, 7 days a week for emergency purposes. The Contractor will administer a Wellness and Fitness Program and operate a fitness facility at Stennis Space Center from 6:00 a.m.

Physicians and nurses must have current certifications in Advanced Cardiac Life Support (ACLS). Experience in the field of occupational health and Certified Occupational Health Nurse (COHN) is preferred.

Other Occupational Health staff such as x-ray and laboratory technicians, if dictated by the contract, must be graduates of an accredited school, registered in accordance with state requirements and be current on Basic Life Support (BLS).

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Each EAP counselor shall have a minimal education level of a Masters degree in an accredited mental health field (e.g., clinical psychology, social work). The counselor shall be licensed in the State of practice and maintain the license throughout the contract. Experience in counseling, with a minimum of 1,000 cases, management consultation, and drug and alcohol assessment expertise is required. Certification as an Employee Assistance Professional (CEAP) is a preferred credential.

Staffing levels must follow EAPA, with a minimum of 1 counselor per 2 to 4,000 employees.

Each professional and technical member of the Environmental Health Program (IH and HP) staff shall possess an academic degree in the discipline, or an equivalent combination of education and experience suitable to the responsibilities of their position. At least one IH staff shall be American Board of Industrial Hygiene (ABIH) Certified Industrial Hygienists (CIH) and at least one HP staff shall be American Board of Health Physics (ABHP) certification or equivalent level of training, education, and experience. Each HP specialist shall be on the National Registry of Radiation Protection Technologist or equivalent level of training, education, and experience.

Environmental Health Program (EHP) staff will be on-site during each workday and available for emergencies 24 hours day, 7 days a week. The contractor shall provide a Radiation Safety Officer (RSO) to represent NASA on the NRC and State licenses. The Radiation Safety Officer shall serve as the

Secretary to the Radiation Safety Committee. A Laser Safety Officer shall also be named.

2.3.2.3 Compliance

The OHS programs shall comply with the requirements of the latest versions of the following: Occupational Health Services Handbook, NPD 1800.2 (latest revision); NASA Occupational Health Program, NPD 1800; Health Services for International Travel, NPR 1810.1; Occupational Medicine Program, NPD 1810.2; Environmental Health Program Support, NPD 1820.1; Hearing Conservation, NPR 1820.1; Employee Assistance Program, NPD 1830.1; Workers Compensation Benefits, NPD 1840.1; SSC Safety & Health Procedures and Guidelines, SPR 8715.1; OSHA Requirements; Occupational Safety and Health Act (OSHA) of 1970; Executive Order 12196 (dated Feb. 26, 1980); Title 29 of the Code of Federal Regulations (CFR), Parts 1960, 1910 and 1926; NPR 1800.1 NASA Occupational Health Program Procedures; U.S. Nuclear Regulatory Commission (NRC) and the State of Mississippi licenses which authorize handling of radioactive sources; U.S NRC regulations and Department of Transportation (DOT) regulations; and NASA Records Retention Schedules (NRRS) NPR 1441.1 Privacy Act 1974; NPRD 1382.17E Privacy Act System of Records (NASA 10HIMS); OSHA Record Keeping Regulations and HIPAA Regulations.

2.3.2.4 Medical Treatment

The Contractor shall provide services, training, treatments,

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types, and quantities of medications adequate to accommodate the SSC population.

Emergency diagnosis and initial first aid type treatment of injury or illness shall be provided to all persons on the Center. Emergency services are intended to provide immediate and effective medical services to save life relieve suffering and minimize disability. Emergency Medical Technician (EMT) services are identified in Annex 2.1.

2.3.2.5 Health Examinations

Authorized personnel employees shall be offered a health maintenance examination within 60 days after employment and annually thereafter.

The OHS Contractor shall be responsible for employee exam, scheduling, appointments, and employee notification. The OHS Contractor shall provide various examinations as identified in **Table 2.3-1**.

Authorized personnel may be given additional tests, or may be examined at more frequent intervals, if warranted by medical findings, hazards in the work environment, schedule or other job related conditions.

Pre-placement examinations for newly hired employees (including job transfer of Civil Service personnel) will include a health maintenance examination, a review of the perspective employee's past medical history, and such supplementary laboratory procedures as are deemed necessary by the

examining physician or as required by an agency. Contractor security personnel examinations shall include drug and psychological testing. Examinations will also include, if requested by an agency, a medical evaluation and recommendation concerning employment or assignment to Stennis Space Center.

Job related pre-placement exams, exams, periodic exams, return to work exams, international travel exams, and requested termination exams will be performed on authorized SSC personnel. Such exams may be required when individuals are engaged in special occupations believed to be directly hazardous to themselves or indirectly hazardous to others. These occupations include, but are not limited to those requiring the wearing of respirators, food handlers, chemical handlers, painters, welders, radiation workers, and special equipment operators. These personnel will be given a general physical examination with additional special tests and hazards to which the individual is exposed. These tests, where appropriate, may include retinal photography, audiometric examinations, and tests to determine the presence or amount of toxic materials or abnormal metabolic products in the body fluids or tissues.

2.3.2.6 Medical Surveillance

Medical surveillance shall be coordinated with safety and health officials to assure that personnel exposed to on-the-job potential health hazards are included in the Occupational Medicine Program and provided any necessary health examinations. As a minimum, the SSC Medical Clinic will

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comply with all OSHA requirements and National Institute of Occupational Safety and Health (NIOSH) recommendations.

2.3.2.7 NASA Drug Free Workplace Program Testing

The Contractor will provide collection services, assistance, and cooperation to the NASA SSC Drug Program Coordinator upon request. Collection services shall be provided in accordance with the NASA “Drug Free Work Place Program Procedures for NASA SSC Civil Servants.”

2.3.2.8 Health Education and Counseling

1. The Contractor shall establish a Health Education Program to encourage employees to maintain personal health off the job as well as healthful work habits on the job. The program shall include advisory services to supervisors regarding the mental and physical health and well-being of employees; distribution of health promotional information through the use of such media as electronic mail, pamphlets, film, and periodic articles in the NASA medical news medium. The Contractor shall promote information on disorders such as HIV, hypertension, diabetes, and glaucoma. Provides health hazard training as required in support of the EHP. Develop and provide training on radiation protection and safety procedures, including on-the-job training, for NASA or contractors, ionizing and non-ionizing radiation workers.

2.3.2.9 Non-Routine Medical Support

Occasionally, it will be necessary for the Contractor to provide special services at times other than normal Health Clinic hours. A typical activity requiring non-routine support would be a special program test where the potential hazards are such that medical and emergency personnel should be on standby attendance. Other activities such as open-house, special demonstrations, disaster relief (hurricanes), hazardous operations and emergency situations may require special support by medical personnel. Based upon the medical circumstance, the Contractor shall have trained personnel to provide emergency first aid treatment at locations other than at the medical clinic location. If necessary, in an emergency, trained personnel may be required to accompany a patient to a local area emergency facility.

2.3.2.10 Documentation and Records

Program Administration, Medical Records, and Statistics, Performance Requirement Summary (PRS), and corresponding Data Requirements Document (DRD).

The Contractor shall administer and document the Occupational Medicine Program, Environmental Health Program (IH and HP), Employee Assistant Program, and Wellness/Fitness Program in a manner consistent with modern business practices and 2.3.2.3. Adequate records shall be maintained and medical record keeping shall comply with accepted medical practices and applicable Government regulations. The Government shall provide the MEDSYS

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medical program for use by the Contractor. The Contractor shall maintain a database file for records information and management. The Contractor shall coordinate and submit data reporting requirements.

All submittals, documents, logs, records, analytical results, and procedures developed in accordance with this Annex's requirements or which are produced in compliance with DRs, regulations and laws shall be prepared using the SSC Office Automation computer software suite of programs (i.e., Microsoft Word, Excel, Access, PowerPoint, Government approved medical database program etc.) and will become the property of the Government. Upon request, the Contractor shall provide Government access to or copies of non-private statistical data existent in the medical database.

The contractor shall generate and maintain documentation for the EHP including reports for compliance requirements, and ensure that reports to customers clearly describe the work performed, including observations, findings, conclusions and recommendations. Contractor shall ensure that a copy of any exposure monitoring records, collected by contractors other than the Industrial Hygiene Contractor, are collected and used for documentation as NASA exposure records, where appropriate.

Develop, implement, and/or maintain various integrated industrial hygiene databases for key programs (e.g., material safety data sheets, air monitoring data, hearing conservation/noise survey data, respiratory protection training, and asbestos hazard assessment data). Data shall be maintained

in data systems owned by the Government. All data, database systems, and database documentation obtained or developed during this contract must be provided to the Government upon request and in the format specified by the Government.

The contractor shall provide summary reports, as required, of all health physics activities, maintain all health physics documentation required by the NRC and NASA, document all NASA Radiation Protection Committee activities, and prepare correspondence required by regulatory agencies or NASA.

At a minimum, documentation will include data from all forms of employee monitoring, wipe testing, sealed source inventories, isotope records, bioassay records, air monitoring data, etc. Health Physics documentation must be kept organized at all times so that it can and made easily accessible for use by the Government.

The Contractor shall provide program management reports and statistics to the Contracting Officer on a regular basis as identified in Data Requirements. On occasion, the Contractor will be required to participate in video teleconferences, NASA meetings and Inter-agency meetings on-site and off-site. The OHS Medical Director will be required to participate as a member of established emergency committees, safety committees, or review boards. The Medical Director will be required to attend the NASA Occupational Health annual meeting at an out-of-state location selected by NASA Headquarters.

EAP records (both hard copy and electronic) are the property

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of NASA.

EAP personnel records shall be in accordance with EAP privacy standards and shall not become part of a medical file.

The EAP counselor is responsible for the maintenance of EAP records and for assuring the confidentiality of records at both on-site and off-site locations. Records must be double-locked and maintained in accordance with privacy standards.

2.3.2.11 Processes and Procedures

All processes, procedures, standing orders, directive, policies, databases, exposure records, and work instructions shall remain the property of the Government.

2.3.3 OCCUPATIONAL MEDICAL SERVICES

2.3.3.1 Acute Care and Prevention

The NASA Occupational Medicine Program (OMP) provides acute care for NASA employees and contractors who become ill or injured while on the Center, as well as preventative health services to maintain and improve the health of the NASA employees with a focus on the prevention, diagnosis, treatment and care of illness, and injuries caused or aggravated by the work environment.

Safeguard the health of NASA employees and contractors who are on international travel and duty assignments.

Provide nutrition education/awareness programs to assist employees in controlling risk factors associated with diseases such as diabetes, obesity, and lipid disorders.

Develop standard operating procedures and standing orders for the clinic. Provide for periodic review and update as necessary.

2.3.3.2 Emergency Medical Services

Provide emergency care, support emergency preparedness, participate in emergency drills, and provide medical guidance to the Ambulance Services provided in Annex 2.1. Integrate Occupational Health Acute Care capabilities into center wide Emergency Response Plan. Prepare for emergency situations including the potential for natural disasters and incidents involving Biological, Chemical, Radiations, Nuclear (BCRN) agent or Weapons of Mass Destruction (WMD).

2.3.3.3 Automated External Defibrillator Program (AED)

Oversee the center wide Automated External Defibrillator (AED) Program (responsibility of the Medical Director) and ensure that it meets the requirements of the NASA AED Program Guidelines.

2.3.3.4 Occupational Injuries or Illnesses (Federal Workers' Compensation)

Provide diagnostic and medical treatment, as an initial measure

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to repair or mitigate potential danger. Interface with the employee's treating physician as necessary including assistance with the completion of any forms required by the Office of Worker's Compensation Program (OWCP), other insurance, and State or Federal health forms.

2.3.3.5 Acute Non-Occupational Injury or Illness

Provide initial on site assessment of acute non-occupational injury or illness within the medical nursing capabilities or function of the staff.

Offer medical treatment for acute non-occupational injury or illness when these services do not interfere with the treatment of occupational-related illnesses or injuries or other primary functions.

Refer employees to their physician for further treatment as appropriate.

Provide a resting and observation area for any employee experiencing physical distress until acceptable arrangements are made to transport home or to their private physician.

2.3.3.6 Occupational Related Examinations

Provide occupational related examinations including pre-placement, surveillance, job certification, special purpose, and other examinations as medically necessary that meet the requirements of the NASA Occupational Health Program Procedures, NPR 1800.1, Occupational Safety and Health

Administration (OSHA), Federal Aviation Administration (FAA), Department of Transportation (DOT), American National Standards Institute (ANSI), Nuclear Regulatory Commission (NRC), NASA standards and other regulatory agencies.

Utilize NIOSH criteria documents as guidelines for medical surveillance of exposed personnel, in the absence of a regulatory or a NASA standard.

Coordinate with the Safety/Industrial Hygiene Officer to take appropriate corrective action following the receipt of alerts relative to newly recognized health hazards, carcinogens, mutagens, etc.

2.3.3.7 Immunizations

Offer all immunizations required by federal, state, local or international laws and regulations will be provided to NASA personnel. Tetanus, influenza, and other immunizations compatible with good public health and preventative medicine measures will be offered to SSC personnel, subject to availability.

2.3.3.8 Administration of Prescribed Medication

Offer the administration of prescribed medications (e.g., allergy shots), prescriptions, and over-the-counter medications to employees to minimize time away from work and/or to provide care until employee can follow up with their personal physician.

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2.3.3.9 Medical Clearance for Health Fitness Center

Provide required medical clearance to identify any potential or actual health problems and minimize risks as appropriate by Center Health Fitness Protocol.

2.3.3.10 Medical Supplies and Equipment

Maintain appropriately dated supplies and materials sufficient to ensure high quality performance of the contract. Maintain medical equipment according to manufacturer's recommendations.

Inform the COTR of any medical equipment deterioration and the need for replacement or repairs.

2.3.3.11 Clinical and Laboratory Services

Provide or contract with an accredited clinical laboratory for required laboratory testing for health maintenance, occupational examination, occupational injury, or illness programs.

Ensure the specimen preparation and handling procedures are managed according to the laboratory specifications. Provide or contract out for x-ray services.

Ensure all x-rays are read by an American Board Certified Radiologist and asbestos-related chest x-rays must be read by "B" readers in compliance with OSHA standards.

Ensure x-ray film and written reports are delivered to the OMP clinic and become property of the government.

Develop or update as needed written Standard Operating Procedures (SOPs) for the clinic. Address methods, procedures, equipment, and training to be used to complete requirements of this Annex.

2.3.4 EMPLOYEE ASSISTANCE PROGRAM

2.3.4.1 Goal

Provide a comprehensive Employee Assistance Program (EAP) that meets the requirements of 2.3.2.3. The NASA Occupational Health Program (OHP) EAP is a confidential, diagnostic, and educational program providing assessment, short-term counseling (generally recognized as up to 5 visits per problem, EAP counselor determines the appropriate number of visits on a case-by-case basis), and referral services free of charge for NASA employees, their families, and Contractors where applicable. The EAP helps employee, their spouse, family members living in the employee's household, and other legal dependents.

2.3.4.2 Areas of Consideration

The EAP shall focus on work-related issues, family or personal relationship issues, stress-related illness, alcohol and substance abuse, psychological and psychiatric disorders, grief and loss, and other (i.e. retirement and elder care).

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2.3.4.3 Management Training

Provide training to management on their responsibilities to employees and identifying employees who may need assistance to be troubled. Increase employee awareness of the availability, nature, and scope of EAP services through periodic training.

2.3.4.4 Functions

Provide services for employees both on and off-site. Referrals may be employee or family self referral, management referral, OHP clinic referral, organizational requests or EAP Administrator/Contracting Office Technical Representative (COTR) referral.

Provide referral access to a hospital, detox/care unit in order to place the employee in a treatment plan that best meets their needs.

Assist in identifying, selecting, and contacting qualified treatment providers. A cost effective and appropriate level of care will be recommended to employee or family member. Facilitate and/or coordinate the implementation and scheduling of health related support group meetings.

Provide a wide range of appropriate educational materials for distribution and posting.

Provide informational sessions, workshops, and seminars on a

wide range of topics on an annual basis or at the request of the EAP Administrator/COTR.

Develop a Critical Incident Stress Management program and provide crisis management for disaster and emergency situations.

Provide consultation to the EAP Administrator/COTR on all aspects of the program including planning, promotion, training, and evaluation.

2.3.5 Wellness and Physical Fitness Program

2.3.5.1 Goals

Provide a physical fitness program that contributes to enhancing and maintaining mental and physical health. The Contractor shall staff and administer a physical fitness program and operate a fitness facility with particular emphasis on employee medical wellness.

2.3.5.2 Areas of Service

Provide guidance and assistance to program participants, plus generally monitoring and observing participants while exercising.

Services shall include instruction on proper methods of exercise and use of equipment.

Provide nutritional counseling, physical fitness testing, and

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maintaining records on participant progress. Health education programs shall be promoted through the fitness facility with emphasis on aerobic and cardiovascular fitness, fitness evaluations and assessments, and back care.

Provide walking and jogging programs and the NASA Annual Fitness Challenge Program will be encouraged as a part of the physical fitness program.

Fitness programs will be operated in conjunction with the OHS clinic to assist SSC employees in preventing and controlling health risk factors by appropriately coordinating medical and nutritional recommendations to reduce chronic disease.

2.3.5.3 Medical Clearance

Written medical clearance, with timely recertification, is required for use of the SSC fitness facility. The OHS physician shall have the final authority for clearing individuals for membership use of the fitness facility.

2.3.5.4 Calendar of Events

The Contractor shall publish a monthly Wellness and Fitness Exercise Program of upcoming events as required in the data Requirements of this contract. The Contractor shall provide Wellness and Fitness Center status report DR 2-SA07.

Information sharing and education through a variety of venues, including pamphlets, newsletters, health screening, lectures and personal training, with the underlying message that optimal

health and fitness are achievable, in part, through regular physical exercise and screenings for early detection of disease.

The Contractor shall maintain the program equipment in operating condition.

2.3.6 Environmental Health Program (Industrial Hygiene)

2.3.6.1 Goal

Provide comprehensive IH services through the continuing development, maintenance, implementation and application of an EHP which:

Ensures that all employees will be provided with a healthful workplace environment that is free from ergonomic stresses and harmful levels of exposure to toxic or hazardous chemical, physical, and biological agents, which may result in illness, serious physical injury, or death;

Complies with all Federal standards/requirements pertinent to workplace hazards. In the event of conflicting standards or regulations, the most protective ones for employees will be met;

Maintains and utilizes an inventory of chemical and physical potential health hazards/agents in all NASA workplaces to ensure that hazardous agents are tracked and to minimize usage and storage of such agents whenever feasible.

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Reviews contracts and work orders to ensure that necessary health hazard controls are included and reviews purchase requests for hazardous new materials (including new applications and uses) or otherwise monitors the issuance and use of hazardous new materials.

Provides appropriate assistance to staff (e.g., safety and environmental) and line organizations (e.g., engineering, program, and procurement) to ensure the incorporation of protective health measures in new equipment, emergency response processes, and facilities or in modifications to existing ones.

Employs sufficient and pertinent exposure-monitoring techniques to ensure compliance and conformity with environmental health standards and guidelines;

Recommends techniques or methods for hazard abatement where exposures are found to be excessive;

Develops plans and procedures, and conducts center reviews to determine the effectiveness of environmental health programs;

Conducts annual inspections of all facilities, operations and work areas to identify and evaluate potential health hazards, including biological agents;

Provides health hazard training as required;

Responds expeditiously to employee complaints and tracks until resolved.

2.3.6.2 Functions

The contractor shall be responsible for continually reviewing applicable regulations affecting EH. The contractor shall be responsible for developing and implementing programs to comply with the above requirements for civil servant and qualified contractor employees. The contractor shall implement a comprehensive IH Program taking into consideration the unique processes/situations applicable to the specific NASA site. In support of that effort the contractor shall perform the following tasks:

Provide a comprehensive exposure assessment program to identify, evaluate, and control chemical, physical, or biological agents that may be encountered in the work environment and to determine compliance with applicable rules and regulations for personnel exposure to such agents. This comprehensive assessment program shall be implemented within 90 days of contract authority to proceed.

Provide ongoing surveys, studies, investigations, and follow-up to identify, evaluate, and control chemical, physical, or biological agents that may be encountered in the work environment and to determine compliance with applicable rules and regulations for personnel exposure to such agents. This effort shall be proactive and conducted cooperatively with other contractors, as appropriate.

Investigate employee potential exposures to chemical, physical, or biological agents based on such things as Occupational

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Medicine (OM) examination findings, exposure assessments, employee complaints, etc. Whenever possible, investigation shall be conducted within 2 hours of receipt of notification.

Investigate employee complaints of potentially life threatening workplace hazards immediately and investigate all other workplace hazards no later than 24 hours of receipt of complaint. The EH contractor shall coordinate with safety, medical, facilities management, and engineering staff (as appropriate) to resolve issues.

Investigate reported indoor air quality complaints within 5 working days of receipt of complaint.

Provide specialized support services to center operations; provide EH standby support, as requested, in areas that have a potential health hazard due to the nature of the operation in progress.

Review identified hazardous operations and procedures to determine and document the adequacy of preventive measures and controls, and ensure compliance with applicable Federal and NASA regulations and requirements.

Conduct field audits in the following situations: 1) as a follow-up when noncompliance conditions were previously identified; 2) by random inspection; 3) on notification of possible noncompliance conditions through employee complaints; 4) as part of mishap investigations; or 5) as scheduled by appropriate Government officials.

Provide EH monitoring services to sample and analyze air contaminants (gases, vapors, dusts, fumes, mists, fibers, and smoke) using recognized real-time measurement techniques and time-weighted sampling methodologies requiring subsequent laboratory analysis. All sampling shall be performed using a recognized sampling method such as NIOSH, OSHA, etc. Monitoring of microbiological materials (e.g., fungi and bacteria) shall also be provided.

Ensure that EH laboratory services to support IH surveys and audits are accredited by the American Industrial Hygiene Association (AIHA). This includes equipment and professional analytical services for sampling and monitoring of microbiological materials (e.g., bacteria, and fungi).

Ensure that analytical services for phase contrast microscopy (PCM) are performed in accordance with regulatory protocol and that the analysis capability is eligible for accreditation by the AIHA. Conduct follow-up analysis of questionable samples.

Provide EH consultations that may include monitoring to evaluate and analyze physical hazards such as temperature extremes, illumination, ergonomic issues, and noise using real-time and time-averaged sampling methodologies.

Conduct annual workplace EH inspections to address occupational issues in all facilities. Inspections shall include, but are not limited to, the review of chemical use, employee chemical exposure, and the review of contractor written health

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programs (this shall include all NASA contractors including those who have their own Occupational Health Programs).

Implement an exhaust ventilation system testing program to include an inventory of all ventilation systems used to control hazardous air contaminants generated by hazardous operations and processes.

Implement a hearing conservation program to include a written program, engineering controls, personal hearing protection, administrative controls, exposure monitoring, medical monitoring, audiometric testing, employee training, and record keeping.

Implement a respiratory protection program to include a written program, engineering controls, personal respiratory protection, administrative controls, exposure monitoring, medical monitoring, pulmonary function testing, employee training, and record keeping.

Implement an effective ergonomics program aimed at the identification and prevention of musculoskeletal disorders (MSDs). The program shall include a written program, engineering controls, administrative controls, exposure assessment, and employee training.

Implement and conduct a confined space program to include an inventory of all confined spaces, hazard assessments for each type of confined space, specific requirements for entry and work based on the hazards identified, and management of the confined space permit entry system. Perform an annual

confined space program evaluation.

Implement and conduct an asbestos management program to include bulk sampling and analysis of suspect asbestos containing materials (ACM), facility surveys and inspections to identify suspect ACM, hazard (risk) analysis of facilities where ACM is present, assessment of written asbestos abatement procedures, pre-abatement inspections, surveys and audits of asbestos abatement operations, and clearance level air monitoring for all abatement projects. For asbestos samples, the contractor shall ensure evaluation of bulk materials that contain or are suspected to contain asbestos by polarized light microscopy (PLM). The analytical laboratory shall be accredited by the National Institute of Standards and Technology/National Volunteer Laboratory Accreditation Program (NIST/NVLAP) to analyze asbestos by PLM. Conduct a follow-on evaluation of questionable bulk samples by other appropriate analytical techniques (such as x-ray diffraction, scanning or transmission electron microscopy).

Work with Occupational Medicine (OM) to provide employee exposure monitoring data, including individual dosimeter monitoring results, for incorporation into employee medical records.

Provide supportive, advisory services to NASA and their resident contractors in fulfillment of their Federal and State regulatory obligations related to EH.

Review new and existing projects and facilities for industrial hygiene concerns, recommend appropriate controls, and work

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with NASA management, Resident Partner management, or other contract management as appropriate.

Perform risk assessments for chemicals that do not have published exposure limits, and recommend appropriate controls.

Act as the regulatory liaison for inspection activity as necessary.

Participate in or lead safety and health forums and accident investigation boards chaired for single issues, a system hazard analysis, or extended tenures, such as respiratory protection committee or asbestos management committee.

Meet as often as necessary with NASA and/or contractor employees and provide consultation on all types of industrial hygiene issues. Prepare briefing materials and meeting summaries as necessary.

Participate as emergency response team members for Class I, II, and III incidents.

Participate in emergency and non-emergency mitigation, abatement, cleanup and decontamination of hazardous materials such as lead and lead-based paint, asbestos, bloodborne pathogens and PCBs.

Provide guidance and recommendations concerning selection, use and control of personal protective equipment (PPE).

Maintain and calibrate sample collection and direct reading instrumentation used in evaluation studies of NASA work environs. Equipment maintained by EH may be loaned out for use by other NASA organizations with qualified industrial hygiene professionals.

Respond in cases of emergency involving exposures or hazards that appear to be immediately dangerous to health or life. The contractor has the authority to request that the operation be stopped. The contractor shall immediately inform the NASA EH Contracting Officer or his authorized representative of the incident and provide recommendations to alleviate the emergency conditions.

Provide an effective system for following up on IH recommendations and assuring appropriate closure of those recommendations.

Provide program development, implementation, coordination and training for programs such as hearing conservation, respiratory protection, chemical hazard communication, confined space entry, gas detection, biohazards, lead, asbestos, mercury, formaldehyde, ethylene oxide, regulated carcinogens, indoor air quality, chemical hygiene programs, ventilation programs, sanitation inspections and other types of typical industrial hygiene programs.

Provide industrial hygiene labels and signs as needed.

Implement an effective food sanitation program that is preventive in nature. Programs shall conform to the principles

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of the Hazard Analysis Critical Control Point (HACCP) standard, the latest Food and Drug Administration (FDA) Food Code, and NPR 1800.1. The program shall provide for food handler inoculations for hepatitis A and tuberculosis, as well as for epidemiological investigations of food borne disease.

Inspect all food service facilities, including food-vending operations, to monitor compliance with applied sanitary practices and provide recommendations to the responsible operating organizations.

The contractor shall also compile, as directed, industrial hygiene documents needed for compliance with Federal, State and local regulations. In addition, the contractor shall prepare correspondence to be submitted to various regulatory agencies and/or to internal organizations or other parties. The contractor shall also prepare reports and plans required by regulations. Environmental Health documentation must be kept organized at all times so that it can be made easily accessible for Government use.

2.3.7 Environmental Health Program (Health Physics)

2.3.7.1 Goal

The primary goal of a NASA center HP Program is to exercise centralized control over the procurement, use, storage, transportation, and disposition of ionizing and non-ionizing radiation sources in order to limit the exposure of personnel, facilities, and the environment to levels of radiation that are As Low as Reasonably Achievable (ALARA) and to administer a

program that is in compliance with all applicable Federal, state, and local regulations. The contractor shall meet this goal through the continuing development, maintenance, implementation and application of health physics program which:

Ensures the use of all sources of radiation is performed in a manner that will minimize health and safety risk to users, center employees, center contractors, and the general public.

Minimizes risk of damage or contamination of equipment from sources of nuclear radiation, and evaluating radiation hazards in order to protect personnel and facilities.

Ensures a radiologically safe work environment for employees and other on-site contractors in accordance with all applicable standards.

Ensures immediate investigation of all radiation mishaps (including close calls) and institution of immediate corrective action to prevent reoccurrence.

Controls the release or disposal of radiation sources or radioactivity.

Maintains an accurate inventory of, and accountability for, all sources of harmful radiation owned or operated by NASA or used on NASA property

2.3.7.2 Functions

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The contractor shall effectively implement and oversee the Health Physics (HP) Program. This includes providing administrative controls and provisions relating to organization and management, procedures, record keeping, material control, and accounting and a management review necessary to ensure safe operations.

The contractor shall implement a comprehensive HP program, taking into consideration the unique processes/situations applicable to the specific NASA site. In support of that effort the contractor shall perform the following tasks:

Identify and control radiological health hazards relating to all relevant sources of ionizing radiation and non-ionizing radiation.

Maintain NRC and State Materials Licenses

Perform comprehensive surveys and submit reports of findings, conclusions, and recommendations. These surveys will provide a basis for issuance of authorizations for use of material or equipment that produces hazardous radiation.

Maintain an inventory of ionizing and non-ionizing radiation sources. Perform inventory verification activities and area surveys and audits for all identified radiation sources in use or in storage.

Perform evaluations, inspections, sampling, analysis, monitoring audits, and surveys to ensure compliance with NASA, and Federal regulations for issues related to radiation

protection, including, but not limited to, ionizing radiation sources, non-ionizing radiation sources, and selected radiological operations.

Maintain the personal ionizing radiation dosimeter program for normal operations to include technical management of vendor subcontract(s), establishment of dosimetry, requirements for personnel, issuance of appropriate dosimetry, assessment and assignment of radiation dose, maintenance of exposure histories as required by applicable regulations, and provide technical expertise/support for specialized dosimetry applications, as required.

Provide surveillance, monitoring, and technical support of all activities associated with the generation and processing of both single hazard and multi-hazard radioactive waste or radioactive mixed waste

Perform handling, collection, and temporary storage of single-hazard, low-level radioactive waste, including the operation and maintenance of a dedicated storage facility pending material disposal or disposition

Provide shipping and receiving, labeling, and supervision over local area transportation of radioactive material being shipped.

Maintain and operate appropriate health physics laboratory and field portable instrumentation.

Ensure that all off-site calibration facilities utilized by the contractor have appropriate licenses. All laboratory analyses

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and calibrations shall conform to appropriate American National Standards Institute (ANSI) or other recognized standards. All laboratories conducting analyses of whole body dosimeters shall accreditation through the National Voluntary Lab Accreditation Program (NVLAP).

Provide supportive and advisory services to NASA and their respective contractors regarding compliance with Federal and State regulatory requirements.

Maintain radiological emergency response capability including personnel, equipment, instrumentation and supplies; conducting training exercises.

Maintain State and or U.S. NRC licenses and registrations for radioactive materials and radiation producing machines.

Support NASA Radiation Protection Committee meetings.

Review proposals and provide analysis of radiation uses and plans for facilities and equipment related thereto. Identify and evaluate the health hazard aspects and submit a formal report of findings and recommendations. This shall include review of certain purchase requests, radiation use requests, and radiation work permits.

Develop and provide training on radiation protection and safety procedures, including on-the-job training, for NASA or contractors, ionizing and non-ionizing radiation workers.

Perform radio assay for identification and qualifications of

radionuclides in biological specimens and potable water samples as furnished by the Occupational Medicine staff or the Industrial Hygiene staff.

Perform malfunction analyses of radiological equipment and recommend corrective measures and repairs. Advise users on the operations, maintenance, and repair of radiological instrumentation and equipment. Minor maintenance will be performed. The manufacturer or other qualified source will perform major repair.

Provide radiological health services and develop contingency plans for center operations involving radioactive material.

Inspect/survey laboratories to ensure compliance with regulations.

Supply and distribute radiation caution signs, labels, notices, and instructions in accordance with Federal regulations.

Prepare all Health Physics Program reports to external agencies or organizations as required by law, and submit in a timely manner to the Radiation Safety Officer for transmittal to the appropriate agency. The contractor shall also compile and complete all reporting requirements and correspondence for the NRC. In addition, the contractor shall prepare correspondence for submittal by NASA to the other internal NASA organizations or other parties.

2.3.8 DEFINITIONS

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SMAC 23/Lipid Profile - Chemistries including glucose; uric acid; BUN; creatinine, serum; BUN/creatinine ration; sodium, serum; potassium, serum; chloride, serum; calcium; phosphorus; protein total; albumin, serum; globulin total; A/G ratio; bilirubin, total; alkaline phosphatase; LDH; SGOT (AST); SGPT (ALT) ; GGT; Iron binding capacity (TIBC); UIBC including Iron, total; Iron saturation; LIPIDS including cholesterol, total; triglycerides; HDL cholesterol; VLDL cholesterol cal; LDL cholesterol calc; T. Chol/HDL ratio; estimated CHD risk.

Medical Service charges are recorded under two categories:

1. **Category I - Base Operations Account**; Category II - Customer Reimbursable Account requested under a Stennis Work Request (SWR).
2. **Category I Clinic Visits** – Base Occupational and Non-Occupational Visits.
 - a. Level 1- Only Medical Record Release (Administrative - Give or send). Includes medical records personnel support time.
 - b. Level 2 - A clinical visit involving an illness/injury requiring the services of a medical records person, registered nurse, and/or technician.
 - c. Level 3 - A clinical visit involving an illness/injury requiring medical records personnel, registered nurse, and/or technician, and a physician.
3. **Category II – Stennis Work Request Account - Occupational Visits**
 - a. Level 1 – Only Medical Record/Supplementary Medical Jacket (SMJ) Contains labor and material.
 - b. Level 2 - Check-In, Check-Out. Contains labor because there can be instances when there may also be no Medical Record/SMJ involved.
 - c. Medical Record/SMJ combined with an immunization and/or medication (material charge).
 - d. If a handwritten Rx - Physician must see patient and write it.
 - e. If medication/Rx dispensed to a traveler or for illness to help employee stay on the job, an RN or Physician must write it.
 - f. During a physical exam (Part II), if also given a shot/Rx or both. The Physical Exam is charged at time of Part I. The Medical Record/SMJ contains labor & material (No separate/ additional visit charge).
 - g. The requestor does not incur a visit charge with Part II of the physical exam. Any Rx and Shot contain a material charge. The physician and/or registered nurse time is reflected in the visit charge.

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2.3.9	PLANS, REPORTS, AND SUBMITTALS			
2.3.9.1	Medical Data Report (DR 2-SA05)	Provide Occupational Health Services transaction and cost data on quarterly basis.	4 Annually	Complete accurate and timely information
2.3.9.2	Occupational Health Program Cost Report (DR 2-MF01)	Provide a breakdown of cost expenditures related to the SSC Occupational Health Service (Medicine) and Environmental Health Program	1 Annually	Complete accurate and timely information
2.3.9.3	Bloodborne Pathogens Exposure Control Plan (DR 2-RA04)	Provide a bloodborne pathogens exposure plan of sufficient detail to comply with 29 CFR 1910.1030.	Updated as required	Complete accurate and timely information
2.3.9.4	Occupational Health International Travel Services Report (DR 2-SA06)	Provide a breakdown of medical serviced provided to various categories of personnel performing international travel.	1 Annually	Complete accurate and timely information
2.3.9.5	Federal Employee Assistance Program Annual Report (DR 2-SA08)	Provide Employee Assistance Program data as required by OPM Form 1210.	1 Annually	Complete accurate and timely information
2.3.9.6	Wellness/Fitness Center Status Report (DR 2-SA07)	Provide statistical and cost data of sufficient detail to measure the effectiveness of the program.	12 Annually	Complete accurate and timely information
2.3.9.7	Medical Services Pricing Manual (DR 2-MF02)	Provide a medial services pricing manual for services offered.	1 Annually	Complete accurate and timely information

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2.3.10	OCCUPATIONAL HEALTH SERVICES PROGRAM (Excluding EAP and Wellness/Fitness Center)	Operate the OHS clinic and provide services in accordance with Annex 2.3.		Compliance with Annex 2.3.
2.3.10.1	Category I -Occupational Illness/Injury	Program must be designed to satisfy all obligations under the provisions of the Mississippi Workmen’s Compensation Law and/or the Office of Worker’s Compensation Programs, US Department of Labor (DOL).	a. Level 1-12 b. Level 2-328 c. Level 3-512	Completes all reporting requirements and compliance with laws and regulations.
2.3.10.2	Category I -Non-Occupational Illness/Injury	Medical care will be provided to prevent loss of life, limb or to relieve suffering until the patient can be placed under the care of a personal physician. Operate in accordance with Annex 2.3.	a. Level-1- 224 b. Level 2- 2,621 c. Level 3- 1,151	Satisfactory completion of Annex 2.3 requirements based on customer complaints.
2.3.10.3	Category II -Occupational Illness/Injury SWR Order	Program must be designed to support program and resident agency documents.	a. Level 1– 457 b. Level 2– 1,141	Completes all reporting requirements and compliance with laws and regulations.
2.3.10.4	Immunizations	See paragraph 2.3.3.7	2,356 - Included in 2.3.8 work-load statistics	Satisfactory completion of Annex 2.3 requirements based on customer complaints.

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2.3.10.5	Health Exams	The program shall provide for authorized physical exams.	2,378 - Included in 2.3.8 work-load statistics.	Satisfactory completion of Annex 2.3 requirements based on customer complaints.
2.3.10.6	Drug Program Testing	See paragraph 2.3.3.7.	4 Tests	Satisfactory completion of Annex 2.3 requirements based on customer complaints.
2.3.11	EMPLOYEE ASSISTANCE PROGRAM (EAP)	See paragraph 2.3.4, Operate the EAP Program	70 Visits	Satisfactory completion of Annex 2.3 requirements based on customer complaints.
2.3.11.1	EAP Training	The program shall provide for education and training to promote personal hygiene and health maintenance using personal conferences, pamphlets and posters See paragraph 2.3.4.	24 Sessions 360 Attendees	Satisfactory completion of Annex 2.3 requirements based on customer complaints.
2.3.12	WELLNESS AND FITNESS CENTER PROGRAM	The contractor shall operate and maintain the SSC Wellness/Fitness Facility and equipment and provide a comprehensive wellness program	Average 430 members.	Satisfactory completion of Annex 2.3 requirements based on customer complaints.

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2.3.12	Continuation WELLNESS AND FITNESS CENTER PROGRAM	The Wellness/Fitness Center Program shall consist of lifestyle appraisals, fitness assessments, orientations, aerobics instruction, smoking cessation classes, and wellness/fitness education and facilitation.		Maintain a minimum membership base of 11 percent of the SSC on-board population.
		The contractor shall publish a monthly schedule of planned events for customer use.		Maintain 90 percent of the exercise equipment in operating condition at all times.
		Fees: Maximum Initial Assessment Orientation Fee is \$25.00.		The contractor shall maintain a 90 percent customer satisfaction level based on survey results.
		Maximum monthly Membership Fee is \$15.00.		
		Membership fees shall be approved by the Contracting Officer.		
		The Wellness/Fitness Center Program shall survey its membership quarterly to determine the quality of the Wellness/Fitness Center Program. The results shall be made available for Contracting Officer review upon request.		

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2.3.13	Environmental Health (Industrial Hygiene)	Provide a comprehensive Industrial Hygiene program that meets the provisions of NPD 1800.1, NASA Environmental Health Program and ensures compliance with applicable Federal, State, and local laws and requirements to provide a healthful work environment.	Varies based upon operational needs, but typically includes an average of 273 Industrial Hygiene assessments per year including: 64 asbestos, 60 ergonomic, 27 Indoor Air Quality (IAQ), 13 lead, 44 microbial, 31 exposure assessments for chemical hazards other than lead and asbestos, 26 noise, 1 illumination, and 7 miscellaneous.	Requirements of 2.3.6

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2.3.13.1	Industrial Hygiene Annual Program Plan (DR 2-GA38)	Written plan identifying annual program needs, goals and objectives for key industrial hygiene programs including, but not limited to, the Exposure Assessment Program, Hazard Communication, Chemical Hygiene, Ergonomics, Exhaust Ventilation, Indoor Air Quality, Hearing Conservation and Noise, Respiratory Protection, Asbestos, Lead, and Blood Borne Pathogens.	Annual	Meet regulatory requirements. Metrics measure program effectiveness
		A minimum of 2 measures of effective performance (including one quantitative) will be established for each program.		
		The Exposure Assessment Program section of the Program plan will include an inventory of homogeneous exposure groups, exposure assessment needs, and exposure monitoring schedule, and must include annual routine asbestos surveillance air monitoring in buildings 1000, 1100, 1200, 2101, and 2201.		

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2.3.13.2	Industrial Hygiene Program Report (DR 2-GA40 and DR2-GA41)	Quarterly written summary of progress towards meeting the goals and objectives of the annual Industrial Hygiene Program Plan, including a comparison of performance against established performance measures.	Quarterly Refer to DR2-GA40.	Complete, timely, and accurate information
		The Exposure Assessment Program section of the Report will include the results and analysis of exposure assessments, an evaluation of the effectiveness of exposure controls, including personal protective equipment, and any recommendations for improving worker health and safety.		Meet program goals and objectives.
		Annual written evaluation of the Center's key Environmental Health programs, Analysis will include completion of the NASA Headquarters Industrial Hygiene Program questionnaire, strengths, weaknesses, assessment of compliance with regulatory requirements and any recommendations for improvement.	Annually. Refer to DR2-GA41.	Performance indicates program meets regulatory requirements.
2.3.13.3	Environmental Health Activity Report (DR 2-GA39)	Written summary of tasks completed and tasks in progress, by program area.	Monthly Report	Complete, timely, and accurate.

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2.3.13.4	Food Service Sanitation Inspection Report (DR 2-SA16)	Perform inspections and provide reports.	Monthly inspections; Quarterly Report	Conformance with DR Timely inspections and corrective action report.
2.3.14	Environmental Health (Health Physics)	Provide a comprehensive Health Physics program that meets the provisions of NPD 1800.1, NASA Environmental Health Program and ensures compliance with applicable Federal, State, and local laws and requirements to provide a healthful work environment. limit the exposure of personnel, facilities, and the environment to levels of radiation that are As Low As Reasonably Achievable (ALARA)		Requirements of 2.3.7
2.3.14.1	Health Physics Annual Program Plan (DR 2-GA42)	Written plan identifying annual Health Physics program needs, goals and objectives.	Annual	Meet regulatory requirements.
		Establish a minimum of two measures of effective performance (including one quantitative).		Metrics measure program effectiveness
2.3.14.2	Health Physics Program Report (DR 2-GA43, DR2-GA44, and DR2-GA45)	Quarterly written summary of progress towards meeting the goals and objectives of the annual Health Physics Program Plan, including a comparison of performance against established performance measures.	Quarterly Refer to DR2-GA44.	Complete, timely, and accurate information. Meet program goals and objectives.

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2.3.14.2	Continuation Health Physics Program Report (DR 2-GA43, DR2-GA44, and DR2-GA45)	Annual written evaluation of the Health Physics program, Analysis will include completion of the NASA Headquarters Health Physics Program questionnaire, audit for compliance with regulatory requirements, strengths, weaknesses, and any recommendations for improvement.	Annually. Refer to DR2-GA45.	Performance indicates program meets regulatory requirements.
		Monthly written summary of health physics tasks complete and tasks in progress.	Monthly Refer to DR2-GA43.	Complete, timely, and accurate information.

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2.4 QUALITY

management and related standards.

2.4.1 SCOPE OF WORK

The Contractor shall be responsible for the planning and management of the contract Quality Management System to ensure its effective execution. The Quality Management System shall be in compliance to ISO-9001 and NPD 8370.5.

Inspection - Activity such as measuring, examining, testing, or gauging one or more characteristics of an entity and comparing the results with specified requirements in order to establish whether conformity is achieved for each characteristic.

The Contractor shall ensure that all programs are consistent with SSC mission requirements that apply to SSC systems, equipment, facilities and operations. Specific quality services described below shall be provided and optimized from conception to completion for all aspects of contractor activities.

Quality Management System - All activities of the overall management function that determines the quality policy, objectives and responsibilities, and implements them by means such as quality planning, quality control, quality assurance and quality improvement within the quality system.

2.4.2 GENERAL REQUIREMENTS

The Contractor shall ensure quality assurance activity is planned and developed in conjunction with other NASA contracted elements. Quality functions shall be an integral part of the design and development process and shall include the evaluation of hardware/components and operational reliability through analysis/assessments and testing.

Quality Surveillance - The continuing monitoring and verification of an entity and analysis of records to ensure that specified requirements for quality are being fulfilled.

2.4.3 DEFINITIONS

ANSI - The American National Standards Institute (ANSI) is the U.S. member body of ISO.

ASQC - The American Society for Quality Control (ASQC) is the U.S. member of ANSI responsible for quality

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2.4.4	Quality Program	<p>Implement surveillance control over special processes where uniform, high quality cannot be assured by inspection of article alone. These processes include, but are not limited to: metallurgical and chemical processes, metal joining processes, bonding processes, plastics application, plating and coating processes, and surface treating processes. In addition, processes such as environmental controls, the methods of verifying the adequacy of processing materials, solutions, and equipment will be controlled to ensure that the results indicate the appropriate quality levels of articles and/or materials. Surveillance requirements are performed independent of those responsible for performing the services and who report directly to the project manager. Establish points of contact responsible for receiving inspection results. These individuals shall be knowledgeable of the area being reviewed, authorized to represent the Contractor, and capable of implementing corrective measures. Surveillance activities shall be performed by personnel who are not responsible for performing the provided services</p>	As required for efforts provided in the entire contract.	<p>Establish surveillance control over special processes where uniform, high quality cannot be assured by inspection of articles and/or materials alone.</p> <p>Establish points of contact for each functional area selected for review during the assessment process.</p>

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2.4.4	Continuation Quality Program	and who report directly to the project manager. Points of contact shall be established for receiving inspection results. These individuals shall be knowledgeable of the hardware/ components being inspected, authorized to represent the contractor on quality issues and capable of implementing corrective measures/actions.		
2.4.4.1	Personnel Certification Plan (DR 2-RA01)	Develop a Personnel Certification Plan that will systematically identify training needs and provide the appropriate training to those personnel whose work affects quality, to ensure that they possess the necessary knowledge, skills and proficiency to consistently meet requirements. SSC has adopted an electronic, site-wide database Training Certification Records System (TCRS) as a repository for training record and certification requirements. This system will be used by the FOOSC.	1 Certification Plan	Certified personnel must be given a card, badge, or similar evidence of certification. Personnel controlling selected processes and operations must be certified per DR 2- RA01. Personnel certification plan must be submitted within 60 days of contract start.
2.4.4.2	GIDEP Usage Report (DR 2-RA02)	Contractor shall participate in the Government Industry Data Exchange Program (GIDEP). An annual usage report will be submitted per program requirement.	Annual Report	Conduct GIDEP Program per NPG 8735.1 - GIDEP

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2.4.4.2	Continuation GIDEP Usage Report (DR 2-RA02)	Contractor will evaluate all incoming GIDEP documents for SSC applicability and take appropriate action per program requirements. Contractor will input SSC specific information into the GIDEP System.	200 Incoming Alerts/Advisories 5 Outgoing Center- wide Alerts/Advisories	
2.4.4.3	Material Review Board Members List (DR 2-RA03)	Provide a list of qualified personnel for the Material Review Board (MRB). MRB members must be selected on the basis of technical competence and shall have sufficient authority to make appropriate dispositions of articles or materials involved.	As list is changed	1 MRB List
2.4.4.4	Parts Control Program	Contractor shall establish and implement a parts management program for ensuring the integrity of all mechanical and electrical electronic, and electro- mechanical (EEE) parts per NASA standards.	1 Program Plan	Conduct Parts Program per NPD 8730.2 - NASA Parts Policy
2.4.4.5	Control of Non-Conforming Products and/or Services List of Nonconforming Products and/or Services (NPS) (DR 2-RA03)	Measures must be established to control materials, parts, or components, which do not conform to requirements in order to prevent their inadvertent use or installation. These measures must include, as appropriate, procedures for identification, documentation, segregation disposition, and notification to affected	Monthly list	Conformance with DR

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2.4.4.5	Continuation Control of Non-Conforming Products and/or Services List of Nonconforming Products and/or Services (NPS) (DR 2-RA03)	organization. Nonconforming items must be reviewed and accepted, rejected, repaired, or reworked in accordance with documented procedures. All nonconforming products and/or services that are documented shall be reported in accordance with DR 2– RA03.		
2.4.4.6	NASA Alerts/Advisory Program Participation	Contractor shall participate in the NASA Alerts/Advisory Program. Contractor will evaluate all incoming NASA Alerts/Advisory.	20 Incoming Alerts/Advisories	Conduct Program per NPD 8730.2 - NASA Parts Policy

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2.5 SAFETY

2.5.1 SCOPE OF WORK

This Annex identifies the Safety Services required to be provided by the Contractor at the John C. Stennis Space Center (SSC). As required in Annex 1, the Safety Program shall be certified by OSHA VPP or equivalent recognized occupation safety certification program within two years.

2.5.2 GENERAL REQUIREMENTS

2.5.2.1 General Limitations and Clarifications

The Contractor shall be in compliance with all applicable Federal, State, and Local laws; Presidential Executive Orders; NASA Policy Directives; NASA Policy Guidance; and Stennis Procedures and Guidelines. The Contractor shall ensure that all employees are knowledgeable of, and comply with, all appropriate Safety Requirements, including personnel certifications.

The contractor shall establish and accomplish a program that is directed toward avoiding loss of life, injury to personnel, damage to equipment or property, mission or test failures, or undue risk.

Safety shall be promoted and safety awareness shall be encouraged through the Contractor program. Safety risks shall be managed through the systematic identification, assessment and control of hazards and their associated risks.

Due to the high potential of unforeseen circumstances occurring over the course of this contract, the Contractor must have at least one safety professional on staff and available each work day unless otherwise approved by the Contracting Officer (CO).

The Contractor shall provide center-wide safety services, including those to meet resident agency demand, consistent with the requirements of the SSC Safety and Health Procedures and Guidelines (SPR 8715.1), OSHA requirements and other government safety regulations, as applicable. These services will include, but are not limited to, operating and maintaining a SSC Safety Library consisting of generic and SSC-specific safety documents; compiling and reporting safety statistical information; administering SSC-wide industrial safety and health awareness program; monitoring workplace environment for health hazards; maintaining and operating a controlled “Safety-Crib” for storage and issuance of protective equipment.

2.5.2.2 Documentation & Information Management Systems

All submittals, documents, logs, records, analytical results, and procedures developed in accordance with this Annex’s requirements or which demonstrate compliance with laws and regulations shall be prepared using the SSC Office Automation computer software suite of programs (i.e. Microsoft Word, Excel, Access, PowerPoint, etc.) and will become the property of the Government. All documentation shall be maintained in the official NASA files in accordance with the latest version of the NASA SSC Safety & Mission

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Assurance (S&MA) Office File Plan. In many cases the requirements or deliverables described in this Annex are the electronic maintenance of information (e.g., databases, schedules). These databases, applications, and documents are to be maintained by the Contractor on the server designated for use by S&MA. This server will be maintained by the ODIN contractor. Much of this information is accessible to the SSC Community as a Safety service on the S&MA Homepage. As applicable, the FOS contractor is responsible for updating their respective information on the S&MA Homepage.

2.5.3 DEFINITIONS

NASA Direct - Procurements made exclusively through NASA Procurement.

SSC Safety Library - A central repository for the storage and access of safety related information including safety videos, CD ROMs, books, promotional materials, training aids, and any other safety tools which will function to enhance program effectiveness and awareness.

SSC Safety Crib - The repository for safety related gear such as PPE (hard hats, ear plugs, safety glasses, etc.), other safety consumables such as caution tape, safety harnesses as well as diagnostic equipment (see TRL for inventory data).

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2.5.4	SAFETY PROGRAM ACTIVITY (DR2-SA09 and DR2-SA11)	Establish and accomplish a Safety Program to ensure compliance with applicable Federal, State, and local laws and requirements (including NASA & SSC policies and requirements) to provide a safe and healthful work environment.	1 Program	Requirements of SPR 8715 and OSHA VPP
2.5.4.1	Safe Atmospheric Verifications	Provide safe atmospheric verification services that are responsive to the SSC customers.	3,210 verifications per year	
2.5.4.2	Safety & Environmental Health Investigations	Provide safety and environmental health investigations and/or regulatory expertise. Provide report of findings and recommendations to requestor. Examples of Safety and Environmental Health areas of investigations include Indoor Air Quality, Ergonomics, and Personal Protection Equipment (PPE).	130 Requests per year Average of 4 hours per request	Reference 2.5.2
2.5.4.3	Maintain Safety and Environmental Training Schedules	Develop monthly training course schedules based on SSC's goals and mission. Provide OSHA required safety and health training courses. Maintain training schedule(s) on the SSC S&MA Homepage and keep an archived hard copy of the completed training records available for NASA review upon request. The Contracting Officer may add or delete course subject titles.	Monthly	Training schedules for each month will be provided 2 months prior to the beginning of the training month.

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2.5.4.4	System Safety Database (DR 2-SA10)	Provide summary descriptions of the physical and functional characteristics of the systems and its components. The capabilities, limitations and interdependence of these components shall be expressed in terms relevant to safety. The system and components shall be addressed in relations to its mission and its operational environment.	As required	Conformance with DR.
2.5.4.5	Safety and Environmental Health Program Self Assessment and Implementation Report (DR 2-SA12)	Develop and submit the Safety and Environmental Health Program Self-Assessment and Implementation Report per DR.	Annual Report	Conformance with DR.
2.5.4.6	Confined Space Inventory (DR 2-SA14)	Provide an annual confined space inventory (permit-required spaces) for facilities, systems, and equipment under the responsibility of the contractor; and compile the annual confined space inventory for all companies and resident agencies by organization at SSC. Maintain confined space database.	Annual Report	Conformance with DR.

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2.5.4.7	Mishap Notification, Investigation, and Corrective Action Report (DR 2-SA13)	Investigate mishaps, incidents, and close calls in accordance with the latest version of NASA guidelines and this contract. Notify the NASA S&MA of all mishaps (including close calls) immediately, followed by submittal of the initial mishap report (NASA Form 1627) within 24 hours. Assure that all corrective actions identified in the “NASA approved” corrective action plan are completed. Report all accidents or mishaps of Type A, B, C & D incidents, close calls, and mission failures. IRIS is NASA’s provided system software to allow for tracking and treating injuries, illnesses, and other significant losses.	Contractor determined	Conformance with DR
2.5.4.8	SSC Safety and Environmental Training and Certification Report (DR 2-SA12)	Develop, coordinate, and implement a safety and environmental training program for SSC personnel, including NASA, Contractors and resident agencies. Products will include training curriculum, training records, and a Safety Library. Remain cognizant of safety and environmental industry training standards and curriculum. Training course list may be modified with the approval of the CO. Training courses will be provided at SSC and during normal SSC working hours; maintain SSC training/certification database on SSC server and S&MA web site for all courses completed.	Annual Report 225 Training Sessions	Conformance with DR. Training courses will be conducted on schedule.

**ANNEX 2.5
LIFE SUPPORT SERVICES
SAFETY**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
2.5.4.9	SSC Safety and Health Awareness Plan (DR 2-SA15)	Develop and provide for NASA review a SSC site-wide Safety and Health Awareness Plan. The Contractor shall implement safety and health awareness activities and campaigns aimed at motivating SSC employees, including resident agencies and support Contractors, to strive for a mishap-free and healthy work environment.	Annual Plan 4 Newsletters 1 S&H Day 4 S&H Council Meetings	Conformance with DR. Safety awareness annual plan will be submitted by October 31, for each calendar year.
2.5.4.10	Annual Awareness Briefing	Provide an annual briefing to NASA, resident agencies, and Contractors as to the location of Asbestos-Containing Material and lead coatings. Provide an awareness briefing to both environmental and safety representatives of each. Provide documentation that can be used by the representatives in informing their employees.	Annual briefing	Conformance with DR.

**PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 2.0 (SERVICES)

1	Project Management	10%	RR, UPI	Timely submittal of all documentation to ensure compliance with all federal, state and local requirements. All of which is associated with the implementation of effective programs that promote the safety and well being of personnel, ensure a safe environment as well as promote outstanding quality assurance for operations at SSC.	100%	Compliance with regulatory requirements as outlined in the DRs, EMS, Safety and Quality Audit Plans that are designed to identify as well as correct noncompliance prior to compromising a safe environment or personnel injury.	5
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**PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 2.0 (SERVICES)

2	Functional Operations Management	90%	RR, PI, UPI, VCC,	<p>(a) Environmental Compliance with Annex 2.2 Requirements.</p> <p>(b) Medical Provide professional medical care and Employee Assistance Program consistent with specific work requirements that are outlined in as stipulated in the NASA requirements. Operate and maintain the Wellness/Fitness Program in accordance with specific NASA work requirements.</p> <p>(c) Fire Protection Respond to all alarms with two qualified, fully staffed and properly equipped engine companies.</p>	100 %	<p>Maintain a 90% customer satisfaction; maintain a minimum membership base of 11% of the SSC population and 90% of the equipment in operating condition at all times.</p> <p>Within 2.5 minutes and implement appropriate fire fighting and rescue procedures. Comply with all requirements of Annex 2.1.</p>	5
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**PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 2.0 (SERVICES)

				<p>(d) Quality Assurance Provide Quality Assurance support to SSC through the use of inspections, surveillance, audits and process verifications; and assist in the administration of the GIDEP program.</p> <p>(e) Safety Maintain effective safety program designed to identify and correct any non-compliance or work environment prior to personnel injury or equipment damage. Maintain VPP certification or equivalent.</p>		<p>Inspections identified within each work/planning document, will be considered as by-passed if discovered as not being performed after the individual work/planning document is closed.</p> <p>Correction of identified items.</p>	
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**ANNEX 3.0
ENGINEERING SERVICES**

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ANNEX 3.0 ENGINEERING SERVICES

3.0 Engineering Services

3.0.1 General Information

3.0.1.1 Annex Description

This Annex identifies the facilities engineering services required by the Government. It should be understood that the engineering called for in this Annex is exclusive of all engineering necessary to meet other contract requirements as called for in other Annexes.

3.0.1.2 Restrictions, Limitations, and Special Conditions

The Contractor must take into account entry restrictions to secure facilities to accomplish the work called for in this Annex.

3.0.1.3 Professional and Non-Professional Engineering Services

Professional engineering services shall include, but not be limited to, civil, architectural, mechanical, electrical, structural, environmental, construction management and fire protection disciplines. Limited crane, instrumentation, electronic control and chemical, specialties will be required. High pressure fluid system and cryogenic system specialties will require emphasis. The design of special equipment such as ground support and propulsion test equipment is also a requirement under this contract. Non-professional engineering services shall consist of, but not be limited to, drafting, detailing, AutoCAD

Computer-Aided Drafting (CAD) operators, in-field testing and research, Central Engineering File (CEF) management, project control, SPECSINTACT management, standards management and construction surveillance in support of SSC activities.

3.0.1.3.1 Design Discipline Supervisors or Leads

Leads shall have an engineering degree in their technical discipline, with a minimum of 5 years of experience working in their discipline.

3.0.1.3.2 Design Engineers

Engineers shall or must be a designer with 3 years minimum specialized experience in their technical discipline.

3.0.1.3.3 Drafting Personnel

Drafting personnel shall have knowledge of Auto CAD software, 3-D modeling, Geographical Information Systems (GIS), personal computer operations, construction practices, the ability to accurately read construction drawings, and recognize building components and such disciplines as architectural, mechanical, electrical, and structural.

3.0.1.4 Design Overview

All designs and studies shall be prepared under the supervision of a professional engineer registered in the State of Mississippi. All designs and studies shall be in compliance with Federal, State, local, and Stennis Space Center (SSC) requirements and

ANNEX 3.0 ENGINEERING SERVICES

regulations. The Contractor shall coordinate with the site Safety, Pressure Systems, Environmental, Fire Safety and the plant engineering offices to ensure each design meets the International Building Code, all other applicable codes, regulations and Government requirements. The Contractor shall retain sole responsibility for ensuring all designs comply with applicable regulations and meet 10 Code of Federal Regulations (CFR) 435 and 436 and subsequent mandated legislation. All new construction designs shall follow Leadership in Energy and Environmental Design/New Construction (LEED/NC) guidelines with a goal of silver rating. Modification and Rehabilitation shall follow Leadership in Energy and Environmental Design/Existing Building (LEED/EB) guidelines.

3.0.1.4.1 Design Reviews

The Government will request one final and a variable number of interim formal reviews of the design process and design deliverables. The specific personnel, requirements, scope and deliverables of the design effort and the design review processes will be addressed on a per project basis with the NASA project manager during the development of the Project Management Plan. Design Review Minutes shall be required for each design review and archived in the Central Engineering Files (CEF).

3.0.1.5 Updating Site-wide Oriented Repair Document (SORD) Drawing (As-Built)

At the start of this Contract the Government will have existing as-built work in backlog. As projects are as-built on this Contract, the Contractor shall review that existing backlog to determine: (1) if any of that backlog work can and should be integrated into the present work and (2) if it should be as-built. The site's SORD drawings shall be maintained and used by the Contractor and provided to others at the request of the Government as references for design, construction and operating efforts. Configuration management software for documentation and data management will be furnished by the Government and the contractor shall use the system provided.

Once the SORD drawings have been updated, the final design drawings, redlines, and the updated masters shall be delivered to Central Engineering Files (CEF) in Building 2104.

3.0.1.6 Computer-Aided Drafting

All CAD drafting called for by this Annex shall be performed using Auto CAD a product purchased by Autodesk. The contractor shall procure the appropriate version with Government concurrence.

All updates shall be formatted per the Facilities Engineering Documentation Standard, and the Facilities Drafting Manual.

3.0.1.7 Accuracy of Project Management Plans Construction Estimates

The Contractor shall include construction budget, design budget and design schedule data on a Project Management Plan (PMP) before a design begins per paragraph 3.2.1. At each design review stage or when requirements change during the

ANNEX 3.0 ENGINEERING SERVICES

design, the Contractor shall review the PMP to determine that projected budget and schedule estimates are still correct. Informal proposals for adjustments to these and all PMP parameters are the responsibility of the Contractor as is notification of same to the Government's technical representative. All changes to these parameters agreed upon between the Contractor and Government's technical representative shall be formalized within 7 days in a revised PMP.

3.0.1.8 Definitions and Acronyms

As-Built: Updating the master facility drawings to accurately depict existing conditions in the field.

CCBD: Configuration Control Board Directive

Certificate of Completion (COC): Document used to close construction project verifying completion.

CoF: Construction of Facilities

Construction: Any and all field work for the purpose of constructing new facilities, and modifying, rehabilitating, or repairing existing facilities. This construction is not limited to Davis-Bacon definitions and includes the installation of special equipment.

CR: Change Request

Documentation and Data Management System (DDMS): Software provided for Configuration Management of facilities.

EMI: Engineering Modification Instruction

LEED: Leadership in Energy and Environmental Design

Project Management Plan (PMP): Detail of a specific scope of work relating to design and study services and deliverables.

Raster Master Drawings: Master facility drawings that have been scanned into electronic format.

Redline Drawing: A drawing which has had approved modifications/changes not incorporated in the controlled official archives.

SIES: Surveillance, Inspection, Engineering Services

Site-wide Oriented Repair Documentation (SORD)

Drawings: Master facility drawings, hardcopy or electronic, that act as the official record of the site's facilities.

Specification Control Drawings (SCD): Detailed drawings showing parts and specifications of individual elements of a component or system such as valve, controllers, expansion joints and pipe fittings.

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ENGINEERING DRAFTING SUPPORT SERVICES & DOCUMENTATION MAINTENANCE**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1	Engineering Drafting Support Services and Documentation Maintenance			
3.1.1	General Services			
3.1.1.1	Site wide Oriented Repair Documentation (SORD), Documentation Update	<p>The contractor shall revise, create and update all SORD drawings to accurately reflect the field conditions upon completion of any facility modification or new construction work performed by this contract and as built changes from NASA and Resident Agencies. This service shall be performed when a facility modification or new construction results in a change to government property, facilities, electrical and climate control systems, plumbing, utilities, roads and grounds. The contractor shall incorporate as-built details to the level of detail presently found on the SORD drawings.</p> <p>The Government shall be given electronic accessibility to the database maintaining these records.</p>	Update drawings for 150 Certificate of Completions per year.	<p>No deviation from Facilities Engineering Documentation Instruction, and the Facilities Drafting Manual</p> <p>The Contractor shall maintain records to show a project's receipt from construction and the percent completion of incorporating as-built details into the SORD System. The records shall cover all as-built work.</p> <p>Review and use all available sources, including redlines, shop drawings, submittals and</p>

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.1	Continuation Site wide Oriented Repair Documentation (SORD), Documentation Update			<p>field investigations to determine the information to be transferred to the affected SORD drawings. Perform all drafting, CAD and manual, to update all SORD drawings affected by a project.</p> <p>Delivery of final as-builts to CEF shall be within 14 days of job completion or NASA review and approval.</p>
3.1.1.2	Specification Control Drawings (SCD) SORD Update	The contractor shall revise, create and update Specification Control Drawings (SCD).	Update 400 "B" size drawings per year	Update per redline mark-ups per Facilities Engineering Documentation Instruction, the Facilities Drafting Manual, and SSC Work Instruction Component Servicing Documentation.
3.1.1.3	Reserved			

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3.1.1.4	Master Plan Updates	The contractor shall revise, create and update all master plan drawings and make available to the government on electronic database. Frequency will be as directed by the Government's designated Master Planner.	Minimum 1 Maximum 30 pages per year.	Update per redlines, mark-ups and information furnished by the government.
3.1.1.5	Design Drafting and Miscellaneous CAD Support	The contractor shall perform CAD drafting services as requested by the government. The contractor shall revise or create projects, signs, graphs, and charts.	100 requests per year. As ordered	The Contractor shall complete these tasks within 14 days of Government providing information. The exact schedule for each task shall be given when the task is assigned. Update or create per redline, mark-ups or information given by the government.
3.1.1.6	Issue Digging Permits	The Contractor shall review construction drawings created by other contractors to ensure installation, re-routing, or removal of cables, and conduits of the site's underground/buried utility systems meets SSC's facility criteria. Contractor will ensure that all potential hazards and position conflicts resulting from such installation are identified visually in the field with paint or tape and conveyed verbally to the	Minimum 25 and Maximum 70 Digging permits issued per year.	All requests for permits and their disposition, whether approved or disapproved, are documented by the Contractor. Within 7 days the Contractor shall review the submitted

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.6	Continuation Issue Digging Permits	Government or construction project manager and to the team physically handling the installation.		construction drawings and respond to the customer with a new permit or a written notice explaining the reason for the request being rejected.
3.1.1.7	Configuration Management and Project Control	The Contractor shall maintain and make available to the Government current project information for all facility projects the contractor has a requirement to perform as requested by the Government. This includes facility designs, studies, locally approved construction and modifications, planned maintenance projects, and construction surveillance. (See DR 1-CM01)	52 written updates per year.	Cost and current status information maintained in the NASA approved system and PC spreadsheet software as required for NASA and Tenant efforts in the COF and local construction programs. Data will include start and completion date, current completion status, point of contact and project cost. Use the Government document and data management systems.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.8	Building Plans (1/8" Floor Plans) DR 3-FA01	Use and build upon the existing Building Plan Drawings and maintain in CAD format. The updated Building Plan drawings shall reflect current room number, and location of walls and partitions within Government and Government-leased buildings. The Contractor shall perform field inspections of the onsite facilities to verify all Building Plan drawings are accurate. The Contractor shall update Building Plans per redlined drawings provided by the Government from bid construction work and from construction performed by this contract.	50 updates per year	Each Building Plan shall represent the current architectural configuration of the area including room numbers and layouts, room type, gross square footage and net usable square footage total. The format of each update shall be according to the Facilities Drafting Manual and all room numbers shall be legible, when photocopied. All onsite buildings shall be field checked at least once a year. All updates shall be completed within requirements set by the COC procedures. Full size drawings shall be plotted to scale: 1/8" = 1'-0" for 28" x 40."

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.8	Continuation Building Plans (1/8" Floor Plans) DR 3-FA01	The Contractor shall make available electronically all building plan drawings to the Government.		Updated Building Plans with wall modifications or room number changes will be distributed with a redlined Building Plans showing the location of the changes. Customer requests shall be met within 8 hours.
3.1.1.9	Fire Evacuation Plans	<p>The Contractor shall create, update, and maintain the Fire Evacuation Plans (FEP) when requested by the Government.</p> <p>The Contractor shall maintain and update the FEP. The Contractor shall work with NASA Facilities Engineering to identify location and placement of key evacuation and safety features in all facilities located at SSC. The Contractor shall also perform field inspections to verify locations of fire hose cabinets; pull stations, and fire extinguishers. The Contractor shall modify existing FEP drawings based on the Building Plan's to include key evacuation symbols.</p>	As Ordered Minimum 1 Maximum 10	SSC Safety and Health Procedures and Guidelines Document Update within 21 days of request Fire Safety items properly located on the FEP. The FEP data shall be consistent with Building Plan data.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.9	Continuation Fire Evacuation Plans	The Contractor shall create and maintain a progress list to document current FEPs.		List kept current and available for inspection by the Government.
		The Contractor shall plot the updated FEP drawings to an appropriate scale to fit the existing 18" x 24" black wood frames located in the facilities. Provide Facility Manager with finished plot.		Full plot fits within existing frames.
3.1.1.10	Asbestos Hazard Control Plans	The Contractor shall update Asbestos Hazard Control Plans (AHCP) based on redlined drawings provided by the Government.	As Ordered Minimum 1	Produce and distribute within 21 days.
		The Contractor shall post AHCPs on SSC Environmental web page.	Nothing additional.	
		The Contractor shall maintain the AHCP list and provide updated lists to the SSC Environmental web page. The Contractor shall also maintain a log for status purposes.		Updated list available for inspection by the Government. Respond to inquiries concerning requested dates and delivery dates within 8 hours.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.11	Drafting and Central Engineering Demand Services	Provide drafting services for SSC programs and Resident Agencies.	As Ordered Minimum 50 Requests	See paragraph 3.1.1.11
		Provide document retrieval and filing services for SSC programs and Resident Agencies.	As Ordered Minimum 50 Requests	
3.1.1.12	Space Utilization and Real Property	The Contractor shall provide up-to-date 1/8" floor plans. Data to be reflected: net square footage per room, type of space per room, gross square footage for building, wall type and tenant occupying room or building. Submit in accordance with DRs 3-FA01 and 3-FA03. Periodic walkthrough inspections of space will be conducted to verify accuracy of plans. These plans shall be incorporated into the current Computer Aided Facilities Management (CAFM) program used by the Government for facility utilization reporting using an AutoCAD integrator program. See paragraph 3.1.1.8	100 requests per year.	See paragraph 3.1.1.8 Support shall be provided within 2-4 hours of the request. The exact schedule for each task shall be given when the task is assigned. NASA Real Estate Management Program Implementation Manual (NPR 8800.15) and the NASA Financial Management Manual (FMM 9251).
		Provide annual listing of Real Property collateral equipment; values over \$5000, per DR 3-FA02.	1 list per year	No instances of unreported property

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.1.13	SPECSINTACT System Maintenance	The Contractor shall maintain and update the NASA's SPECSINTACT Software System to produce project specifications for Government bid projects. The SSC Submasters shall be updated twice a year per the latest SPECSINTACT text updates, format changes, and the software shall be updated twice a year per the latest SPECSINTACT software updates. The Government shall be given 5 days to review and approve the Submaster changes before they are made available for project design use. A copy of the latest master text and Submasters shall be kept on the shelf for use by the Government.	4 updates per year. SPECSINTACT Submaster Index.	Updates shall be completed within 30 days of receiving the latest SPECSINTACT software or text updates. Master text updates and approved Submasters shall be on the shelf within 30 days.
3.1.1.14	Management of Engineering Guidelines and Work Instructions	The Contractor shall maintain and update SSC engineering guidelines and work instructions. The contractor will update these documents when changes are request by the government and incorporate updated industry consensus standards as they occur. There are 110 engineering guidelines and work instruction to be maintained.	20 Document updates per year	Accurate updates shall be completed within 30 days of change data received. Documents will be grammatically correct and provided in a consistent format.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED DOCUMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
3.1.2	Computer-Aided Drafting Information System Maintenance and Management of Databases	<p>The Contractor shall provide programming support for AutoCAD and other government furnished engineering software, which includes providing functional enhancements, response to questions, trouble shooting of problems, and assistance in printing.</p> <p>The contractor shall maintain/create all engineering and drafting electronic databases to SORD, EMI, SCD, 1/8" floor plans (Building Plan Drawings). The contractor will devise a fast response retrieval system and provide the government network access to the databases. The databases consist of Raster, Vector and Raster/Vector AutoCAD, and AutoCAD compatible drawings. The contractor shall maintain a back-up and security system to prevent the loss of information.</p>	Support required throughout normal working hours weekly, 200 hours per year.	Support shall be provided within 2-4 hours of the request. The exact schedule for each task shall be given when the task is assigned. All databases shall be maintained current.
3.1.3	Central Engineering Files (CEF)	The contractor shall operate the government's Central Engineering Files addressing customer requests, research, document distribution, document pick-up and delivery, document archive and retrieval, control of Engineering Modification Instructions, control of vendor data, control of engineering	Operate weekly during normal working hours, 40 hours/week.	Comply with SSC work instructions Facilities Engineering Documentation Instruction, Facilities Drafting Manual. NASA Facilities Project Implementation Guideline

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3.1.3	Continuation Central Engineering Files (CEF)	work instructions, and maintaining current engineering/industry consensus standards.		and the Standard Operating Procedure for CEF.
3.1.3.1	Documentation Research	The contractor shall provide information to the government by researching the databases and files in CEF. The request would be for drawings, specifications, technical reports, standards, vendor data, space utilization, and real property information.	2,000 requests per year	Information is complete based on customer request
3.1.3.2	Pick-Up and Delivery	The contractor shall provide pick-up and delivery services to and from CEF.	100 per year	Respond within three days of the request.
3.1.3.3	CEF Filing and Maintenance of Hard Copies	The contractor shall file and maintain hard copies of drawings, manuals, and technical papers.	5,000 documents to file per year	All documents, drawings used shall be filed on a weekly basis.
3.1.3.4	CEF Control of Engineering Modification Instructions (EMI) Packages	The contractor shall receive, check, have signed, print and release all EMI packages.	150 EMI's per year	At the Government's request CEF will release and maintain all EMI packages.
3.1.3.5	CEF Support to Documentation Updates	The contractor shall supply CEF support to the drafting staff for documentation updates such as Certificates of Completion (COC), SORD #'s, pulling EMI packages, research,	Update 500 drawings per year	Support within 5 days of request.

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3.1.3.5	Continuation CEF Support to Documentation Updates	Engineering Orders (EO), Field Change Request(s) (FCR) and filing. Research all existing SORD facility drawings to determine those affected by each modification.		
3.1.3.6	Input and Maintenance of CEF Computer Database	The contractor shall update databases in CEF to control documentation files. The database will consist of the vendor cross reference index, EMI/SWR cross reference indexes, CAD/EMI indexes, Technical reports and studies indexes, SSC standards index, SSC technical procedures index, SSC maintenance instructions index, government standards and specifications index, Industry standards and specifications index, Construction SPECSINTACT index, CAD/SCD index, SORD Drawing index, CR/CCBD index and component database (CDB to parts list).	100,000 entries per year	All databases shall be maintained current. All documentation, such as drawings, manuals, technical papers, pertinent to SSC facilities, systems, and equipment will be controlled by CEF.

**ANNEX 3.2
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DESIGN**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
3.2 DESIGN				
3.2.1	Project Management Plan (PMP)	<p>A. For each design and study effort of a value >\$1000, the Contractor shall develop the Project Management Plan (PMP) for Government review and approval. The PMP initiates each design process and details the following:</p> <ol style="list-style-type: none"> 1. Objectives 2. Necessary personnel 3. Activities, deliverables, and schedule 4. Construction funding constraints 5. Total proposed cost of implementing the PMP 6. Schedule of values detailing the schedule and level of compensation to the contractor 7. Number of design reviews <p>B. In the event that changes in the Government's requirements or resources occur, the efforts stipulated in the PMP can be expanded, reduced or terminated. Contractor shall develop and provide a revised PMP within 7 days of Government notice.</p>	<p>Minimum: 75 PMP's per year.</p> <p>Maximum: 105 PMP's per year.</p>	<p>Completed PMP delivered for approval on the following schedule: Within 14 days of receipt of the design</p>

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DESIGN**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
3.2.1	Continuation Project Management Plan (PMP)	C. The Contractor shall be represented at NASA’s Facilities Project Status weekly meetings.	52 meetings per year	Background information necessary to provide status is ready for distribution and request discussion.
		D. In the event the contractor requests revision to the PMP to accommodate management of workforce, data shall be provided to Government validating request.		Maintain workload data available for Government review.
3.2.2	Design Limits			
3.2.2.1	Engineering Designs for Fixed Price Work Construction Value <\$10K or <\$1000 Design Cost	Contractor pricing shall include design and implementation estimate in the SWR for construction.	See 3.2.2.3.	
3.2.2.2	Engineering Designs for Fixed Price Work Construction Value \$10K - \$200K or Greater than \$1000 Design Cost	The Contractor shall produce designs for open competitive bid by the Government to accomplish construction. The Contractor shall produce final engineering design package drawings and specifications necessary to make the correct facility modifications to meet the requirements determined in the project scope of work. The designs shall accommodate the modification, repair of existing, and the construction of new	See 3.2.2.4.	Design shall meet the PMP requirements. All design construction drawings are formatted per the SSTD-8070-0001-CONFIG Facilities Engineering Documentation Instruction, and SSTD-8070-0002-CONFIG the

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3.2.2.2	Continuation Engineering Designs for Fixed Price Work Construction Value \$10K - \$200K or Greater than \$1,000 Design Cost	facilities.		Facilities Drafting Manual.
				All designs address and resolve specific requirements as detailed in the approved PMP. All designs created require the following: Specifications, cost estimate and design drawings to define the construction work to be accomplished.
				All engineering designs reference the specifications developed for the construction project.
				Latest and most applicable specifications are edited and tailored to meet specific project requirements.

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3.2.2.2	Continuation Engineering Designs for Fixed Price Work Construction Value \$10K - \$200K or Greater than \$1000 Design Cost			The final design includes all the required materials and is delivered per schedule.
				Designs are in compliance with the National Resource Protection Act when modifications are made in a secure area. The specifications are produced using the NASA SPECSINTACT Submasters, and the CCB NASA SPECSINTACT Master text, whichever is the latest and most applicable. Minutes of Design Reviews recorded and disposition of all comments.
				Design prepared under the supervision of a registered professional engineer

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3.2.2.2	Continuation Engineering Designs for Fixed Price Work Construction Value \$10K - \$200K or Greater than \$1000 Design Cost	The Contractor shall provide an itemized construction cost estimate with each design review package. A final construction cost estimate, based upon the final Government approved design, shall be provided with the final design.		An itemized construction cost estimate is provided with each design review package. Final cost estimate, based upon the final Government approved design, is delivered with the final design.
				Final cost estimate is within plus or minus 12% of the competitive proposals accepted by the Government.
		The format of the estimates shall be per the PMP as a deliverable.		Construction change requests due to design error as compared to total original construction cost shall be less the 5% cost.
3.2.2.3	Accomplish Design for Construction Category \$10K - \$200K	See paragraph 3.2.2.2	As Ordered. Maximum 90	See paragraph 3.2.2.2

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3.2.2.4	Engineering Designs Construction Value > \$200,000	The Contractor shall produce final design engineering drawings and specifications necessary to make the correct facility construction modifications to meet the requirements determined in the project scope of work. The designs shall accommodate the modification, repair of existing, and the construction of new facilities. The Contractor shall produce designs for its own construction personnel or open competition by the Government.	As Ordered. Maximum 30	See paragraph 3.2.2.2
		For Construction projects greater than \$200,000, the Contractor shall create new project specifications using CCB NASA SPECSINTACT software and text. Each new or edited project specification shall be based upon marked-up specifications at various stages of design. The specification edits shall occur at 60%, 90% and 100% design.		The new or edited project specification shall accurately reflect the marked-up specifications.
		The marked-up specifications shall be proofread before editing begins to ensure an understanding of what and how the specification is to be edited. The edited product shall be reviewed for, spelling, sentence structure, punctuation, clarity, and accuracy.		The edited product shall have no spelling, sentence structure, or punctuation errors.

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3.2.3	Environmental Design Certifications, Permits, and Permit Applications	<p>For all applicable environmental designs, the Contractor shall prepare design and construction certifications signed by an independent, registered, professional engineer. The Contractor shall not use staff personnel to provide the design or construction certification if the corresponding designs or construction work will be performed by the Contractor.</p>	As Ordered. Minimum 1	<p>Certifications are prepared in accordance with 40 CFR 270 and 40 CFR Part 60. Certifications are submitted in accordance with regulation in time to support construction schedules.</p>
		<p>The Contractor shall prepare permits, permit applications, modifications, renewals and certification forms and applicable documentation and calculations per local, State, and Federal environmental regulations. The permit applications will be reviewed and approved by the Government before submission to the State. The Government shall be given a minimum of one week for review.</p>		<p>All documentation is submitted to the Government and the State within a schedule that will not impede construction activities.</p> <p>Permits, permit applications, and modifications are prepared and submitted per Mississippi Environmental Administrative Code.</p>

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3.2.4	Engineering Studies	The Contractor shall perform feasibility studies, special engineering investigations and analysis, environmental studies, existing condition studies, analysis of future requirements, cost and design feasibility studies, conceptual project design studies, and energy conservation studies.	As Ordered. Minimum 1 Maximum 3	Study report shall: Describe all data used for the final conclusion.
		The Contractor shall perform field investigation, engineering analysis, research of master facility drawings, and all engineering necessary to produce reports, studies, and planning documents relative to: a. Existing facility operations anomalies to make remedial (non-repair) recommendations. b. Modification of existing facility structures and systems. c. Design of new facilities and systems		Provide analysis of problem or issue and sound engineering recommendations. Address project feasibility, constructability, cost effectiveness, schedule, and energy efficiency as applicable. Design prepared under the supervision of a registered professional engineer.
3.2.5 As-Built Drawings				
3.2.5.1	SORD Drawing Updates (Construction Projects <\$200,000)	See paragraph 3.1.1.1	Nothing Additional	See paragraph 3.1.1.1

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3.2.5.2	SORD Drawing Updates (Construction Projects >\$200,000)	The Contractor shall revise, create, and update all NASA master facility (SORD) drawings to accurately reflect the field conditions upon completion of any facility modification work performed by this contract. This service shall be performed when a facility modification results in a change to Government property, including but not limited to, facilities, systems, utilities, roads, and grounds.	As Ordered. Minimum 2 Maximum 15	The Contractor shall: Research all existing master facility drawings SORD, CAD, or hardcopies to determine those affected by each facility modification.
		The Contractor shall prepare as-build drawings to the level of detail presently found in the Facilities Engineering Documentation Instruction and the Facilities Drafting Manual.		Review and use all available sources, including redlines, shop drawings, submittals, and field checks to determine the information to be transferred to the effected master facility drawings.
				Perform all drafting necessary, CAD and manual, to update all master facility drawings affected by a project.

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3.2.5.2	Continuation SORD Drawing Updates (Construction Projects >\$200,000)			Deliver final as-builts to CEF within 14 days of job completion or NASA review and approval.
				Complete all backlog work within the same room, system, or functional area at the same time as the current as-building job.
3.2.6 Reserved				
3.2.7	Test Complex Engineering	There are special requirements for engineering work for test programs and for test complex facility maintenance. These requirements are divided into two areas: Component Engineering and Area Engineering	See 3.2.7.1 and 3.2.7.2.	

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3.2.7.1	Component Engineering Capability	<p>The requirements are:</p> <p>The contractor shall maintain, update, and write specifications for components. These standards are called Specification Control Drawings (SCDs) or commonly called B00-Specs. The responsibility for selection of components for the correct application and maintenance of all component site standards and procurement specifications falls within component engineer.</p> <p>This includes engineering in the Fluid Component Processing Facility (FCPF), and as such, makes all engineering decisions regarding repair techniques, application of components and piece parts, and disposition of Discrepancy and Corrective Action reports for components. Close interface with shop and quality personnel is required along with good customer relations.</p> <p>Coordinate procurement of spare parts for various programs and facilities. Maintain data base all backlogs spares requirements, canvas customers annually on their</p>	<p>Maximum 430 tasks/yr for SCD's Maximum 215 tasks/yr in Fluid Component Processing Facility (FCPF).</p> <p>1 annual task for spares requirements document.</p>	<p>SCDs will be current and changes will be input within 3 months of requirement.</p> <p>Engineering decisions will be completed within 1 day for shop work. Customer coordination will be timely and technically in accordance with SSC standards.</p>

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3.2.7.1	Continuation Component Engineering Capability	<p>requirements for the next year, and provide a prioritized listing of requirements for spares prior to the start of each fiscal year. The requirements for spares shall be segregated by program. Promote synergy and commonality between programs as cost reduction emphasis. Serve as advocate for spares procurement and coordinate all annual requirements with the various NASA Program Offices and NASA Facilities. Construction and maintenance activities shall develop spare parts lists divided into: large dollar spares, operating spares, and consumable startup items.</p> <p>Coordinate spares procurements to meet customer need dates, maintain a data base on the status of each item, and provide the customer with weekly or monthly updates of delivery information. Depending on the criticality, this update may be required daily but no less often than monthly. Review shop bench stock and assure that quantities and type of material are adequate to meet customer needs. Provide cost estimates for repairs.</p>		

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3.2.7.2	Area Engineering Capability	The contractor shall provide design engineering and drafting for the Pressure Vessel Recertification Program; plan and coordinate all facility maintenance projects; support field engineering for maintenance and construction projects; coordinate all test complex facilities maintenance; provide drafting support for design packages, and construction drawings; coordinate annual facilities maintenance inspection; maintain the backlog of maintenance (BMAR) databases; and develop the five-year maintenance plan. Attend weekly status meetings. Perform engineering evaluations, work coordination, and quick response problem solving.	Shop Packages: 160 Planned Maintenance Projects/year Studies: 2/yr Pressure Vessel initial certifications: 15/yr. Recertification's: 10/yr. Periodic inspections of pressure vessels: 80/yr.	Designs shall meet standards in 3.2.2.2

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
3.3	Construction Services			
3.3.1	Construction and Engineering Management of Contractor Administrated Construction Contracts and Contractor Performed Work	The Contractor shall develop Surveillance, Inspection, Engineering Services (SIES) requirements prior to project implementation.	As Ordered. Minimum 15 Construction Projects	Complete SIES requirements identified with estimated cost of SIES.
3.3.1.1	Pre-solicitation Activities	Manage Government Furnished Equipment (GFE) issues related to construction contracts including: funding confirmation, Facility Review Board (FRB) approvals, other relevant approvals, and order placements		Manage GFE issues to effect minimum project schedule impact.
		Responsible for checking documentation for accuracy, appropriate approvals, proper issuance by CEF, and for the reproduction of contracts and design documents as required.		Checking and reproduction are to be completed prior to the pre-solicitation distribution of documents.
		Responsible for the development, approval acquisition, and implementation of the project Statement of Work, NASA Forms 1509 and 1510, Material Request (MRs) and Stennis Work Request (SWRs) for construction support.		Development and approval of required documentation to be completed prior to the pre-solicitation conference.

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3.3.1	Continuation Construction and Engineering Management of Contractor Administered Construction Contracts and Contractors Performed Work	The Contractor shall be responsible for consideration of legal, labor, Facility Review Board (FRB), and funding requirements.		Consideration and resolution of issues to be implemented prior to pre-solicitation conference.
3.3.1.2	Solicitation Activities	The Contractor shall be responsible for technical review of the solicitation package for accuracy and for development of the anticipated construction schedule.		Completion is required prior to the pre-solicitation conference.
		The Contractor shall be responsible for the planning and management of the pre-solicitation conference and for the documentation and resolution of amendments and any GFE issues.		
3.3.1.3	Award Activities	The Contractor shall be responsible for the management and documentation of the proposal opening process.		All documentation is to be collected, registered and reported upon within 5 days.

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3.3.1.3	Continuation Award Activities	The Contractor shall be responsible for the development of the implementation cost worksheet (which details design costs, construction cost estimates, and available funds), proposal summary, technical evaluation, and updates to the construction report.		All items, except the Construction Report, are to be developed and presented to the Government within five days of the proposal opening.
		The Contractor shall be responsible for the management of remaining GFE issues and for the coordination of the Post-Award Conference.		GFE issues shall be managed to resolution.
3.3.1.4	Construction Activities	The Contractor shall be responsible for the processing and delivery to the Government of all subcontractor submittals.		The submittal review process shall be managed with the goal of minimal impact on the construction effort.
		The Contractor shall review and approve the subcontractor's Proposed Construction Schedule and shall evaluate and remain apprised of the degree of construction completion.		Complete updates to Master Schedule weekly.

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3.3.1.4	Continuation Construction Activities	<p>The Contractor shall conduct daily inspections of the project site keeping records of progress and issues in a daily construction log and filed in CEF at project completion. The Contractor shall perform routine safety inspections of the job site and report discrepancies. Develop trend analysis for safety by month.</p>	Daily record of safety observation.	<p>Requirement shall be completed daily.</p> <p>Daily safety findings shall be recorded and trends kept on all safety observations and corrective actions.</p>
		<p>The Contractor shall ensure the approval of all necessary permits and coordinate all elements of construction activities. These include updating construction reports, management of construction costs, Facility Change Request (FCR), Material Safety Data Sheets (MSDS) issues, utility outages, subcontractor access to restricted areas, and all related documentation including “as-built” drawings.</p>		<p>Related issues shall be managed with the goal of minimal impact on the construction effort</p>
		<p>The Contractor shall meet with the NASA Project Engineer regularly for briefing on the current project status.</p>		<p>This requirement shall be addressed at a minimum effort of once weekly. FCR shall be processed in accordance with Facilities Construction Configuration Management Manual RA-97-02.</p>

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3.3.1.5	Contract Closeout Activities	The Contractor shall collect and distribute all documentation related to the construction effort including required NASA forms, “As-Built” drawings, Certificate of Completion (COC), parts lists, warranties, equipment operations, maintenance manuals, submittals, and construction logs.		Document collection and distribution shall be complete prior to COC approval. In accordance with Real Property accountability requirements and COC procedure.
		The Contractor shall conduct a walk-through inspection of the completed work ensuring the completion, as specified, of all components of the subcontract.		Walk-through shall be completed prior to final invoice and COC approval.
		The Contractor shall conduct a facilities maintenance assessment of all facilities and equipment installed within the project as identified in the SIES requirement.		Written report shall be distributed upon completion of walk-through and resolution of all punch-list items.
3.3.2	Construction Surveillance, Inspection, Engineering Services (SIES) for NASA Direct Construction Contracts	The Government shall provide the Contractor requirements for SIES at the beginning of each construction project.	As Ordered Minimum 2 Construction Projects Maximum 8 Construction Projects	Provide detailed cost estimate and preliminary schedule for all items of SIES identified by the Government.

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3.3.2.1	Pre-Solicitation Activities	At the discretion of the Government, the following requirements may be contracted for on an as needed basis.		
		The Contractor shall implement and resolve all GFE related issues.		Manage GFE issues to effect minimum project schedule impact.
		The Contractor shall check documentation for completeness and for appropriate approvals and issuance by CEF.		Checking is to be completed prior to the pre-bid distribution of documents.
		The Contractor shall be responsible for the reproduction of contract and design documents as necessary.		Reproduction is to be completed prior to the pre-bid distribution of documents.
		The Contractor shall develop a complete Statement of Work.		Development shall be completed prior to solicitation.
		The Contractor shall develop and implement the construction management SWR as required.		Development shall be completed prior to solicitation.

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3.3.2.2	Solicitation Activities	At the discretion of the Government, the following requirements may be contracted for on an as needed basis.		
		The Contractor shall review technical portions of the solicitation package for accuracy and return any relevant comments to the NASA Project Engineer.		Review shall be completed prior to solicitation.
		The Contractor shall attend the Pre-Proposal Conference and document the details of the meeting, any proposed amendments, and details of GFE issues.		Resolution of issues shall be managed to resolution.
		The Contractor shall attend the Post-Award Conference and assist in the orientation of the accepted bidder.		Attend the meeting as scheduled.
3.3.2.3	Construction Activities	At the discretion of the Government, the following requirements may be contracted for on an as needed basis.		
		The Contractor shall be responsible for the continued management of GFE issues. Develop trend analysis for safety by month.	Daily record of safety observation.	GFE issues shall be managed to resolution. Daily safety findings shall be recorded and trends kept on all safety observations and corrective actions.

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3.3.2.3	Continuation Construction Activities	The Contractor shall coordinate the processing of all contractor submittals.		The submittal review process shall be managed with the goal of minimal impact on the construction effort.
		The Contractor shall ensure the approval of all necessary permits.		Related issues shall be managed with the goal of minimal impact on the construction effort.
		The Contractor shall conduct daily inspections of the project site keeping records of progress and issues in a daily construction log.		This requirement shall be performed daily.
		The Contractor shall perform quality control surveillance and document discrepancies. The Contractor shall perform routine safety inspections of the job site and report discrepancies. The Contractor shall coordinate elements of construction activities including updating construction reports, FCR and MSDS issues, utility outages, permits, contractor access to restricted areas, and all related documentation including current "AS BUILT" drawings.		Related issues shall be managed with the goal of minimum impact on the construction effort. FCRs shall be processed in accordance with Facilities Construction Configuration Management Manual RA-97-02.

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3.3.2.3	Continuation Construction Activities	The Contractor shall meet with the NASA Project Engineer regularly for briefing on the current project status, conflicts, incidents, or injuries.		This requirement shall be met at a minimum of once weekly. Incidents and injuries shall require notification.
3.3.2.4	Contract Closeout Activities	As requested of the Government, the following requirements may be contracted for on an as needed basis.		
		The Contractor shall collect and distribute, as and to whom appropriate, all documentation related to the construction effort including required NASA forms, "As-Built" drawings, COC, parts lists, warranties, equipment operations and maintenance manuals, submittals, construction logs, and any close-out documentation required for Real Property Accountability for capitalization activities.		Document collection and distribution shall be completed prior to COC approval.
		The Contractor shall conduct a final facility acceptance inspection of the completed work ensuring the completion, as specified, of all components of the contract or provide Facility Commissioning Services for new construction.		Walk-through shall be completed prior to final invoice and COC approval.

**PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

Annex 3.0 Performance Requirement

1	Provide Design Services: Engineering Designs Engineering Studies Project Management Plans	60 %	PI, UPI, RR	Timely submission, Quality, Documentation, Cost	100%	Submit 7 days after established completion date. Meet Quality Standards established by customer. Meet documentation requirements according to SSC standards. No cost overrun greater than \$1,500 and 10% of the Project Management Plan estimate	50%
2	Provide Construction Services	20%	PI, UPI, RR	Provide continual presence at construction site, safety observations, documentation, and timely closeout	100%	No work days without surveillance. Construction logs and documentation complete. Monthly safety trends complete.	15%
3	Provide Engineering Drafting Support Services, Documentation Maintenance, and Component Engineering: Drafting Digging Permits Space Utilization CAD Systems Support Central Engineering Files (CEF)	20%	VCC, RR	Maintain accurate drawings with required information shown on drawings and maintain documentation. Timely response to service requests. Provide SSC customers access to NASA engineering files. Maintain and update SCDs to accurately reflect configuration of components.	100%	In accordance with Annex 3.1. Not to exceed One validated customer complaint per month. SORD updates within 60 days of receipt of COC. SCD updates completed within 90 days of preparation of action & reply notice for drafting services..	20%

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ANNEX 4.1 INSTITUTIONAL SERVICES

4.1 INSTITUTIONAL SERVICES

Facilities covered by this Annex are found in the Master Facility Plan in Central Engineering Files, Building 2104.

4.1.1 GENERAL INFORMATION/ REQUIREMENTS

4.1.1.4 Limitations, Restrictions, or Other Exceptions

4.1.1.1 Annex Description

This Annex identifies Institutional Services which consists of Food Services, Mail Services, Custodial Services, Fire Protection Services, Multimedia Service, Information Service, and Educator Services. Even though specific guidelines, regulations and minimum performance standards have been established, the services to be performed will rely heavily on knowledgeable and experienced individuals who are innovative and resourceful in their approach.

The Contractor shall ensure that all services protect the integrity of the Government's property and supplies. Contractor employee's private vehicles shall not be used to transport Government property and supplies.

4.1.1.5 Workload Data

The Contractor shall maintain records for workload data given in this Annex to include monthly actual and average workload data for the current fiscal year. The data shall be electronically available by Annex by the tenth day of the following month.

4.1.1.2 Scope of Work

The Contractor shall furnish all personnel, supervision, management, equipment, materials, tools, transportation, supplies, and other items or services necessary to provide support services in this Annex.

4.1.1.6 Uniforms

Uniforms shall be required for employees tasked to perform in Sub-Annexes 4.2 Food Services, 4.4 Custodial Service, and 4.6 Visitor's Center.

During the performance of the contract, the Contractor shall respond to requirements of an unforeseen nature which cannot be precisely estimated in terms of labor or materials. These requirements are closely related to other elements of the scope of work.

All Contractor personnel shall be properly uniformed and be neat, clean in appearance, and easily recognized. All employee uniforms shall be the same design and color. The uniforms worn by any field supervisors shall be of the same basic design, but may be of a different color for distinction from the general staff. Shorts or cut-off slacks shall not be worn. Shoes shall have closed toes. Sandals and other open type shoes shall not be worn.

4.1.1.3 Location of Services

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4.1.1.7 Communication

Any employee whose job requires contact with occupants of facilities at SSC must be able to communicate in the English language.

4.1.2 GOVERNMENT FURNISHED PROPERTY

The Government will provide, without cost to the Contractor, equipment and materials listed in Attachment J-10, List 1 and List 2. The Government Furnished Equipment (GFE) shall be maintained and managed in accordance with the guidelines set forth in Annex 1.

The listing of GFE shall not be construed as being sufficient or adequate to meet the requirements of this Annex; the Contractor shall make recommendations for any additional or state of the art equipment and materials that may be required to properly perform the requirements of this Annex.

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FOOD SERVICES

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ANNEX 4.2
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FOOD SERVICES

4.2 FOOD SERVICES

4.2.1 GENERAL REQUIREMENTS

4.2.1.1 Scope of Work

The Contractor shall deliver Food Services at the Stennis Space Center (SSC) as defined in this Annex. The intent is that food service activities will be operated as a “not for profit” business that covers the cost of operation with food sale revenue. To achieve this, the contractor will be required to deliver a variety of prepared meals that are attractive, healthy, and reasonably priced to ensure a strong customer base.

4.2.1.2 Cafeteria and Food Truck

Food services will be provided in two cafeterias and two food trucks. The main cafeteria will be located within Building 1100, the satellite cafeteria will be located in Building 2201, and the food truck will be dispatched from the main cafeteria.

4.2.1.3 Salad Bar and Sandwich Line

A salad bar and sandwich line will be maintained in the main cafeteria and shall include items that are health conscious, yet customer driven.

4.2.1.4 Catering

The contractor shall maintain the ability to perform a full range of catering services for SSC organizations. These services may be within the cafeteria or at the requesting organization’s facility.

4.2.1.5 Regulatory Compliance

The Contractor shall comply with all applicable laws of the Mississippi State Board of Health Division 100, Part 10, as well as applicable sanitation requirements of NPR 1820.1B and SPG 8715.1.

4.2.1.6 Menu

Menus will be developed on a cycle of no less than 6 weeks and reflect healthy, nutritionally balanced meals. Priced menus shall be prominently posted and distributed to all offices. Menus will be posted both electronically and hardcopy on each Friday prior to the Monday of a new week.

4.2.1.7 Meals

The Contractor shall serve two meals per day, 5 days per week, 52 weeks per year, except for Federal Holidays. At a minimum, breakfast shall be served in the main cafeteria between the hours of 6:30 a.m. and 9:00 a.m., and lunch shall be served in both cafeterias between the hours of 11:00 a.m. and 1:00 p.m.

4.2.1.8 Pricing

The pricing schedule shall be kept reasonable and based on a “break-even” concept.

4.2.1.9 Customer Count

The average daily customer count shall be maintained at a minimum of 25 percent of the population of SSC.

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4.2.2 GOVERNMENT-FURNISHED PROPERTY

The Government will provide, without cost to the contractor, equipment and materials necessary to operate the cafeteria, as well as limited material (i.e. paper products and condiments).

The Contractor shall perform preventive maintenance on all food service equipment. Contractor shall be responsible for all levels of preventive maintenance to maintain all equipment in a safe and operable condition and to repair or identify for replacement as required.

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4.2.3	Operate on a Self Sufficient Cost Basis (DR4-GA01)	Develop a pricing schedule with respect to economy of scale and break-even concept.	1,000 to 1,500 meals daily	Maintain net margin within $\pm 5\%$ of monthly gross sales and $\pm 1.5\%$ of annual sales.
		Recognize and correct sanitation deficiencies.	Contractor determined.	Immediately correct deficiencies in accordance with SPR 8715.1 and Mississippi State Board of Health.

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4.3.1 SCOPE OF WORK

This Annex describes the Contractor's responsibilities for providing a SSC mail service. The operation of the SSC mail service function for the NASA John C. Stennis Space Center (SSC) will be maintained during the core duty hours of Monday through Friday, 7:30 a.m. to 4:00 p.m. There may be times when the Contractor shall provide these services during non-core hours, such as, in the afternoons and evenings, weekends, and holidays as requested by the Government. The Contractor is expected to use to full advantage the equipment and facilities provided by the Government and the United States Postal Services to offer the greatest degree of mail services possible. Although fairly routine in nature, the services provided under this Annex are largely customer oriented and will rely heavily on the Contractor's ability to establish an efficient, courteous, and quality customer pickup and delivery schedule which will best serve the customers.

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4.3.2	MANAGEMENT AND GENERAL REQUIREMENTS	<p>The mailroom shall be the central area for SSC mail services. This area is the focal point for the receipt or dispatch of mail, and for further SSC internal distribution to customer office locations or entry into the United States Postal Services (USPS) mail system. The Contractor shall provide the rapid handling and accurate delivery of mail at the lowest cost available. Processing steps shall be kept to a minimum; sound principles of work flow shall be applied; and modern equipment shall be used. Annual calibration of equipment scales shall be a Contractor responsibility. The Contractor’s mail management operation shall be in full compliance with the USPS/mail meter requirement, the local area USPS mail sorting and bagging requirements, and the current editions of the following documents:</p> <ul style="list-style-type: none"> a. U.S. Postal Service Domestic Mail Manual (DMM). b. U.S. Postal Service International Mail Manual(IMM) c. U.S.P.S Rates, Fees, and Calculators d. Postal Zone Charts e. U.S. Publication 28, “Postal Addressing Standards” f. NASA Mail Management Guide (MMG) 		<p>The Contractor shall deliver all mail pieces per the mail delivery schedule. Misdelivered mail (wrong recipient or non-delivery) shall be below 2 customer complaints per month.</p>

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4.3.2	Continuation MANAGEMENT AND GENERAL REQUIREMENTS	<p>g. NASA NPD 1490.1 NASA Printing, Duplicating, Copying, Forms, and Mail Management</p> <p>The Contractor shall be responsible to maintain updated editions of these documents or have access to electronic versions of these documents at all times.</p>		
4.3.2.1	Security	<p>The mailroom, mail, and meters shall be in the control of mailroom personnel at all times. Meter security shall be handled in accordance with the "NASA Mail Management Guide (MMG).</p>		
4.3.2.2	Personnel	<p>Personnel shall be fully qualified, trained, and knowledgeable in handling and processing USPS mail in accordance with the DMM and IMM. Personnel must have a proper security clearance to handle classified mail at the Secret Clearance level, if applicable.</p>		
4.3.2.3	Work Hours	<p>To the extent possible, the Contractor shall schedule and arrange work so as to enhance the mission of the customer organizations and accommodate the USPS mail delivery and pickup schedule.</p>		

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4.3.2.4	U.S. Postal Service	The USPS local area authority for the John C. Stennis Space Center is: Postmaster, 1200 Hwy. 90 Bay St. Louis, MS 39520.		
4.3.3	MAILROOM SERVICES			
4.3.3.1	Manage and Operate a Central Mailroom	<p>Operation shall be in conformance with the General Requirements listed in 4.3.2.</p> <p>This includes: Funding commercial digital meter account; annual equipment calibration; receiving, dispensing, and delivering of all mail to USPS and SSC mail customers; and responding to customer requests for information and mailing estimates.</p>	Approximately 200 SSC mail pickup and delivery customer locations	
4.3.3.2	Receive Mail from USPS	USPS will provide 2 deliveries daily, Monday through Friday, excluding holidays.	180,000 pieces annually	Refer to 4.3.2
4.3.3.3	Deliver Mail to USPS	USPS will provide 1 pick up daily, Monday through Friday, excluding holidays.	45,000 pieces annually	Refer to 4.3.2
4.3.3.4	Dispense Mail to Customers on a “Walk-in” Basis	Includes SSC customers (resident organizations, permanent and visiting, etc.), who elect to pick up their mail from the mailroom or who do not receive routing delivery services.	5 to 10 customers per day	Refer to 4.3.2

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4.3.3.5	Delivery/Pickup Mail at Scheduled Locations	<p>The minimum delivery/pickup frequency shall be once daily during SSC work hours. Delivery of first class incoming USPS mail and accountable mail shall be made within 6 hours from the time the mail enters the central mailroom. All other mail shall be delivered no later than the next delivery run following receipt into the mail system.</p>	60,000 pieces annually	<p>Deliver first class and accountable mail within 6 hours of receipt into the central mailroom (excluding late USPS mail arriving after 9:00 a.m.) and delivery of all other mail no later than the next delivery schedule following receipt in the mail system.</p>
		<p>Contractor shall develop and adhere to a delivery/pick-up schedule.</p>		<p>Pickup and deliveries shall occur within 30 minutes of the published schedule.</p>
4.3.3.6	Special Services	<p>This shall include Registered Mail, Certified Mail, Special Delivery, Special Handling, Insured Mail, Return Receipts, Certificates of Mailing, Restricted Delivery, Express Mail, Federal Express Mail, etc.</p>	7,000 pieces annually	Refer to 4.3.2

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4.3.3.7	Delivery/Pickup of Print Shop Material and Procurement Office Material	Print shop material for customer delivery and NASA procurement office and FOS procurement office special package requirements (i.e., engineering drawings, RFP/RFQ packages, etc).	300 boxes/packages annually	Process during same day received into the central mailroom.
4.3.3.8	Unaddressed Distribution	Information flyers, newsletters, employee information, etc.	150,000 pieces annually	Deliver as scheduled by requestor.
4.3.3.9	USPS Misrouted Mail	Incorrect zip code. Return misrouted mail to the USPS.	12,000 pieces annually	
4.3.3.10	USPS Undeliverable Mail	Undeliverable mail shall be processed in accordance with the DMM and NASA MMG. To the greatest extent possible, disposable material shall be processed through the SSC recycle program.	10,000 pieces annually	
4.3.3.11	SSC Misaddressed Internal Mail	Forward misaddressed internal mail to the appropriate Agency Administration Office for identification and redistribution.	100 pieces annually	
4.3.3.12	International Mail	International mail should be processed through the most economical means available.	100 pieces annually	Process in accordance with NASA MMG and IMM
4.3.3.13	Direct Accountability	See Data Requirement DR4-LS01		Comply with DR4-

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	Commercial Digital Meter and Mail Distribution Report			LS01

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4.4 CUSTODIAL SERVICES

4.4.1 GENERAL REQUIREMENTS

4.4.1.1 Return Moved Items

Numerous tasks required by this Annex will necessitate moving chairs, furniture, and other items in order to fully accomplish the task. In all cases, when items are moved to accomplish a task, the items will be returned to their approximate original position.

4.4.1.2 Protect Government Property

During execution of the work, the Contractor shall take special care to protect all Government property including furniture, walls, baseboards, and other surfaces from being used improperly. Accidental splashes shall be removed immediately. The Contractor shall notify the trouble desk of needed repairs and/or damage to fixtures by 10:00 a.m. of the work day following the discovery. Any item of a critical, priority, or emergency nature shall be reported immediately upon discovery.

4.4.1.3 Definitions

Asbestos Containing Floor Covering - Any floor covering containing 1% or greater of Chrysotile, Amosite, or Trimolite asbestos.

Annually (A) - Services performed once during each 12-month period of the contract at intervals of 345 to 365 days.

Cleaning - The removal of dirt, soil, stains, liquids, trash, refuse, scale, and any foreign material.

Daily (5W) - Services performed once each calendar day, Monday through Friday, excluding holidays unless otherwise specified.

Damp mopping - The use of a cotton or similar yarn-type mop, which has been mechanically wrung/squeezed to remove excess solution, for the purpose of removing light soil, dirt, liquid, or foreign material from a floor which does not require the complete mopping of the area, or the area is not soiled sufficiently to require wet mopping.

Disinfecting - The removal or neutralization of material containing or supporting the growth of bacteria/viral organisms capable of causing infection in humans if untreated.

Dispenser service - The checking, refilling, and replacement of all towel, toilet tissue, soap, or any other dispensers which may be identified by the Government.

Dusting - The removal of laden airborne dirt, soil, lint, or foreign material from railings, ledges, and any other items which may accumulate airborne particles or stains.

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Dusting/cleaning - The removal of dirt, soil, stains, , liquids, bugs, cobwebs, trash, refuse, and any foreign material from any item, office furnishing, fixture, horizontal or vertical surface, or area.

Dust-mopping - The removal of laden airborne dirt, soil, lint, or foreign material from a floor using a clean antistatic dust mop.

Hard floors - Includes composition tile, ceramic tile, brick, and exposed concrete.

LEED/EB: Leadership in Energy and Environmental Design Existing Building

Mirror/glass cleaning - The removal of dirt, soil, smudges, smears, or any other substance which will interfere with the passage or reflectance of light depending on the particular object and/or condition.

Monthly (M) - Services performed 12 times during each 12-month period of the contract at intervals of 28 to 31 calendar days.

Polishing - The removal of dirt, soil, fingerprints, smudges, water marks, scale, and foreign material from metal surfaces and fixtures.

Scrubbing - The removal of built-up dirt, soil, or foreign material from a hard floor surface by manual or mechanical means.

Sealing - The application of an approved floor sealer prior to the application of the final floor finish in accordance with industry standards and manufacturer recommendations.

Semi-annually (2A) - Services performed 2 times during each 12-month period of the contract at intervals of 6 months.

Semi-monthly (2M) - Services performed 24 times during each 12-month period of the contract at intervals of 14 to 16 calendar days.

Shampooing - The application of an approved cleaning agent to a carpeted floor, cloth material, or covering for the purpose of removing embedded soil, dirt, stains, or foreign materials.

Spot cleaning - The removal of dirt, soil, debris, liquids, stains, or foreign materials from carpets where adequate cleanliness can be accomplished by cleaning only the immediately affected area and where the cleaning of the entire area would not be necessary.

Spray buffing - The application of a wax and water solution to a floor and buffing with a high speed buffing machine to refurbish the floor finish after wet or damp mopping.

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Stripping - The complete (95 percent or greater) removal of the wax/finish applied to non-carpeted flooring.

Sweeping - The removal of loose dirt, dust, debris, and foreign material through either manual or mechanized methods.

Three times weekly (3W) - Services performed three times a week, on Monday, Wednesday, and Friday.

Trash/waste removal - The collection and disposal of all materials which have been placed into appropriate containers dedicated for disposal or bagged and set aside.

Vacuuuming - The mechanical removal of loose dust, dirt, soil, debris and foreign material from carpeted floors and elevator tracks as applicable.

Waxing/finishing - The application of three coats of an approved nonslip gloss finish to hard surfaced floors such as vinyl, rubber, cork, linoleum, terrazzo, wood, or tile.

Weekly (W) - Services performed 52 times during each 12-month period of the contract at intervals of 6 to 7 calendar days.

Wet mopping - The removal of built up dirt, soil, liquids, or foreign materials from a floor using a cotton, or similar yarn-type mop with either sufficient neutral detergent and water solution, or neutral disinfecting detergent and water solution.

This will include rinsing if recommended by the detergent manufacturer.

4.4.1.4 Facilities

The estimated square footage is shown in attached Table 4.4.1. Approximately 40% is covered with immovable objects and shall not be considered as areas to be cleaned.

Cleaning products shall be in accordance with LEED Guidelines.

4.4.2 WORK SCHEDULE

4.4.2.1 Routine

The initial work schedule for applicable routine tasks shall be submitted to the CO for approval no later than 7 days after the contract award. Once approved, all work shall be performed in strict compliance with the work schedule to facilitate the Government's inspection of the work. The work schedule shall reflect service to test complex facilities on all holidays; except Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day.

4.4.2.2 Shift work

It is the intention of NASA to minimize work performed at night in order to meet federally mandated energy conservation goals, except as may otherwise be specified, all basic work

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shall be performed between the hours of 6:00 a.m. and 9:30 p.m. However, to minimize inconvenience to both the customers and NASA personnel, some discrete projects, such as stripping, waxing, or shampooing floors, may be performed outside of the normal work hours. Such project work may be accomplished between the extended hours of 5:00 p.m. to 1:30 a.m. (second shift). It should be noted that access to certain offices and buildings may be restricted outside the normal “core hours” of 7:00 a.m. to 4:30 p.m. When such access is restricted, Security personnel will have to be notified by the Contractor, in advance, to provide that access.

4.4.2.3 Effects of Holidays

When a service is required less than 3 times per week and the time for that service falls on a holiday, the services shall be accomplished on the work day preceding or following the holiday.

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4.4.3	Work Areas			
4.4.3.1	Clean Hard Floors	a. Dust mop or sweep hard floors.	W	Floor will be free of any laden airborne dirt, liquid, heel marks, soil, lint, or foreign material.
		b. Sweep, wet mop, and rinse hard floors in Bldg. 1100 Cafeteria, Atrium, and site maintenance.	5W	See 4.4.3.1.a
		c. Spray buff hard floors in the Fluid Component Processing Facility (FCPF).	2M	Spray buffed floors will be free of dirt, soil, stains, heel marks, debris, and have a high gloss appearance.

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4.4.3.1	Continuation Clean Hard Floors	d. Strip, wax, and seal hard floors.	A	A stripped floor shall be completely free of all dirt, stains, deposits, wax, finish, water, and cleaning solution, and shall be ready for the reapplication of sealer and floor finish. No splash evidence on baseboards and furniture/fixtures shall exist. The floor shall present a uniform high gloss appearance.
		e. Sweep and damp mop hard floors.	2M	See 4.4.3.1.a
		f. Dust mop or sweep hard floors in high-visibility areas and executive areas.	5W	See 4.4.3.1.a
		g. Dust mop or sweep hard floors in common use areas.	5W	See 4.4.3.1.a
		h. Sweep and damp mop common use areas.	W	See 4.4.3.1.c
		i. Spray buff hard floors in site cafeteria.	M	See 4.4.3.1.c

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4.4.3.1	Continuation Clean Hard Floors	j. Spray buff hard floors at North and South Reception Centers, Buildings 7101 and 3101.	2M	See 4.4.3.1.c
		k. Spray buff hard floors in cafeteria and Bldg. 1100 Snack Bar area.	W	See 4.4.3.1.c
		l. Stripping wax or finish coat from Asbestos containing floor covering.	2A	In accordance with EPA recommendations for custodial/maintenance of Asbestos containing floor coverings.
4.4.3.2	Clean Carpets	a. Vacuum carpet.	W	No evidence of any dust, dirt, or any other loose foreign materials.
		b. Spot clean carpet.	As required.	For spot cleaning, remove any evidence of soiling and return the finish of the area affected to its previous condition.
		c. Shampoo carpet.	A	Carpet will be free of dirt, soil, and stains. Excess cleaning agent shall be removed from baseboards, walls, and

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				furniture/fixtures.
4.4.3.2	Continuation Clean Carpets	d. Vacuum carpet in high-visibility, executive offices, and Bldg. 2120.	5W	See 4.4.3.2.a
		e. Vacuum carpet in Bldg. 1100 common use	5W	See 4.4.3.2.a
		f. Shampoo carpet common use areas, Bldg. 2120.	M	See 4.4.3.2.c
		g. Shampoo carpet cafeteria, Bldg. 1200 first floor, and 2201 Security.	6A	See 4.4.3.2.c
4.4.3.3	Trash Receptacles	a. Waste containers shall be emptied.	5W	The waste receptacles will be free of all waste and disposed materials.
		b. Replace soiled or torn plastic liners.	5W	The waste receptacles will be lined with unsoiled and new plastic liners.
		c. Containers shall be cleaned and disinfected, if soiled.	5W	Wash with a disinfectant solution.

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4.4.3.3	Continuation Trash Receptacles	d. Remove items placed adjacent to waste containers marked "TRASH". Provide extra plastic liners or portable trash bins and remove upon request. Cardboard trash shall be broken down and put in the proper outside receptacles marked for cardboard only, which will be located next to trash bins in high cardboard use areas. If the cardboard receptacles do not exit at a building, the broken cardboard shall be stacked neatly next to the outside trash bin for pick up.	5W	Area shall remain debris-free and any residue which may be left from the material. Collection shall be immediately cleaned, so that the collection area is free from stains and odor. Keep all areas around the containers free of type of debris.
4.4.3.4	Clean Stairwells	Clean stairs	2M	The stairs, railings, ledges, and ramps will be free of any laden airborne materials, streaks, smudges, dirt, soil, debris, liquids, or foreign material
4.4.3.5	Clean Elevators	a. Clean elevator cab walls and door tracks.	W	The elevator cab walls and door tracks will be free of all dirt, soil, stains, or foreign material.

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4.4.3.5	Continuation Clean Elevators	b. Clean elevator floors.	W	The floor will be free of any laden airborne dirt, soil, lint, or foreign material.
4.4.3.6	Clean Entrance Ways	a. Sweep outside entrances and steps	5W	Entrance ways will be free of all dirt, soil, stains, foreign material, and debris.
		b. Sweep or vacuum entrance way mats.	5W; 225 SF per entrance	See 4.4.3.6.a
		c. Empty ash receptacles.	5W	See 4..4.3.6.a
4.4.3.7	Perform Dusting, Cleaning, and Furniture Polishing	a. Dusting and cleaning shall be performed.	A	Dusted/cleaned items to be free of dust, dirt, lint, soil, stains, and foreign material with no streaking.
		b. Baseboards, door frames, venetian blinds, and window ledges dusted.	M	All items will be free of dirt, soil, stains, bugs, cobwebs, trash, refuse, and any foreign material

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4.4.3.7	Continuation Perform Dusting, Cleaning, and Furniture Polishing	<p>c. Cleaning and polishing will be performed on wood furniture, fixtures, walls, vestibule doors, and bathrooms with an approved wood cleaner, oil and/or polish.</p> <p>d. Dust and cleaning shall be performed in high-visibility and executive offices.</p> <p>e. Baseboards, door frames, and window ledges dusted in high-visibility and executive offices</p> <p>f. Cleaning and polishing will be performed on wood furniture, fixtures, walls, vestibule doors, and bathrooms with an approved wood cleaner, oil and/or polish in executive offices.</p> <p>g. Exposed surfaces of vents, defusers, and grills.</p>	<p>M</p> <p>W</p> <p>W</p> <p>W</p> <p>2A</p>	<p>All items will be free of dirt, soils, and stains and have a high-gloss appearance.</p> <p>See 4.4.3.7.a</p> <p>See 4.4.3.7.a</p> <p>See 4.4.3.7.a</p> <p>See 4.4.3.7.a</p>
4.4.3.8	Clean Drinking Fountains	Clean, disinfect, and polish drinking fountains	5W	Drinking fountains will be free of all dirt, soil, stains, or foreign material; and will have a non-abrasive high gloss appearance.

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4.4.3.9	Clean Glass	a. Clean interior windows and associated window frames.	2A	Glass surfaces and trim will be free of dirt, soil, smudges, and smears; and present uniform appearance.
		b. Clean entranceway glass doors.	5W	See 4.4.3.9.a
		c. Clean display shelves in high visibility areas.	2A	See 4.4.3.9.a
4.4.3.10	Clean Medical Clinic, Labs, Bldg. 2120, and Restrooms	a. Restroom fixtures, water closets, urinals, lavatories, wash stations, and sinks shall be washed inside and outside utilizing a disinfectant.	5W	Fixtures, floors, floor drains shall be free of stains, dirt, soil, smudges, graffiti, and odors.
		b. Contractor shall clean and disinfect partitions, stalls, doors, and wall areas adjacent to wall-mounted lavatories, urinals, and toilets.	5W	See 4.4.3.10.a
		c. Mop hard floors with a disinfectant.	5W	See 4.4.3.10.a
		d. Floor drains shall be cleaned and flushed with disinfectant.	5W	See 4.4.3.10.a

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4.4.3.10	Continuation Clean Medical Clinic, Labs, Bldg. 2120, and Restrooms	e. Mirrors shall be cleaned and polished.	W	Mirrors and mirror trim shall be free of dirt, soil, smudges, smears, and other substances and have streak-free appearance.
		f. Waste containers shall be emptied, disinfected, and plastic liners replaced. Cardboard trash shall be broken down and put in the proper outside receptacles marked for cardboard only, which will be located next to trash bins in high cardboard use areas. If the cardboard receptacles do not exist at a building, the broken down cardboard shall be stacked neatly next to the outside trash bin for pick up as covered under sub-Annex 5.4.6.	5W	Waste containers will be free of all wastes and liners replaced.
		g. All dispensers shall be filled to include those in restrooms, labs, cafeteria, and break rooms.	5W	No empty dispensers.
		h. Clean spaces and equipment contaminated with blood, body fluids, or potentially infectious materials.	5W	In accordance with SSC Health Clinic, Blood Borne Pathogens Exposure Control Plan, and NPR 8715.1.

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 INSTUTIONAL SERVICES
 CUSTODIAL SERVICES**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.4.3.11	Reports and Schedules	Cleaning Schedules, DR 4-SC01	A	Conformance to DR 4-SC01

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2510			723	0	500	0	0	48	0	79	0	0	0	51	0	6	0	0	1	0	0	0	0	2	2	1	3	0	86	0	0	2	1	0		
3101	1	6,477	4,431	303	596					710				263		16			1	1	20	1	2	3	2	4			418		3	2				
3102		0												99					1																	
3200		10,400		140				10,173						24	12	5							1	1	1	1	1	1	87			1				
3201		853		389									104	9	6								1	1	2	2	1	2		360		2	2			
3202	2	26,055	4,002					20,667	141					54	21	576	6	2	1	1	18	2	4	5	4	6		851			2	3	578			
3203	3	23,752	9,225	4,895	100			7,050	1,357					400	20	21	587	22	6	1	2	48	4	4	8	4	7		490		3	1	4,781			
3205	2	12,329	6,173					4,051	434					345		24							1	2	4	1	4		271		4	1	3,918			
3206	2	1,026	710						206					83		3							1	2	2	1	2		110		2	1				
3208	1	2,699						2,699																												
3225	1	21,148	13,931	1,183	64			5,280	171					771	106	36					1	1	41	2	2	8	4	6		478		7	3			
3228	1	21,125	15,611	896	64			4,036						627	106	36					1	1	44	2	2	8	4	6		474		7	3			
3300		1,177		867										36		6							1	1	1	1	1		106			2				
3305	2	9,874		9,246					248					199	33	6								2	2	2	1	2		380			2	1		
3406		434						434						12																						
3407		1,227		624				425		84				27		2	49	2	2																	
3416	1	100																																		
4010	3	20,028	6,021	8,191				4,126	89	718				546	36	9	100	1	2		1	42	1	2	4	2	4	3	741			100	2			
4080	1	12,120	887	4,241				4,244	709	66				40	14						1	1	33	3	2	4	2	27	3		840		4	1		
4110	2	10,551	1,416	5,836				1,060	126	1,564				252	20	14	163	4	2		1	58	2	2	4	2	4		308		4	1				
4120 TEST STAND A1	2	22,063	3,896	4,768				9,327							18	210	8	8	1	1	20	6	4	4	5	4	2		387		4	4				
4122 TEST STAND A2	2	22,156	4,232	5,585				8,331							18	210	8	8	1	1	20	6	4	4	5	5	2		323		4	4				
4202		241		213										36	6	3																				
4210	3	10,941	702	7,861				149		1,363				20	392	4	2				1	69	2	2	4	2	4		400		5	1				
4220/4221 TEST STAND B1/B2	5	114,847	4,436	5,816				96,674		7,208				30	252	55	19	2	2	60	10	4	6	5	7	1			594		5	4				
4301	3	2,598	1,660	150				529						302	48	21							1	1	24	1	2	3	1	232		3				
4302		3,115		700				2,285						8		24																				
4400		34,122		1,982				30,797		105				723		2	92	2	2		2	41	1	2	3	3	2	2	58		322		2	1		
488	4	26,354	12,080	10,348				1,355		2,508				11	788	39	975	5	3		2	217	4	5	9	5	9		356		508		9	3		
5002A/B (5008)	4	4,445		472				3,292		162					15															531			3	1		
7001	2	2,659	191	1,437				508						176		38						1	1	16	2	4	6	3	4		601		6	2		
7002		50		50										99																						
7020	2	1,122	82					1,020	20																											
8100	4	69,926	17,640	23,829				21,165		4,557				495	42	39	1,139	5	3	1	3	53	7	9	14	5	12	2	356		1176		11	4	16,214	
8110	2	15,453	478	13,447				1,091						18	50	27						1	1	28	1	2	8	4	5	2		402		7	4	13,447
8120		2,840		2,380				460																												
8201	2	7,080	1,673	3,030				848						274	35	14	1,287							2	2	3	3	3		240		2	2		2,617	
8301	2	7,944	7,188					445						716	56	18						1	1	20	1	2	1	2	4		296		4	2		
8304		6,803		1,295				4,998						64		15								1	2	3	2	3	2		596		4	1		
8305		2,112		490				1,500						8		6									1	2	2	2		120			2	1		
8306		3,958	1,243	1,471				846						676	90	18						1	1	20	1	2	4	2	4		358				3,518	
9801	1	1,570		1,533											18		6																			
BASEBALL BATHROOMS	1	440												23		18																				
1-10 WELCOME CENTER	4	1,955			296					1,659				1278		168																				
BUILDING TOTAL	199	1,728,749	655,226	293,853	10,733	3,084	496,041	100,637	60,128	12,189	2,110	25,767	57,608	10,559	4,001	16,271	181	150	21	89	3,071	194	280	588	257	578	82	8,220	39,786	633	441	145	163,859			
GRAND TOTAL (BUILDING + TRAILERS)	205	1,750,211	674,204	296,137	10,733	3,084	496,041	100,637	60,352	12,189	2,110	25,767	57,806	10,565	4,001	16,271	181	150	21	89	3,071	194	283	602	257	592	82	8,304	39,786	633	441	145	163,859			

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INSTITUTIONAL SERVICES
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4.5 MULTIMEDIA SERVICES

the labor force to minimize labor hours charged to the NASA Shared Pool Account.

4.5.1 SCOPE OF WORK

The Contractor shall provide a professional multimedia service program as defined in this Annex at the John C. Stennis Space Center.

The Contractor shall plan, furnish, and manage the resources required to provide cost-effective black and white and color graphics, artwork, editing, printing multimedia and photographic services, visualization capability for graphics rendering, and animations resulting in three dimension simulations of plans, drawings, data files, and image files.

4.5.2 GENERAL REQUIREMENTS

4.5.2.1 Management and General Requirements

The Contractor shall provide a comprehensive range of graphics, publication, printing, and photographic services. Services shall be provided in accordance with applicable laws, regulations, and SSC procedural and regulatory guidance.

The Contractor shall file and store on various media (e.g., electronic disks and hard drives) all graphics and publication work that is generated and ensure that all computer files are safeguarded and retrievable. The Contractor shall establish and maintain a descriptive retrievable database that cross-references all artwork publications, film, and proofs that are generated. The Contractor shall maintain all backup systems for graphics and publication products on file servers or other methods to the satisfaction of the customer.

4.5.2.2 Resources Management

The Contractor shall manage the labor, material, and other resources required to perform the work described herein. The SSC normal business hours are 7:30 a.m. and 4:00 p.m. weekdays. To support the requirements of NASA and SSC resident agencies and organizations, the contractor shall provide services outside normal business hours as requested by the customer. This may require the contractor to be flexible in adjusting work time to outside normal business hours (i.e., nightshift, weekend, and holiday). The Contractor shall manage

The Contractor shall maintain records for the purpose of extracting production and cost accounting data by benefitor code, organization, base and demand customers, and prepare and submit required activity reports in accordance with contract data requirements. The Contractor shall be responsible for recording and classifying all work orders by organization, reimbursable, non-reimbursable, subject category, job type, date and time of job request, job cost estimate, actual cost at completion, and job completion date/time in compliance with appropriate reporting requirements.

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The Contractor shall be capable of providing services involving classified subject matter. Such work and materials shall be handled in accordance with the latest version of the National Industrial Security Program Operating Manual (NISPOM).

4.5.2.3 Work Authorization

All products and services shall require an authorized Stennis Work Request. SWRs will specify requirements, describe the work to be done, indicate schedules, quality level, publication number, and any special considerations. The Contractor shall be responsible for verifying that all SWRs have proper authorization signatures and contain programmatic codes before any work is performed. The Contractor shall provide work control services in the Multimedia locations to allow customers the opportunity to drop off work, ask any questions, receive status on their requests, and pick up completed products. The Contractor shall track the status of all work requests in accordance with DR 4-MA11.

4.5.3 PRODUCT QUALITY ASSURANCE

The Contractor shall have a systematic and documented method of ensuring that it has an understanding of and can meet the customers' requirements. The Contractor shall review the customers' orders before accepting them, date and time stamp receipt, provide an estimated cost of work (unless otherwise directed by the customer), assign a completion time and date. Government Printing Office (GPO) orders shall be processed in accordance with Public Printing and Documents Regulation. The contractor shall maintain accurate and complete records The

Contractor shall provide an evaluation method by which the customer may provide a comment on the performance of the job.

4.5.4 REPORTS

The Contractor shall submit data requirements in accordance with the DR instructions.

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MULTIMEDIA SERVICES**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.5.5	MULTIMEDIA/GRAPHICS SERVICES	Includes simple to complex word charts, basic page layout, automated complex formats used for simple matting/mounting, automated templates, scanning and redrawing technical illustrations, downloading and redesigning illustrations, original designs, patch art, layout/paste-up photo manipulation, building and designing photographic and graphic design montages, web site design and support, home page development, press-ready electronic artwork, 3-D and motion graphics, general artwork, vinyl lettering for signage, and fabrication services. Finished products will include overhead transparencies, slides, report covers, illustrations, schematics, certificates, diagrams, charts, posters, flyers, pop-up exhibits, banners, signage etc. Coordinates with the requester in design structure to develop final product.	See Table 4.5-1 Multimedia Job History FY03 through FY06.	Complete work by the established due date within cost estimate. Work meets customer specifications and requirements. This minimum standard applies to all subsequent performance requirements.
4.5.6	PUBLICATIONS AND ILLUSTRATIONS SERVICES	Includes editing, proofing, design and layout, desktop publishing, document scanning and document production coordination from initial concept to hard copy and/or electronic distribution. Examples of publications are technical reports, briefing papers, educational fact	Refer to 4.5.5	

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.5.6	Continuation PUBLICATIONS AND ILLUSTRATIONS SERVICES	<p>sheets, brochures and pamphlets.</p> <p>Illustrations shall be developed consisting of engineering, orthographic, schematic and perspective drawings in digital format, and manual board art format showing detailed sections, cutaways, and exploded views. The Contractor shall prepare CAD drawings; space-related subject matter; technical charts, graphs, and diagrams; and illustrations that visually support, clarify, or enhance related written information.</p>		
4.5.7	PRINTING AND DOCUMENT REPRODUCTION SERVICES	<p>Service includes maintaining a record of the date and time of job request and the date and time of the job completion. The Contractor shall notify the customer of job readiness.</p> <p>The Contractor shall provide:</p> <ul style="list-style-type: none"> a. Customer pickup service. b. SSC Taxi delivery arrangements (based on taxi availability) c. Small package mail room delivery. d. Service includes electronic file storage, recovery, reduplicating. Electronic files must be accurately stored and retrieved. 	Refer to 4.5.5	The Contractor shall comply with the NASA Procedures and directive NPD 1490.1 NASA Printing, Duplicating, Coping, Forms, Mail Management and Quality standards reflect Quality Level III of GPO QATAP unless the requester selects a specific quality level.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.5.8	PHOTOGRAPHIC SERVICES (to include maintaining a studio suitable for portrait work)	<p>Provide support, labor, and operational supplies for the creation of custom, classified, and non-classified; black and white, color, traditional and digital still images for SSC customers, including official portraits. Work to include the design, development, modifications, and implementation of still imaging systems to meet customer requirements which includes specialized processing. Shooting and lighting techniques shall meet customer approval. Maintain a painted canvas background and United States Flag for portraits.</p> <p>Approximately 15% of the work will be urgent work, 25% priority work, and 60% routine work. NOTE: Due to the photography locations, special certificates may be required (i.e., confined space and full hood respirators).</p> <p>Photographers may required to take aerial photo shoots from aircraft and from aboard marine ship/vessels.</p> <p>The Contractor shall provide, operate, and maintain an electronic negative and photo library with the ability to retrieve electronically negatives or proofs by number, date, project, or title.</p>	Refer to 4.5.5	<p>Complete all services for Urgent Work within 8 "Core Hours", Priority Work within 16 "Core Hours" and Routine work within 40 "Core hours" of receipt of Work Request or completion of application shooting, whichever is later.</p> <p>Service customers within 10 minutes of their arrival, or availability of the studio, if work is in progress.</p> <p>Instant portrait shall be provided to the customer prior to their departure. Studio shall present a professional appearance at all times.</p>

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.5.8.1	Photograph SSC Events and Projects	<p>Includes a wide variety of subjects, such as ceremonial events, accidents, crime scenes, public affairs functions, newsworthy events, mission activities, resident agency requests, construction projects, environmental, architectural, wildlife, etc.</p> <p>NOTE: Workload is reflected in the number of requests, or individual jobs. Jobs can vary significantly in size. Approximately 10% of the work will be outside "core hours".</p>		Photographer shall be on scene and ready to work a minimum of 15 minutes prior to scheduled shoot time.
4.5.8.2	Provide Copy/Duplication Services and Film Processing	<p>Services require the copy/duplication of Contractor or customer generated original material to produce negatives, slides, transparencies, and internegatives from prints, slides, negatives, blueprints, artwork, computers, digital cameras, etc. NOTE: Services shall include any related film processing and mounting for slides and transparencies.</p>		Process and handle all photographic materials and maintain all photographic processes. Process machines per manufacture's recommendations and established quality control standards.
4.5.8.3	Produce Color Copy Negatives, Color Copy Slides and Transparencies and Develop Finished/Produced Film	<p>Includes the creation of a color negative, slide or transparency from a photographic print, blueprint, artwork, computer, digital camera, etc., when an original negative is not available.</p>		Color balance of duplicate shall meet or exceed that of the original.

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4.5.8.44	Produce Color Print Enlargements, Small Machine Color Prints, Small and Large Custom Color Prints	Includes color enlargements, small machine color prints, and small and large custom color prints ranging in size from 4"x6", 5"x7," 8" x 10", 11" x 14" to 30"x40". Enlargements will be produced from either Contractor or government furnished color negatives in 35mm, 120, or 4"x5" formats. Produce prints with a glossy "F" surface or a matte "N" surface as specified by the customer. NOTE: The vast majority of color enlargements will be done using a large format high resolution printer using paper stock with a finish similar to photo quality paper.		
4.5.8.5	Mount Finished Prints	Includes mounting and matting of produced prints. Maintain a wide selection of current mat colors for customer selection and appropriate mounting substrates.		Matted/mounted prints shall be free of air bubbles, wrinkles, or other defects. Mounts and mats shall be clean and free of defects.

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4.5.8.6	Maintain Visual Information Products for Future Use	<p>Label and file visual information products. Includes varying types of visual information products and lengths of retention.</p> <p>The customer will identify specific photographic jobs requiring caption information collection. Provide a brief description of action taking place, and the following information for all persons appearing in each photograph: Military: full name, rank and command; Military family members: full name, age (children only), and sponsor's full name, rank and command; Non-military: full name and command/organization.</p> <p>Maintain and preserve SSC official photographic collection of archival photos including pictures of set-up designs of large major exhibits (original negatives and captioned print) with associated texts.</p> <p>Preserve all archival photos as permanent records. Retain a negative and captioned print of each photo for transfer to the National Archives and Records Administration with index.</p>		<p>Visual information products are correctly labeled and filed upon completion of customer's job.</p> <p>Complete information shall be collected for all persons appearing in each photograph.</p> <p>Archival photographs shall be environmentally controlled at 65° F (+ or - 3°) and relative humidity of 40% (+ or - 5%) per 36 CFR, Chapter 12, Subpart 1232.26B.</p> <p>Storage Conditions and ANSI/NAPM IT 9.11 - 1993, Imaging Media Processed Photograph Films - Storage. Comply with all other regulations in DR 1-DM01.</p>

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4.5.9	Copier Management Services	Service includes coordinating and processing monthly machine count data, allocating cost data, evaluating, and distributing copier equipment in accordance with NASA agreements. The Contractor shall coordinate budget and monthly cost data with the NASA SSC Copier Manager.	Manage approximately 150 copiers and multifunctional devices.	The Contractor shall comply with the NASA Agreements and Directive NPD 1490.1 NASA Printing, Duplicating, Copying, Forms, and Mail Management.
4.5.10	PLANS, REPORTS, AND SUBMITTALS			
4.5.10.1	NASA 3Year Comprehensive Printing, Duplicating, Copying, and Publishing Management Plan DR4-GA02	SSC Printing and Duplicating Statistics for current year actuals and three year printing projections.	1 Annually	Submit complete, accurate, and timely data.
4.5.10.2	Annual Information Reproduction Management Reports DR4-GA03	JCP Form No. 1, Printing Plant Report; JCP Form No. 2, Commercial Printing Report; JCP Form No. 5, Annual Plant Inventory; JCP Form No. 7, Excess Equipment Disposal Report with associated forms Government Printing Office statistics	1 Annually	Submit complete, accurate, and timely data.

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4.5.10.3	Multimedia production and cost data DR4-MA11	Provide production units and cost data by crew, customer organization, product code, category, type (I-V), base and demand, date/time received and completed estimated, and actual cost. Data shall include work in process. Data shall be electronically provided to the Government in a Microsoft Excel file.	Monthly and as required	Submit complete, accurate, and timely data.
4.5.10.4	Copier Management Report DR4-GA05	Provide copier analysis, management activity, usage count, and invoice information. Provide copier use recommendations based on analysis.	Monthly and as required	Submit complete, accurate, and timely data in compliance with NASA agreements.

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**Table 4.5-1
Multimedia Job History - FY 2003 through FY 2005**

Jobs	Product Type	QTY			< 2 Hrs			2 - 4 Hrs			4.1 - 8 Hrs			8.1 - 16 Hrs			>16 Hrs		
		FY 03	FY 04	FY 05	FY 03	FY 04	FY 05	FY 03	FY 04	FY 05	FY 03	FY 04	FY 05	FY 03	FY 04	FY 05	FY 03	FY 04	FY 05
Repro	B&W Impressions	809,204	837,150	890,207	241	198	240	189	155	97	85	68	83	28	27	38	14	12	10
	Color Impressions	265,733	306,201	282,189															
Illustrations*					403	348	318	349	276	227	187	171	146	114	114	92	78	99	51
Photo	Color Prints	4,882	5,913	5,215	239	205	237	144	115	129	56	51	70	10	20	22	10	7	5
	Assignments	263	211	260															
Tech Pubs**					63	42	24	16	3	7	4	6	4	10	6	5	7	8	4
GPO	Jobs Processed	70	72	84															

* Includes graphic design, layout and production of brochures, books, signs, banners, web pages, large displays, murals and floor overlays; original illustrations; framing; lamination; and construction and maintenance of displays.

** Includes writing, editing and layout of technical documents - from reports to books. Create hardcopy and electronic formats.

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EXTERNAL AFFAIRS AND EDUCATION SERVICES

4.6. EXTERNAL AFFAIRS AND EDUCATION SERVICES

4.6.1 SCOPE OF WORK

The Contractor shall provide services to the NASA External Affairs and Education at the John C. Stennis Space Center (SSC) in the areas of Visitor Center operations, media services, History Office, conference facilities, public outreach activities, and Education Services at the Stennis Space Center (SSC) as defined in this Annex and in support of the NASA SSC's Strategic Plan for Education.

4.6.2 General Requirements

Communicate External Affairs information relating to SSC goals, missions, direction, projects and programs including but not limited to news releases, broadcast scripts, text for signs and exhibits. Also, disseminate this information to the widest practicable audiences as identified by the NASA Stennis Space Center External Affairs and Education Office.

Contractor training shall remain current with latest technology relative to the execution of this Annex.

Travel-The work defined in this contract shall be performed principally at NASA's John C. Stennis Space Center. During

the life of this contract, contractor employees will be required to travel to off-site locations to perform tasks defined in this contract.

The NASA logo and insignia shall be correctly represented on all exhibits, materials and publications in compliance with the NASA Graphics Standard Manual (NAB 1430.2).

Contractor shall perform work, open, and close the Visitor Center and the Launch Pad bus tour terminal as scheduled (from Memorial Day Weekend to Labor Day Weekend, 9 a.m. to 5 p.m. daily; from Labor Day to Memorial Day, Monday through Saturday, 9 a.m. to 4 p.m.; except during approved closed dates), with all facilities being staffed and operational including exhibits and movies. Approved closed dates are Easter, Fourth of July, Thanksgiving, Christmas Eve, and Christmas Day.

The Educator Resource Center (ERC) will be open to the public during the hours of 9:00 a.m. to 4:00 p.m. Monday through Friday, except Holidays. The Little Red School House, Trend 2000 facility, Mississippi Interactive Video Network Classroom (MIVN), and e-SPACE facility will be generally open from 8:00 a.m. to 4:30 p.m., and at other times as needed for special events.

The ERC personnel will serve as NASA's interface to the

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education community by disseminating information, answering phone requests, and greeting all on-site visitors to the ERC.

Contractor shall refer to the Public Affairs Operations Manual (PAOM – SWI-1380-0001) for specific information/details and guidelines.

Contractor shall provide Media Services personnel to cover beats consisting of: Propulsion, Program Development, Applied Sciences, Education, and Visitor Center.

4.6.3 Government-Furnished Property

The contractor shall establish and maintain property management processes, which ensure that all Government-Furnished Equipment (GFE) is utilized for mission-essential purposes, and from which the Government can accurately determine the location of every item, assigned to the contractor's staff. The contractor shall submit to periodic inventories of GFE by the Government's designated representative. Contractor staff should not remove GFE from the Government's facility without submitting a written request to the Contracting Officer for approval.

The Government will provide, without cost to the contractor, equipment and material listed in Attachment J-10, List 1 and List 2. The Government furnished equipment shall be

maintained and managed in accordance with the guidelines set forth in Annex 1.

4.6.4 Information Archives

The contractor shall store and manage in the appropriate medium (hard copy and/or electronic) for current and future reference, documents such as media statistics, still photos, produced videos, video scripts, fact sheets, news releases, columns, press kits, brochures, information summaries, biographies, speeches and weekly activity reports according to the most current **NASA Records Retention Schedule**.

4.6.5 Communication

Any employee whose job requires contact with the public must be able to effectively communicate in the English language.

4.6.6 Facilities

Facilities covered in this Annex are Educator Resource Center, Little Red School House, Mississippi Interactive Video Network Classroom (MIVN) and e-SPACE facility, and Trend 2000 computer lab.

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4.6.7	MEDIA SERVICES REQUIREMENTS			
4.6.7.1	Publications and Information	Develop, write, and edit brochures, reports, press releases, bulletins, letters, and other materials. Determine how best to present the information, prepare, disseminate the material to appropriate audiences. Contractor shall generate the publications as listed in the External Affairs Operations Manual. Samples of the listed publications are available for review.	See SSC Generated Publications List in the External Affairs Operations Manual for frequencies	All publications should be in compliance with NASA graphics standards as required by the NASA Communications Materials Review process and in accordance with the Associated Press (AP) style. All printed products shall contain no grammatical or technical errors.
4.6.7.2	Distribute Media	Disseminate information through national and local media and existing channels of communication within target groups or organizations.	As required	Send information to media within established timeframes as listed in External Affairs Operations Manual.
4.6.7.3	Respond to Inquiries	Answer inquiries about NASA programs from a variety of audiences and ensure that the needs of the particular individuals and groups for more information are quickly and fully satisfied. Direct inquiries to proper sources for assistance.	As required	Send information to requestor within established timeframes as listed in External Affairs Operations Manual.

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4.6.7.4	Media Information Storage	Contractor shall maintain all media services material. Photos, exhibits, videos, news releases, press kits, brochures, biographies, and speeches are to be stored and managed by contractor for current and future reference.	As required	Information should be easily retrievable and filed electronically using established system.
4.6.7.5	Media Calls, Visits, and Interviews	Contractor shall respond to incoming media calls and arrange follow-up interviews, materials, and information. Contractor shall be responsible for coordinating visits to SSC or SSC off-site events by the media.	As required by number of incoming media calls	Media calls should be coordinated through NASA PAO and NASA Office of External Affairs, Education. Contractor to notify NASA PAO of all incoming media inquiries within 30 minutes and respond to inquiry within 1 hour of receiving. See Media Calls/Inquiries/Visits Procedure in the External Affairs Operations Manual.
4.6.7.6	Print Media Subscriptions and Clippings	Contractor shall subscribe to local, regional, and national print publications as established by SSC media list. Contractor shall be responsible for providing clipping service to PAO of all stories related to NASA/SSC and space related article of interest for delivery to the NASA PAO and to designated program offices.	8 newspapers per week	News clipping to be provided daily to NASA PAO by 10 a.m., Monday through Friday. See List of Print Publication Subscriptions in the External Affairs Operations Manual.

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4.6.7.7	Media Tracking	Contractor shall provide status/ tracking report of NASA/SSC programs and activities in print and broadcast national, regional, and local media coverage by story and publication.	1 per month	Information to be provided on Weekly Activity Report. See DR4-MA01 .
4.6.7.8	NASA Television	Contractor shall work with program offices and PAO to identify and produce stories for NASA Television (NTV).	1 to 3 per month	Coordinate video footage for delivery to NASA Headquarters within 48 hours of TV shoot.
		Contractor shall research topics, write scripts, coordinate approvals with program offices and NASA PAO.		See Guidelines for Production of NASA TV Video Files in the External Affairs Operations Manual.
4.6.7.9	Internet and Intranet Websites Design, Create, and Maintain Office of External Affairs, Education Primary Public Web Site	Design, create, and maintain Office of External Affairs and Education Internet and Intranet websites. Contractor shall assist with the maintenance and review of the NASA/SSC Home Page.	Quarterly	Comply with NAS HQ PAO and SSC External Affairs guidelines found in the External Affairs Operations Manual for NASA Portal requirements.
		Contractor shall assist with the maintenance of the NASA/SSC Home Page. Work with External Affairs and NASA Information Management Systems personnel to incorporate approved changes.	Quarterly	Comply with NAS HQ PAO and SSC External Affairs guidelines found in the External Affairs Operations Manual for NASA Portal requirements.

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4.6.7.9	Internet and Intranet Websites Design, Create, and Maintain Office of External Affairs, Education Primary Public Web Site	Update suggestions to be provided to PAO on a quarterly basis.	Quarterly	Implement within 5 workdays after receiving approval.
		Provide news releases, photographs, and photograph releases to Information Systems personnel for uploading onto the NASA/SSC Home Page.	Within 1 workday of release.	Current and accurate. Comply with guidelines found in External Affairs Operations Manual.
4.6.7.10	Telecons and Videoteleconferences (VITS)	Contractor shall participate in or provide information to support NASA Headquarters and center-initiated telecons and/or VITS on a variety of program topics.	2 per month	No instances of unattended telecons or VITS without prior approval.
4.6.7.11	Status Meetings	Contractor shall participate in meetings with NASA External Affairs and Education to discuss project status and/or to plan upcoming media-related activities.	Weekly	Meetings to be held every week, unless otherwise required.
4.6.8	VISITOR CENTER OPERATIONS			

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4.6.8.1	Staff Visitor Center's Indoor and Outdoor Exhibits and Provide Tours	Contractor shall provide qualified and trained personnel to staff Visitor Center exhibits and provide tours.	115,000 visitors Annually	Provide tours utilizing an approved NASA External Affairs and Education Tour Guide Script. See Visitor Center Operations Guidelines and Visitor Center Tour Guide Script in External Affairs Operations Manual. Public bus tours to begin at 10 a.m. and run continually throughout the day on days of operation; groups with their own transportation allowed early admittance at 9 a.m.
4.6.8.1 Cont.	Provide Transportation for Visitors	See Annex 6.4 - Transportation and Drayage.		
4.6.8.2	Maintain On-Site Exhibits	The contractor shall ensure that all exhibits are operational, scheduled for repairs, current, and clean.	Cost of operation, repairs, updates and cleaning for approximately 50 indoor exhibits and 17 outdoor exhibits.	All exhibits will be operational during the Visitor Center's operational hours.

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4.6.8.3	Solicit Written Feedback From Visitors (DR4-MA04)	Supply and distribute PAO-approved comment cards to visitors. Collect and report results to PAO via Weekly Activity Report.	50 per week	Surveys turned in to NASA PAO should represent a 3% sampling of total annual number of visitors. See Visitor Center Comment Cards Response Card Results per DR 4-MA03 and Weekly Activity Reports.
4.6.8.4	Provide Visitor Statistics	The contractor shall comply with NASA Security-directives for clearing visitors to the visitor center and accurately record the number of visitors received daily, including which states and countries in which visitors reside; and which schools and tour groups are represented.	Updated daily	Report in Weekly Activity Report to NASA PAO. See DR4-MA02.

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4.6.8.5	Book and Schedule Tour Groups	The contractor shall schedule groups who wish to visit the Visitor Center and confirm reservations with the group 1 week prior to visit. In addition, the sole use of the auditorium must be scheduled so that its use will not conflict with walk-in visitor groups and will ensure that adequate staffing is available for groups that have booked the auditorium.	Approximately 30,000 school children per year	Follow established procedures for booking groups. Visitor Center Operations Guidelines.
		The contractor shall report statistical information regarding the number of groups visiting the Visitors Center to NASA External Affairs on the Weekly Activity Report. This report should also include information regarding the number of groups that scheduled visits and the number that actually attended.	1 time per week	Follow established procedures for reporting statistical information Visitor Center Operations Guidelines.
4.6.8.6	Audiovisual Equipment	The contractor shall coordinate the availability of the audiovisual equipment in the Visitor Center auditorium.	Daily	Fully operative audiovisual equipment.
4.6.8.7	Special Events at the Visitors Center	Contractor shall provide planning and logistical support as well as staffing for a variety of events.	3 events per year	Provide logistical support for special event. Examples: Apollo 11 35 th Anniversary, Million Seconds Test Celebration

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4.6.8.8	Estimate Project Costs and Expenses	Contractor shall provide written estimates to PAO prior to executing projects and obtain written approval from PAO before proceeding with projects.	10 to 35 estimates per fiscal year.	Respond to PAO request for estimate by COB within 4 working days.
4.6.9	EXHIBITS / PRESENTATIONS PROGRAM			
4.6.9.1	Display Exhibits and Provide Presentations at Off-Site Locations (DR4-MA05, DR4-MA06, DR4-MA07, and DR4-MA08)	Contractor shall provide exhibits and perform demonstrations at events, conventions, etc. as requested by NASA PAO. Provide PAO with received request or proposal for event along with a cost estimate.	50 exhibits per year	The contractor will display models and exhibits at off-site locations in accordance with Visitor Center Requirements Guidelines. Programs will be current, correct and up to date, and must be previewed by PAO prior to public presentation.
4.6.9.2	Perform Presentations Visiting Groups in Visitor Center	Contractor shall perform informational programs in the Visitor Center auditorium (i.e., Experimentation Station Stage Program).	Daily during operational week	Programs will be presented on time and with trained personnel performing PAO-approved scripts and programs.
4.6.10	SPECIAL EVENTS			

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4.6.10.1	VIP Tours	The contractor shall provide material and personnel (and transportation at the request of PAO) support to the NASA SSC PAO for all VIP tour activities.	<u>VIP Tours:</u> FY 05/75	85 per fiscal year and no unsupported tours
		SSC VIP tours may include, “any” part of the SSC site designated by the VIP Tour Coordinator. Changes to the VIP tour agenda may be submitted at any time.		The NASA SSC VIP Tour Coordinator will submit support requests to the contractor via fax or e-mail. This form of request will be at the discretion of NASA PAO.
		The contractor shall provide VIP packets and/or associated materials to the specified visitors (at the request of PAO).	<u>VIP Packets:</u> FY 05/1200	A sample kit will be provided to External Affairs and Education for approval 3 days prior to event.
4.6.10.2	Space Shuttle Launch Guest Operations	The contractor will provide support and SSC VIP Packets to the NASA/SSC PAO for all Space Shuttle Launch Guest activities (at the request of PAO).	3 launches per year; 300 VIP packets per year.	To be mailed to the appropriate hotel 1 week before launch date.

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4.6.10.3	Conference Center Support	Contractor shall provide logistical support services and materials for center-driven meetings.	Daily	See Conference Center Requirements Guidelines.
		Contractor shall be responsible for securing and maintaining audiovisual and communication equipment.	Daily	See Conference Center Requirements Guidelines. Faxing, copying, taking phone messages, room and equipment set up, trouble-shooting, etc.
		Support personnel to provide any required assistance during meetings, visits or events specified by PAO.	Average of 3 events each month	See Conference Center Requirements Guidelines
4.6.11	HISTORY OFFICE			
4.6.11.1	Disposition of Records Procedures	The contractor shall participate in the placement of documents in appropriate order according to the NASA Records Retention Schedule.	Daily	See NASA Records Retention Schedule NPR 1441.1 and History Office Desk Guide.
4.6.11.2	Capture Historically Significant Documents	The contractor shall review and identify historically significant documents.	1,250 per year	Follow the History Office Desk Guide .

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4.6.11.3	Respond to Requests for Research	The contractor shall respond to all relevant requests for historical information in the form of walk-in requests, telephone requests, and traditional and electronic mail requests received by the History Office.	50 per year	The contractor shall fill research requests within 5 working days of request initiation. See History Office Desk Guide for sample research request form.
4.6.11.4	Statistical Tracking of Documents	The contractor shall track the amount (in linear feet) of documents received by the office each month that potentially will be added to the office's records collection. The contractor shall provide this information in the Weekly Activity Report.	Weekly	See sample Weekly Activity Report.
4.6.11.5	Correct History Office Database Problems or Errors	The contractor shall make arrangements for the correction of any and all problems and errors in the History Office computer database that could cause a work stoppage, including downtime, repairs and/or upgrades. Any corrections needed, made or not made to the database shall be reported via the Weekly Activity Report	Any corrections needed, made or not made to the database will be reported on the Weekly Activity Report.	Written notification of the inability to make corrections of problems and/or errors within three working days by close of business must be made immediately to the NASA SSC History Office Monitor . See Weekly Activity Report. DR4-MA02.
4.6.11.6	Perform Data Entry	The contractor shall perform History Office data entry services for the office.	30 entries per week	The contractor shall perform all required data entry.

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4.6.12	EDUCATION SERVICES			
4.6.12.1	Conduct Educator Workshops			
	Prepare workshop schedule	Identify topics requested by customers. Determine the number needed to meet known anticipated needs. Identify intended learning outcomes for each work shop. Determine and schedule qualified presenters.	3 Annually	Workshops will be presented on time and with trained and NASA approved presenters
	Prepare and disseminate workshop brochure	Determine layout wording and conduct proofreading. Consult with printer. Update database and prepare labels. Prepare for mailing.	3 Annually	Brochures will be current, correct, and up to date. It also must be previewed by NASA Office of External Affairs, Education prior to mailing
	Conduct Workshops	Welcome participants and present agenda. State intended learning outcomes. Present workshop material through lecture, demonstration, and/or hands-on participation. Answer questions. Assist participants in using the NASA Education Evaluation Information System (NEEIS) electronic evaluation tool to evaluate workshop	40 workshops Annually	Workshops must be current, correctly represented information, be professionally presented and be safe for participation. Proper audio support must be used. Workshops must meet Contingency Education Units (CEU) requirements of the (IRCET)

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4.6.12.1 Cont.	Workshop registration logistics	Prepare registration booklet. Prepare computer database for data entry. Register participants in workshop registration booklet via phone, fax, and/or mail. Input Workshop registration data into computer database. Prepare and mail participant confirmation letters. Send workshop participant names to security. Prepare workshop participant certificates.		Confirmation letters will be mailed to reach participants at least 1 week before workshop. Names must be provided to security 48 hours before workshop. Participant certificates will be disseminated at end of workshop.
	Prepare content, activities, and agenda	Determine and prepare appropriate workshop activities. Gather materials and activity handouts. Prepare visuals and participant materials.		Correlate content and activities to state and national education standards.
	Conclude and evaluate workshop	Collect from participants desiring Continuing Education Unit (CEU) credits their completed CEU form. Issue receipts to participants. Instruct participants on the use of the computer to complete necessary NEEIS. After all participants have left, collect workshop tools, and restore facility to standard form. Delete all computer files generated during the workshop. Analyze participant evaluation for future improvements.		Complete, accurate, and timely information. Information input by either contractor or participant using NEEIS. 90 Percent positive feedback required from customer.

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4.6.12.2	Facilitate Distance Learning Workshops and Activities	Receive request for workshop/activity support. Schedule requirement. Facilitate workshops/activities as required by customer. Conduct research to stay current with knowledge of distance learning technologies. Collaborate with other NASA centers to provide subject-matter-experts for distance learning events utilizing multiple NASA sites.	14 Annually	Resolve conflicts with other scheduled events. 90 Percent positive feedback required from customer.
4.6.12.3	Conduct Offsite Presentations	Arrange for travel to presentation location. Set necessary equipment. Conduct offsite presentation at locations throughout the Stennis Space Center Service Region and at other locations as required.	24 Annually	Programs will be presented on time and with trained personnel. Entire presentation received and approved at least 2 days prior to being conducted. Proper equipment will be used. 90 Percent positive feedback required from customer.
	Receive Customer Request for Presentation	Determine the need of the customer. Define with the customer the content of the presentation. Determine audio/visual equipment requirements.		Presentations will be current, correct, and up to date. Proper audio/visual support must be used.

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4.6.12.3 Cont.	Prepare Presentation	Conduct research to gather necessary information. Determine appropriate medium for presentation. Solicit required approvals and review and practice. Prepare necessary property passes for equipment to be taken to presentation site.		Conformance with NPD 4200.1B and SSC Security manual for property removal. Equipment removal must be scheduled and agreed upon by education staff.
	Conclude and Evaluate Presentation	Receive requests for additional information. Analyze evaluations (when conducted) for future improvements and/or changes		Report to NASA Office of External Affairs, Education of recommended improvements and/or changes.
4.6.12.4	Manage Information Dissemination			
	Maintain and Replenish Stock	Prepare and fax order form for materials to be ordered from NASA Headquarters. Receive and shelve material for efficient distribution.	Daily	Organize educational materials according to grade level and subject. Reproduce when there is a shortage of stock on hand.
	Assemble Educator Packets	Select items including lesson plans, posters, general publications and lithograph. Roll posters to have available for educators. Work with visitors' center to determine how many educators will be visiting. Coordinate with PAO.	2,000 Annually	Organize according to grade level. Packets are to be made up at least 1 day prior to visit

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4.6.12.4 Cont.	Process Video Tape Duplication Requests	Prepare and update video catalog listing titles available for duplication. Distribute catalogs. Receive and log video orders. Duplicate videos in real time. Return completed orders to educators by arranging pickup or by packaging order and returning by mail.	500 Annually	Complete, accurate, and timely information with updates to catalog at least twice yearly. Blank tapes to be provided by customer.
4.6.12.5	Manage and Conduct Projects	Receive request for project from customer. Determine resources required for project. Prepare project plan including budget. Enlist partners. Conduct planning meetings as required. Conduct meetings. Continuously monitor and evaluate progress and customer satisfaction. Conclude project.		Prepare formal and informal progress reports. Prepare final evaluation upon completion of project. Complete NASA approved projects based on customer requirements and satisfaction.
	Long-Term Projects	Same as 4.6.12.5. Projects equal to or greater than one year.	4 Annually	Same as 4.6.12.5
	Short-Term Projects	Same as 4.6.12.5 Projects less than one year except as liaison support in a remote site from SSC	15 Annually	Same as 4.6.12.5
	Special Projects	Same as 4.6.12.5 Except as liaison support in a remote site from SSC.	4 Annually	Same as 4.6.12.5

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4.6.12.6	Manage Computer Lab Operations	Maintains material and supplies to operate facilities.	Weekly	Adequate supplies for all activities

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4.6.12.6 Cont.	Maintain Computer Labs	Log all problems and coordinate/expedite repair with the ODIN contractor. Maintain temporary folders and delete contents after each workshop. Evaluate performance of all required software and recommend upgrades as necessary. Provide basic cleaning of equipment. Maintain room arrangement. Contractor must be readily available to address computer problems during lab time.		Report and facilitate software failures and upgrades. All lab equipment must be up to date and function properly during hours of operation.
	Maintain All Other Educational Technology Assets	Log all problems and coordinate/expedite repair. Maintain stock of required expendables associated with equipment. Contractor must be readily available to address problems during operation time.		All other education technology assets must be up to date, and function properly during hours of operation.
	Maintain Property Tracking and Control System	Manage database of all educator resource technology assets. Maintain procedure for checking out equipment and ensuring timely return.		Conformance with NASA NPD 4200.1B and SSC Security manual for property removal. Equipment removal must be scheduled and agreed upon by education staff.
4.6.13	ASTRO CAMP			

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4.6.13 Cont.	Astro Camp Annual Implementation Plan	Contractor shall submit a detailed annual Implementation Plan to NASA SSC Office of External Affairs & Education by an agreed-upon-date. The Plan should be prepared and specify dates for sessions and draft agenda well in advance to accommodate anticipated calls from parents and requirements to publicize the Astro Camp events. The Plan should also describe an evaluation component.	1 Annual Implementation Plan	Implementation Plan should be prepared according to specifications of the NASA Office of External Affairs & Education
	Astro Camp Annual Summer Weekly Camps	Contractor shall conduct Astro Camp Weekly Camps as specified, approved, and described in the Annual Implementation Plan. Contractor shall develop and implement approved Weekly Camps and oversee registration and all Weekly Camp logistics for instruction, transportation, food services, etc.	4-7 per year	Weekly Camps completed according to written schedule and standards as outlined in the Annual Implementation Plan and commonly accepted management practices.
	Astro Camp Special Event Camps	Contractor shall conduct Astro Camp Special Event Camps as specified, approved, and described in the Annual Implementation Plan. Contractor shall develop and implement approved Special Event Camps, oversee registration, and all Special Event logistics for instruction, transportation, food services, etc.	2-6 per year	Special Event Camps completed according to written schedule and standards as outlined in the Annual Implementation Plan and commonly accepted management practices.

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4.6.13 Cont.	Astro Camp Annual Summary Report	Contractor shall submit a detailed annual Summary Report to NASA SSC Office of External Affairs & Education by an agreed-upon-date. The Summary Report should include a review of past year's events (numbers, etc) and comparison to historical Astro Camp data. The Summary Report should also describe the results of the evaluation component as outlined in the Annual Implementation Plan.	1 Annual Summary Report	Astro Camp Annual Summary Report should be prepared according to specifications of the NASA Office of External Affairs & Education.
	Astro Camp Events Submitted in NASA Web-Based Weekly Activity Report (WAR)	Contractor shall submit, as needed, Astro Camp event summaries into the NASA web-based WAR. The Event Summaries should include event participant numbers and content descriptions and other items of note.	Weekly, as Astro Camp events occur	NASA WAR entries should be prepared according to specifications of the NASA Office of External Affairs & Education

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4.6.14	Informal Education Support	<p>Liaison with a 501 (c) 3, non-profit organization for coordinated planning toward the development of a Science, Technology and Education Center to be located near Exit 2 of Interstate 10 that will, potentially become a template for NASA in the development of facilities that present NASA to informal audiences.</p> <p>Liaison with a 501 (c) 3, non-profit organization to identify and work with an exhibit design company to be employed by the non-profit organization for the designing of exhibits that will present to formal and informal audiences compelling information, demonstrations and experiences that will improve public understanding and appreciation of science and technology.</p> <p>Coordination with Stennis Space Center resident agencies for the voluntary providing of exhibits, the design of which will be consistent with the chosen theme of the Science, Technology and education Center and promote science, technology, engineering and mathematics.</p> <p style="text-align: center;">(NNS07AB21C)</p>		

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.6.14	Continuation Informal Education Support	<p>Coordination with the NASA Code N Education representatives and education representatives from other NASA enterprises for the incorporation of the missions of those enterprises in the exhibit presentations.</p> <p>Routinely interact with key education and community leaders, senior NASA managers and SSC resident agencies and commercial contractor senior managers regarding coordination of exhibit design and other elements of the Science, Technology and Education Center.</p>	As Required	Current and Accurate
4.6.14.1	Personnel Requirements			
	Plan for Continuous Staff Development	<p>Staff will attend state and national conferences. Determine conferences best suited for staff development. Coordinate attendance with other activities to minimize impact to schedule. Attend and participate in conferences. Share information/ techniques learned with remainder of staff. Subscribe to professional journals.</p>	6 Annually	<p>Read at least six professional journals. Complete all necessary paperwork for travel, registration, and evaluation.</p>

**ANNEX 4.6
 INSTITUTIONAL SERVICES
 EXTERNAL AFFAIRS AND EDUCATION SERVICES**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
4.6.14.1 Cont.	Maintain Awareness of State-Of-The-Art Knowledge in Educational Technology Through Trade Journal Reading.	Subscribe to and read trade magazines in educational technology.	Weekly	Contractor will report to NASA SSC Office of External Affairs, Education about educational technology changes through email, conferences or telecon.
	Maintain Awareness of State-Of-The-Art Knowledge in Education Technology Through Trade Show/Technology Conference Participation.	Attend conferences and trade shows related to education technology. Determine conferences and trade show best suited for acquiring state-of-the-art knowledge. Coordinate attendance with other ERC activities to minimize impact to ERC schedule. Attend and participate. Share information learned with remainder of staff. Complete all necessary paperwork for travel, registration, and evaluation.	2 conferences annually	Contractor will report to NASA Office of External Affairs, Education of educational technology changes through email, conferences, written reports or telephone.

**ANNEX 4.6
 INSTITUTIONAL SERVICES
 EXTERNAL AFFAIRS AND EDUCATION SERVICES**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENTS</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
	Plan, Coordinate and Facilitate e-SPACE projects.	Receive request for project from customer. Determine requirements for the project. Prepare project plan including budget if cost will occur. Conduct workgroups, focus groups and strategic planning meetings as required. Continuously monitor and evaluate progress and customer satisfaction.	10 Annually	Contractor will report to NASA Education office of educational technology changes through email, conferences, written reports or telephone.

Annex 4.0
PERFORMANCE REQUIREMENTS
SUMMARY

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 4.0 (INSTITUTIONAL SERVICES)

1	Provide Institutional Services	75%	<i>Provided Institutional Services as Follows: 100%</i>				
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**Annex 4.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 4.0 (INSTITUTIONAL SERVICES)

			RR, PI, UPI, VCC	FOOD SERVICES: Operate cafeteria on a break even concept, providing complete breakfast and lunch each day in accordance with established menus and schedules.		Maintain customer count at 25% of SSC population and monthly P&L net margin at +/- 5% and annual margin at +/- 2%. Have no sanitary deficiencies.	2
			UPI, VCC	MAIL SERVICES: Timely pickup and delivery in accordance with NASA Mail Management Guide.		Meets customer requirements in accordance with contract requirements.	
			PI, UPI, VCC	CUSTODIAL SERVICES: Provide comprehensive janitorial services and cleaning services for all floor, glass, and wall surfaces, including removal of trash from trash cans, in accordance with established schedules.		All floors shall be free of all laden airborne dirt, liquid, heel marks, soil, lint, and foreign material.	
			RP, PI, UPI, VCC	MULTIMEDIA SERVICES: In accordance with the work statement, provide a comprehensive range of graphics, publications, artwork, printing, and photographic services; and provide reasonable cost estimates based on the SSC work request provided by customer.		Produce and deliver quality products on time and within costs agreed by the customer.	

(NNS07AB21C)

Attachment J-1

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**Annex 4.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 4.0 (INSTITUTIONAL SERVICES)

2	Provide Public Affairs Support and Education Services	25%	RR, PI, UPI, VCC,	<p>Release or distribute approved information, support to all programs/functions conducted and collect/maintain appropriate documents and database.</p> <p>Timely accomplishment of quality work as outlined in PAOM.</p> <p>Maintain required documentation.</p> <p>Provide comprehensive educational services in accordance with the statement of work, which includes conduct and facilitate workshops, make on-site presentations, manage information dissemination, provide educator media services, and provide property management services.</p>		Comply with PAOM and provide services specified in Annex 4.6.	2
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**ANNEX 5
FACILITY AND MAINTENANCE OPERATIONS**

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- 5.2 PREVENTIVE MAINTENANCE**
- 5.3 CORRECTIVE MAINTENANCE**
- 5.4 OPERATIONS**
- 5.5 AVAILABILITY**
- 5.6 SPECIAL OPERATIONS & MAINTENANCE TEST COMPLEX**
- 5.7 SYSTEM ENGINEERING/ FACILITY MAINTENANCE AND OPERATIONS/ FACILITY INSPECTIONS
PROGRAMMED & PLANNED MAINTENANCE**
- 5.8 GROUNDS MAINTENANCE & INTEGRATED PEST MANAGEMENT SERVICES**

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FACILITY MAINTENANCE AND OPERATIONS
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**ANNEX 5.1
FACILITY MAINTENANCE AND OPERATIONS
GENERAL INFORMATION**

5.1 GENERAL INFORMATION

5.1.1 ANNEX DESCRIPTION

This Annex provides definitions and general information which relate to performance of facility maintenance and operations at Stennis Space Center described in Annex 5 that is subdivided as follows:

- 5.1 General Information
- 5.2 Preventive Maintenance
- 5.3 Corrective Maintenance
- 5.4 Operations
- 5.5 Availability
- 5.6 Special Operations and Maintenance Test Complex
- 5.7 Facility Inspections Programmed and Planned Maintenance
- 5.8 Grounds Maintenance and Integrated Pest Management Services

The facilities are all located within the boundaries of the SSC fee area and include facilities occupied by NASA, NASA Contractors, and Resident Agencies and their Contractors.

Adopt Leadership in Energy and Environmental Design for Existing Buildings (LEED/EB) program meeting all Executive Order and NASA directives for this program.

5.1.2 CONTRACTOR RESPONSIBILITY

The Contractor shall be responsible for performance of Preventive Maintenance (PM), Corrective Maintenance (CM), Operations, System Availability, and all other work specified. The Contractor shall use the following documents, lists, tables, databases, and geographical boundaries to further define the scope of the Contractor's responsibility:

1. Table 5.1-1 This table identifies and defines major systems, subsystems, and units such as 13.8 kV electrical system, potable water system, sanitary sewage system, energy management and control system, natural gas system, marine system, mechanical systems, and other systems.
2. The MAXIMO equipment database (available in Technical Reference Library (TRL)) identifies numbered equipment and gives criticality for each. For proposal purposes, the baseline is the data in the RFP Workload Data. Where there is a difference in the RFP Workload Data and the MAXIMO database in the TRL, the RFP Workload Data will govern.
3. The Specified Structures and Facilities List (available in TRL) identifies the structures and facilities included in

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SYSTEM DEFINITIONS

Structures Facilities Utilities, Systems and Subsystems (SFUSS).

4. The Installation-Accountable Government Property IAGP List (J-10, List 1 and List 2) identifies equipment for which the Contractor has Maintenance and Operations (M&O) responsibility.
5. The System Operational and Maintenance Responsibility Database (SOMRD) identifies SFUSS and IAGP for which the Contractor has M&O responsibility. Additionally, this database identifies the System Management Organization responsible for M&O funding. The FOS Contractor is responsible for the development and maintenance of this database in accordance with NASA Work Instruction, RA-98-08 and SSC STD 99-025. Reports shall be provided as detailed in DR 5-GA25.
6. The Master Facility Plan (available in TRL) defines the geographical boundary of the SSC fee area. The NASA portion of this area contains all SFUSS and IAGP for which the Contractor is responsible.

5.1.3 EQUIPMENT REPLACEMENT

Equipment covered under this Annex may be replaced when it reaches “end of service life” or becomes uneconomical to repair in accordance with the PM plan. Replacement of this equipment in-kind (including upgrade to accommodate equivalent modern technology) shall not relieve the Contractor

of the responsibility of continued performance of specified work within Annex 5. The Contractor shall begin maintenance and operations of such replacement equipment as soon as it is placed in service. Where applicable, equipment numbers shall be assigned and installed.

5.1.4 RESERVE

5.1.5 EQUIPMENT NUMBERING/TAGGING

Corrections to the Computerized Maintenance Management System (CMMS) Equipment Database shall be accomplished in accordance with 5.2.2.3.

5.1.6 DEFINITIONS

The following are definitions for Annex 5. See Annex 1 for additional definitions that may relate to this Annex.

Augmentation - The method to be used to augment the core work force to handle additional work for each sub-Annex.

Biennially - Also called 2-year Frequency. Activities accomplished 1 time during each 24 month period of the contract, at intervals of 23 to 25 months. 50% of the Biennial Tasks shall be completed each year under any given task sheet.

Backlog of Maintenance and Repair (BMAR) - The unfunded facilities maintenance work required to bring

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facilities and collateral equipment to a condition that meets acceptable facilities maintenance standards.

Base - See Institution

Buffer Zone - An area of 125,071 acres surrounding the fee area. All activities within all portions of this zone are subject to specific easement provisions. These provisions specify that habitable buildings cannot be erected; however, farming livestock raising, pulpwood and timber operations, and mining activities are allowed.

Collateral Equipment - See equipment definition from Facility Maintenance Handbook.

Common Use Areas - Facilities and/or portions of facilities, to which access is afforded and which are constructed, maintained and operated specifically for, but not incidental to, the benefit of all SSC residents. Common use areas include entry and hallways, stairs and stairwells, restrooms, and vending areas within dedicated facilities. An access restriction, for security or other reasons, does not alter this definition.

Criticality Level

Level I - Safety and/or Environmental Impact

Level II - Mission Operational Impact

Level III - Significant Operational Impact (replacement cost)

Level IV - Personnel Costs (loss of facility use)⁽³⁾

Level V - Non-Critical

Debris - For purposes of this Annex, debris is defined as any trash, wastepaper, gum, limbs, leaves or other matter lying scattered about which is foreign to its surroundings; e.g., leaves/rocks in equipment areas, or other items not placed or intended for the given location.

Energy Management and Control System (EMCS) - A computerized system for monitoring and controlling systems and equipment through an integrated network of microprocessor based controls.

Facilities - A facility is an enclosed structure to protect personnel, material or equipment from the elements and provide associated work or storage space. For purposes of this contract, a facility includes the utility systems inside the building/structure and extends five feet from the facility or as otherwise defined.

1. **Architectural** - Includes (interior/exterior) doors; windows; flooring (coatings and coverings); stairs and stairwells; interior walls, ceilings, and partitions.
2. **Structural** - Includes foundation; structural system; building shell; roof; external attachments (e.g. walkway covers, overhangs, loading docks, etc); and facilities water collection and drainage system.
3. **Electrical** - Includes electrical wiring and lighting, hardware, and panels; power for equipment up to the point of disconnect, grounding or lightning arresting

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FACILITY MAINTENANCE AND OPERATIONS
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systems; alarm systems and communication equipment (excluding telephones).

4. **Mechanical** - Includes all equipment, components and controls associated with the following systems as well as components located outside the facility: HVAC; plumbing; compressed air; steam; fire suppression; gas; boilers, furnaces; and generators.

5. **Building Specialty** - Includes installed equipment within the facility such as food service and processing equipment; appliances; elevators; automatic doors; roll-up doors; blast doors; vehicle gates; waste disposal equipment; shop equipment and hoists; and Visitor Center exhibits.

Fee Area - An area of approximately 25 square miles (13,800 acres) of government-owned land. The property was acquired in “Fee Simple” and includes the underlying mineral rights. It is within this area that NASA and the other resident agencies have constructed the test facilities, laboratories and office and support buildings necessary for conducting their operations.

General Maintenance Work Priority System - The following is a description of the General Maintenance Work Priority System:

Priority/Description Narrative

1. Emergency Safety of life or property threatened; immediate mission impact; loss of

2. Urgent

3. Priority

4. Routine

utilities: Begin immediately; divert resources as necessary; overtime may be authorized.

Maintenance or repair work should be completed to ensure continuous operation of the facility and to restore healthful environment. Not a life-threatening emergency.

Work that is to support the mission on a priority basis or to meet project deadlines. Complete before starting new Priority 4 (routine) work.

Facilities maintenance work that can be scheduled routinely within the capability of the facilities maintenance organization. Complete in order of receipt, subject to availability of resources, and consolidate by facility or zone or as directed to obtain efficiency of operation.

Institution or base - For purposes of this contract Institution and Base are used interchangeably. Institution refers to those facilities and equipment that are in the fee area, west of a line parallel to and 1,000 feet west of Propelland Blvd and excludes

ANNEX 5.1
FACILITY MAINTENANCE AND OPERATIONS
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all Test Complex structures, facilities and utilities, and the Army Complex.

Integrated Pest Management - The utilization of control measures coordinated for overall environmental protection so as to reduce pest numbers to a controlled level without adverse effects to the surroundings.

IAGP - Installation-Accountable Government Property in the possession of, or directly acquired by the Government and subsequently made available to the Contractor for use in the performance of work related to this contract.

Maintenance - Includes day-to-day periodic, scheduled or unscheduled work required to preserve or restore a piece of equipment, a system, or utility to such a condition that it may be effectively utilized for its intended purpose, output, redundancy, and availability.

Maintenance Level - A designation used to specify the frequency of services and type of grounds maintenance required.

Monitor and Inspect - These terms are used in conjunction with “Operate” to delineate system activities other than actual operations which require periodic staffing. The Government requires that these activities would be accomplished by trained personnel with ability to recognize abnormal conditions and evidence of potential problems.

Mowing - Mowing shall include cutting and trimming, within the designated area, all grasses, weeds and other vegetation, which is 1 inch, or less in diameter (at ground level).

Operate - This term is used for systems that require periodic operational activities but not continuous staffing. Personnel may be available for other contract activities. Operations include at least the first hour of trouble-shooting/investigation of a malfunction or availability loss (See Table 5.5-2 for response time), and also includes operational support for planned outages required for Utility PM’s.

Outage - The planned or unintentional interruption or termination of a utility service such as electricity, water, sanitary sewage, EMCS control, or natural gas.

Planned Maintenance Projects - A project which is approved and funded for a fiscal year as a result of the comprehensive inspection process (See Table 5.7.3.2 - 5.7.8) or as designated by the CO.

Predictive Testing and Inspection (PT&I) - The use of testing techniques (primarily non-intrusive), visual inspection, and performance data to assess equipment condition. Continuing analysis of equipment condition is used to replace arbitrarily timed maintenance tasks with maintenance that is scheduled based on equipment condition.

Preventive Maintenance (PM) - PM is the planned, scheduled periodic inspection; adjustment, cleaning, lubrication, parts

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replacement; and calibration of components, equipment and systems. Also frequently called time-based, but in the broad sense, is extended to include PT&I.

Proactive Maintenance (PAM) - Maintenance which seeks to reduce maintenance costs through better design, construction/installation, specifications, maintenance procedures, workmanship, and scheduling. Proactive Maintenance employs techniques such as specification of new/rebuilt equipment, precision build/installation, failed part analysis, root-cause failure analysis, reliability engineering, rebuild certification/verification, age exploration, and recurrence control.

Programmed Maintenance - Programmed Maintenance consists of those maintenance task whose cycle exceeds 1 year, such as painting a building every 5th year.

Pruning - Pruning is selectively removing unwanted growth to make a plant or tree grow or respond in a desired manner. Pruning differs from 'shearing'. Pruning involves selection and judgment. 'Shearing' means clipping all growth on a plant at a uniform distance and shape.

Quinquennially - Also called 5-year frequency. Activities accomplished 1 time during each 60 month period of the contract, at intervals of 58 to 62 months. 20% of the Quinquennial Tasks shall be completed each year under any given task sheet.

Reliability Centered Maintenance (RCM) - An on-going structured process which determines the optimum mix of reactive, preventive, and proactive maintenance practices in order to provide the required reliability at the minimum cost.

Service Requests - Service Requests are not maintenance items, but are so often performed by facilities maintenance organizations they become a part of the baseline. Service Requests are requests for facilities related work which is new in nature, and as such are funded by the requesting organization. Service Requests are initiated by anybody on the Center and are submitted on a demand SWR which require approval by someone before any action is taken, planned and estimated, materials procured, and shop personnel discretely scheduled to accomplish the work. Examples of these requests include installation of an outlet to support a new copier machine; providing a compressed air outlet to new test bench; renovating an office; and installing special cabinetry.

Six-Year Frequency - Activities accomplished 1 time during each 72 month period of the contract, at intervals of 70 to 74 months. 1/6 of the Six-Year tasks shall be completed each year under any given task sheet.

Special Purpose Mobile Equipment (SPME) - Commercially available, self-propelled vehicles or trailers that incorporate internal combustion engine power designed for special-purpose use, e.g., forklifts, bulldozers, cranes, fire trucks, tractors, pressurant and propellant trailers, and certain aircraft ground support equipment. It does not cover general-purpose vehicle,

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house trailers, or portable shop equipment, such as welders. In gray areas, the NASA Transportation Officer will make the final determination as to whether or not equipment will be treated as SPME.

Special Test Equipment (STE) - This designator is assigned by test programs to differentiate between facility systems that are configuration controlled and systems and equipment that is used uniquely for specific testing of test article. As a general rule, STE is not configured and can be changed frequently to accommodate unique requirements of the testing program. Interface points between facility and STE are normally shown in SSC Interface Control Drawings which are part of the SORD Drawing System or by memorandum of agreement. The SOMRD will also designate system responsibility and in some areas define STE system responsibility. All work accomplished by the FOS Contractor on STE will be by demand work order.

Staff and Operate - This term is used for systems that require continuous staffing during the operational period. Personnel may also operate other systems within the immediate vicinity.

Standard Operating Procedure (SOP) - This is a standing procedure that provides step-by-step instructions to operate systems. It is used for activities that commonly occur. The SOP requires CO review and shall be maintained in electronic format easily accessible to the Government. Documents shall become Government property and shall be stored at CEF (See DR 5-GA09).

Structures - A structure is a constructed unit established for a designated objective. Structures that are part of or inside a facility are included with the facility. For purposes of this contract, structures are generally described as:

- (1) Allowing pedestrian and vehicular transportation. Includes roads and parking areas, paved or gravel surfaces, curbs, shoulders, guard rails, medians, wheel stops, walkways, bridges, sidewalks, and associated hardware.
- (2) Preventing access and maintaining privacy. Includes fences, gates, barbed wire, grounding systems, planters, bollards, chains, and associated hardware and attachments.
- (3) Retaining or directing natural elements. Includes culverts, drainage systems, gravity storm water systems, retaining wall, bulkheads, landscaped borders, head walls, rip rapped areas, retention/detention ponds, spillways, canals, navigational lock, catch basins, and oil/water separators.
- (4) Providing information. Includes signs, pavement markings, flag poles, displays, historical markers, monuments, and associated equipment.
- (5) Other - Boat ramps, docks, landfill, and associated equipment.

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System/Subsystem - Groups/subgroups of equipment forming a network serving a common purpose.

Test Complex - For the purpose of this contract, all facilities, equipment, and land east of a line parallel to and nominally 1,000 feet west of D road and extended to the ARMY complex.

Training/Certification - The Contractor shall define the methods to train and certify new and existing employees in areas that require certification and address how the Contractor will handle attrition.

Utilities - For purposes of Annex 5, consist of 13.8 kV Electrical System, Potable Water System, Sanitary Sewage System, EMCS System, and the Natural Gas System as defined and described in Table 5.1-1.

Utility Process Plan (UPP) - This is a 1 time per operation. Contractor generated document that provides step-by-step instructions that establish responsibility and control system configuration changes. It provides details such as lockout/tag-out, switch operation, valve operation, coordination, etc. Documents shall become Government property. Refer to DR 5-FA05.

Utility System - A utility system is a system for collecting or distributing services between a common point and specific locations both above and below ground. See Annex 5.1, Table 5.1-1 for descriptions of utility systems.

Work Location - The Contractor shall define the location where each type of work will be performed (or location based out of).

5.1.7 ACRONYMS

BHMA – Building Hardware Manufacture’s Association

BOHS- Building Operating Hours Summary

CEF- Central Engineering Files

CM – Corrective Maintenance

CMMS – Computerized Maintenance Management System

CO - Contracting Officer

COTR – Contract Officers Technical Representative

CSBR – Critical Systems Breakdown Report

EGFE – Essential Government Furnished Equipment

EMCS – Energy Management Control System

FCPF – Fluid Component Processing Facility

FID – Field Interface Device

GEE – Government Essential Equipment

GMAW – Gas Metal Arc Welding

GTAW – Gas Tungsten Arc Welding

GPD – Gallons per Day

GPH – Gallons per Hour

HVAC – Heating, Ventilation, and Air Conditioning

IVTEL – Inventory of Vertical Transportation Equipment List

IAGP – Installation-Accountable Government Property

LEED – Leadership in Energy and Environmental Design

LEED/EB – LEED Existing Building

MPCo – Mississippi Power Company

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MBC – Modular Building Controller
MSDH – Mississippi State Department of Health
MTS- Maintenance Task Sheet
NDE – Non-Destructive Evaluation
NDT- Non-Destructive Testing
NFPA – National Fire Protection Association
OEM - Original Equipment Manufacturer
O&M – Operations & Maintenance
PAM – Proactive Maintenance
PLC – Programmable Logic Controller
PT&I – Predictable Testing and Inspection
RCM – Reliability Centered Maintenance
ROW – Right-of-Way
SCD – System Control Document
SCU- System Control Units
SFUSS – Structures, Facilities, Utilities, System/Subsystem
SMAW - Shielded Metal Arc Welding
SOMRD - System Operation & Maintenance Responsibility Database
SOP – Standard Operating Procedure
SPME – Special Purpose Mobile Equipment
SSC – Stennis Space Center
TRL – Technical Reference Library
UC – Unitary Controller
UPP – Utility Process Plan
VAV – Variable Air Volume

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FACILITY MAINTENANCE AND OPERATIONS
TABLE 5.1-1
SYSTEM DEFINITIONS

<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
E1	Electrical	Site Electrical 13.8 kV Main Substation	
		A. Description	Two Mississippi Power Company (MPCo) 115 kV distribution lines serve a split bus through two 115 kV/13.8 kV power step/down transformers with automatic load tap changers. The tubular aluminum split bus has eight 2000 A vacuum circuit breakers. Each circuit breaker can be bypassed and isolated by air break switches and a bypass bus. The split busses can be tied by a motor operated switch. The controls and protective relaying are located in an adjacent building. All maintenance of the SSC main substation is the responsibility of MPCo.
		B. Output	The site electrical 13.8 kV main substation is an integral part of the SSC 13.8 kV distribution system. This MPCo owned and joint NASA/MPCo operated substation provides electricity to the site from the MPCo grid. The split bus is configured to provide a method of isolating sections with either manual switching or through coordinated protective relaying circuits. The output of this system is continuous since it is located on the utility grid between two generating plants and can be isolated from either in the event of a fault on the utility. The output of the two primary transformers is continuous and regulated.
		C. Components	Components including bus, circuit breakers, air break switches, transformers, transformer grounding resistors, automatic load tap changers, protective relaying circuits, control wiring, switches, control panels, meters, connecting and structural bus supports PTs, CT's, CT & PT supports, batteries, battery chargers, manual transfer switches, automatic transfer switches, grounding mat, lightning masts, fence and gates. All components, except the power transformers, are the property of MPCo.
E2	Electrical	Site 13.8 kV Electrical Distribution System	
		A. Description	Input to the site 13.8 kV electrical distribution system is provided from the main substation. The system is configured as a 13.8 kV delta system, with overhead static wires on all above ground feeders.
			Two overhead power lines (one from each bus) serve the SSME Test Area underground 13.8 kV network. The overhead power lines feeding the SSME Test area are mounted on concrete poles. The SSME Test Area underground 13.8 kV network is configured as a double radial with multiple tie points.
			Two overhead power lines (one from each bus) serve the Test Support Area. The Test Support Area is configured as a double radial, mostly overhead on double circuit wood poles.
			Two overhead power lines (one from each bus) serve the Administrative and Industrial Areas on a combination of wood poles, concrete poles, and concrete encased ductbanks.
			The distribution system extends to the main disconnecting means at each facility, and includes the facility transformer(s) and metering.
E2	Electrical	Continuation Site 13.8 kV Electrical Distribution System	

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<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
		B. Output	Provide electrical power to facility main disconnecting means. The output of the system is continuous since each area of the site is served by two feeders or a looped feed and has provisions for isolating faulted components. System switching is accomplished through phased closed transition of loads between feeders.
		C. Components	Components include, but are not limited to, switchgear, circuit breakers, bus, meters, control wiring, batteries, battery chargers, transfer switches, control panels, capacitors/switches, cable, cable splices, duct banks, cable trays, manholes, sump pumps, poles, cross arms, insulators, fuses, distribution switches, service/control power/instrument transformers, grounding system relays, transducers, fences, reactors, fused disconnects, lightning arrestors, static wires, ground rods, power monitors, splice shields, strip heaters.
E3	Electrical	Exterior Lighting System	
		A. Description	The exterior lighting system provides lighting for roadways, parking areas, safety and security. (See General Site Plan Exterior Lighting Drawings and Master Utility Plans in CEF.)
		B. Output	Provide lighting to reduce risk of injury, theft, or property damage. Foot-candle levels shall be maintained in accordance with SSC 50-002.
		C. Components	This system is defined to include, but is not limited to: lamps, reflectors, ballasts, lens, light poles, conductors, conduit, photocells, timers, and associated hardware.
E4	Electrical	13.8 kV Switching Facilities	
		A. Description	Air, gas or oil 13.8 kV switch assemblies.
		B. Output	Provide switching capability between multiple 13.8 kV feeders to the facility transformer(s)
		C. Components	This system is defined to include, but is not limited to: Air, gas or oil 13.8 kV switches, fuse enclosures, fuses, fuse holders, heater strips, secondary breakers, thermostat controls, control circuits, monitoring circuits, and associated hardware.
E5	Electrical	Medium Voltage Transformers	
		A. Description	13.8 kV transformers
		B. Output	Provide step down from site electrical 13.8 kV distribution to the secondary distribution level facility voltages.
		C. Components	This system is defined to include, but is not limited to: 13.8 kV transformers (dry type, mineral oil filled, silicon oil filled), gauges, fans, fan motors, heater strips, meters, nitrogen tanks, secondary breakers, control circuits, thermostat controls, monitoring circuits, and associated hardware.

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NUMBER	TYPE	SYSTEM	NONMENCLATURE
E6	Electrical	Service Entrance Systems	
		A. Description	The systems which provide a current path for service entrance between the facility transformer secondary bushings or subfeed from another source/facility and the facility main disconnecting means.
		B. Output	Operate at assigned ratings to carry energy reliably without exceeding the maximum hot-spot temperature rise of 55 degrees Centigrade for 60 cycle systems, providing for the given indoor and outdoor environmental conditions. Service entrances must maintain the ability to dissipate heat losses.
		C. Components	These systems are defined to include, but are not limited to: air or sandwich busduct, busway, cablebus, multiplex conductor assemblies, conduit/wire systems, busbar, straight lengths, elbows, tees, tap boxes, power take offs, plugs, housings, insulation, hangers, and other associated hardware.
E7	Electrical	Main Disconnecting Means	
		A. Description	The main disconnecting means are comprised of 480/277 Volt or 120/208 Volt, protection and switching, including tie-breakers at double ended substations.
		B. Output	Operate, control and protect low voltage distribution equipment, and provide service entrance, power, and lighting distribution. Faults must be isolated by the overcurrent protective device closest to the fault.
		C. Components	These systems are defined to include, but are not limited to: assembled indoor or outdoor equipment, switching, interrupting, control, metering, protective, and regulating devices, together with their supporting structure(s), enclosure(s), conductors, electric interconnections and accessories; grounding, bus, bus supports, heaters, and associated hardware. Examples of these systems are switchboards; indoor, outdoor, drip-proof, protected aisle and common aisle variety of metalclad switchgear; motor control centers; loadcenters; meter panels or centers; and molded-case circuit breaker distribution panels (PP, MDP, DP classified panels) and their components for voltage transformation, metering, circuit switching, and system protection in the Secondary Electrical Distribution System.
E8	Electrical	Secondary Distribution Equipment	
		A. Description	The secondary distribution equipment systems are comprised of 480/277 Volt or 120/208 Volt distribution, protection and switching equipment within the various facilities at SSC.
		B. Output	Operate at assigned ratings without exceeding the maximum hot-spot temperature rise of 55 degrees Centigrade at 60 cycles, providing for the given indoor and outdoor environmental conditions. The ratio of load current to the ampere rating of the overcurrent protective device determines its operating temperature shall be used for panelboards.
		C. Components	These systems are defined to include, but are not limited to: assembled indoor or outdoor equipment, switching, interrupting, control, metering, protective, and regulating devices, together with their supporting structure(s), enclosure(s), conductors, electric interconnections and accessories; grounding, bus, bus supports, heaters, protective devices, enclosures, busbar and terminal connections, disconnects, fuses,

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<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
E8	Electrical	Continuation Secondary Distribution Equipment	
		C. Components	contactors, motor overload relays, pilot and miscellaneous control devices, interlocks, and associated hardware. Examples of these systems are switchboards; indoor, outdoor, drip-proof, protected aisle and common aisle variety of metalclad switchgear; motor control centers; loadcenters; meter panels or centers; and molded-case circuit breaker distribution panels (PP, MDP, DP classified panels) and their components for voltage transformation, metering, circuit switching, and system protection in the Secondary Electrical Distribution System other than service entrance equipment.
E9	Electrical	Lighting System (Interior)	
		A. Description	That system which comprises the building or facility interior general area lighting from the lighting panel board to the end-user.
		B. Output	Operate at recommended minimum building illumination levels in accordance with SSC 50-002.
		C. Components	These systems are defined to include, but are not limited to: fixtures, lamps, reflectors, ballasts, lens, diffusers, fuses, switches, mounting hangers and hardware, conductors, conduit, controls and associated hardware. This includes systems in general office, hi-bays, laboratories, cafeteria's, etc...Lamp types vary and include incandescent, compact fluorescent, fluorescent, and HID (mercury, metal-halide, high pressure sodium, and low pressure sodium).
E10	Electrical	Emergency Lighting System	
		A. Description	That system which comprises the life safety lighting including, but not limited to emergency lighting units exit lighting, stairwell and egress lighting.
		B. Output	Emergency lighting for evacuation purposes must energize automatically upon loss of power or normal lighting. Emergency lighting must be maintained for at least 1 ½ hours for battery-powered units. The maximum tolerated duration of power failure is up to 10 seconds, preferably not more than 3 seconds, in accordance with ANSI/IEEE Std 446-1987. Light levels must be maintained to provide enough illumination to allow easy and safe egress from the area involved. Comply with ANSI/NFPA 70 for the operation and maintenance requirements and ANSI/NFPA 101 for emergency lighting specific to life safety lighting.
		C. Components	This systems is defined to include, but is not limited to, lamps, reflectors, ballasts, lens, emergency power supplies, conduits, wiring, and associated hardware.
E11	Electrical	Obstruction and Warning Lighting Systems	
		A. Description	That system which comprises the aircraft warning lights on water towers and other facilities at SSC.
		B. Output	Operate at recommended building illumination levels in accordance with FAA circular AC70/7460-1K

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NUMBER	TYPE	SYSTEM	NONMENCLATURE
E11	Electrical	Continuation Obstruction and Warning Lighting Systems	
		C. Components	This system is defined to include, but not limited to: lamps, reflectors, ballasts, lens, conduits, wiring, masts, and associated hardware.
E12	Electrical	Lightning Protection System	
		A. Description	That system which comprises the lightning protection systems for all buildings and structures including substation, technical equipment buildings, towers, antennas, and masts.
		B. Output	Provide current path to ground system for lightning strokes.
		C. Components	These systems are defined to include, but not limited to: air terminals, roof conductors, down conductors, all separately mounted shielding systems, overhead static wires, and associated hardware.
E13	Electrical	Grounding System	
		A. Description	That system which comprises the facility ground systems. Contractor shall maintain chronological records of all tests and observations. Any measurement not meeting the specified or recommended values shall be investigated, a major discrepancy report prepared and delivered to the COTR annually. Contractor shall include these updates in the facility historical files.
		B. Output	Provide means to limit voltages due to lightning, line surges, or unintentional contact with higher voltage lines, and to stabilize the voltage to ground during normal operation. Reference ANSI/IEEE 142-1982, and for ground-fault protection reference ANSI/IEEE std 242-1986. Earth resistance shall be maintained at 5 to 7 ohms.
		C. Components	The components which comprise this requirement include but are not limited to: ground rods, grounding conductors and/or counterpoise, bonds, connections, test wells, and associated hardware.
E14	Electrical	Emergency Power Backup Systems	
		A. Description	That system which serves as an emergency source for supplying power loads in the event of loss of a service interruption or loss of power.
		B. Output	Provide emergency backup power that, upon failure or outage of the normal source, automatically provides power within a specified time to critical devices and equipment whose failure to operate satisfactorily would jeopardize health and safety of personnel or cause equipment damage.
		C. Components	The components which comprise this requirement include but are not limited to: storage batteries, generator sets, UPS (energy storage batteries, rectifiers, inverters, and associated controls), transfer switching devices, relay synchronizing, protective and auxiliary devices, alarms and controls, conductors, wiring components, grounds and associated hardware.

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NUMBER	TYPE	SYSTEM	NONMENCLATURE
E15	Electrical	Fire Detection and Security Systems	
		A. Description	The alarm systems for fire detection and security in various facilities throughout the site.
		B. Output	Provide reliable operation of SSC fire detection and security systems. Provide adequate alarm capabilities in accordance with SSC 50-008, NFPA 70, NFPA 72, NFPA 101 and the ADA.
		C. Components	This system is defined to include, but is not limited to: fire and security alarm control panels, manual and automatic initiating devices, audible alarm devices, visual alarm devices, interface devices, signaling circuitry, radio frequency (RF) transceivers, cable, cable clamps, antennas, auxiliary relays and devices, annunciator panels, and associated equipment.
E16	Electrical	Facility Fire Protection System	
		A. Description	The facility water fire protection system provides for fire protection water at the facilities.
		B. Output	The system shall provide for the continuous supply of fire protection water to the facilities as designed.
		C. Components	The facility fire protection system includes, but is not limited to: piping, valves, sprinkler heads, booster pumps, wet pipe sprinkler systems, dry sprinkler systems, deluge systems, flow switches, tamper switches, pipe hangers/supports, fire hydrants and associated hardware.
C1	Civil	SSC Utility Potable and Water Distribution System	
		A. Description	The utility system that provides for the distribution of potable and fire water to a point five feet outside all facilities at SSC. It includes appurtenances that the water system supplies that are not considered facilities or fire protection devices. It does not include the system inside facilities such as rest rooms, sinks, showers, drinking fountains, etc.
		B. Output	The system shall provide base facilities with a continuous supply of potable/fire water at 55 to 65 psig referenced at wells No.1 and No. 2. It shall provide test facilities with a continuous supply of potable/fire water at 75 to 85 psig referenced at the base of elevated storage tank No. 3.
		C. Components	The distribution system is defined to include, but is not limited to, the following components: all piping, valves, fittings, valve boxes, valve and pipeline markers, and insulation. Also, associated appurtenances outside facilities such as eye washes, safety showers, hose reels, wash racks, truck fill lines, and gages.
C2	Civil	SSC Utility Potable Water Pumping System	
		A. Description	The utility system that provides for the pressurization of the SSC potable water system.
		B. Output	During normal operations the pump system shall maintain the base side pressure at 55 to 65 psig referenced at wells No. 1 and No. 2. It shall maintain the test site pressure at 75 to 85 psig referenced at the base of elevated storage tank No. 3. For emergency operations pressure can be provided by connection to the Mississippi Army Ammunition Plant water system, and/or well No. 3 could be activated from its standby status and support pressure at a somewhat reduced pressure.

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NUMBER	TYPE	SYSTEM	NONMENCLATURE
C2	Civil	Continuation SSC Utility Potable Water Pumping System	
		C. Components	The utility potable water pumping system is defined to include, but is not limited to, the following components: centrifugal pumps, electric motors, water meters, gages, pressure tank, and associated appurtenances inside the pump houses.
C3	Civil	SSC Utility Potable Water Generation System	
		A. Description	The utility system that provides for the generation of potable water for SSC potable water system.
		B. Output	The generation system shall provide the designed quantity of water to meet designed peak needs for regular usage plus fire protection.
		C. Components	The utility potable water generation system is defined to include, but is not limited to, the following utility components: two active and one inactive artesian wells that supply water to the well head at approximately 18 psig from an approximate depth of 1000 feet.
C4	Civil	SSC Utility Potable Water Storage System	
		A. Description	The utility system that provides for the elevated storage of potable water.
		B. Output	The elevated tanks maintain head pressure within the designed pressures and provide approximately 850,000 gallons of storage.
		C. Components	The utility potable water storage system is defined to include, but is not limited to, the following components: two 300,000 gallon elevated tanks and one 250,000 gallon elevated tank., Components include associated structural framing, gages drain pipes, screens, vents, and cathodic protection. The piping inside the elevated storage tank is also included.
C5	Civil	SSC Utility Potable Water Treatment System	
		A. Description	The utility system that provides for the treatment of SSC potable water.
		B. Output	The chemical treatment system located in each pump house shall provide the quality of water that meets Mississippi Department of Environmental Quality standards for chemical dosages and quality control of bacteria.
		C. Components	The utility potable water treatment system is defined to include, but is not limited to, the following components: chlorinators, chlorine cylinders, scales, piping, fittings, valves, insulation, chlorine alarm detection system, and associated hardware to inject gaseous chlorine.

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<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
C6	Civil	Primary Sanitary Sewage Collection Systems	
		A. Description	The Sanitary Sewage Collection Systems consist of a combination of gravity lines, lift stations and forced feed lines which transport waste water from a site facility to a waste water treatment lagoon. The Sanitary Sewage Collection Systems begin five feet outside of the served facility and end at the inlet connection to the weir which discharges into a treatment lagoon (Exception: If pumping stations are located within a facility, the system begins two feet upstream of the pumping station inlet check valve.).
		B. Output	The systems shall be maintained free of excessive leakage and shall provide continuous service as designed and required to accomplish transport of wastewater from facilities to treatment systems.
		C. Components	The Sanitary Sewage Collection System is defined to include, but is not limited to piping, valves, check valves, wet wells, dry wells, manholes, pumps, pump motors, sump pumps, vents, blowers, compressors, grinders/comminutors, controls, and other appurtenances required to provide a complete system for transferring sewage from site facilities to a treatment system.
C7	Civil	Sanitary Sewage Treatment Lagoons	
		A. Description	The Sanitary Sewage Treatment Lagoons consist of two separate lagoon systems which serve the function of retention and removal of objectionable characteristics of the sewerage through natural interaction between the decomposing organic matter, vegetation life (duck weed, water hyacinths, and other water vegetation) and natural lagoon oxidation. In each system, wastewater passes from the main lagoon into an adjoining shallow polishing marsh and is discharged through an Ultra Violet (UV) Reactor for final disinfection.
			Micro-processor based controls are used to control the treatment process flow; A Landis & Gyr Modular Building Controller (MBC), accepts input from lagoon and polishing marsh level sensors, influent and effluent flow rates, UV reactor intensity. Output signals from the MBC governs outflow of the lagoon through a crossover valve, and outflow of the polishing marsh is regulated by an actuator controlled slide gate. Influent and effluent flow rates are logged and stored by the Energy Management and Control System (EMCS), through the MBC.
			Each Sanitary Sewage System begins at, and includes, the main lagoon inlet weir, and ends immediately downstream of the final discharge weir.
		B. Output	The system shall be maintained in such a manner as to provide wastewater treatment and discharge water quality in compliance with state regulations and permit requirements, without interruption to SSC site operations. Independent laboratory sampling analysis, in accordance with permit requirements, will be provided by the Government through another contract mechanism.
		C. Components	Each Sanitary Sewage Treatment System consists of a main lagoon, a polishing marsh and a UV disinfection reactor. The systems include all berms, levies, piping, valves, wiers, controls, reactors, and

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NUMBER	TYPE	SYSTEM	NONMENCLATURE
			appurtenances required to provide a complete functional treatment system.
C8	Civil	Rock-Reed Sanitary Sewage Systems	
		A. Description	The Rock-Reed Sanitary Sewage Treatment Systems consist of two separate Rock/Reed systems which serve the function of retention and removal of objectionable characteristics of the sewage through natural interaction between the decomposing organic matter, vegetation life and natural oxidation. In each system, waste water passes through a septic-settling tank and into the rock/reed filter, then is disinfected by a UV reactor and discharged into the environment. The system begins at the facility discharge point, which is defined as five feet from the facility, and ends immediately downstream of the discharge weir.
		B. Output	The system shall be maintained in such a manner as to provide wastewater treatment and discharge water quality in compliance with state regulations and permit requirements, without interruption to SSC site operations. Independent laboratory sampling analysis will be provided by the Government through another contract mechanism.
		C. Components	Each Sanitary Sewage Treatment System consists of a septic tank, rock-reed filtration system, UV reactor. The system includes all berm, levies, piping, valves, vegetation and other appurtenances required to provide a complete functional system.
C9	Civil	Septic Tank/Field Drain Sanitary Sewage Systems	
		A. Description	This utility consists of four separate Septic Tank and Field Drain Systems, which serve four separate facilities. The system begins five feet outside of the served facility and ends at the end-run of field drain.
		B. Output	The system shall be free of leaks and shall provide continuous availability of sewage flow and treatment from facilities, during normal working hours.
		C. Components	Each System consists of piping, a septic tank, and a field drain with aggregate.
C10	Civil	Site Utility Natural Gas Distribution System	
		A. Description	The Facility system that provides for the distribution of natural gas from the supplier's metering station to the point of utilization. The point of utilization is a) at the facility service valve, b) 5 feet from the facility, or c) at the outlet connection to the gas meter or regulator, whichever is closest to the facility.
		B. Output	The system shall provide for natural gas to the facilities at the designed rate and pressure based on the designated regulator settings.
		C. Components	The natural gas system is defined to include, but is not limited to, the piping and pipe wrapping, fittings, gages, valves and associated identification markers and labels, blow offs, regulators, valve stations, relief valves, cathodic protection system, and associated isolation unions and anodes and meters.

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<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
II	Instrumentation	Energy Management and Control System	
		A. Description	<p>The Energy Management and Control System (EMCS) is a distributed network of stand-alone controls, which interface with a central station for monitoring and operator adjustment. The system is used to control and monitor a wide variety of equipment and processes.</p> <p>The Energy Management and Control System (EMCS) Central Station serves as the central control point for real-time monitoring, operation and management of facility systems and utilities throughout the entire SSC site. The system acts as an effective tool for energy management, management reporting, data archiving and analysis for equipment control operations and maintenance. As such, this system (both the machine and human elements) is of vital importance for SSC missions operations and shall be operated and maintained in a dependable configuration and manner. The Central Station operation includes the EMCS as well as the Fuel Monitoring System and the Main Substation Monitoring System; these systems are defined separately in this table.</p>
		B. Output	<p>Provide all services necessary to maintain and operate the entire EMCS, including central station, field cabinets, instrumentation, and wiring in a reliable, continuous and accurate, operational state as specified in this contract. Work includes continuous staffing and operating of the central station, performing database management and backup required to protect software, real-time management and support of the site facilities in regard to site mission specific requirements, and coordination and notification of site utility outages/activities, repair of EMCS equipment, wiring, instrumentation and controllers.</p>
		C. Components	<p>The EMCS operating environment is the Siemens Building Technology APOGEE Insight system software and central station hardware platform configuration. This system provides real time monitoring, command and control of every aspect associated with various buildings and facilities at SSC.</p> <p>Approximately 75 buildings / facilities are connected to this system. The EMCS APOGEE Insight building / facility automation system is currently comprised of approximately 30,000 field points at the floor level network. These points are connected to approximately 230 field stand-alone microprocessors at the building level network, communicating over 8 peer to peer networked data trunks routed to a main and back-up server at the management level network central station. The operating system man-to-machine interface is established at the management level network, and is currently comprised of 3 Insight color graphic operator workstations. Additionally, this management level network is configured to communicate with the SSC Ethernet and is available to all authorized computer workstations and supports operational visibility of the EMCS APOGEE technology as a site wide building automation information tool.</p> <p>Furthermore, the man-to-machine interface is available at the field sensor and field microprocessor level. This floor and building level network access allows field technicians to interface and use the system as a tool in the field using a computer laptop.</p>

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NUMBER	TYPE	SYSTEM	NONMENCLATURE
			<p>The Central Station alarms into a PC, which acts as an electronic printer of alarms. The Central Station is defined to begin at the ISU line connection and include all interconnected wiring, connections, keyboards, monitors, printers, tape/disk drives, power protection devices, hardware, firmware, software and other appurtenances required to have a completely functional and maintainable Central Host.</p> <p>EMCS field components include instrumentation, signal cables and wiring, programmable controllers and components (MBCs, SCUs and RBCs), and network wiring up to the point of interface with the telecommunication links (EMCS includes the ISU).</p>
I2	Instrumentation	Fuel Management Monitoring System	
		A. Description	The Fuel Monitoring System consists of a Veeder-Root fuel management system which monitors fuel storage tank conditions at six locations, and reports status and alarm conditions to a PC Host/Central Console. Alarms are recorded through the EMCS alarm logging PC. The central controller operates on Trak Engineering software, and includes management of the Fuel Sentry, which dispenses automotive fuel (Diesel and Gasoline) at SSC. Fuel Sentry access keys are also programmed and managed from the host.
		B. Output	Provide all services necessary to maintain and operate the entire Central Console System in a reliable, continuous and accurate operational state as specified in this contract. Work includes manning of the console, performing database management and backup required to protect software (For Host and Field Microprocessors), and management and support of the site fuel dispensing and reporting requirements.
		C. Components	The Central Host is defined to begin at the ADI line connection and include all interconnected wiring, connections, keyboards, monitors, tape/disk drives, power protection devices, hardware, firmware, software and other appurtenances required to provide complete functions described for monitoring and operating the fuel management/monitoring system. The system monitors 6 fuel storage tank systems, and 2 fuel sentry systems that dispense and track automotive fuel.
I3	Instrumentation	Main Substation Monitoring System	
		A. Description	The Main Substation Monitoring System consists of a PC Host that operates on Starview, and provides visibility of the main substation breaker operations and status.
		B. Output	Operate and monitor the PC Host. Provide immediate notification of any concerns or problems.
		C. Components	The system host components consist of a PC. All components are the property and maintenance responsibility of Mississippi Power.

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<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
M1	Mechanical	Site HVAC	
		A. Description	Site Heating Ventilation and Air Conditioning (HVAC) consist of a variety of equipment and systems used for the purpose of maintaining temperature, humidity and air quality conditions within design limits.
		B. Output	<p>HVAC systems shall be capable of providing design conditions during occupied and operational hours. Output shall be sufficient to meet the following requirements:</p> <ol style="list-style-type: none"> 1. Human Comfort HVAC Systems shall be capable of maintaining spaces at set point +/- 2F, within Comfort Envelope defined by ASHRAE Standard 55-74. 2. Computer Room, Switch-Gear Room, Programmatic and specialty HVAC Systems shall be capable of maintaining conditions as defined by designs. 3. Ventilating Systems shall be capable of ventilating at design rates to prevent buildup of contaminants and heat (within design limits). 4. Heating units shall be capable of heating spaces within +/- 2F of set point (within design limits). 5. Refrigeration equipment shall be capable of operating to design conditions. 6. Chilled Water Systems and Heating Water Systems shall be capable of maintaining system temperatures as defined by designs.
		C. Components	HVAC includes chillers, boilers, air handling equipment, piping systems, pumps, cooling towers, exhaust systems, refrigeration equipment, instrumentation and controls, and peripheral equipment required to control temperatures, humidity conditions and air quality.

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<u>NUMBER</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>NONMENCLATURE</u>
MO1	Marine	Site Marine	
		A. Description	Marine Systems are defined as a series of canals and associated structures, that are required to move propellants and devices from one place to another at SSC and to provide water access to the Site from Pearl River System. In addition, marine systems are defined as the NASA Tugboat and barges which are used extensively on site and off site to move material from one place to another and to perform maintenance on water structures.
		B. Output	Marine Systems shall be capable of providing on-time service for the: delivery of propellant barges as required by programmatic requirements; support to the Navy, Customs and other tennant agencies; and provide timely maintenance of systems.
		C. Components	Marine Systems include: The NASA Tugboat (Clairmont II) Bascule Bridge, Navigation Lock, Canal system, Docks, Water Structures, Navigation aids, Work Barges, Piers, Safety Equipment, Operating supplies and equipment, Marine warehouse and office space, Canal pumping station, Spillway system, Canal banks and drainage into canal, river system to the entrance from the Pearl River system, All tug specific equipment, Navigation aids, Traffic barriers and Special lighting.
O1	Other	Site Other	
		A. Description	Other Systems include Elevators, Built In Cranes, Hoists, Backflow Preventers and Roofs.
		B. Output	Other Systems shall be capable of operating as follows: <ol style="list-style-type: none"> 1. Elevators: Accomplish all operations necessary to meet availability requirements and operational hours as designated in Annex 5.5 and the Operating Hours Summary. 2. Built In Cranes and Hoists: The contractor is responsible for providing operations where the Inventory List shows the contractor as responsible operators and provide these operations in accordance with NASA_STD-8719.9 and SSC SWI-8834-0001.. 3. Roofs: Meet requirements of Annex 5.7
		C. Components	Other Systems include: All Elevators, Built In Cranes, Hoists, Backflow Preventers and Roofs.

ANNEX 5.2
FACILITY MAINTENANCE AND OPERATIONS
PREVENTIVE MAINTENANCE

5.2 PREVENTIVE MAINTENANCE

5.2.1 General Information

5.2.1.1 Annex Description

This Annex identifies the routine Preventive Maintenance (PM) requirements for Structures, Facilities, Utilities, Systems/Subsystems and Installation-Accountable Government Property (SFUSS & IAGP). PM includes day-to-day planned, periodic, scheduled, inspection, adjustment, cleaning, lubrication, and specified parts replacement required to preserve or restore a piece of equipment or a system to such a condition that it may be effectively utilized for its intended purpose and availability, and to preserve equipment reliability through life cycle. This includes minor replacement or repair of worn or deteriorated components.

The Contractor shall complete all minor repair requirements and correct all minor discrepancies identified during the performance of a PM inspection as part of the PM. However, if the Contractor determines that the work required to complete, the identified repairs, or correct discrepancies is too great to be accomplished during PM, this work shall be accomplished as CM and in accordance with **Annex 5.3**.

The Contractor may use the equipment and facilities provided by the Government to provide SFUSS & IAGP required functions, outputs and availability through PM services. The Maintenance Task Sheets (MTS) and Maintenance Instructions (MIs) provide minimum performance standards intended to

protect the life cycle of SFUSS & IAGP, and to protect the Government's financial risks associated with SFUSS & IAGP repair and/or replacement. The MTS may not provide the level of PM necessary for meeting availability requirements; thus the services to be provided will rely heavily on the Contractor's ability to establish and implement a Preventive Maintenance Program, which is innovative and resourceful. Proposed changes or significant deviations from the provided MTS must offer an equivalent or improved program/service or other considerations and must be submitted in writing to the Contracting Officer (CO) for approval.

Specified structures and facilities are available in Technical Reference Library (TRL) and IAGP is identified in Exhibit 4 of Annex 5 and Attachment J-10, List 1 and 2. Additionally, Table 5.1-1 identifies defined systems, subsystems, and units and the MAXIMO equipment database identifies numbered equipment. The defined systems in Table 5.1-1 and the numbered equipment in the MAXIMO equipment database are part of the specified SFUSS & IAGP (see 5.1.2).

The following terms are defined and described in Annex 5.1:

Structures

Facilities

Utilities

Systems/Subsystems

Installation-Accountable Government Property (IAGP)

ANNEX 5.1
FACILITY MAINTENANCE AND OPERATIONS
TABLE 5.1-1
SYSTEM DEFINITIONS

5.2.1.2 Preventive Maintenance

This Annex includes the requirement for establishment and maintenance of a PM program which shall include all labor, materials, and reporting necessary to accomplish and validate specified PM. Additionally, the PM program shall assure that the SFUSS & IAGP perform their respective intended functions, outputs, and redundancies and are available during required operating periods. The Government has also established the minimum requirements of the quantity and frequency for each Time Based PM and PT&I on each system, subsystem, and unit.

The Government has defined specified SFUSS & IAGP and associated equipment for which the Contractor shall prepare and submit a scheduled maintenance plan for NASA SSC review as required (**see paragraph 5.2.2.1.1**), that shall result in availability of intended functions, outputs, and redundancies for the specified SFUSS & IAGP and their respective systems and subsystems or units. The Contractor shall, in the planning and executing of PM, utilize the RCM process to determine the optimum combination of Time Based PM, PT&I, and PAM tasks for each system, subsystem, or unit specified to attain the respective levels of availability, output, redundancy, and intended function. The Contractor plan shall include instructions down to the PM and PT&I task level, and shall include a schedule and any necessary implementation instructions required for completion of the work. This plan shall also provide recommendations of any modifications to the

Government provided minimum requirements which would result in an improved maintenance value.

The plan shall be subject to the review of the Government and will be inspected down to the PM, PT&I task, and schedule. Upon review, this plan shall become the property of the Government and shall be maintained in the Central Engineering Files (CEF).

5.2.1.3 Restrictions, Limitations, or Special Conditions

PM does not include cosmetic painting.

PM does include touch-up painting of utilities and system equipment which has deteriorated or has been damaged; however, it is limited to minor surface painting (up to 25 percent of the surface of the equipment) to correct damage or deterioration.

PM does include services such as filter changes, light bulb replacements, drive belt replacements, lubricant replacement, etc., due to unsatisfactory testing or inspections. PM does not include corrections/upgrades identified as SFUSS or IAGP deficiencies (e.g., safety or fire inspections, new laws, etc.). Materials such as filter, light bulbs, chlorine gas, lubricants, belts, etc. shall be provided as part of the PM.

5.2.1.4 Inspections and Incentives

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The MTS and MIs establish the minimum quantity and frequency for all PM and PT&I task for specified SFUSS & IAGP. The government will inspect to the PM and PT&I task.

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level. Performance incentives shall be assessed in accordance with the Performance Requirements Summary (PRS). Timeliness means meeting the scheduling criteria in Table 5.2-1, additionally availability will be given incentives as described in Annex 5.5.

5.2.1.5 Reliability Centered Maintenance (RCM)

The SSC RCM Analysis Manuals contain RCM analysis of the facilities and systems listed in **5.2.2.6**. The Contractor is required to update these analyses and make recommendations to MTS according to the requirements of **5.2.2.6 and 5.2.2.6.1**. The purpose of these updates and changes to MTS is to provide a process that continually proposes modifications to PM methods, frequencies, and technologies that will provide the optimum combination of PM (time based), PT&I (condition based), Reactive (run to failure), and Proactive (change design) maintenance. Proposed changes that affect the minimum requirements of the MTS require the approval of the CO.

Contractor recommended changes to MTS must meet the above stated purpose while maintaining SFUSS & IAGP life cycle and ability to provide the specified availability to the intended function, outputs, redundancies, and support to SSC missions and goals. It is the Government's intention to concur with these type MTS changes, thereby allowing the Contractor to perform PM with less resources.

5.2.1.6

**Installation-Accountable Government
Property (IAGP)**

The Contractor shall maintain all Installation-Accountable Government Property (IAGP) equipment in accordance with the requirements of FAR Part 45.5. The Contractor's maintenance program shall be described in the PM plan (DR 5-FA04), see section 5.2.2.1.1. The applicable preventive maintenance tasks for IAGP are defined by Maintenance Task Sheets (MTS) and Maintenance Instructions (MIs) which are referenced in this Annex. The applicable MTS and MIs for the Special Purpose Mobile Equipment (SPME), which is a subset of the IAGP, are listed in Exhibit 4 of Annex 5. All IAGP equipment is listed by class in Attachment J-10, lists 1 and 2. List 1 comprises of the IAGP (No Class Exceptions), while list 2 contains the IAGP (Class Exceptions) as defined in Section G.

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PREVENTIVE MAINTENANCE**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
5.2.2	PREVENTIVE MAINTENANCE PROGRAM	<p>Provide the labor and materials to implement, maintain, and accomplish, as defined below a reliability centered preventive maintenance program for SFUSS & IAGP.</p> <p>The SFUSS & IAGP specified for Preventive Maintenance (PM) below are defined in Table 5.1-1 and listed in the MAXIMO equipment database, structures and facility list, and IAGP list. This work requires the use of the existing Computerized Maintenance Management System (CMMS) MAXIMO to schedule and manage the specified PM. Maintenance Task Sheets (MTS) for SFUSS & IAGP are provided in Exhibit 2 of this Annex.</p>		
5.2.2.1	Preventive Maintenance Management, Scheduling and Control			
5.2.2.1.1	Provide PM Plan DR 5-FA04	<p>Prepare a SFUSS & IAGP Preventive Maintenance Plan for the SFUSS & IAGP specified in this Annex. The Plan shall, as a minimum, meet the requirement of FAR Part 45.5. It shall detail how the Contractor plans to perform all the required PM tasks at the specified frequencies. Further it shall include any additional Contractor maintenance procedures required to meet the required</p>		

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5.2.2.1.1	Continuation Provide PM Plan DR 5-FA04	levels of availability. The Plan shall contain a full one-year schedule of all SFUSS & IAGP PM (See Table 5.2.2.1.3). The schedule shall address when each MTS task number and step number for all SFUSS & IAGP will be performed. In addition, the plan shall comply with schedule in Section G and H and also Annex 6.	1 PM Plan	The PM Plan shall be submitted for CO review within 90 days from contract start.
5.2.2.1.2	Manage PM – Using the Existing CMMS MAXIMO; Operate a PM System for Tracking; and Reporting all SFUSS & IAGP PM.	The system shall provide on-line access to all SFUSS & IAGP PM status. It will provide full visibility on scheduled, in-progress, completed, and deferred PM work. Data entry shall be timely so that it will provide the scheduled PM planned for each day. The data shall be available for Government review by 7 a.m. daily.	Contractor determined	Information shall be available for Government review during core work hours.
5.2.2.1.3	Schedule PM - Using the Existing CMMS and Scheduling SFUSS & IAGP PM.	PM shall be scheduled to meet the minimum requirements of the Maintenance Task Sheets (MTS).	Contractor determined	Consideration shall be given to seasonal PM requirements.

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5.2.2.1.4	Control PM-Using the Existing CMMS; Operate a Work Control Center for Coordinating; and Tracking all SFUSS & IAGP PM.	Assign a work control number to each Maintenance Task Sheet (MTS) to be worked, for tracking and reporting purposes. The work control number shall be referenced to the equipment ID number and Maintenance Task Sheet (MTS).	Contractor determined	All PM work shall be identified with a work control number, MTS number, and equipment ID number.
5.2.2.2	Accomplish SFUSS & IAGP PM	Accomplishment of SFUSS & IAGP PM includes all the labor and materials required to perform the maintenance tasks on the SFUSS & IAGP specified below in accordance with the Maintenance Task Sheets (MTS) provided in Exhibit 2.	See Below	In accordance with paragraphs 5.2.2.2.1 thru 5.2.2.2.1.10 and meet scheduling / rescheduling criteria in Table 5.2-1.
5.2.2.2.1	Accomplish PM for Electrical 13.8kV System	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for the 13.8kV Electrical Power System.	See Below	Perform all PM tasks on schedule and retain documentation attesting to its completion. Document in accordance with paragraphs 5.2.2.5 through 5.2.2.5.3.
5.2.2.2.1.1	Accomplish PM for Air Brake Switch, Pad Mounted	Perform tasks at specified frequencies in accordance with MTS #E-1.	18 Tasks	See paragraph 5.2.2.2.1

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5.2.2.2.1.2	Accomplish PM for Fuse Cutout	Perform tasks at specified frequencies in accordance with MTS #E-2.	300 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.3	Accomplish PM for Pole Mounted Gang Switch	Perform tasks at specified frequencies in accordance with MTS #E-3.	82 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.4	Accomplish PM for SF6 Gas Switch	Perform tasks at specified frequencies in accordance with MTS #E-5.	30 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.5	Accomplish PM for Transformer, Pad Mount	Perform tasks at specified frequencies in accordance with MTS #E-6.	125 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.6	Accomplish PM for Pole Mounted Transformer	Perform tasks at specified frequencies in accordance with MTS #E-7.	90 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.7	Accomplish PM for Recloser	Perform tasks at specified frequencies in accordance with MTS #E-8.	20 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.8	Accomplish PM for Distribution System	Perform tasks at specified frequencies in accordance with MTS #E-9.	360 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.9	Accomplish PM for Area Lighting	Perform tasks at specified frequencies in accordance with MTS #E-10.	1,347 Tasks	See paragraph 5.2.2.2.1
5.2.2.2.1.10	Accomplish PM for Electric Meters	Perform tasks at specified frequencies in accordance with MTS #E-11.	33 Tasks	See Paragraph 5.2.2.2.1

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5.2.2.2.2	Accomplish PM for Roads, Bridges, and Storm Drains	No tasks have been specified by the government. The Contractor shall develop, schedule and perform any tasks necessary if applicable to achieve system reliability and the required availability.	See Below	Submit as part of PM plan (5.2.2.1.1). Schedule and perform concurred tasks.
5.2.2.2.2.1	Accomplish PM for Road System	Contractor shall maintain smooth, even driving surfaces free of vegetation and potholes.	There are approximately 45 miles of primary and 20 miles of secondary roads.	
5.2.2.2.2.2	Accomplish PM for Bridges (Other than Bascule Bridge)	<p>Contractor shall maintain structure to insure safe passage of appropriate vehicles at rated load.</p> <p>Driving surfaces shall be maintained smooth and even. Any barrier shall be repaired as necessary.</p>	Contractor Determined	
5.2.2.2.2.3	Accomplish PM for Storm Drains	Contractor shall insure all storm drains are clear of debris and vegetation and are capable of allowing water to drain freely.	Contractor Determined	

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5.2.2.2.3	Accomplish PM for Potable Water System	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for the Potable Water System.	See Below	Perform all PM tasks on schedule and retain documentation attesting to its completion. Document in accordance with paragraphs 5.2.2.5 through 5.2.2.5.3.
5.2.2.2.3.1	Accomplish PM for Well House Systems	Perform tasks at specified frequencies in accordance with MTS #PW-1, #PW-2 and #PW-3.	47 Tasks	See paragraph 5.2.2.2.3
5.2.2.2.3.2	Accomplish PM for No. 3 Elevated Tank Pump House System	Perform tasks at specified frequencies in accordance with MTS #PW-4.	16 Tasks	See paragraph 5.2.2.2.3
5.2.2.2.4	Accomplish PM for Canals, Locks Docks, Bascule Bridge, and Tugboat	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for Marine Systems and Equipment as defined below.	See Below	
5.2.2.2.4.1	Accomplish PM for Canal System and Associated Structures	Perform tasks at specified frequencies in accordance with MTS # MO1	1 Task	Perform PM Tasks as scheduled. Document per 5.2.2.5

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5.2.2.2.4.2	Accomplish PM for the Canal Water Pumping Station 2311	Perform tasks at specified frequencies in accordance with MTS # MO2	5 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.3	Accomplish PM for the Navigation Lock System 2315-2317	Perform tasks at specified frequencies in accordance with MTS # MO3	5 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.4	Accomplish PM for the Bridge and Lock Equipment Building 2315	Perform tasks at specified frequencies in accordance with MTS # MO4	57 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.5	Accomplish PM for the Lox Docks (15 total)	Perform tasks at specified frequencies in accordance with MTS # MO5	5 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.6	Accomplish PM for the Hydrogen Docks (9 total)	Perform tasks at specified frequencies in accordance with MTS # MO6	5 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.7	Accomplish PM for Other Docks and Piers	Perform tasks at specified frequencies in accordance with MTS # MO7	5 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.8	Accomplish PM for the Bascule Bridge and Associated Installed Structures and Equipment	Perform tasks at specified frequencies in accordance with MTS # MO8	7 Tasks	Same as item 5.2.2.2.4.1
5.2.2.2.4.9	Accomplish PM for the NASA Tugboat, Clermont II	Perform tasks at specified frequencies in accordance with MTS # MO9	57 Tasks	Same as item 5.2.2.2.4.1

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5.2.2.2.5	Accomplish PM for Sanitary Sewage System	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for the sanitary sewage system.		Perform all PM tasks on schedule and retain documentation attesting to its completion. Document in accordance with paragraphs 5.2.2.5 thru 5.2.2.5.3.
5.2.2.2.5.1	Accomplish PM for Collection System Lift Stations	Perform tasks at specified frequencies in accordance with MTS #SS-1 & #SS-2.	170 Tasks	See paragraph 5.2.2.2.5.
5.2.2.2.5.2	Accomplish PM for Treatment Lagoons	Perform tasks at specified frequencies in accordance with MTS #SS-3.	106 Tasks	See paragraph 5.2.2.2.5.
5.2.2.2.5.3	Accomplish PM for Rock-Reed Systems	Perform tasks at specified frequencies in accordance with MTS #SS-4.	6 Tasks	See paragraph 5.2.2.2.5.
5.2.2.2.5.4	Accomplish PM for Septic Tank/Field Drain Systems	Perform tasks at specified frequencies in accordance with MTS #SS-5.	12 Tasks	See paragraph 5.2.2.2.5.
5.2.2.2.5.5	Accomplish PM for Treatment System at Building 1105	Perform tasks at specified frequencies in accordance with manufacturer's recommendations.		See paragraph 5.2.2.2.5.

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5.2.2.2.6	Accomplish PM, Testing, and Inspection for IAGP Equipment	<p>The Contractor shall perform all maintenance tasks in accordance with the approved PM plan (DR 5-FA04). The Contractor can utilize the appropriate Maintenance Task Sheets (MTSs) and MI's to accomplish this maintenance. Additionally the Contractor shall perform the testing and inspection required by 5.2.2.2.6.2 and 5.2.2.2.6.3.</p> <p>Deficiencies discovered during testing and inspections shall be corrected as part of the test inspection. However, if the Contractor determines that the work exceeds PM scope, this work shall be accomplished as CM and in accordance with Annex 5.3</p>	See Exhibit 4 of Annex 5 & Attachment J-10, lists 1 and 2	See 5.2.2.2.6.1, 5.2.2.2.6.2, and 5.2.2.2.6.3
5.2.2.2.6.1	Accomplish PM for IAGP Equipment	Perform all PM described in the appropriate MTS or MI listed in the referenced inventory. Accomplish tasks at the specified frequencies given in the MTSs or MIs. The Contractor shall perform all tasks to insure that the IAGP equipment can be operated safely. The Contractor shall refer to the appropriate MTS or MI for safety information	See Exhibit 4 of Annex 5 & Attachment J10, lists 1 and 2	<p>Perform maintenance tasks</p> <p>On schedule and retain documentation in accordance with Paragraphs 5.2.2.5 thru 5.2.2.5.4.</p>

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5.2.2.2.6.2	Accomplish Testing for SPME	The Contractor shall perform all tests required by the appropriate MTS or MI for IAGP equipment. Accomplish testing at the specified frequencies given in the MTSs and MIs and in accordance with the latest revision of the NASA STD-8719.9 and SWI-8834-0001. Cumulative test records shall be kept for each IAGP equipment element listed in the referenced inventory. These records shall be available to NASA and Government over-site agencies such as OSHA.	See Exhibit 4 of Annex 5 & Attachment J10, lists 1 and 2	No instance of any IAGP equipment in inventory being out of certification because of failure to perform testing in accordance with this paragraph.
5.2.2.2.6.3	Accomplish Inspection for SPME	The Contractor shall perform periodic safety inspections in accordance with the MTS's, MI's, and the latest revision of the NASA STD-8719.9 and SWI-8834-0001. Cumulative inspection records shall be kept for each IAGP equipment element listed in the referenced inventory. These records shall be available to NASA and Government over-site agencies such as OSHA AND DCMA.	See Exhibit 4 of Annex 5 & Attachment J10, lists 1 and 2	No instance of any IAGP equipment in inventory being out of certification because of failure to perform inspection in accordance with this paragraph.
5.2.2.2.7	Accomplish PM for EMCS System	No tasks have been specified by the government. The Contractor shall develop, schedule and perform any tasks necessary (if applicable) to achieve system reliability and the required availability.	Contractor determined	Submit tasks for government review. Schedule and perform concurred tasks.

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5.2.2.2.8	Buildings & Structures			
5.2.2.2.8.1	Accomplish PM and Periodic Certifications for Elevator and Dumbwaiters	The Contractor shall perform all tasks at the specified frequencies in accordance with the MTS listed below in 5.2.2.2.8.1.1 . Additionally, the Contractor shall provide the inspection and testing services required for the periodic certification of elevators and dumbwaiters as required in 5.2.2.2.8.1.2 . Deficiencies discovered during routine and periodic inspection/testing shall be corrected as part of the inspection/test. However, if the Contractor determines that work exceeds routine and periodic inspection/testing scope, this work shall be accomplished as CM and in accordance with Annex 5.3 .	Elevators and Dumbwaiters are listed in Exhibit 5 of Annex 5, in the Inventory of Vertical Transportation Equipment List.	See 5.2.2.2.8.1.1 & 5.2.2.2.8.1.2
5.2.2.2.8.1.1	Accomplish PM for Elevators and Dumbwaiters	Perform tasks at specified frequencies in accordance with MTS #EL1, MTS #EL2, and MTS #EL3. All work shall comply with ASME A17.1.	26 Tasks	Perform all PM tasks on schedule and retain documentation. Document in accordance with

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				Paragraph 5.2.2.5 thru 5.2.2.5.3
5.2.2.2.8.1.2	Accomplish Periodic Certifications for Elevators and Dumbwaiters	<p>The Contractor shall provide inspection and testing services as required for routine and periodic certification requirements of elevator and dumbwaiter systems. All inspections and tests shall be performed in the presence of a certified inspector who shall not be an employee of the Contractor, but provided by the Contractor through a separate facilities support contract. The Contractor may perform the inspection/tests but cannot provide the certified inspector.</p> <p>1. Semi-Annual: Routine inspection and testing of passenger and freight electric and hydraulic elevators shall be performed semi-annually in accordance with ASME A17.1 rules, 1001.1, 1001.2, 1004.1, 1004.2, 1007.1 and 1007.2.</p>	See 5.2.2.2.8.1	<p>The routine and periodic inspections/testing shall be performed at the time intervals required by ASME A17.1. The inspection/test schedule shall be based on the last inspection date and test date as given in the Inventory of Vertical Transportation Equipment List in Exhibit 5.</p> <p>There shall be no incidence of non-certification because of failure to perform the inspections/ testing required by ASME</p>

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5.2.2.2.8.1.2	Continuation Accomplish Periodic Certifications for Elevators and Dumbwaiters	<p>2. Annual: Periodic inspection and testing of passenger and freight electric and hydraulic elevators shall be performed annually in accordance with ASME A17.1, rules 1002.1, 1002.2, 1005.1, 1005.2, 1008.1 and 1008.2. Periodic inspection and testing of dumbwaiters shall be performed annually in accordance with ASME A17.1, rule 1010.4.</p> <p>3. 3 Year: Hydrostatic tests shall be performed on hydraulic elevators at three year intervals in accordance with ASME A17.1, rule 1005.3.</p> <p>4. 5 Year: Full load and speed tests shall be performed on all electric traction elevators at five year intervals in accordance with ASME A17.1, rules 1002.3 and 1005.4.</p>		A17.1.
5.2.2.2.8.2	Accomplish PM, Testing, and Inspection for Built-in Cranes, Monorails, and Hoists	The Contractor shall perform all maintenance tasks described in the Stennis Maintenance Instructions listed below in 5.2.2.2.8.2.1. Additionally, the Contractor shall perform the testing and inspection required by 5.2.2.2.8.2.2.	Exhibit 1 of Annex 5, Inventory of Built-in Cranes, Monorails and Hoists.	See paragraphs 5.2.2.2.8.2.1 through 5.2.2.2.8.2.3 below.

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5.2.2.2.8.2	Continuation Accomplish PM, Testing, and Inspection for Built-in Cranes, Monorails, and Hoists	Deficiencies discovered during testing and inspections shall be corrected as part of the test/inspection. However, if the Contractor determines that the work exceeds PM scope, this work shall be accomplished as CM and in accordance with Annex 5.3.		
5.2.2.2.8.2.1	Accomplish PM for Built-in Cranes, Monorails, and Hoists	Perform all maintenance tasks described in appropriate SMIs listed in the Inventory of built-in cranes, monorails and hoists, Exhibit 1 of Annex 5. Accomplish tasks at the specified frequencies given in the SMIs. Note: The PM, testing and inspection of this equipment shall be accomplished in accordance with the Maintenance Instructions (SMIs) and not by Maintenance Task Sheets (SMTSs).	Exhibit 1 of Annex 5, Inventory of Built-in Cranes, Monorails, and Hoists. The MIs referenced in this Inventory are in the TRL.	Perform MI tasks on schedule and retain documentation. Document in accordance with Paragraphs 5.2.2.5 through 5.2.2.5.3.

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5.2.2.2.8.2.2	Accomplish Testing for Built-in Cranes, Monorails, and Hoists	3 types of tests are required for built-in cranes, monorails, and hoists: proof load tests, rated load tests, and operational tests. The proof load tests and operational tests shall be performed prior to first use for new cranes or for existing cranes that have had modifications or alterations performed to components in the load path.	Exhibit 1 of Annex 5, Inventory of built-in cranes, monorails and hoists.	No instance of any built-in cranes, monorails, and hoists listed in inventory being out of certification because of failure to perform testing in accordance with this paragraph.
5.2.2.2.8.2.2	Continuation Accomplish Testing for Built-in Cranes, Monorails, and Hoists	<p>The Contractor shall meet the above requirements and perform all tests required by the appropriate testing SMIs listed in the Inventory of built-in cranes, Monorails and Hoists, Exhibit 1 of Annex 5. The Contractor shall accomplish testing at the specified frequencies given in the SMIs and in accordance with the latest revision of NASA</p> <p>STD 8719.9 and SSC SWI-8834-0001. Cumulative test records shall be kept for each built-in crane, monorail, and hoist listed in the referenced inventory. These records shall be available to NASA and Government over-site agencies such as OSHA and DCMA</p>	The SMIs referenced in this inventory are in the TRL.	

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5.2.2.2.8.2.3	Accomplish Inspection for Built-in Cranes, Monorails, and Hoists	The Contractor shall perform daily and periodic safety inspections in accordance with SMI-8830-0114, “Wire Rope, Hook, Chain, and Link Inspection” and NASA -STD-8719.9 (latest version). Cumulative Inspection records shall be kept for each built-in crane, monorail, and hoist in the referenced inventory. These records shall be available to NASA and government over-site agencies such as OSHA and DCMA.	Exhibit 1 of Annex 5, Inventory of Built-in Cranes, Monorails, and Hoists	No instance of any built-in crane, monorail, or hoist listed in inventory being out of certification because of failure to perform inspections in accordance with this paragraph.
5.2.2.2.8.2.4	Establish and Maintain a Certification Program for Built-in Cranes, Monorails, and Hoists	The Contractor shall establish and maintain a certification program for all built-in cranes, monorails, and hoists listed in the inventory, including both critical and non-critical. This program shall meet all NASA and OSHA crane safety requirements. Certification shall be based on the 5.2.2.2.8.2.2 and 5.2.2.2.8.2.3 testing and inspections.		Program shall be kept current and be available to NASA for inspection.
5.2.2.2.8.3	Accomplish Roof Inspection	The Contractor shall perform an annual roof inspection of all roofs as part of the Annual Facility Inspection required by Annex 5.7.	Roofing 1.7 million SF – 118 Buildings	Meet the requirements of Annex 5.7

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5.2.2.2.8.4	Accomplish PM for Electrical Systems and Equipment	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for Electrical Systems and equipment as defined below.	See Below	Perform all PM tasks on schedule and retain in documentation. Document in accordance with paragraphs 5.2.2.5 thru 5.2.2.5.3
5.2.2.2.8.4.1	Accomplish PM for Switchboards and Distribution Panel boards	Perform tasks at specified frequencies in accordance with MTS #E-12.	1,301 Tasks	See paragraph 5.2.2.2.8.4
5.2.2.2.8.4.2	Accomplish PM for Motor Control Centers	Perform tasks at specified frequencies in accordance with MTS #E-13.	117 Tasks	See paragraph 5.2.2.2.8.4
5.2.2.2.8.4.3	Accomplish PM for Interior, Exterior, Emergency and Exit Lighting Systems	Perform tasks at specified frequencies in accordance with MTS #E-14.	130 Tasks	See paragraph 5.2.2.2.8.4
5.2.2.2.8.4.4	Accomplish PM for Dry Type Transformers, 45 Kva and Above	Perform tasks at specified frequencies in accordance with MTS #E-15.	180 Tasks	See paragraph 5.2.2.2.8.4
5.2.2.2.8.4.5	Accomplish PM for Uninterruptible Power Supplies (UPS) 7 Kva and Above	Perform tasks at specified frequencies in accordance with MTS #E-16.	76 Tasks	See paragraph 5.2.2.2.8.4
5.2.2.2.8.4.6	Accomplish PM for Diesel Generators	Perform tasks at specified frequencies in accordance with MTS #E-17.	183 Tasks	See paragraph 5.2.2.2.8.4

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5.2.2.2.8.4.7	Accomplish PM for Cathodic Protection Systems	Perform tasks at specified frequencies in accordance with MTS #E-18.	12 Tasks	See paragraph 5.2.2.2.8.4
5.2.2.2.8.4.8	Accomplish PM for Lightning, Grounding, and Surge Protection Systems	Perform tasks at specified frequencies in accordance with MTS #E-19.	248 Tasks	See paragraph 5.2.2.2.8.4

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5.2.2.2.8.5	Accomplish PM for Backflow Preventers	The Contractor shall test all backflow preventers [referred to as cross connection control devices by the Mississippi State Department of Health (MSDH)] each year with an MSDH approved and licensed backflow device tester. The testing shall be performed by a Waterworks Operator certified for a Class “D” water system by the MSDH and shall be performed in accordance with MSDH requirements.	Inventory of 104 Back Flow Preventers, See Exhibit 6	Test all backflow preventers in inventory annually and maintain records of testing.
		Records of testing shall be maintained by the Contractor and be available for review by NASA and MSDH Division of Water Supply staff.		No violation of MSDH requirements for backflow preventer testing.
5.2.2.2.8.6	Accomplish PM for HVAC and Refrigeration Systems and Equipment	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for HVAC and Refrigeration Systems and Equipment.	See Below	Perform all PM tasks on schedule and retain documentation attesting to its completion. Document in accordance with paragraph 5.2.2.5.
5.2.2.2.8.6.1	Accomplish PM for Centrifugal and Screw Compressor Type Chillers	Perform tasks at specified frequencies in accordance with MTS # M-1.	172 Tasks	See paragraph 5.2.2.2.8.6

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5.2.2.2.8.6.2	Accomplish PM for Reciprocating Compressor, Water Cooled Chillers	Perform tasks at specified frequencies in accordance with MTS # M-2.	14 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.3	Accomplish PM for Reciprocating Compressor, Air Cooled Chillers and Heat Lifts	Perform tasks at specified frequencies in accordance with MTS # M-2.	21 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.4	Accomplish PM for Gear Drive, Forced Draft Cooling Towers	Perform tasks at specified frequencies in accordance with MTS # M-3.	112 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.5	Accomplish PM for Belt Drive, Forced Draft Cooling Towers	Perform tasks at specified frequencies in accordance with MTS # M-4.	47 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.6	Accomplish PM for Gas Fired Hot Water Heating Boilers	Perform tasks at specified frequencies in accordance with MTS # M-5.	715 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.7	Accomplish PM for Electric Hot Water Heating Boilers	Perform tasks at specified frequencies in accordance with MTS # M-6.	4 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.8	Accomplish PM for Condenser Water Chemical Injection Systems	Perform tasks at specified frequencies in accordance with MTS # M-7.	52 Tasks	See paragraph 5.2.2.2.8.6

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5.2.2.2.8.6.9	Accomplish PM for Pumps (CHW, HW, CW, and Industrial Water Pumps).	Perform tasks at specified frequencies in accordance with MTS # M-8.	876 Tasks	See paragraph 5.2.2.2.8.6

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5.2.2.2.8.6.10	Accomplish PM for CHW Type AHUs	Perform tasks at specified frequencies in accordance with MTS # M-9.	1,267 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.11	Accomplish PM for HVUs	Perform tasks at specified frequencies in accordance with MTS # M-10.	261 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.12	Accomplish PM for CHW Type CRUs	Perform tasks at specified frequencies in accordance with MTS # M-11.	352 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.13	Accomplish PM for DX Type CRUs (Water Cooled and Air Cooled)	Perform tasks at specified frequencies in accordance with MTS # M-11.	337 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.14	Accomplish PM for DX Type Air Conditioning Equipment, including Split Systems, Unitary Units, RTUs, etc. (Water Cooled and Air Cooled)	Perform tasks at specified frequencies in accordance with MTS # M-12.	1,972 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.15	Accomplish PM for Unit Gas Heaters	Perform tasks at specified frequencies in accordance with MTS # M-13.	156 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.16	Accomplish PM for Fans; Blowers, Vents, and Hoods	Perform tasks at specified frequencies in accordance with MTS # M-14.	541 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.17	Accomplish PM for Air Compressors and Air Dryers	Perform tasks at specified frequencies in accordance with MTS # M-15.	136 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.18	Accomplish PM for Kitchen Exhaust Hoods.	Perform tasks at specified frequencies in accordance with MTS # M-16.	7 Tasks	See paragraph 5.2.2.2.8.6

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5.2.2.2.8.6.19	Accomplish PM for Walk-in Coolers.	Perform tasks at specified frequencies in accordance with MTS # M-17.	3 Tasks	See paragraph 5.2.2.2.8.6
5.2.2.2.8.6.20	Accomplish PM for Refrigeration Appliances (Ice Makers, Refrigerators, Freezers, etc) and All Other HVAC and Refrigeration Equipment and Systems as Required to Meet Availability Requirements of Annex 5.5	<p>Perform all PM and PT&I tasks (not identified in paragraphs 5.2.2.2.8.6.1 through 5.2.2.2.8.6.19) which the Contractor feels are necessary to meet Availability Requirements. The Contractor shall perform all necessary PMs to HVAC and Refrigeration Equipment and Systems (identified in the Equipment Database).</p> <p>These PMs shall include all peripheral and such as support equipment, parts and components pumps, motors, actuators, piping, expansion tanks, controls, instrumentation, and other components necessary to provide a complete and operational system. The Contractor shall provide a complete itemized task listing of these PM activities. This listing shall provide a technical breakdown of activities similar to the Task Sheets provided by the Government</p>	Contractor Determined	<p>See paragraph 5.2.2.2.8.6</p> <p>Contractor shall identify SFUSS & IAGP, quantities and types of PM, Tasks, and shall provide a schedule breakdown by Task.</p>

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5.2.2.2.8.7	Accomplish PM for Fire Protection & Detection Systems	The Contractor shall perform all tasks at the specified frequencies in accordance with the Maintenance Task Sheets (MTS) for Fire Protection & Detection Systems.	See Below	Perform all tasks on schedule and retain documentation attesting to its completion. Document in accordance with paragraphs 5.2.2.5 through 5.2.2.5.3.
5.2.2.2.8.7.1	Accomplish PM for Fire Alarm Central Console	Perform tasks at specified frequencies in accordance with MTS #E-20	1 Task	See paragraph 5.2.2.2.8.7
5.2.2.2.8.7.2	Accomplish PM for Radio Frequency Transceivers	Perform tasks at specified frequencies in accordance with MTS #E-21	96 Tasks	See paragraph 5.2.2.2.8.7
5.2.2.2.8.7.3	Accomplish PM for Facility Fire Alarm Panels and Systems	Perform tasks at specified frequencies in accordance with MTS #E-22	112 Tasks	See paragraph 5.2.2.2.8.7
5.2.2.2.8.7.4	Accomplish PM for Facility Security Systems	Perform tasks at specified frequencies in accordance with MTS #E-23	2 Tasks	See paragraph 5.2.2.2.8.7
5.2.2.2.8.7.5	Accomplish PM for Sprinkler & Suppression Systems	Perform tasks at specified frequencies in accordance with MTS #E-24	112 Tasks	See paragraph 5.2.2.2.8.7
5.2.2.2.8.7.6	Accomplish PM for Fire Hydrants and Post Indicator Valves	Perform tasks at specified frequencies in accordance with MTS #E-25	457 Tasks	See paragraph 5.2.2.2.8.7

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5.2.2.2.9	Accomplish PM for Natural Gas System	The Contractor shall perform all tasks at the specified frequencies in accordance with MTS #NG-1 for the Natural Gas System.	5 Tasks	Perform all PM tasks on schedule and retain documentation attesting to its completion. Document in accordance with paragraphs 5.2.2.5 through 5.2.2.5.3.
5.2.2.3	SFUSS & IAGP Equipment Identification - Maintain CMMS Equipment Identification on the Equipment in the MAXIMO Database	Ensure SFUSS & IAGP equipment has an equipment ID tag attached. Ensure equipment has a corresponding ID in the CMMS database. Maintain equipment numbering to the same level as the existing MAXIMO equipment database.	As required	Retag equipment that has missing or illegible tags.
5.2.2.4	Update and Maintain SFUSS & IAGP PM Program		Contractor determined	
5.2.2.4.1	Identify Configuration Changes, Errors, or Deficiencies to the Existing SFUSS & IAGP PM Program	Includes, identification of changes found by application of maintenance actions, manufacturer's maintenance change bulletins, configuration changes, and changes recommended by updated RCM analysis.	As required	Identify all changes to reflect current configuration.

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5.2.2.4.2	Accomplish or Recommend Updates	Accomplish updates not requiring contract modification. Recommend all other updates to the CO (e.g. changes to MTS).	As required	Updates or recommendation to be made within 10 days of identification.
5.2.2.5	Document Work		Contractor determined	Input information within 48 hours of action.
5.2.2.5.1	Document completed PM Provide government access to documentation. Provide reports specified in DR 5-FA02.	Accomplished PMs shall be recorded into the CMMS program. Record the actions accomplished, the date of accomplishment, the name of the individual responsible for accomplishing the action, and any other pertinent data necessary to provide a complete audit trail of accomplishment.	As required	A complete audit trail exists for each PM action.
5.2.2.5.2	Document deferred PM Document PM actions which have been deferred. Provide reports specified in DR 5-FA02.	Document reason for deferral, including data such as the date and times PM was attempted, individuals contacted for access, deferral code, rescheduled date, et. Codes and deferral logic are found in Table 5.2-1.	As required	Documentation supports efforts to accomplish the PM, and to support the reported deferral code.

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5.2.2.5.3	<p>Document PM which will not be accomplished.</p> <p>Provide reports specified in DR 5-FA02.</p>	Document reason for non-performance. Table 5.2-1 gives reschedule limits beyond which PM will not be rescheduled.	As required	Documentation for PM that will not be accomplished due to Contractor fault shall show corrective measures taken to prevent reoccurrence.
5.2.2.5.4	Document accomplished PM on all IAGP	Accomplish PMs shall be recorded on all IAGP. Record the actions accomplished the date of accomplishment, and any other pertinent data necessary to provide a complete audit trail of accomplishment.	See Exhibit 4 of Annex 5, Attachment J-10, Lists 1 and 2	A complete audit trail exists for each PM action.
5.2.2.6	Perform RCM Analysis Update the Existing RCM Analysis and Criticality Assessments	Update the RCM analysis, critical system lists, criticality line drawings, and all other pertinent information contained in the existing RCM analysis and criticality assessments. See 5.2.2.4.2 for updates of MTS.		The updates shall reflect the current configuration and be performed annually. The CO shall concur with updates.

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5.2.2.6.1	Recommend Changes to MTS Based on RCM Analysis	Recommended changes can be of the result of configuration changes, new technologies, change of mission or goals etc. The Contractor shall base the recommendations on RCM analysis and provide evidence that the proposed changes to MTS improve system reliability and maintain the lifecycle of equipment. See 5.2.2.4.2 for updates of MTS.	Contractor Determined	Recommendations and RCM analysis are submitted to CO for approval.

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MAINTENANCE SCHEDULING REQUIREMENTS

Reference 5.2.2.5 and DR 5-FA02.

GOVERNMENT CAUSED. The following deferral explanations and related codes will be used when maintenance actions cannot be accomplished within an initial scheduled window. Use Report Code (GC) for Government caused deferrals and rescheduled maintenance as defined in this table. To be considered and approved as a Government caused deferral, maintenance must be attempted and/or access must have been requested within the first 25 percent of the allotted "windows" as defined below e.g., a quarterly action (28-day window) must be attempted within the first 7 days of the scheduled date; an annual action (56-day window) within the first 14 days; a weekly (4-day window) within the first day, etc. Additionally the CO must be notified within 75 percent of the allotted "window" when work cannot be accomplished. Notification shall be accomplished electronically and contain enough information to allow sufficient Government action/follow-up. In all cases, the maintenance actions or portions of which can be accomplished must be accomplished. Re-performance of government caused delays shall be per this table and this shall not affect incentive fee.

Access Denied - Access to a particular building, area, or equipment is denied or prevented by the Government, preventing accomplishment of a maintenance action. Report code "GA" and reschedule maintenance as defined in this table:

Access Obstructed - The maintenance action cannot be accomplished as access to the equipment is physically obstructed (e.g., new wall constructed around equipment, the

equipment is installed preventing access, etc.) and further Government action is required to obtain access. Report code "GO" and reschedule maintenance as defined in this table, unless notified by the CO to suspend maintenance actions.

Equipment Not in Place - The maintenance action cannot be accomplished as the equipment has been, or is being, removed, replaced, modified, placed in storage, or never installed in the system. Report code "GE" and reschedule maintenance as defined in this table, unless notified by the CO to suspend maintenance actions.

Maintenance Action Invalid - The established maintenance action is inappropriate for the equipment and the maintenance cannot be performed. Report code "GM" and reschedule maintenance as defined in this table, unless notified by the CO to suspend maintenance actions.

Safety Hazard - The maintenance action or the piece of equipment presents an immediate safety hazard. Report code "GS" and reschedule as defined in this table, unless notified by the CO to suspend maintenance actions.

Contractor Caused - Any uncompleted maintenance actions not meeting one of the deferral codes above shall be coded "CC" for Contractor Caused and rescheduled as defined in this table. This may affect incentive fee.

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MAINTENANCE SCHEDULING REQUIREMENTS

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MAINTENANCE SCHEDULING REQUIREMENTS

Maintenance Frequency	Initial Window (Days)	First Reschedule Window (Days)	Second Reschedule Window (Days)	Third Reschedule Window (Days)	Fourth Reschedule Window (Days)	Follow-on Reschedule Window (Days)	Comments
Weekly	4	N/A	N/A	N/A	N/A	N/A	Do not reschedule
Every 2 Weeks	7	N/A	N/A	N/A	N/A	N/A	Do not reschedule
Monthly	14	N/A	N/A	N/A	N/A		Do not reschedule
Semi-Quarterly	21	32	N/A	N/A	N/A		
Quarterly	28	42	N/A	N/A	N/A		
Semi-Annually	56	84	N/A	N/A	N/A		
Annually	56	84	84	N/A	N/A		
Every 18 Months	56	84	84	84	84		
Every 24 Months	56	84	84	84	84	84	Reschedule 1 more time
Every 36 Months	56	84	84	84	84	84	Reschedule 4 more times
Every 48 Months	56	84	84	84	84	84	Reschedule 7 more times
Every 60 Months	56	84	84	84	84	84	Reschedule 11 more times

ANNEX 5.3
FACILITY MAINTENANCE AND OPERATIONS
CORRECTIVE MAINTENANCE

5.3.1 GENERAL INFORMATION

5.3.1.1 Annex Description

This Annex section identifies the Corrective Maintenance (CM) requirements for SFUSS and IAGP. CM includes the scheduled or unscheduled work required to repair a piece of equipment, a system, or a real property facility to such a condition that it may be effectively utilized for its intended purpose through life cycle. Repair includes overhaul, reprocessing, or replacement of constituent parts or material that has deteriorated by action of the elements or usage, have been damaged, regardless of the cause, or have not been corrected through maintenance. CM shall repair to a condition equivalent to the original intended or design capacity, efficiency or capability, and shall comply with SSC site standards/Stennis Work Instructions (Available in the TRL). Parts and equipment used for repair shall meet all SSC standards and guidelines. The Contractor is responsible for preparation of scope definition descriptions, engineering requirements, work control, tracking, and all other CM management services otherwise required under the terms of this Annex.

Specified structures and facilities are available in TRL of this Annex and IAGP is identified in Attachment J-10, List 1 and List 2. The defined systems in Table 5.1-1 and the numbered equipment in the MAXIMO equipment database are part of the specified SFUSS & IAGP. (See 5.1.2)

The Contractor shall use all possible inputs to identify CM work. These include CM discovered during PM, operations, PT&I, trouble calls, periodic inspections, casual observations, customer complaints, etc.

The Contractor is expected to use to full advantage the equipment and facilities provided by the Government to offer the greatest extent of CM possible. Although minimum performance standards and guidelines have been established, the Contractor is expected to establish and implement a CM program that is innovative and resourceful.

CM resulting from a Malfunction or Availability Loss shall comply with maximum response & repair times given in Table 5.5-2. Other identified CM work shall be accomplished within the maximum repair times given in Table 5.3-1 (unless otherwise specified within an individual line item). When a CM repair cannot be accomplished within the allowed repair time, due to circumstances beyond the control of the Contractor, the Contractor may obtain relief through a special request to the CO for a continuance. This procedure is detailed in **5.5.1.4**. Failure to meet repair time or to obtain an approved continuance may affect incentive fee.

5.3.1.2 Definition of Terms

Due to the complexity of the required tasking, lack of common industry descriptions, and for the purposes of this contract, the

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FACILITY MAINTENANCE AND OPERATIONS
CORRECTIVE MAINTENANCE

following terms and others are defined and described in Annex

5.1:

- Structures
- Facilities
- Utilities
- Systems/Subsystems

Installation-Accountable Government Property (IAGP)

5.3.1.3 Contractor Responsibility

The Contractor is responsible for all CM work required for the specified SFSS & IAGP.

5.3.1.4 Temporary Repairs and Services

When permanent repairs require an extended outage, the Contractor shall perform temporary repairs and/or provide temporary services when these repairs/services are possible and will result in substantially earlier restoration of service.

Temporary repairs shall meet all safety standards. Temporary services shall be provided using portable or rental equipment and other means, where feasible, to maintain the availability of facilities and systems.

When the permanent repair can be scheduled and work resumes, the CM shall be accomplished per this Annex. See 5.3.7.2.1 for emergency and mitigation work.

5.3.1.5 Trouble Calls

Trouble calls are a subset of CM and are reactive maintenance generally called in by telephone by occupants of a facility or maintenance workers. Trouble calls are divided into two categories: Emergency calls (Priority 1) and Routine calls (Priority 2, 3, 4). Historical data on trouble calls received can be found in the TRL.

Emergency trouble calls (Priority 1) require immediate action to prevent loss of or damage to SSC property; restore services that have been disrupted; eliminate hazards to personnel or equipment; affect the operations of equipment or systems identified as critical.

Routine trouble calls (Priority 2, 3, 4) are minor facility problems that are too small to be estimated (usually less than about \$2,000 labor and material) and are generally responded to by grouping according to craft and location and do not reasonably require detailed job planning.

The Contractor shall be responsible for mitigating situations requiring emergency work. This includes any work, which consists of correcting a failure, or an anticipated/pending failure, which constitutes an immediate danger to personnel, property, or mission. Additionally, this includes clean-up actions resulting from an emergency situation, such as moving equipment, covering sensitive systems, etc., to preclude further damage to property and follow up checks to ensure reliability of services.

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CORRECTIVE MAINTENANCE

Regardless of the type of trouble call, the Contractor is responsible for sustaining feed back and direct contacts with all customers. To promote good customer relations, the Contractor will strive to ensure that for each trouble call is a complete mutual understanding of the description of work, scheduling, and access requirements. Sustaining feed back is keeping the customers advised of any problems or necessary changes in the work or schedule and sustaining this effort until work completion. A joint Contractor/customer walk-thru final inspection of the work is desirable for highly visible or critical areas.

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CORRECTIVE MAINTENANCE**

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5.3.2	Utility Distribution		Nothing Additional	
5.3.2.1	Accomplish CM on Electrical 13.8 kV System	As defined below in paragraphs 5.3.2.1.1 thru 5.3.2.1.11	Nothing Additional	<p>Respond and perform all activities within required time constraints established in Table 5.3-1. Systems shall meet output as defined in System Definition, Table 5.1-1 and in this Annex. If there is a system malfunction or availability loss, refer to Table 5.5-2.</p> <p>Repair damage, deterioration, and worn equipment to protect reliability and preserve equipment though life cycle.</p>
5.3.2.1.1	Accomplish CM on Air Brake Switches	The Contractor shall adjust linkage arms, repair or replace components resulting from discrepancies noted during PMs, during switching operations, or of trouble calls.	49 Switches	See Paragraph 5.3.2.1

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5.3.2.1.2	Accomplish CM on Fuse Cutouts	The Contractor shall repair or replace components so as to restore cutouts to original intended use.	156 Cutouts	See Paragraph 5.3.2.1
5.3.2.1.3	Accomplish CM on Pole Mounted Gang Operated Switches	The Contractor shall adjust mechanical linkage, repair or replace components so as to restore the switch to original operating condition.	40 Switches	See Paragraph 5.3.2.1
5.3.2.1.4	Accomplish CM on B-4400 Substation	The Contractor shall adjust, repair, or replace equipment or components to restore the substation to its original operating condition.	1 B-4400 Substation	See Paragraph 5.3.2.1
5.3.2.1.5	Accomplish CM on SF6 Switches	The Contractor shall adjust, repair, or replace equipment or components to restore the switch to its original operating condition.	30 Switches	See Paragraph 5.3.2.1
5.3.2.1.6	Accomplish CM on Pad Mounted Transformers	The Contractor shall repair or replace bushings and/or gaskets, leaking valves, or gauges to restore transformer to original operating condition.	94 Transformers	See Paragraph 5.3.2.1
5.3.2.1.7	Accomplish CM on Pole Mounted Transformers	The Contractor shall replace defective transformer(s) that have failed due to damage,	138 Transformers	See Paragraph 5.3.2.1

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		rupture, or leakage.		
5.3.2.1.8	Accomplish CM on Reclosers	The Contractor shall troubleshoot recloser and controller to determine malfunction, then remove and send offsite for repairs.	4 Reclosers	See Paragraph 5.3.2.1
5.3.2.1.9	Accomplish CM on Distribution System	The Contractor shall repair/replace poles, cross arms, guy wires, anchors, insulators, jumpers, clamps, overhead or underground cables, connectors, straps, ground rods, lightning arrestors, and potheads to restore electrical service.	780 Poles 8 Ckts 52 Miles OH wire 13 miles VG wire	See Paragraph 5.3.2.1
5.3.2.1.10	Accomplish CM on Area Lighting Systems	The Contractor shall repair/replace area lighting luminaries or poles as a result of damage by vehicular traffic or acts of nature.	626 in Lighting System	See Paragraph 5.3.2.1
5.3.2.1.11	Accomplish CM on Electric Meters	The Contractor shall replace defective electric meters.	152 Meters	See Paragraph 5.3.2.1
5.3.2.2	Accomplish CM for Potable Water Distribution System	Potable water systems are described in Table 5.1-1 System Definitions. See below in 5.3.2.2.1 thru 5.3.2.2.2	See Below	See Paragraph 5.3.2.1
5.3.2.2.1	Accomplish CM for Wellhouse Systems	Include wells, pumps, and treatment systems	3 Well House Systems	See Paragraph 5.3.2.1

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5.3.2.2.2	Accomplish CM for Water Storage Systems	Includes all elevated and ground level water storage tanks and their ancillary systems such as cathodic protection.	3 Water Storage Systems	See Paragraph 5.3.2.1
5.3.2.3	Accomplish CM for Sanitary Sewage System	The Contractor shall repair and replace all damaged and worn component parts of the system. Replacement parts shall be equal to or better in quality and capacity to that being replaced. All plumbing components shall be free of leaks and operate in accordance with the manufacturer's design specifications.	Systems consist of approximately 76,800 linear feet of forced main, and approximately 29850 linear feet of gravity main.	See Paragraph 5.3.2.1
5.3.2.3.1	Accomplish CM for Collection System Lift Stations	See paragraph 5.3.2.3	52 Stations	See Paragraph 5.3.2.1
5.3.2.3.2	Accomplish CM for Treatment Lagoons	See paragraph 5.3.2.3	Effluent for Lagoon #1 is approximately 210,000 GPD; Lagoon #2 is approximately 90,000 GPD.	See Paragraph 5.3.2.1
5.3.2.3.3	Accomplish CM for Rock-Reed	See paragraph 5.3.2.3	Two Rock-Reed systems treat less than 3,000 Gallons	See Paragraph 5.3.2.1

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			Per Day (GPD).	
5.3.2.3.4	Accomplish CM for Septic Tank/Field Drain Systems	See paragraph 5.3.2.3	3 septic tank/field drain systems treat less than 3,000 GPD.	See Paragraph 5.3.2.1
5.3.2.3.5	Accomplish CM for Treatment System in B-1105	See paragraph 5.3.2.3		See Paragraph 5.3.2.1
5.3.2.4	Accomplish CM for Natural Gas Distribution System	The Contractor shall make repairs, to the natural gas system (see Table 5.1-1 for description). After completing repairs to an area which affects the integrity of the gas system, pressurize the system, and check for leaks. If the repair is made shall b to a buried section of the system, a pressure test e accomplished prior to covering the repaired area.	Nothing Additional	See Paragraph 5.3.2.1

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5.3.2.5	Accomplish CM for Fuel Systems	<p>The diesel fuel system supplies fuel for use in engines. This includes stationary and portable generators, pumps, and the tug boat. The diesel fuel system includes, but is not limited to, monitoring system (Veeder Root System), storage tanks, fill pumps, recirculating pumps, supply pumps, valves, environmental controls, level measurement devices, flow indicators, flow elements, pressure regulators, gauges, fittings, and pipe.</p> <p>The propane fuel system provides fuel for heating in areas not serviced with natural gas. The system may include, but is not limited to, fill pumps, storage tanks, valves, pressure gauges, level measurement devices, fittings, and pipe.</p>	31,300 Gallons of Fuel Stocked	See Paragraph 5.3.2.1

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<p>5.3.3</p>	<p>Accomplish CM on Marine Structures, Installed Equipment, Marine Equipment, and Marine Material</p>	<p>Historical costs for this line item are \$20,000/yr under a cost reimbursement type contract.</p>	<p>(See Annex 5.4 for detailed descriptions.) The canal system consists of approximately six miles of canals, banked with rip-rap, with most of the test area drainage directed into the canal through a system of ditches and culverts. The navigation lock allows marine traffic to drop from the canal level to the varying river level, a distance of approximately 18 ft. The bascule bridge is a double span, counter-balanced structure controlled by variable speed electric motors. The canal pumping station consists driven centrifugal</p>	<p>Performed to Availability defined in Annex 5.5. Housekeeping and general appearance must be at a high level due to the public visibility of marine operations.</p>
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<p>5.3.3</p>	<p>Accomplish CM on Marine Structures, Installed Equipment, Marine Equipment, and Marine Material</p>		<p>pumps which are used to pump water from the river into the canal to maintain water level. Docks and piers: 15 oxygen docks, 9 hydrogen docks, 1 construction dock, 1/3 mile of piers, 75v dolphins, 1/4 mile of dock timbers, 100 roller mooring devices, navigation markers, navigation lights, warehouse building, the tugboat Clermont II, skiff with outboard motor, and marine supplies and support equipment.</p>	
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5.3.3.1	Accomplish CM on the Canal System	The Canal System is defined as the surface water, structures, and devices adjacent to the canal system which are installed as part of the canal waterway system, spillway, canal banks, riprap, navigation aids, piling, dolphins, mooring devices, sheet piling and timbers, and other devices which are used or maintained by marine operations.	6 miles of canal system and surrounding. (Historical work load, 20 tasks/year)	See paragraph 5.3.3
5.3.3.2	Accomplish CM on the Bascule Bridge	The Bascule Bridge is defined as the bridge, bridge control building, and all machinery and controls located within and exterior to the bridge structures, navigation lighting, approaches, traffic barriers, and electrical power which supplies the bridge.	1 control building, and surrounding.	See paragraph 5.3.3
5.3.3.3	Accomplish CM on the Navigation Lock	The Navigation Lock is defined as the lock, lock control buildings, hydraulic equipment building, and all machinery and controls located within and exterior to the lock structure.	1 lock, 2 lock control buildings, 1 hydraulic and power supply building and equipment, and surrounding. See MAXIMO for historical workload.	See paragraph 5.3.3

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5.3.3.4	Accomplish CM on the Canal Pump Station	The Canal Pump Station is defined as the building structure, water inlet and discharge sumps and gratings, equipment located within and exterior to the building and associated piping systems.	4 vertical centrifugal pumping units, piping, valves, inlet grating, outlet grating, and surrounding.	See paragraph 5.3.3
5.3.3.5	Accomplish CM on the Marine Operations Building (B 3201)	Building 3201 is used exclusively for storage of marine supplies and equipment and as an office facility.	1 air compressor, warehouse fencing, marine supplies and equipment.	See paragraph 5.3.3
5.3.3.6	Accomplish CM on Marine Signage, Navigation Aids, Safety Equipment, and Other Special Marine Equipment Including the Skiff.	Unless maintained under other Annexes or in other areas of this Annex, cost any items that are not covered above. These include the marine skiff with outboard motor, work barges, dock ramp, fenders and other marine equipment.	3 work barges, dock ramp, marine skiff, and various marine equipment.	See paragraph 5.3.3

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5.3.3.7	Accomplish CM on the NASA Tugboat Clermont II	The tug is critical item of equipment and shall be maintained to strict Coastguard Standards and as determined by the tug captain. This line item includes the tugboat interior and exterior and all equipment mounted on the tug, or mobile equipment used on the tug. This includes mooring lines, winches, fenders, communication equipment, electronic equipment, electrical equipment, engines, compressors, lifting devices, and all other equipment which is part of the tugboat operations.	1 tugboat	See paragraph 5.3.3 Support mission requirements within 2 hours notice.
5.3.3.8	Reporting CM (DR 5-GA24)	The Contractor shall document all CM actions in accordance with Annex 5.4 (CMMS). The Contractor will submit to the CO and designated NASA personnel an equipment failure report. For critical systems in the Test Complexes, these reports shall be submitted within 2 hours of the equipment outage during normal work hours, and within 2 hours of the start of the next normal working day for outages that occur after hours or on holidays.	Nothing Additional	Reports shall be documented in 5 working days from time of completion of repairs.

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5.3.4	Accomplish CM for Roads, Bridges & Storm Drain Systems	The Contractor shall repair or replace components and/or devices found to be defective during scheduled PMs (see Annex 5.2) or in response to trouble calls.	Nothing Additional	See Paragraph 5.3.2.1
5.3.4.1	Accomplish CM for Road System	The Contractor shall perform CM in response to trouble calls, or as a result of discrepancies not corrected during scheduled PMs (see Annex 5.2).	There are approximately 41 miles of primary and 18 miles of secondary roads.	See Paragraph 5.3.2.1
5.3.4.2	Accomplish CM for Bridges (excluding the Bascule Bridge).	The Contractor shall perform CM in response to trouble calls, or as a result of discrepancies not corrected during scheduled PMs (see Annex 5.2).		See Paragraph 5.3.2.1
5.3.4.3	Accomplish CM for Storm Drain System	The Contractor shall perform CM in response to trouble calls, or as a result of discrepancies not corrected during scheduled PMs (see Annex 5.2).	Nothing Additional	See Paragraph 5.3.2.1
5.3.5	Accomplish CM for Fire Protection & Alarm Detection Systems	The Contractor shall repair or replace components and/or devices found to be defective during scheduled PMs (see Annex 5.2) or in response to trouble calls.	Nothing Additional	See Paragraph 5.3.2.1

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5.3.5.1	Accomplish CM for the Security Radio Frequency (RF) Control Console	The Contractor shall perform CM in response to trouble calls, or as a result of discrepancies not corrected during scheduled PMs (see Annex 5.2).	1 Console	See Paragraph 5.3.2.1
5.3.5.2	Accomplish CM for RF Transceivers	The Contractor shall perform CM on any Fire Alarm (FA) RF & transceiver failing a “self test”. Repairs must be completed within 24 hours of detection.	92 RF Transceivers	Repair within 24 hours of detection.
5.3.5.3	Accomplish CM for Fire Alarm (FA) Panels	The Contractor shall perform CM on all fire alarm panels in response to trouble calls and alarms via the RF System or as a result of discrepancies not corrected during PMs.	94 Panels	See Paragraph 5.3.2.1
5.3.5.4	Accomplish CM for Security Systems	The Contractor shall perform CM discovered as a result of trouble calls or false alarms, on all security systems connected to the site wide RF alarm system.	2 Security Systems	See Paragraph 5.3.2.1
5.3.5.5	Accomplish CM for Sprinkler & Suppression Systems	The Contractor shall inspect, repair, and maintain all fire suppression systems including sprinklers, foam, dry chemical, and gas (CO ₂ and Halon) in accordance with applicable National Fire Protection Association (NFPA) 13 & 72. This includes all piping, valves, tanks, pumps, gauges, and associated equipment.	105 Sprinkler Systems & 5 Suppression Systems	See Paragraph 5.3.2.1

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5.3.5.6	Accomplish CM for Fire Hydrants	The Contractor shall inspect, repair, and maintain all fire hydrants at SSC as a result of trouble calls and/or as a result of discrepancies not corrected during scheduled PMs.	146 Hydrants 20 Post Indicator Valves	See Paragraph 5.3.2.1
5.3.6	Accomplish CM for Buildings and Structures	(Intentionally Left Blank)	Nothing Additional	See Paragraph 5.3.2.1

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5.3.6.1	Accomplish CM for Interior Electrical Systems	Electrical work shall include repair of electrical equipment and systems up to 600 volts for each building beginning at and including the main distribution panel. All electrical equipment, connections, feeders, branch circuits, and end use devices shall be repaired or replaced so as to operate as originally intended and designed, and in a safe manner. All workmanship and materials shall conform to the National Fire Protection Association (NFPA) 70, National Electrical Code. Maintenance/Repair of lamps, appliances, and cords owned by individuals is not the responsibility of the Contractor.	Nothing Additional	See Paragraph 5.3.2.1

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5.3.6.1.1	Accomplish CM for Switchboards and Distribution Panel Boards	The Contractor shall ensure that switchboards and panel boards are securely fastened IAW NFPA 70. Defective molded case circuit breakers shall be replaced with circuit breakers of equal rating. Defective adjustable trip circuit breakers shall be repaired, adjusted or replaced. All loose connections shall be tightened.	1,349 Boards	See Paragraph 5.3.2.1
5.3.6.1.2	Accomplish CM for Motor Control Centers	The Contractor shall repair or replace components found to be defective during scheduled PM activities (See Annex 5.2), such as starter module circuit breakers, control transformers, wiring, relays or other devices. CM as a result of trouble calls shall also be included.	112 MCCs	See Paragraph 5.3.2.1
5.3.6.1.3	Accomplish CM for Interior and Exterior Lighting Systems, Emergency and Exit Lighting Systems	Cracked, broken, or missing receptacle and switch faceplates shall be replaced with new plates of the same color and size. Light fixture lenses and globes which are damaged or missing shall be replaced with same size and color. Burnt out bulbs and lamps reported by customers are trouble calls and shall include cleaning of lenses, reflectors, and luminaries to obtain maximum light output.	124 Systems	See Paragraph 5.3.2.1

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5.3.6.1.4	Accomplish CM for Dry Type Transformers	The Contractor shall perform CM in response to trouble calls, or as a result of discrepancies not corrected during scheduled PMs. See Annex 5.2 for PM requirements.	176 Transformers	See Paragraph 5.3.2.1
5.3.6.1.5	Accomplish CM for Uninterruptible Power Supply (UPS) Systems	The Contractor shall troubleshoot and repair or replace components, battery cells, and assemblies to restore equipment to original operating condition.	76 UPS	See Paragraph 5.3.2.1
5.3.6.1.6	Accomplish CM for Generators	The Contractor shall troubleshoot, repair components, or replace with like items so as to operate as originally intended and designed, and in a safe manner.	13 Generators	See Paragraph 5.3.2.1
5.3.6.1.7	Accomplish CM for Cathodic Protection System	The Contractor shall correct all discrepancies documented during performance of scheduled PM. See Annex 5.2 for PM requirements.	1 System	See Paragraph 5.3.2.1
5.3.6.1.8	Accomplish CM for Lightning Protection, Grounding, and Surge Protection Systems	The Contractor shall repair or replace ground conductors, air terminals, and ground rods as a result of damage from excavation or construction to restore the system to its original intended use.	248 Systems	See Paragraph 5.3.2.1

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5.3.6.2	Accomplish CM for HVAC and Refrigeration Equipment and Systems	The Contractor shall perform all necessary repairs to HVAC and Refrigeration Equipment and Systems (identified in the MAXIMO Equipment Database). This includes CM for all peripheral and support equipment, parts and components (such as pumps, motors, actuators, piping, expansion tanks, controls, instrumentation, Variable Air Volume (VAV) boxes, ducts, insulation, and other components necessary to provide a complete and operational system.	Nothing Additional	See Paragraph 5.3.2.1
5.3.6.2.1	Accomplish CM for Centrifugal and Screw Compressor type Chillers and Associated Chilled Water Distribution Systems	Perform CM to meet defined output, reliability, and availability, and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits. Chillers shall be maintained below alarm levels of vibration analysis.	24 Units	See Paragraph 5.3.2.1
5.3.6.2.2	Accomplish CM for Reciprocating Compressor; Water Cooled Chillers, Heat Lifts, and Associated Water Distribution Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits.	10 Units	See Paragraph 5.3.2.1

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5.3.6.2.3	Accomplish CM for Reciprocating Compressor, Air Cooled Chillers and Associated Chilled Water Distribution Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits.	18 Units	See Paragraph 5.3.2.1
5.3.6.2.4	Accomplish CM for Gear Drive, Forced Draft Cooling Towers and Associated Condenser Water Distribution Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	22 Units	See Paragraph 5.3.2.1
5.3.6.2.5	Accomplish CM for Belt Drive, Forced Draft Cooling Towers and Associated Condenser Water Distribution Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	9 Units	See Paragraph 5.3.2.1
5.3.6.2.6	Accomplish CM for Gas Fired Hot Water Heating Boilers and Associated Hot Water Distribution Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	57 Units	See Paragraph 5.3.2.1.

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5.3.6.2.7	Accomplish CM for Electric Hot Water Heating Boilers and Associated Hot Water Distribution Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	3 Units	See Paragraph 5.3.2.1
5.3.6.2.8	Accomplish CM for Condenser Water Chemical Injection Systems	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	14 Units	See Paragraph 5.3.2.1
5.3.6.2.9	Accomplish CM for Pumps (CHW, HW, CW, and Industrial Water Pumps)	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	221 Units	See Paragraph 5.3.2.1
5.3.6.2.10	Accomplish CM for CHW Type AHUs	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	267 Units	See Paragraph 5.3.2.1

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5.3.6.2.11	Accomplish CM for HVUs	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	87 Units	See Paragraph 5.3.2.1
5.3.6.2.12	Accomplish CM for CHW Type CRUs	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	49 Units	See Paragraph 5.3.2.1
5.3.6.2.13	Accomplish CM for DX type CRUs (Water Cooled and Air Cooled)	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits.	52 Units	See Paragraph 5.3.2.1
5.3.6.2.14	Accomplish CM for DX type Air Conditioning Equipment, Including Split Systems, Unitary Units, RTUs, Window Units, etc. (Water Cooled and Air Cooled)	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits.	407 Units	See Paragraph 5.3.2.1
5.3.6.2.15	Accomplish CM for Unit Heaters	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	159 Units	See Paragraph 5.3.2.1
5.3.6.2.16	Accomplish CM for Fans; Blowers, Vents, and	Perform CM to meet defined output, reliability, and availability and to preserve and protect	541 Units	See Paragraph 5.3.2.1

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	Hoods	equipment through life cycle.		
5.3.6.2.17	Accomplish CM for Air Compressors and Air Dryers	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits.	34 Compressors 25 Dryers	See Paragraph 5.3.2.1
5.3.6.2.18	Accomplish CM for Kitchen Exhaust Hoods	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	7 Units	See Paragraph 5.3.2.1
5.3.6.2.19	Accomplish CM for Walk-in Coolers	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits .	3 Units	See Paragraph 5.3.2.1
5.3.6.2.20	Accomplish CM for Refrigeration Appliances (Ice Makers, Refrigerators, Freezers, etc)	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle. Maintain refrigerant leaks below EPA established limits.	33 Units	See Paragraph 5.3.2.1
5.3.6.3	Accomplish CM for Plumbing and Miscellaneous Mechanical	The Contractor shall perform all necessary repairs to the plumbing and miscellaneous mechanical system.	Nothing Additional	See Paragraph 5.3.2.1

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5.3.6.3.1	Accomplish CM for Potable Water System	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	See Annex 5.2	See Paragraph 5.3.2.1
5.3.6.3.2	Accomplish CM for Wastewater System	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	See Annex 5.2	See Paragraph 5.3.2.1
5.3.6.3.3	Accomplish CM for Natural Gas System	Perform CM to meet defined output, reliability, and availability and to preserve and protect equipment through life cycle.	See Annex 5.2	See Paragraph 5.3.2.1
5.3.6.3.4	Accomplish CM for Plumbing and Fixtures	All sinks, tubs, urinals, basins, faucets, lavatories, showers drain lines, etc. shall be free of leaks and drips, operate properly, drain freely, and free of excessive dripping, cracks, and coloration. All fixtures and components thereof that cannot be repaired shall be replaced with fixture that are in strict compliance with BOCA Basic Plumbing Code 978-4 th Edition.	Approximately 526	See Paragraph 5.3.2.1

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5.3.6.3.5	Accomplish CM for Water Heaters	Water heaters shall be repaired or replaced to provide hot water at least 140° F without leaks. Controls, control devices, and safety devices shall operate safely and properly. Water heater insulation jackets (3 inch minimum thickness) shall be installed on all replacement water heaters and/or existing units when excessively worn, damaged, or missing.	145 Water Heaters	See Paragraph 5.3.2.1
5.3.6.3.6	Accomplish CM for Drinking Fountains	The Contractor shall repair and replace all water fountains and their component parts. Fountains shall be free of leaks and shall operate in accordance with the manufacturer's design specifications. All damaged and worn component parts shall be replaced. Replacement fountains or component parts shall be equal to or better in quality, size, and capacity to that being replaced. Fountains shall be firmly secured to support structures and free of movement and vibration	240 Drinking Fountains	See Paragraph 5.3.2.1
5.3.6.4	Accomplish CM for Carpentry Architectural Features	Carpentry and masonry repair, and minor construction services shall be provided in accordance with the definitions, procedures, and standards specified in this subsection and in the Facilities Engineering Handbook, and in SPECSINTACT (the automated specification	Nothing Additional	See Paragraph 5.3.2.1

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		processing system used by NASA).		
5.3.6.4.1	Accomplish CM for the Building Interior Features Listed Below:	This section is for repair of damaged building interiors, as defined below; however, worn or deteriorated building interiors will be repaired or replaced under a service request.	Building Drawings in C.E.F. for Sections 5.3.6.4.1 thru 5.3.6.4.3.	See Paragraph 5.3.2.1

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5.3.6.4.1 Cont	Floors & Floor Coverings	Damaged flooring, sub-flooring, and structural members shall be repaired or replaced to provide a structurally sound, uniform, and aesthetic surface that is free of cracks, breaks, chips, tears, gouges, stains, and buckling.		See Paragraph 5.3.2.1
	Resilient Tiles	Damaged tiles shall be replaced with matching tiles of original thickness and shall be removed without affecting adjacent tiles. If tile is replaced adjacent to a wall, vinyl baseboards shall be replaced. Installation shall be in accordance with the tile manufacturer's instructions.		See Paragraph 5.3.2.1
	Linoleum and Vinyl Sheet Flooring	Areas of flooring having gashes or other defects shall be replaced with matching sheet flooring of the same thickness as the original. Damaged flooring shall be removed without affecting adjacent areas. The patch shall be installed using adhesive as recommended by the flooring manufacturer. If flooring is replaced adjacent to a wall, vinyl baseboard shall be replaced.		See Paragraph 5.3.2.1

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5.3.6.4.1 Cont.	Finished Wood Flooring	Loose or slightly warped flooring shall be renailed or reglued to subflooring and/or concrete slabs with appropriate adhesive. Scarred flooring that has holes and gashes less than ½ inch wide shall be filled and sealed. Damaged flooring shall be removed and replaced without damage to adjacent walls or flooring.		See Paragraph 5.3.2.1
	Carpet	Damaged carpeting shall be stretched and repaired to match existing carpeting.		See Paragraph 5.3.2.1
	Concrete Floors	Cracked, broken, or spalled areas shall be patched with a non-shrinking cement mortar. The patch shall be finished even with the adjacent surfaces and finished to match existing texture.		See Paragraph 5.3.2.1
	Vinyl Baseboards	Damaged sections of vinyl baseboard shall be removed and replaced with matching baseboard.		See Paragraph 5.3.2.1
	Ceramic Tile	Ceramic tiles that are broken, missing, cracked, or discolored shall be replaced. Floor tiles shall be regouted, to provide a waterproof seal. In those cases where re placement tiles of an exact match cannot be found, the Contractor shall be required to remove and replace non-defective tiles to create a pattern and minimize the visual effect of		See Paragraph 5.3.2.1

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		the mismatch.		
5.3.6.4.1 Cont.	Interior Walls, Ceilings, and Trim	Damaged walls, ceilings, and related trim shall be replaced to provide an attractive surface free of noticeable cracks, spalls, raised areas, holes, dents, marks, and stains. Wood trim items and ceiling fixtures shall be removed as necessary to provide access to the damaged area. On completion of the repair activity, fixtures and trim shall be reinstalled, nails set and filled and items repainted or refinished to restore them to their original condition		See Paragraph 5.3.2.1

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	Drywall	Small dents and holes shall be repaired with spackle over a backing plate when necessary. Spackle shall be feathered on the adjacent surfaces. Holes and other defects in wallboard between two studs or beams shall be repaired by removing a rectangle of gypsum board to the center of the adjoining studs or beams. Replacement gypsum board shall be of the same thickness and texture as the adjacent sheets.		See Paragraph 5.3.2.1
5.3.6.4.1 Cont.	Vinyl Wall Covering	Wall covering that has been ripped, scarred, stained, or otherwise damaged shall be replaced as necessary. Wall covering shall be repaired if the damaged area can be patched and is not noticeable. Wall covering that is extensively damaged or for which a matching wall covering is not available shall be repaired by replacing the wall covering on the entire wall. If matching wall covering is not available, the Contractor shall find a comparable substitute. The Contracting Officer will approve all replacement wall coverings that do not match the existing wall covering. Replacement wall covering shall be hung according to the manufacturer's recommendations.		See Paragraph 5.3.2.1

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	Ceramic Tile	Ceramic tiles and window stools and marble saddles that are broken, missing, cracked, or discolored shall be replaced and required. Tiles shall be regouted to provide a waterproof seal. In those cases where replacement tiles of an exact match cannot be found, the Contractor may be required to remove and replace non defective tiles to create a pattern and minimize the visual effect of the mismatch.		See Paragraph 5.3.2.1
5.3.6.4.1 Cont.	Suspended Ceilings	Broken and badly stained ceiling tiles shall be replaced with tiles of the same material, style, size, and color. Damaged and broken suspended grid system shall be repaired or replaced as necessary to provide a suspended ceiling system as designed.		See Paragraph 5.3.2.1

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	Doors	Interior doors shall be maintained and repaired to operate smoothly without binding or sticking. Damaged, deteriorated, or missing doors and associated hardware shall be repaired or replaced. The replaced doors shall be the same type and have the same finish as the original doors. All replacement doors shall be installed with the hardware from the damaged door unless the hardware is unrepairable. Small holes in door faces shall be filled and finished to match the surrounding door surface.		See Paragraph 5.3.2.1
5.3.6.4.1 Cont.	Overhead or Rolling Doors and Vault Doors	Rails shall be checked for alignment. Rusted or corroded areas shall be repaired or replaced. All bearings, rollers, gears, and pulleys shall be properly lubricated. All hangers, bolts, springs, and pins shall be free of rust and corrosion and shall be tightly mounted and secured. Motors and controls shall operate properly and be properly lubricated. Cables and fusible links shall be correctly installed and free from corrosion and rust.		See Paragraph 5.3.2.1

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	Stairs & Stairwells	The Contractor shall secure loose treads, risers, stringers, handrails, brackets and other components. Badly damaged stair and handrail components shall be refinished to match original components. Damaged stair finish shall be repaired. Trim items susceptible to damage during the repair activity shall be removed and reinstalled upon completion of the repair activity.		See Paragraph 5.3.2.1
5.3.6.4.1 Cont.	Traverse/Curtain Rods	Sagging and/or non-functioning rods shall be repaired to an operating condition if possible. If beyond economical repair, as determined by the Contracting Officer, rods shall be replaced. Loose brackets shall be secured. Broken cords shall be replaced. Broken or missing drapery slides shall be replaced. Rods shall be level and parallel with the ceiling. Additional support brackets shall be installed to support sagging rods.		See Paragraph 5.3.2.1
	Venetian Blinds and Shades	Venetian blinds and window shades shall be restored to a smooth operating condition. Cracked or damaged slats shall be replaced. Broken or worn cords shall be replaced. Soiled or worn tapes shall be replaced. Loose or missing brackets and supports shall be secured or		See Paragraph 5.3.2.1

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		replaced. Damaged or deteriorated hardware shall be replaced or reworked to operating condition. Damaged rails and torn fabric shall be repaired. If beyond economical repair, as determined by the Contracting Officer, or missing, venetian blinds and shades shall be replaced.		

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5.3.6.4.1 Cont.	Cabinets and Countertops	Damaged or deteriorated cabinets, shelving, and countertops shall be repaired or replaced. Missing or inoperative hardware shall be replaced. Countertops shall be free of warped, chipped, burned, cut, or otherwise marred areas.		See Paragraph 5.3.2.1
	Interior Accessories	The Contractor shall repair or replace damaged, inoperative, or missing interior accessories including, but not limited to, towel bars, shower curtain rods, medicine cabinets, mirrors, and door stops. Loose accessories shall be resecured. Damaged or missing items shall be replaced with items matching the original. Replacement hardware shall conform to the Building Hardware Manufacturer's Association (BHMA) Product Standard . Hardware items requiring lubrication shall be lubricated and restored to an operable condition. Repairable rusted metal components shall be cleaned of all rust, coated with a rust inhibitor, and restored to an operational condition.		See Paragraph 5.3.2.1
5.3.6.4.2	Accomplish CM for Building & Structure Exterior features listed below:	This Section is for repair of damaged building exteriors, as defined below. Worn or deteriorated building exteriors will be repaired or replaced under Annexes 5.6 or 5.7 .	118 Buildings	See Paragraph 5.3.2.1

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5.3.6.4.2 Cont.	Exterior Walls	Damaged wall areas shall be repaired or replaced to restore them to a serviceable, structurally sound, and watertight condition. This includes, but is not limited to, replacing damaged masonry units; tuck pointing loose or eroded mortar joints; sealing penetrations in wall openings; replacing damaged or deteriorated structural members; siding underlayment and exterior trim; replacing miscellaneous hardware items; and removal of graffiti or other defects that would render an unsightly appearance to exterior walls.		See Paragraph 5.3.2.1
	Masonry	Damaged masonry units (brick or concrete block) shall be replaced with a unit of the same size, color, and texture. The mortar shall be completely removed and the cavity cleaned and all debris removed. The masonry unit shall then be resealed in mortar and the remaining cavity packed with mortar. All joints between masonry units shall be pointed to match existing. Damaged mortar joints shall be chipped out, cleaned, and dampened before being repainted. Repainted joints shall match undamaged joints.		See Paragraph 5.3.2.1

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5.3.6.4.2 Cont.	Hardboard Siding	Damaged hardboard siding shall be removed without damaging adjacent siding or underlayment. Replacement siding shall match the existing siding in color, texture, and material. Nails shall be of the type and size specified by the manufacturer and shall be driven flush. All joints shall be caulked.		See Paragraph 5.3.2.1
	Concrete	Badly damaged concrete walls shall be repaired with a nonshrinking cement mortar and painted to match.		See Paragraph 5.3.2.1
	Artificial Stucco	Damaged stucco walls shall be repaired and painted to match.		See Paragraph 5.3.2.1
	Metal Siding	Small areas of damaged wall may be spliced with like metal panels; larger damaged areas are to be replaced with like panels.		See Paragraph 5.3.2.1
	Seams	Seams between window or door frames and exterior walls shall be caulked. Old joints shall be scraped and cleaned with a solvent recommended by the caulking manufacturer. The caulking shall be applied according to the manufacturer's directions.		See Paragraph 5.3.2.1

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5.3.6.4.2 Cont.	Metal Flashing and Trim	Damaged metal flashing and trim shall be repaired or replaced to match the existing trim.		See Paragraph 5.3.2.1
	Exterior Trim	Exterior trim, including all exterior moldings, millwork, shutters, and cornice shall be repaired or replaced.		See Paragraph 5.3.2.1
	Exterior Concrete and Masonry Structures	Exterior concrete (portland cement and asphalt) surfaced areas within five feet of the building or structure, such as patios, equipment access pits, sidewalks, and steps, shall be repaired so that they are structurally sound, at original alignment and grade, and are free of damage and major cracks. Roots that cause or contribute to concrete damage shall be removed and the area backfilled. Masonry fences, planters, and steps shall be repaired to replace missing or broken masonry units and repair deteriorated mortar parts, gaps, breaks, and loose components.		See Paragraph 5.3.2.1
	Exterior Accessories	Damaged or missing building numbers, exhaust fan vent caps, chimney caps, and other miscellaneous components and hardware shall be installed, repaired, or replaced.		See Paragraph 5.3.2.1

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5.3.6.4.2 Cont.	Stairs	Damaged stairs, stairways, and fire escape stairs (including treads, risers, nosings, stringers, brackets, balustrades, handrails, and other components) shall be repaired or replaced.		See Paragraph 5.3.2.1
	Doors, Windows, and Screens	Doors, storm doors, windows, storm windows, and screens shall operate smoothly without binding or sticking in accordance with the manufacturer's design. Damaged or missing doors, windows, screens, and associated components shall be repaired or replaced. Caulking, glazing, and weather-stripping shall be fully intact to maintain a fully weather tight seal. Replacement glass shall be of the same size, type, and quality as the existing glass.		See Paragraph 5.3.2.1
	General Doors	Damaged, warped, swollen, and sagged doors shall be repaired/replaced with doors the same type and size. Exterior doors shall be removed and replaced the same work day. All replaced doors shall be installed with hardware from existing doors, if practicable. Cracked and broken glass in doors shall be replaced with the same quality, type, and size.		See Paragraph 5.3.2.1

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5.3.6.4.2 Cont.	Sliding Doors	Damaged metal and wooden sliding doors and related hardware shall be repaired/replaced with doors and related hardware of the same type, size, and color.		See Paragraph 5.3.2.1
	Screens	Replacement screening shall be of the same material as the existing metallic screening. Small holes (less than 4 square inches) in screens may be repaired with a patch matching the existing screening.		See Paragraph 5.3.2.1
	Hardware	Damaged, inoperable, or missing hardware such as hinges, locks, striker plates, latches, keepers, window operating mechanisms, door closures, springs, etc. shall be adjusted, repaired, or replaced. Replacement hardware shall match existing hardware in type, size, quality, and finish and meet the Building Hardware Manufacturer's Association (BHMA) Product Standards. Hardware shall be installed in accordance with the manufacturer's recommendations.		See Paragraph 5.3.2.1

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5.3.6.4.2 Cont.	Overhead or Rolling Doors and Blast Doors	Rails shall be checked for alignment. Rusted or corroded areas shall be repaired or replaced. All bearings, rollers, gears, and pulleys shall be properly lubricated. All hangers, bolts, springs, and pins shall be free of rust and corrosion and shall be tightly mounted and secured. Motors and controls shall operate properly and be properly lubricated. Cables and fusible links shall be correctly installed and free from corrosion and rust.		See Paragraph 5.3.2.1
5.3.6.4.3	Accomplish CM for the Miscellaneous Structures	Repair or replace damages to flagpoles, monuments, bleachers, and towers.	130 Structures	See Paragraph 5.3.2.1
		Repair or replace damaged fences & gates including, but are not limited to, the following: repairing holes in the chain link fence and wire cages; stringing barbed wire on top of the fence; replacing or resetting fence support stanchions; replacing or repairing hinges and locking devices; and removing rust and painting fences.		See Paragraph 5.3.2.1
		Repair sidewalks (5 feet beyond building) that have buckled more than 1 inch out of alignment. Repair so that they are structurally sound, in alignment, at original grade, and free of damage and cracks. Where roots have caused buckling, remove roots, and backfill.		See Paragraph 5.3.2.1

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5.3.6.5	Accomplish CM for EMCS	Contractor shall perform all necessary CM for the EMCS System. This shall include CM for the Landis & Staefa System 600 Host as well as all associated field panels, wiring, and instrumentation.	See System Definition, Annex 5.1, Table 5.1-1.	Time constraints given in Table 5.3-1 or 10 days (whichever is less). Output as defined in System Definition Table 5.1-1 and in this Annex.
		CM activities shall not modify the general configuration or the functionality of the EMCS without Government Approval.		Repair damage, deterioration, and components to protect reliability

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		<p><u>IMPORTANT:</u> Note that most field cabinets and instrumentation are directly associated with and required for the operation of equipment or systems identified as part of this contract. Where failure of EMCS field cabinets or instrumentation results in malfunctions or loss of availability for equipment or systems, Availability Losses or Malfunctions will be accrued against the affected equipment/systems until the equipment/systems are restored to normal operation. The allowed repair time for EMCS cabinets, instrumentation, and wiring does not relieve/reduce Contractor responsibility and liability for maintaining Availability of the controlled equipment/systems.</p>		<p>Provide documentation per 5.3.3.8.</p>

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5.3.6.5	Continuation Accomplish CM for EMCS	Where monitoring capability is lost, the Contractor shall be responsible for monitoring equipment to maintain reliability and protect against damage. Where equipment is operated in hand mode, the Contractor shall also start/stop equipment to maintain energy efficient operation.		
5.3.6.5.1	Accomplish CM for EMCS Host	Perform CM for the System Central Host to restore the system to fully functional and reliable condition, including the Central Processor, PC terminals, keyboards, monitors, printers, tape/disk drives, power protection devices, hardware, firmware, software, interconnecting wiring, and other appurtenances required to have a completely functional and maintainable host.	One Central Processor, 2 PC Terminals. See System Definition, Annex 5.1, Table 5.1-1.	Restore complete, functional, and reliable operation. Time constraints in Table 5.3-1 or 10 days (whichever is less).
5.3.6.5.2	Accomplish CM for Programmable Field Cabinets.	Perform CM for the field cabinets to restore fully functional and reliable condition, including MBCs, SCUs, UCs, wiring, uninterruptible power sources, and other appurtenances required to provide a complete, functional and reliable microprocessor based field control cabinet.	63 ea MBCs. 87 ea SCUs. 34 ea UCs.	Restore complete, functional, and reliable operation. Time constraints in Table 5.3-1 or 10 days (whichever is less).

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5.3.6.5.3	Accomplish CM for Instrumentation, Sensors, and Wiring.	<p>Perform CM for instrumentation, sensors, and wiring.</p> <p>It is important to note that most of these points are directly related to the operation and/or monitoring of systems and equipment. The 45 day requirement is the maximum allowed time for repair where points do not result in malfunctions or availability losses to an equipment item or system (e.g. points which only monitor Criticality Level III & lower equipment/conditions and do not actually perform a control function. When loss of an EMCS point results in malfunction or loss of availability of an equipment item or system, the repair time will be established by the equipment/system as defined in Annex 5.5.</p>	Approximately 14,000 field points.	<p>Restore complete functional and reliable operation.</p> <p>Respond and repair within time constraints established in Table 5.3-1 or 45 days (whichever is less).</p>

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5.3.6.6	Accomplish CM for Elevators	Provide CM for the passenger and freight, cable and hydraulic elevators, and dumbwaiters listed in the Inventory of Vertical Transportation Equipment List in Exhibit 5. Perform work necessary to determine the cause of system and equipment malfunctions, eliminate the cause(s), and restore the system or equipment to satisfactory working condition. All repair work and replacement parts shall satisfy the recommendations and requirements of ASME A17.1. Major repairs or modifications as defined by ASME A12.1 require recertification. PM including routine and periodic inspections/tests and recertification shall be accomplished under Annex 5.2.	Nothing Additional	See Paragraph 5.3.2.1
5.3.6.7	Accomplish CM for Built in Cranes	All repair work and replacement parts shall satisfy the recommendations and requirements of ASME B30.10 through B30.13, B30.15 through B30.17 "Safety Standards for Cableways, Cranes, Derricks, Hoists, Jacks and Slings." Repairs or alterations to non-lifting, secondary lifting, or holding components such as suspension assemblies, electrical systems, crane cab, do not	Exhibit 1	See Paragraph 5.3.2.1

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5.3.6.7	Continuation Accomplish CM for Built in Cranes	necessitate the need for a load test; although a functional check shall be performed to determine if the repairs or alterations are acceptable.		
5.3.7	Accomplish Trouble Call Work	See description of trouble calls in General Information 5.3.1.5		
5.3.7.1	Receive Trouble Calls	The Contractor's work control center will receive all trouble calls 24 hours per day, seven days a week, including weekends and holidays and classify each call. All telephone calls shall be answered within 30 seconds by an individual fully familiar with the Contractor's work control procedures and the terms and conditions of this contract. A description of the problem or requested work, date and time received, location, requestor's name organization and telephone number and other appropriate information will be placed on a Work Order and processed by the Contractor. The data will be entered into the CMMS by the Contractor daily.	Average of 7,500 Trouble Calls.	No instance of phone not being answered. No instance of work not being entered into MAXIMO.

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5.3.7.2	Respond to & Work Trouble Calls	The Contractor shall have procedures for picking up trouble call work authorizations from the Contractor's work control center during regular working hours, responding to emergency and routine trouble calls 24 hours per day, seven days a week, including weekends and holidays. A single local telephone number shall be provided by the Contractor for receipt of all trouble calls.	See Paragraph 5.3.7.1	See Paragraph 5.3.2.1
5.3.7.2.1	Emergency Trouble Calls (Priority 1)	<p>Emergency trouble calls shall be responded to immediately and the Contractor must be on the job site and working within 30 minutes after receipt of an emergency trouble call during core hours. After core hours and when workers must be called in, response time is 2 hours.</p> <p>The Contractor shall work continuously without interruption and shall arrest the emergency condition before departing the job site (e.g., shut off water, close a gas valve, temporarily patch a roof leak, etc.). If further labor and material (follow up work) are required to complete the repair, the emergency repair will be stabilized and accomplished in accordance with normal CM.</p>		No instance of non-response.

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5.3.7.2.2	Routine Trouble Calls (Priority 2,3,4)	Routine trouble calls are: <ul style="list-style-type: none"> a. minor facility problems that are too small to be estimated (usually less than about \$2,000) b. generally responded to by grouping according to craft and location; c. do not reasonably require detailed job planning; d. and normally accomplished during regular working hours, Monday through Friday. All routine trouble calls shall be completed as specified in Table 5.3-1.		Respond to all routine trouble calls.

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5.3.7.2.3	Trouble Calls for Lighting	The Contractor shall respond to trouble calls for replacing burned out or blinking light bulbs and tubes between scheduled relamping services; and is a special class and is an exception to Table 5.3-1 response times. Relamping will be accomplished under Annex 5.7 Programmed Maintenance. Trouble calls for lighting in work areas shall be responded to within 2 days during regular working hours. Lighting outages in common use areas such as halls, restrooms, and lobbies that are not a safety problem may be scheduled with work area trouble calls. Lighting trouble call work includes cleaning of lens, lenses reflectors, and luminaries to obtain maximum light output.		Respond to all lighting trouble calls.
5.3.7.2.4	Trouble Calls Beyond Scope of Routine Call	When the Contractor receives/responds to a routine trouble call and believes that the work is beyond the scope of a trouble call, as defined above, the work shall be performed as normal CM.		Perform work either as trouble call or CM.

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5.3.7.2.5	Completed Trouble Calls	<p>Within 1 working day after completion of each trouble, the Contractor shall notify the requestor of completion and add the following information to the CMMS and to the work authorization form: (See 5.4.7.11)</p> <ul style="list-style-type: none"> a. Description of work actually completed. b. Brief description of material and parts used, including quantities. c. Date and time work began. d. Date and time work was completed. e. Validation of the Contractor's craftsman performing the work (or supervisor), indicating that the work has been completed. 	Trouble Calls average 7,500	No instances of undocumented trouble call work.
5.3.8	Accomplish CM for Installation-Accountable Government Property (IAGP)	The Contractor shall plan, provide, and accomplish the repair of all IAGP as listed in J-10 List 1 and 2.	Nothing Additional	See Paragraph 5.3.2.1
5.3.8.1	Accomplish CM for Special Purpose Mobile Equipment (SPME)	All essential Special Purpose Mobile Equipment shall be repaired in accordance with industry standards.	See Exhibit 4	See Paragraph 5.3.2.1

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Table 5.3-1

“Corrective Repair Times”

Priority ①	Maximum Repair Time
1. Emergency	Work Immediately ②
2. Urgent	1 Day
3. Priority	7 Days
4. Routine	90 Days Â
5. Discretionary	1 Year
6. Defer to BMAR *	Indefinite

Notes:

1. See Annex 5.1 for priority definitions.
2. Priority 1 work will begin immediately and continue without interruption and shall arrest the emergency condition before the Contractor departs the job site.

*The Contractor may submit routine (Priority 4) work to the CO for inclusion in the Backlog of Maintenance and Repair (BMAR). With CO concurrence, this work will be removed from CM and added to the BMAR.

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5.4 OPERATIONS

5.4.1 General Information

5.4.1.1 Annex Description

This Annex identifies the day-to-day operation, standing, recurring, and miscellaneous services required for the Structures, Facilities, Utilities, Systems/Subsystems and Installation-Accountable Government Property (SFUSS & IAGP). Even though specific guidelines/requirements and minimum standards have been established, the services to be performed will rely heavily on knowledgeable, experienced individuals capable of safely and efficiently operating the SFUSS & IAGP. The Contractor is required to operate the SFUSS & IAGP, providing cost effective and energy efficient usage. Services addressed in this Annex include operator maintenance but do not include Corrective Maintenance (CM) or Preventive Maintenance (PM) services (See Annex 5.2 for PM and Annex 5.3 for CM).

5.4.1.2 Minimum Standards

Operation of systems, included in this Annex, shall include necessary skills and procedures, tools & equipment to facilitate SFUSS & IAGP operations, to provide intended functions, outputs, redundancy, and availability as defined in Annex 5.5.

5.4.1.3 Common Terms Used in this Annex

For additional terms and definitions, not listed here, see Annex 5.1.

Monitor and Inspect - These terms are used in conjunction with “operate” to delineate system activities other than actual operations which require periodic staffing. The Government requires that these activities would be accomplished by trained personnel with ability to recognize abnormal conditions and evidence of potential problems.

Recurring Work – Work which is performed under the contract which is not a part of the Scheduled Maintenance and Repair Program and is required an undetermined number of times during the year, but is required at least once. This work will be accomplished as required. An example is implementation of the Hurricane Plan which will be performed (partially) once per year at the start of hurricane season with the resumption and completion of the plan carried out dependent on the number of storms which threaten the Gulf Coast.

Staff and Operate - This term is used for systems that require continuous staffing during the operational period. Personnel may also operate other systems within the immediate vicinity.

Standard Operating Procedure (SOP) - This is a standing procedure that provides step-by-step instructions to operate systems. It is used for activities that commonly occur. The SOP requires Contracting Officer (CO) review and shall be

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maintained in electronic format easily accessible to the Government. Documents shall become Government property and shall be stored at CEF. (See DR 5-GA09)

Standing Work – Work which is performed under the contract which is not a part of the Scheduled Maintenance and Repair Program and is required a pre-determined number of times during the year. The schedule can be specifically called out as in, once per hour or may be left to the Contractor, as in, once annually. An example is meter reading which always occurs once per month.

Operate - This term is used for systems that require periodic operational activities but not continuous staffing. Personnel may be available for other contract activities. Operations include the first hour of trouble-shooting/investigation of a malfunction or availability loss (See Table 5.5-2 for response time), and also includes operational support for planned outages required for Utility PM's.

Utility Process Plan (UPP) - This is a one time per operation. Contractor generated, document that provides step-by-step instructions that establish responsibility and control system configuration changes. It provides details such as lockout/tag-out, switch operation, valve operation, coordination, etc. Documents shall become Government property. (See DR 5-FA05)

5.4.1.4 Operations Guidelines for this Annex

The Contractor shall provide personnel with qualifications, technical knowledge, and skills required to manage, supervise, operate, and maintain the SSC SFUSS & IAGP. Major configuration changes or changes which place the SFUSS & IAGP in an abnormal configuration shall be accomplished with a UPP. If the change is accomplished with a SOP, then the UPP is not required. Operational inspections/logging require a check sheet to document time/date, items inspected, conditions found, actions taken, and identification of inspector. All operations shall be performed by trained/certified personnel. The SFUSS & IAGP located in test areas and secure resident agency areas require special access requirements. These requirements limit access to individuals who have a need to be in these areas, and are aware of restrictions and notification requirements for activities within these areas (See SOI 8080-0040 & SOI 8080-0029).

5.4.1.5 Operations Plan

The Contractor shall prepare an Operations Plan for all SFUSS and IAGP covered under this Annex. The Plan shall provide details as to how the Contractor intends to perform work necessary to meet all requirements for Operations under this Annex, including operations required to meet Availability as defined in Annex 5.5. This plan shall also address how the Contractor intends to meet personnel requirements, including certifications, training, etc. Where operations require specific skills and/or certification, the Contractor shall submit planned

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methods for addressing attrition or other necessary contingency planning. DR 5-GA10 Plan shall be submitted for CO approval within 60 days from contract start, and be updated annually.

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5.4.2	Personnel Requirements	See Annex 1 and information below.	Nothing Additional	Current certifications or evidence of experience is on hand for individuals performing services.
5.4.2.1	Electrical Personnel			
5.4.2.1.1	Provide Lineman/Linemen to perform operations and services on the 13.8 kV High Voltage System	Each lineman shall have satisfactorily completed an initial apprenticeship-training program for overhead and underground systems with annual re-certification as per OSHA Regulation Standard 29 CFR 1910.269 Electric Power Generation, Transmission and Distribution and ANSI C2 National Electrical Safety Code. An acceptable apprentice-ship training program shall be similar to that of Mississippi Power Company (MPCo) with a term of 4 to 5 years and shall ensure that the candidate acquires and demonstrates proficiency in the safe work practices involved in high voltage overhead and underground systems.	Contractor Determined	Be able to show compliance with training and knowledge requirements for individuals working on high voltage power systems.

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5.4.2.1.2	Provide High Voltage System Engineer/Manager with the Qualifications, Technical Knowledge, Demonstrated Experience and Skills Required to Efficiently Manage, Supervise, Operate and Maintain the SSC 13.8 kV Electrical System	The electrical engineer/manager shall have successfully completed a 4-year electrical Engineering Bachelor’s degree and have at least 6 years experience in high voltage system operations in distribution systems similar or larger in size and type as those at SSC. Specific experience shall include design and cost estimating; knowledge and ability to generate and modify electrical and geographical system utility maps, one-line drawings, and shop drawings; perform trouble shooting and repair; system load and fault current analysis; relay coordination; tests and measurement; system operation and switching; operation of centrally located back-up generators; and management of R.O.W. re-clearing.	Contractor determined to support Performance Requirement	Current degrees, certifications and experience history shall be on file for Government review.
5.4.2.2	Potable Water			
5.4.2.2.1	Provide Potable Water System Certified Operator	Operator shall be certified by the State of Mississippi (Mississippi State Department of Health per MS Code of 1972; 41-26-5 and 41-26-14) for drinking water system operation. Operator shall be trained and experience in operations of potable water system. The systems shall be operated in a manner to ensure compliance with permit requirements for each potable water well.	Contractor Determined minimum of one on staff at all times.	Show compliance with certification and operating knowledge required to maintain potable water system within requirements of this contract.

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5.4.2.2.2	Provide Potable Water System Technician	Technician shall be trained and experience in operations of potable water system.	Contractor Determined Minimum of 1 on staff at all times.	Show operating knowledge required to maintain potable water system within requirements of this contract.
5.4.2.3	Sanitary Sewage			
5.4.2.3.1	Provide Sewage Treatment System Certified Operator	Operator shall be certified by the State of Mississippi (Mississippi Department of Environmental Quality) to operate Sewage Treatment Systems. Operator shall be trained and experienced in operations of the wetland type lagoons and rock-reed systems.	Contractor Determined Minimum of 1 on staff at all times.	Show compliance with certification and operating knowledge required to maintain effluent water quality within requirements of this contract.
5.4.2.3.2	Provide Sewage Treatment System Technician	Technician shall be trained and experienced in operations of the wetland type lagoons/rock -reed systems.	Contractor Determined Minimum of 1 on staff at all times.	Show operating knowledge required to maintain effluent water quality within requirements of this contract.

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5.4.2.4	EMCS			
5.4.2.4.1	Provide EMCS System Operators	Shall demonstrate practical working knowledge of industrial HVAC systems and other related industrial utility systems.	Contractor Determined. Minimum of one operator continuously.	Provide staff per plan (DR 5-GA10).
		Operators shall also demonstrate site-specific knowledge and training required prioritizing EMCS activities, notifications, and callouts, and performing other real-time management decisions. Operators shall possess an understanding of the facility service organization structure and system; failure response procedures; and implementation practices for both working and non-working hours. Operators shall demonstrate the ability to utilize information collected through site resident agencies/customers, control system feedback, and field technicians to make sound decisions. Utilities Operations Plan costed under Annex 5.4.1.5 (DR 5-GA10) shall address specific procedures/methods used to achieve EMCS operator qualifications as well as ensure that EMCS related SSC site specific operational requirements are continuously met.		

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5.4.2.4.2	Provide EMCS System Chief Operator	Chief Operator shall possess same technical qualifications as Operators; additional requirements shall be as follows. 3 years (minimum) as an EMCS operator; Supervisory experience, training or equivalent; 5 years (minimum) in engineering technology field or equivalent practical working knowledge of industrial HVAC, automation, or remote utility control systems.	Contractor Determined. Minimum of 1.	Demonstrate knowledge of EMCS and SSC site specific operational requirements.
5.4.2.5	Establish, Maintain and Document a Certification Program for Equipment Operators	The Contractor shall establish, maintain, and document a certification program for operators of built-in cranes, monorails, hoists, and Special Purpose Mobile Equipment (SPME). The certification shall be based on successfully completed classroom instruction and testing, and hands on training and demonstrated proficiency. Training shall be provided by an independent third-party training Contractor. The certification program shall meet NASA-STD-8719.9 and SSC SWI-8834-0001(latest edition), OSHA requirements and receive CO approval.	One operator certification program.	The program shall meet NASA-STD-8719.9 and SSC SWI 8834-0001 (latest edition) and OSHA requirements. All documentation concerning certification, including evidence of operator certification, shall be maintained by the Contractor and be available for NASA review.

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5.4.2.5.1	Provide Licensed Operators for Built-in Cranes, Monorails, and Hoists	A certification from the above certification program (5.4.2.5) is required for operating both critical and non-critical lifting equipment. The inventory referenced in the work load data column gives the responsible operator for each lifting device. The Contractor shall provide certificated operators for the equipment where he is listed as the responsible operator.	See Exhibit 1, Inventory of built-in cranes, monorails, and hoists. In the FOS contract certification of non-Contractor personnel will be provided upon request.	Only certificated operators will operate the lifting equipment for which the Contractor is shown as the responsible operator. No instance of non-certificated operators operating the lifting equipment for

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				which the Contractor is shown as the responsible operator.
5.4.2.5.2	Provided Certificated Operators for Special Purpose Mobile Equipment (SPME)	A certification from the above certification program (5.4.2.5) is required for operating both critical and non-critical SPME.		No instance of SPME being operated by non-certificated operators.
5.4.2.5.3	Provide a Lifting Devices and Equipment (LDE) Manager and Safety Specialist	The LDE Manager and Safety Specialist shall be responsible for ensuring the LDE program remains in compliance with NASA-STD-8719.9 and SSC SWI-8834-0001.	Contractor Determined	
5.4.2.6	HVAC			
5.4.2.6	Provide Air-Conditioning & Refrigeration Technicians	All Personnel performing installation, maintenance, or repairs that might reasonably have the opportunity to release refrigerant into the atmosphere shall be certified per EPA regulations.	Contractor Determined	Contractor shall maintain records & evidence of certification available for Government review upon request
5.4.2.7	Nondestructive Evaluation Personnel (NDE)			

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5.4.2.7.1	Lead Technician/Supervisor	Must have current Level 1 NDE Certification in accordance with Recommended Practice No. SNT-TC-1A (latest edition) as recommended by The American Society for Nondestructive Testing, Inc. At least two years experience in reading film including interpretation of results from high energy cobalt used in NDE of wall thickness in excess of 4 inches.	Minimum of 1on staff at all times.	Current certificate and evidence of experience on file.
5.4.2.7.2	Technicians	Must have 1 year or greater experience in setting up and taking radiographs of thick walled pressure vessels and piping. Level III Certification required.	Contractor Determined	Current Certificate and evidence of experience on file.
5.4.2.8	Marine Operations			
5.4.2.8.1	Tugboat Captain	Must have current U.S. Coast Guard approved certification for inland Waterways of the United States for Uninspected Towing Vessels (Minimum Requirement) with Radar Endorsement.	Contractor Determined	Current certification
5.4.2.8.2	Tug Pilot	Must have current U.S. Coast Guard approved certification for inland Waterways of the United States for Uninspected Towing Vessels (Minimum Requirement) with Radar Endorsement.	Contractor Determined	Current certification
5.4.2.8.3	Marine Maintenance	At least 2 years experience in the maintenance of	Contractor Determined	Certification

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		marine vessels and equipment.		
5.4.2.8.4	All Operating Personnel	Able to pass annual physical examination for confined space entry and CPR certification training. Captain and Pilots require 5 year physical to renew certification. Marine personnel are governed by the JONES ACT.	Contractor Determined	Certification
5.4.2.9	Provide Energy Engineer with the qualifications, technical knowledge, experience and skills required to manage and supervise SSC energy programs.	The Energy Engineer shall have successfully completed a 4-year Engineering Bachelor's degree in any Engineering discipline. The Energy Engineer will be responsible for maintaining, improving, and optimizing existing SSC energy plans and establishing an energy management program to ensure compliance with federal, agency, and center mandates	Contractor determined to support performance requirements.	Engineering degree shall be on file for Government review.
5.4.2.10	Provide Pressure Systems Engineer and Pressure Systems Administrator with the technical qualifications and experience necessary to maintain the pressure systems program	The Pressure Systems Engineer and Administrator shall have successfully completed a 4-year Engineering Bachelor's degree in any Engineering discipline. They will be responsible for maintaining, improving, and optimizing existing SSC pressure systems in accordance with NASA-NPD-8710.5 and NASA-NPR-8715.3.	Contractor Determined	
5.4.3	Utility Distribution			

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5.4.3.1	Electrical 13.8 kV System			
5.4.3.1.1	Operations	<p>The current system configurations and operations have been established by the Government based on Mississippi Power Company (MPCo) requirements, customer needs, and the availability of equipment. System definitions and descriptions are provided in Table 5.1-1. Complete drawings of the systems are available in the SSC Central Engineering Files (CEF). The Contractor shall be responsible for ensuring proper operation of the systems.</p> <p>All operations on the 13.8 kV Electrical System require 2 qualified linemen during normal duty hours, per OSHA Standard Work Practices as per 29 CFR 1910 series. Operational performance is required in addition to any operator maintenance in an effort to preserve the integrity of the equipment.</p>	Operator maintenance by linemen is limited to replacement of fuses or resetting of switches and/or circuit breakers.	Linemen shall be attentive to potential problems and initiate any required corrective action in a timely manner.

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5.4.3.1.1.1	Operate the MPCo/SSC 13.8 kV Main Substation	Operations within the 13.8 kV main substation are limited to switch operation for maintenance, NASA/SSC construction support, and as requested by MPCo for service access or isolation. All operations require coordination with the MPCo control center as well as the SSC EMCS control center. Per the MPCo/NASA Operating Procedure, all operations shall be executed via radio-phone with MPCo's control center. Within 30 minutes after any switching activity, mark-up the Electrical Utility one line drawing to indicate present configuration.	The primary workload is determined by the amount of maintenance/construction activity. Unit: Daily workdays	Linemen available at SSC for scheduled switching operations. Linemen available within 1 hour for non-scheduled switching or problem investigation. Operate the system to achieve the availability requirements and operational hours as designated in Annex 5.2.
5.4.3.1.1.2	Monitor and Inspect the MPCo/SSC 13.8 kV Main Substation	Inspect all 13.8 kV buswork to the high side of each transformer including all components listed in Table 5.1-1, "Site Electrical 13.8 kV Main Substation", for visual damage and abnormal conditions. Notify MPCo via radio-phone immediately of any abnormal condition.	1 Substation Unit: Daily workday. Inspection shall be ground level with system energized.	Inspect entire system no less than once each work day by personnel qualified to operate the system.

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5.4.3.1.1.3	Operate the SSC 13.8 Kv Distribution System	Operations on the 13.8 Kv Distribution System entail switch and circuit breaker operation for maintenance support, construction support, isolation of faults, and redistribution of loads. All switch and breaker shall be executed via 2-way radio communications with the EMCS Control Center. Within 30 minutes after any switching activity, mark-up the Electrical Utility one line drawing to indicate present configuration. Operate the Site 13.8 Kv Distribution System in accordance with SOP's for maintenance support and UPP's for construction support. Prior to operating switches, check for evidence of tampering or damage. During operations of switches, observe for signs of arcing.	Primary workload is determined by the amount of maintenance or construction activity. Unit: Daily workdays	Linemen available at SSC for scheduled switching. Linemen available within 1 hour for non-scheduled switching or problem investigation. Operate the system to achieve the availability requirements and operational hours as designated in Annex 5.2 .
5.4.3.1.1.4	Monitor and Inspect the SSC 13.8 Kv Distribution System	Beginning at the load side of each 13.8 Kv 2000A vacuum Breaker in the MPCo/NASA Main Substation to each facility main disconnecting means as listed in Table 5.1-1: "Site 13.8 Kv Electrical Distribution System." Inspect all switches and overhead line components for visual damage or abnormal conditions.	Inspection shall be ground level with system energized. Unit: Daily workdays	Inspections shall be conducted by personnel qualified to operate the system. Initiate corrective action for all abnormal conditions in a timely manner

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5.4.3.1.1.5	Operate the Area Lighting Systems	These systems are operated by a combination of photo cells and timers, and have up to 10 different types of luminaries.	621 lights	Monitor the systems, and initiate corrective action for all abnormal conditions in a timely manner to obtain availability.
5.4.3.1.1.6	Operate 13.8 Kv Facility Switches	Operations on the 13.8 Kv facility switches entail switch operation for maintenance/ construction support, isolation of faults, and redistribution of loads. All switch operations are executed via 2 way radio communications and recorded in the EMCS Control Center. Within 30 minutes after any switching activity update the one line diagram to indicate present configuration. Operate the 13.8 Kv Facility switches in accordance with SOPs, and UPP's. Prior to operation of facility switches, inspect enclosures for evidence of tampering or damage. During operations observe switch contacts for arcing.	Primary workload is for maintenance and construction support. Minimum redistribution of loads once annually. Refer to Table 5.1-1 for description and components of "13.8 Kv Switching Facilities." Unit: Daily workdays	Linemen available at SSC for scheduled switching. Linemen available within 1 hour for non-scheduled switching or problem investigation. Operate the system to achieve the availability requirements and operational hours as designated in Annex 5.2
5.4.3.1.2	Standing Work			

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5.4.3.1.2.1	Read and Record main Substation	Document the kilowatt-hour (kWh), voltage and current readings at the main substation. All readings must be taken and date recorded on the last workday of each month.	Unit: 8 meters Monthly	Accurately read meters and record data on the last workday of each month.
5.4.3.1.2.2	Read and Record Kilowatt-Hour (kWh) Meters at all Locations on the Site 13.8 Kv Electrical Distribution System	Document the electrical loads on all metered facility electrical systems at SSC. All readings must be taken and data recorded on the last two workdays of each month or the last workday of the month and the first workday of the new month if these days are separated by a weekend. This data shall provide input for DR 5-GA18.	Unit: 172 meters Monthly	Accurately read kWh meters and record data on the last workday of each month.
5.4.3.1.2.3	Read and Record Run Time on Installed Generators	Document run time and provide input for DR 2-GA13 under Annex 2.2.	7 generators at Buildings: 1100, 1110, 1201, 2201, 2204, 3203, and 3206. Unit: Monthly	Initiate reporting of corrective action for all abnormal conditions, in a timely manner.
5.4.3.1.2.4	Maintain High Voltage Switching Documentation Map	Maintain Site HV System Configuration which is the Reference Document for High Voltage Switching that identifies response to power losses in buildings switches, feeders, and transformers. To be used in the planning of outages or restoration procedures.	Unit: Daily workday	Provide marked-up map to CEF quarterly

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5.4.3.1.2.5	Control Access to Main Substation, Building 4400 Substation, and Cryogenic Transfer Deluge Substation	Fenced area is controlled access. Operations personnel are responsible for controlling access and securing area when they are not present.	3 Substations Unit: Continuous	Verify personnel are logged into fenced area (Main Substation only) and that gates are kept locked (all areas).
5.4.3.1.3	Recurring Work			
5.4.3.1.3.1	Update/Maintain Electrical Power System & SOPs (DR 5-GA09)	All activities, which can impact the reliability of the electrical power supply, shall have a SOP developed or upgraded. The CO approved SOPs shall be electronically maintained with Government access. System documentation shall be maintained as required by configuration changes. (See DR 5-GA09)	Update annually or as equipment or operational changes are made. Unit: Yearly	Maintain system SOPs and equipment documentation to be available for review by CO.
5.4.3.1.3.2	Provide Marked-Up Utility Drawings for Mission Support	Provide marked-up master utility drawings showing system and switch configuration. A set of drawings shall be delivered to CEF.	Unit: Quarterly 4 Drawings per Year	Provide marked-up drawings quarterly, to CEF.
5.4.3.1.3.3	Locate, Identify, and Mark Electrical Utility Systems Upon Request	This work is required through SSC 99-015 Site Wide Digging Permit. The Contractor shall mark electrical utilities within 3 workdays of the request. Utilities shall be marked using colored flags and paint as specified by the Government.	Unit: 26 per Year	Physically mark the affected utility within 3 days of request.

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5.4.3.1.3.4	Provide Operational Support During Adverse Weather Conditions	Monitor ambient temperatures and provide operations support as required in the SSC Freeze Conditions Plan to implement the plan and to monitor and inspect equipment as needed to preclude damage. Operational performance is requires in addition to any operator maintenance in an effort to preserve the integrity of the equipment.	Unit: 40 occurrences per year	Linemen shall be attentive to potential problems and initiate corrective action for all abnormal conditions, in a timely manner.
5.4.3.1.3.5	Provide Support to Maintain Right-of-Way (R.O.W.) Clearance for Overhead Power lines	Consistently manage and document plans and progress related to a 5-year plan for the removal of tree branch growth into the R.O.W. Bring one fifth of the distribution system into compliance with the minimum standards each year with emphasis on feeder circuits and those areas most in need of clearance	Unit: 151,350 LF 18,500 LF	13.8 Kv Single circuit: 15 ft. either side of centerline 13.8 Kv Dual Circuit: 30 ft. either side of centerline
5.4.3.1.3.6	Pump Out Electrical Manholes	Provide operational support for maintenance and operation requirements.	Unit: 10 occurrences per year	Maintain water level no higher than top of sump in base of manhole.
5.4.3.2	Potable Water System			

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5.4.3.2.1	Continuation Operations	The potable water system shall be operated to ensure a continuous supply of water is provided at all times. The system is used to operate drinking, sanitation, and fire protection systems. See Table 5.1-1 for a description of the system. Further detailed information is given in the SSC Utility RCM Analysis manual for Potable water. The Contractor shall be responsible for ensuring proper and efficient operation of the system while continually monitoring and evaluating the system configuration and operations, making recommendations for improvements to the CO. System performance shall comply with requirements of the Mississippi Department of Environmental Quality. The system shall be kept under the direct supervision of qualified personnel who are kept knowledgeable and capable of performing all operations and associated work. Operators shall have and maintain the certification required by the State of Mississippi.	Typical daily water usage during regular workdays is approximately 310,000 gallons. System output requirements are given in Table 5.1-1.	Potable Water System operations do not require continuous coverage but do require operator support to meet availability requirements (See Annex 5.5)

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5.4.3.2.1.1	Operate SSC Water Treatment System to Maintain Water Quality	Operate the water treatment system in accordance with SSC OI 42-54-001 (Operating Instruction for Potable Water System Well House). Operate the system to achieve the availability requirements as designated in Annex 5.5, Table 5.5-2, and the operational hours as designated in the Building Operating Hours Summary. Operate the water treatment system to maintain the output as stated in Table 5.1-1. The Contractor shall operate, inspect and monitor the chemical treatment equipment. The Contractor shall purchase all chemicals associated with water treatment and field test for chlorine content. Chemicals used shall be equivalent in salient characteristics to those for which the facility was designed.	24-hour a day controlled treatment of chlorine. Provide chemicals on a continual basis to treat all flow conditions. Field test chlorine content daily at the active pump houses and weekly at a remote point approximately ¼ to ½ mile from the pump house.	Monitor system as needed for continuous control. Water quality shall meet Mississippi Department of Health standards.

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5.4.3.2.1.2	Operate SSC Water Storage System to Maintain Water Quantity	Operate the system to achieve the availability requirements as designated in Annex 5.5, Table 5.5-2, and the Operational Hours as designated in the Building Operating Hours Summary. Operate the water treatment system to maintain the output as stated in Table 5.1-1. Maintain levels in elevated tanks to achieve the pressures required in Table 5.1-1.	Continuous Operation. The storage system consists of three elevated tanks. Tanks 1 & 2 each have a capacity of 300,000 gallons. Tank 3 has a capacity of 250,000. There is a 10,000-gallon ground level pressure tank at Well No. 3 in down mode.	Monitor system as needed for continuous control. Elevated storage tanks shall be monitored for high/low alarm. Respond to alarms within 30 minutes during core hours, and within 2 hours during non-core hours.
5.4.3.2.1.3	Operate SSC Water Wells and Pumping System to Maintain Water Generation and Water Pressure	Operate the system to achieve the availability requirements as designated in Annex 5.5, Table 5.5-2, and the operational hours as designated in the Building Operating Hours Summary. Operate the water treatment system to maintain the output as stated in Table 5.1-1. Maintain the operability of the 3 water wells and their associated pumps.	Monitor system as needed for continuous control. Wells 1 & 2 are active and each has a 500 gpm, 30 hp electric driven pump. Well 3 is stand-by and has two 750 gpm, 40 hp electric driven pumps. The No. 3 elevated tank pump house has two 15 hp electric driven pumps	Monitor system as needed for continuous control. Operate each pump monthly.

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5.4.3.2.1.4	Operate SSC Water Distribution System	<p>The Potable Water Distribution System begins at the point of pump discharge and ends at a point 5 feet outside the facility, which it serves. See Table 5.1-1 for system definition. It shall be operated to ensure a continuous supply of water is provided at all times to all facilities and use points. The Distribution Piping Systems provides water to facilities and Firze Protection Systems.</p> <p>The Distribution System is designed with a series of loops and valves to minimize outages in the event of line failures or repairs. The Contractor is expected to take advantage of this design to maintain availability</p>	Approximately 16 miles of piping distribution system. Piping materials are cast iron, plastic, or Transite and ranges in size from 14” to 2”.	Water Distribution System Operation does not require continuous coverage but does require operator support to meet availability requirements (See Annex 5.5). Operators shall maintain the certification required by the State of
5.4.3.2.1.4	Operate SSC Water Distribution System	Fire hydrants are located on lines throughout the system for flushing and fire protection. Flushing of the lines is necessary to maintain site water quality and to maintain the chlorine residual required by the Mississippi Department of Health. Operate the system to achieve the availability requirements as designated in Annex 5.5, Table 5.5-2, and the operational hours as designated in the Building Operating Hours Summary. Operate the water treatment system to maintain the output as stated in Table 5.1-1.		Mississippi. The system shall be kept under the supervision of a certified operator per the regulations. Maintain Mississippi Department of Health required chlorine residual as a minimum

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5.4.3.2.1.4	Continuation Operate SSC Water Distribution System	The Contractor shall monitor, inspect and operate the water distribution system to maintain the quality of the water, to maintain the functionality of the distribution system and to initiate corrective actions to maintain the output as stated in Table 5.1-1 . Water distribution outages shall be supported. Flushing shall be required in areas, which experience deterioration of water quality noted through bacteriological sampling or physical discoloration due to outages or to correct customer complaints. All flushing shall be done per an SOP in a controlled manner to minimize impacts of pressure fluctuation in the system.		
5.4.3.2.2	Standing Work			

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5.4.3.2.2.1	Read and Record Water Meters	A flow meter is installed in each pump house. Read and record water meters at active pumps daily to monitor total gallons pumped.	2 meters each workday.	Records available continuously.
5.4.3.2.2.2	Maintain a Daily Log of Operator Activities	The Log shall include the kinds and quantities of chemicals used, feed rates, dosages, and water quality field tests conducted. The log shall include the status and length of outages and all other pertinent information.	One log, update daily.	Log available continuously.

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5.4.3.2.3	Recurring Work			
5.4.3.2.3.1	Update/Develop/Maintain Potable Water System Operation Manuals and SOPs (See DR 5-GA09)	Potable water system documentation shall be maintained and updated as required. (See DR 5-GA09)	One annual revision.	Develop or revise and obtain CO concurrence on documentation within 90 days of contract start date.
5.4.3.2.3.2	Change Out Chlorine Tanks	Check chlorine tanks and replace as necessary. When changing cylinders verify product in cylinder prior to connecting to service.	2 active wells, 1 inactive well.	No instance of empty chlorine cylinders.
5.4.3.2.3.3	Support Freeze Plan	Monitor ambient temperatures and provide operations support as required in the SSC Freeze Plan (Annex L of the SSC Disaster Preparedness Plan) to implement the plan, and to monitor and inspect equipment as needed to preclude freeze damage.	2 occurrences per year.	No instances of non-support.
5.4.3.3	Sanitary Sewage Systems			

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5.4.3.3.1	Operations	The Sewage Collection Systems shall be operated to ensure continuous collection, pumping and removal of wastewater is provided at all times. Treatment System shall be operated to ensure that effluent water quality meets all applicable state regulations and permit requirements, without disruption of wastewater flow from any facility during occupied periods. The Sanitary Sewage Systems consists of Primary Collection Systems, Lagoon/Treatment Systems, Rock-Reed Systems, and Septic Tank/Field Drain Systems. See SSC Utility RCM Manuals and Table 5.1-1 for sketches and technical descriptions.		
5.4.3.3.1.1	Operate, Monitor, and Inspect the Sanitary Sewage Collection Systems	Operate the Sanitary Sewage Collection Systems to achieve the availability requirements and operational hours as designated in Annex 5.5 , and to achieve output as stated in Table 5.1-1. Operate the Collection Systems in accordance with applicable O&M Manuals, SOP's and UPP's. Operations for Slide Mounted Pump Type Lift Stations shall include the following (These requirements are weekly (W) for criticality levels I, II, and III, and monthly (M) for criticality IV &V):	Two collection systems consist of 47 Lift Stations, approximately 76,800 linear feet of forced main, and approximately 29,850 linear feet of gravity main. Separate collection system in B-1105.	Maintain continuous availability for sewage pumping and transport from any facility (during occupied periods) to the treatment system.

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5.4.3.3.1.1	Continuation Operate, Monitor, and Inspect the Sanitary Sewage Collection Systems	<ol style="list-style-type: none"> 1 Check and insure that “WATER IN LUBRICANT” light is off. 2 Trip primary effluent limit switch and verify system operation. 3 Trip backup effluent limit switch and verify system operation. 4 Check alternator circuitry by tripping primary limit switch twice and verifying alternate pump operation. 5 Trip alarm limit switch and observe alarm light is on. 		

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5.4.3.3.1.1	Continuation Operate, Monitor, and Inspect the Sanitary Sewage Collection Systems	Weekly (W) operations for Secure Mounted pump Type Lift Stations shall include the following: 1. Check operation of Lift Station ventilator and lights by opening access cover and verifying operation. 2. Verify air is flowing in air bubbler systems, check flow meter, regulator and level gauge.		

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5.4.3.3.1.2	Operate, Monitor, and Inspect the Sanitary Sewage Treatment Lagoon Systems	<p>Operate the Sanitary Sewage Treatment Systems to achieve the availability requirements as designated in Annex 5.5, and to achieve output as stated in Table 5.1-1. Operate system equipment in accordance with applicable O&M Manuals, SOP's and UPP's. Operations shall include activities such as:</p> <ol style="list-style-type: none"> 1. Clean debris and other materials from scupper. 2. Clean UV light bulbs of contaminant buildup, verify proper operation, and replacement of bulbs as required. 3. Verifying proper lagoon and marsh levels. 4. Verifying proper instrumentation operation. 5. Maintain/Replenish vegetation life within the lagoon and marsh. 6. Addition and mixing of environmentally approved chemicals and compounds as required. 7. Inspect and initiate any necessary corrective actions on berms and levees to prevent erosion or leaks. 	Effluent for Lagoon #1 is approximately 210,000 GPD, Lagoon #2 is approximately 90,000 GPD.	Maintain treatment capability for all sanitary sewage, without interruption to facility sanitary sewage discharge. All effluent shall comply with state regulations and permit requirements.

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5.4.3.3.1.3	Operate, Monitor, and Inspect the Sanitary Sewage Rock-Reed Systems	<p>Initiate any necessary activities to control wildlife or rodents.</p> <p>Operate the Sanitary Sewage Treatment Systems to achieve the availability output as stated in Table 5.1-1.</p> <p>Operate system equipment in accordance with applicable O&M Manuals, SOPs, and UPPs. Operations shall include:</p> <ol style="list-style-type: none"> 1. Clean debris and other materials from rock/reed and discharge area. 2. Clean UV light bulbs of contaminant buildup; verify proper operation, and replacement of bulbs as required. 3. Maintain/Replenish vegetation life. 4. Addition and mixing of environmentally approved chemicals and compounds as required. 5. Inspect and initiate any necessary corrective actions on berms and levies to prevent erosion 	<p>1 ea. Systems.</p> <p>Rock-Reed systems treat less than 3,000 GPD.</p>	<p>Maintain treatment capability for all sanitary sewage, without interruption to facility sanitary sewage discharge. All effluent shall comply with state regulations and requirements.</p>

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		or leaks.		

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5.4.3.3.1.4	Operate, Monitor, and Inspect the Sanitary Sewage Septic Tank/Field Drain Systems	Operate the Sanitary Sewage Treatment Systems to achieve the availability requirements as designated in Annex 5.5, and to achieve output as stated in Table 5.1-1. Add environmentally approved chemicals and compounds as required.	Three septic tank/field drain systems shall be operated: less than 3,000 GPD treatment.	Maintain treatment capability for all sanitary sewage, without interruption to facility sanitary sewage discharge.
5.4.3.3.1.5	Notify Government of any Excursions from State permits, Regulations and Requirements	Contractor shall provide notifications to the Government in accordance with Annex 2.0.	Report per occurrence.	Reports shall be maintained on record and available for Government review upon request.
5.4.3.3.2	Standing Work			

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5.4.3.3.2.1	Maintain a Daily Log of Operator Activities	<p>The log shall include the following information:</p> <p>Listing of any abnormal conditions, concerns, systems malfunctions or failures, or other pertinent data related to systems operations and inspections.</p> <p>Any corrective actions initiated or completed on systems.</p> <p>Status of systems configurations.</p> <p>Scheduled outages.</p>	Log in accordance with contractor developed procedures	Log shall be accurate and current, and shall be available for Government review upon request.
5.4.3.3.2.2	Maintain Statistical Data	<p>Trend and maintain accurate records of the following influent and effluent flow rates for lagoon systems:</p> <ol style="list-style-type: none"> 1. Peak Flow Rate during month, Gallons per Hour (GPH). 2. Peak Daily Average during month, Gallons per Day (GPD). 3. Monthly daily average (GPD). 4. Annualized daily average (GPD). 	Update monthly.	Records shall be accurate and current, and shall be available for Government review upon request.
5.4.3.3.3	Recurring Work			

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5.4.3.3.1	Update/Develop/Maintain Sanitary Sewage System Operation Manuals and SOP's (See DR 5-GA09)	Documentation shall be updated and maintained as required for the operation and maintenance of the treatment systems: Lagoon Systems, Rock-Reed Systems, and Septic Tank/Field Drain Systems (See DR 5-GA09)	One annual revision.	Develop or revise and obtain CO review within 90 days of contract start date.
5.4.3.3.2	Pump Out Oil/Water Separator	Pump out and dispose of waste.	One oil/water separator located outside Building 2105 and 4400. (Historically 2 times annually)	Pump out as necessary to ensure tanks do not exceed 80% capacity; however, no less than annually.
5.4.3.3.3	Pump Out Grease Traps	Pump out and dispose of waste.	One grease trap located at Building 1100. (Historically 2 times annually)	Pump out as necessary to ensure traps are clean and functional.
5.4.3.4	Energy Management and Control System			

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5.4.3.4.1	Operations	<p>The EMCS Operations Control Center consists of the EMCS, the Fuel Management Monitoring System and the Main Substation Monitoring System as defined in Table 5.1-1. These systems are consolidated into a single operations room, which shall be staffed and operated continuously. The Control Center is established to monitor and control parameters of various utilities, systems, and equipment. By this function, the Center acts as an effective method for controlling energy consumption, operations and maintenance. Because of the broad visibility of site systems at the Center, operators act as a central focal point for the real-time operation and management of utilities, systems, and equipment.</p>		

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5.4.3.4.1.1	Staff and Operate the EMCS Central Console Station	<p>Staff and operate the EMCS Central Console Station, consisting of the EMCS, the Fuel Management Monitoring System and the Main Substation Monitoring System. Operation shall be in accordance with applicable SOPs, O&M Manuals, and as listed below:</p> <ul style="list-style-type: none"> a. Monitor ambient temperatures and weather conditions and provide operational support and notifications as required to support site operations. b. Coordinate and track site outages (Planned and Unplanned) for maintenance and construction and provide notification to site users and Facility Managers. c. Receive and log user complaints for utilities and facility systems malfunctions, interruptions or failures. Initiate investigation and work orders for problems, as required, and log significant site activities and problems. d. Answer phone inquiries. 	EMCS Systems: 1-work station operating 24/7, with 1 additional work station operating during core hours.	The system shall be staffed continuously be personnel who are knowledgeable of site specific operations and missions and are trained to operate EMCS hardware and software (including other systems at the EMCS Central Console Station).

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5.4.3.4.1.1	Continuation Staff and Operate the EMCS Central Console Station	<ul style="list-style-type: none"> e. Implement EMCS control system set-point and algorithm adjustments as required to maintain site operations and maintain energy conservation. f. Monitor and respond to alarm conditions. Initiate work orders as required to initiate investigation or repairs. g. Report significant breakdowns, malfunctions and reliability concerns to the CO. h. Maintain audible system alarm records. i. Analyze and adjust operating parameters to resolve field positions. j. Provide operational data, analyze and adjust operating parameters in response to Site Emergency Management requests. k. Input data to EMCS reports, operating instructions, support programs and databases. 		

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Attachment J-1

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5.4.3.4.1.1	Continuation Staff and Operate the EMCS Central Console Station	<ul style="list-style-type: none"> <li>l. Input after-hours notifications and callouts in response to site problems or systems failures (e.g., fire alarm, natural gas, high voltage, electrical, Bascule Bridge, sewer systems, phone systems, high pressure industrial water, high pressure gas, HVAC). <li>m. Monitor and initiate fueling operations to maintain fuel storage tanks properly supplied. <li>n. Program fueling keys and maintain records on Fuel Sentry system. <li>o. Monitor Main Substation and initiate callout to Mississippi Power for Monitoring System or Substation problems. <li>p. Provide operator support for condition assessment and plans as maintenance requires EMCS (including hardware, firmware and software). <li>q. Perform benchmarking for the EMCS as required to ensure system speed, availability and reliability are maintained (existing benchmark is available in the TRL). <p style="text-align: center;">NNS07AB21C Attachment J-1</p>	Monitoring System with Work Station.	<p>Obtain approval from CO prior to any hardware, software or firmware changes. Acknowledge non-critical alarm within 10 minutes and start remedial action within 15 minutes.</p> <p>Acknowledge critical alarms within 1 minute and start remedial action within 3 minutes.</p> <p>Adjust algorithms to correct operational problems and/or optimize efficiency within 3 work days.</p> <p>Apply consistent methods of control and logic site wide.</p>

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5.4.3.4.1.1	Continuation Staff and Operate the EMCS Central Console Station	<ul style="list-style-type: none"> r. Initiate and manage data trending for EMCS monitored systems and equipment. Provide system-generated reports and trend data as requested. s. Assist in defining EMCS site equipment/system requirements in support of equipment/system designs and operational inquiries. Provide system generated reports upon request. t. Provide host operational support for Functional Checkout and Point-to-Point Checks in support of PM, trouble shooting, corrective maintenance and construction. u. Monitor critical Field Device parameters through back-up communication links during System 600 Central Host outages. v. Initiate corrective actions as required on all EMCS System equipment, Fuel Management Monitoring System equipment, and Main Substation System. w. Monitoring System equipment and Main Substation System equipment (Host and field devices). <p style="text-align: center;">NNS07AB21C</p>		Provide Security for all central console equipment and software.

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5.4.3.4.1.2	Manage EMCS Software	<p>Manage software for the EMCS Central Console Systems and accessories, EMCS programmable field panels and the Fuel Management Monitoring System (does not include the Main Substation Monitoring System).</p> <p>Management of software includes quality assurance, reliability, verification/ validation, document and data control, configuration/change control, certification agreements, maintenance, records, training, servicing, audits, back up, handling, storage, packaging, testing, acceptance, nonconformance reporting, coordinating corrective actions, and security. Includes all software developed, supplied, maintained or operated for, or in support of, EMCS Systems and the Fuel Monitoring System.</p>	<p>See Table 5.1-1 Includes: EMCS Central host systems. EMCS Field Cabinet software: System – 150 MFDs (SCU's &MBC's), and 35 UCs.UC's. Three laptop PC's used for EMCS troubleshooting, operations and database management Fuel Monitoring System Host.</p>	<p>Maintain daily, weekly, monthly and quarterly taped backup of system software for EMCS Central host. Quarterly backup shall be registered and stored in CEF. System Software shall also be backed up prior to any system configuration changes or modifications. Maintain current software taped backup of EMCS for each</p>

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5.4.3.4.1.2	Continuation Manage EMCS Software	<p>Protect systems and data. Return all items in a usable and documented format at end of contract</p> <p>Provide Software Management Support for completion of vendor benchmarking, upgrades or troubleshooting. This includes system backup/protection, and transmitting of system data to the vendor.</p> <p>Provide test plan for all software development or changes. Functionally check operation after any system modifications.</p>		<p>Field Cabinet software. Maintain current software taped backup of software for Fuel Monitoring Host. Taped backup shall be capable of system restoration in event of system corruption or destruction. System operating, programming and maintenance manuals shall be maintained current.</p>

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5.4.3.4.1.3	Provide EMCS Programming Support	Provide EMCS programming support, including the following: <ul style="list-style-type: none"> a. Accomplish graphics modifications or additions to operator-machine interfaces (e.g., floor plans, information screens, system schematics and point description). b. Accomplish algorithm modifications or additions to support operational requirements and maintain energy efficient operation. c. Modify point parameters for alarm management and energy conservation (e.g., set-points, alarm limits, start/stop times). d. Modify parameter settings in response to natural gas curtailment exercises and activities. 	See Table 5.1-1. Includes: <ul style="list-style-type: none"> 1. EMCS Central Host systems. 2. EMCS Field Cabinet software (FID, MBC, SCU and UC). 3. Fuel Monitoring System Host. 	All EMCS databases, programs and reports shall be made available electronically for Government access. All software development and modifications shall comply with the system standards, or shall receive prior approval from the CO.

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5.4.3.4.1.4	Maintain Energy Conservation Exception Log	Log shall provide information for tracking and calculating energy consumption due to individual requests to activate facility utilities or HVAC for after-hours operations. Log shall include date of request, requester and phone number, building number, room number, equipment required to run, time on and time off, number of personnel working, authorizing official, and any pertinent comments.	Log updated daily.	Log shall be maintained continuously, current and accurate. Data shall be submitted to Energy Analyst for calculation of Energy Consumption Allocation, monthly. Data shall be available for Government review upon request.
5.4.3.4.1.5	Maintain Daily Log	Maintain daily log of trouble calls, outages, and significant site events. Log shall record dates and times of events.	Maintain updated and available for review continuously. Log update daily.	Continuously update and maintain accurate. Records shall be sufficient to allow for time-sequenced review of site events. Data shall be available for Government review upon request.
5.4.3.4.1.6	Reserved			

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5.4.3.4.1.7	Encode Fuel Sentry Keys	Support for fueling activities shall include encoding keys as required for site vehicle fueling. This shall include encoding keys as required for site vehicle fueling. This shall include encoding, record keeping and reporting of keys generated, reported losses of keys, etc.	Contractor Determined	Sufficient to meet operational needs.
5.4.3.4.2	Standing Work			
5.4.3.4.2.1	Provide Fuel Forecast Report (DR 5-GA01)	Provide Fuel Forecast Report (DR 5-GA01).	Semi-annual Report	Conformance with DR
5.4.3.4.2.2	Provide EMCS Status Report (DR 5-GA02)	Provide Monthly EMCS Report (DR 5-GA02).	Monthly Report	Conformance with DR
5.4.3.4.2.3	Provide Fuel Receipt Report (DR 5-GA03)	Provide Monthly Fuel Receipt Report (DR 5-GA03).	Monthly Report	Conformance with DR
5.4.3.4.2.4	Provide Fuel Utilization Report (DR 5-GA04)	Provide Monthly Fuel Utilization Report (DR 5-GA04).	Monthly Report	Conformance with DR
5.4.3.4.3	Recurring Work			
5.4.3.4.3.1	Develop Operating Manuals and SOPs. (DR 5-GA09)	Documentation shall be developed as required for proper instruction and procedures for the EMCS (See DR 5-GA09).	Contractor Determined	Conformance with DR

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5.4.3.4.3.2	Update and maintain Operating Manuals and SOPs (DR 5-GA09)	Documentation shall be bound in manual(s) and maintained available for EMCS operator instructions at the EMCS Central Console. Requests for updates shall be initiated by the EMCS as required to maintain current data. Initial documents shall be presented for Government review within 30 days of start of contract, and upon review shall become Government property. Documents shall be available at CEF and at the EMCS. Documents shall provide all pertinent phone, pager, and radio numbers for operational or emergency notification, EMCS procedures and instruction to support all facility specific and mission specific requirements, and any operation plans and instructions required to perform EMCS operations, recurring and standing work. (See DR 5-GA09)	39 Ea Documents	Conformance with DRs. Documents maintained current and accurate.

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5.4.3.4.3.2	Continuation Update and maintain Operating Manuals and SOPs (DR 5-GA09)	These documents shall include: <ul style="list-style-type: none"> a. Radio and Pager Number Listing b. Responsible Person Listing (By System-NASA and Contractor Personnel) c. Building 1103 Room 113 ITD/SRSC (Space Remote Sensing Center) Procedures and Notification d. NAVO Facility Equipment Room Procedures e. High Pressure Industrial Water Alarm and Callout Procedure f. Test Area After Hours EMCS Support Procedures g. Building 1003 Air Conditioning Failure Procedure h. Building 1105, EPA After Hours Contact List i. After Hours Contact Listing for Graphics Personnel j. After Hours Contact Listing for CEF (Central Engineering Files) 		

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5.4.3.4.3.2	Continuation Update and maintain Operating Manuals and SOPs (DR 5-GA09)	<ul style="list-style-type: none"> k. Hazardous Spill Requirements/Instruction l. Building 4110 After Hours Helium Alarm Response Procedure m. Building 3305 HPG (High Pressure Gas) Alarm Procedures and Contact Listing n. Building 1110 Computer Room Monitoring and Response Procedures o. Telephone IM Equipment Requirements and Locations Listing p. Building 1000 Super Computer Room Control Requirements and Contact List q. Building 1000 Boiler Restoration Plan r. Emergency After-Hours Callout for Communications Systems s. Sewage Treatment Systems' Out of Tolerance Procedures t. Gas Leak Notification Procedures 		

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5.4.3.4.3.2	Continuation Update and maintain Operating Manuals and SOPs (DR 5-GA09)	<ul style="list-style-type: none"> u. Notification and Recall Procedure for After Hours Incidents Involving Construction SubContractors or Utilities Systems v. After Hours Warehouse and Salvage Yard Access Procedure w. FOSS Safety Personnel Recall List x. FOSS After Hours Call Listings and Procedures y. Procedures for Generator Support to Mississippi Power Co. z. SSC Essex Back-Up Phone Listing aa. Building Operating Hours Summary bb. Disaster Preparedness Plan cc. Critical Facility Custodian Listing dd. FOSS Emergency Recall List ee. SSME Test Complex Security Access Concurrence Contact List 		

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5.4.3.4.3.2	Continuation Update and maintain Operating Manuals and SOPs (DR 5-GA09)	ff. SSC Building Manager List gg. Emergency Operations Center Telephone List hh. Operation Control Center, 24 Hour Operations ii. NASA PSC Video Teleconference System Support jj. Natural Gas Outage Notification List Building Operating Hours kk. Summary Mississippi Power Emergency Contact Phone Listing and Instructions ll. Fuel Cell Operating Instructions and Call Out Listing		
5.4.3.4.3.3	Maintain Manual of Updated Procedures, Instructions & Listings	Refer to the TRL	Contractor Determined	Kept Current
5.4.3.5	Natural Gas System			

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5.4.3.5.1	Operations Information	Natural gas for SSC is supplied by the Koch Gateway Pipeline Co. metering facility. An odorizing station is located adjacent to the metering facility. The odorized gas flows into a 10” main pipeline at a pressure of 40-43 psig to the main distribution No. 1 meter. The gas system piping continues to the user facilities where pressure is reduced to the pressure required by the equipment it serves. See Table 5.1-1 for system definition. Additional detailed system information is given in the SSC Utility RCM Analysis Manual for Natural Gas.	Nothing Additional	
5.4.3.5.1.1	Operate, Inspect, and Monitor the Natural Gas Distribution System	<p>Operate the Natural Gas System in accordance with applicable SOP.</p> <p>Operate the system to achieve the availability requirements and operational hours as designated in Annex 5.5, Table 5.5-2 and the Operating Hours Summary (EMCS Operating Procedure).</p> <p>Operate the natural gas distribution system to maintain the output as stated in Table 5.1-1.</p>	SSC has approximately 78,000 linear feet of pipe and associated valves, regulators, meters and cathodic protection.	The natural Gas System Operation does not require continuous coverage, but does require operator support to be available 24 hours a day to accomplish routine activities and respond to emergencies.
5.4.3.5.2	Standing Work			

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5.4.3.5.2.1	Maintain Log of Operator Activities	The Natural Gas Distribution System log shall include status of valve configuration if other than normal, outages (scheduled & non-scheduled), and other pertinent information.	According to applicable contractor provided procedures.	Log available continuously.
5.4.3.5.2.2	Read main and Distribution Meters to Monitor Consumption	Record and record meter reading for input into energy allocation program. Meter locations and number are given in SSC Utility RCM Analysis Manual for Natural Gas.	Read 36 meters.	Read meters on the first work day of the month. Record date, time, location, and reading.
5.4.3.5.2.3	Inspect and Operate In-Ground Valves	<p>Inspect and operate in-ground valves to ensure valves operate properly.</p> <p>Develop and implement a schedule that provides for the location and manual operation of each underground natural gas valve to ensure it operates properly. Lubricate valves as needed to ensure proper operation.</p> <p>Log any discrepancies found during the inspections in the natural gas distribution system log. Identify any valves requiring new identification markers.</p>	See SSC Utility RCM Analysis Manual for Natural Gas for location of valves. (Approximately 66 valves)	Accomplish valve inspection annually. Note discrepancies in log daily.

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5.4.3.5.2.4	Inspect Distribution System for Leaks	Develop and Implement a schedule that provides for the Inspection of the Natural Gas Distribution System for leaks. Log any leaks found during the inspections in the daily operations log and initiate work orders for repairs. Immediately safeguard and mitigate conditions posing imminent danger to life, health, or property.	78,000 linear feet of pipe. See SSC Utility RCM Manual for Natural Gas System.	Accomplish valve inspection annually. Note discrepancies in log daily.
5.4.3.5.3	Recurring Work			
5.4.3.5.3.1	Provide Operational Support for Gas Curtailment	Provide operations support necessary to implement the SSC Natural Gas Curtailment Plan when notified by the government of a natural gas curtailment.	Historically, 2 curtailments since 1990.	Follow Plan and take actions necessary to ensure the safety of personnel and protection of government owned facilities and equipment, while keeping gas consumption below the Maximum Daily Quantity specified in the Plan.

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5.4.3.5.3.2	Identify Above Ground Markers	The Natural Gas underground piping required above ground markers per SSC standard 80-005. During routine operations, identify missing and/or badly damaged/deteriorated markers.	Approximately 350 markers & 78,000 linear feet of pipe. See SSC Utility RCM Manual for Natural Gas.	Initiate work order for repair within 7 days of discovery.
5.4.3.5.3.3	Update, Develop, and Maintain Natural Gas System SOP's (DR 5-GA09)	SOPs shall be maintained and updated as required (see DR 5-GA09).	Annual revision or whenever configuration changes. Quantity is Contractor determined	Develop or revise and obtain CO review within 90 days of contract start.
5.4.3.6	Operate Fuel Systems (DR5-GA05)	Operate the fuel storage tanks, fuel tanks, pumps, and ancillary components to provide for adequate fuel supplies and safe loading and unloading, of fuel. Receive vendor delivery vehicles within 30 minutes of arrival and remain with delivery vehicle at all times while unloading. Measure tank levels before and after loading. Monitor for leaks and spills, and report any to the CO. Fuel shall be procured in accordance with Annex 6 .	Described below	Described below

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5.4.3.6	Continuation Operate Fuel Systems (DR5-GA05)	<p>The diesel fuel storage tanks (two 25,000 gal. Tanks) are located at Building 2105. Diesel fuel is received here and dispersed to the equipment and fuel tanks described by the Workload Data. Additionally, the Contractor shall provide diesel fuel to resident agencies on an SWR.</p> <p>Sample the diesel fuel in the two 25,000 gallon storage tanks semi-annually, and treat as required with MIL-S-5302/A approved conditioners to meet the fuel quality standards of Federal Specification VV-F-8000.</p>		<p>Storage Tanks Building 2105:</p> <p>-Maintain 90% or above level during hurricane season June 2 thru December 1, maintain 75% or above level the rest of the year.</p> <p>Fuel Tanks:</p> <p>-Provide fuel to generator tanks to achieve availability at all times. No instance of generator unavailability because of fuel supply.</p> <p>Tugboat Tank:</p> <p>-Provide fuel as required by mission.</p>

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5.4.3.6.1	Manage and Operate Diesel Fuel System			<p>No instance of unavailability because of lack of fuel.</p> <p>Equipment:</p> <ul style="list-style-type: none"> -Provide fuel for all IAGP (including portable generators) equipment used by the Contractor. -Operate all diesel fuel systems to provide the availability requirements of Annex 5.5.
5.4.3.6.2	Operate Propane Fuel System	The propane fuel system provides fuel for heating in areas not serviced with natural gas. Propane shall be procured in accordance with Annex 6.	Supply Propane Tank: 1-1,000 gal. Tank at Building 2105	Supply Propane Tank Building 2105: Maintain 50% or above level.

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5.4.3.6.2	Continuation Operate Propane Fuel System	The Contractor shall operate the system to provide adequate supplies to the tanks given in the Workload Data.	Food Service Truck: 1-500 gal. Tank	Food Service Truck: Fill as required to maintain availability.
		Normally these tanks are filled by vendor delivery vehicles at the tank location. There is one supply propane tank located at Building 2105. It is used to fill the propane tank on the food service truck. The Contractor shall provide propane to resident agencies on an SWR.	Propane Tanks: 1-500 gal. Tank and 1-1,000 gal. Tank at Building 2423	Propane Tanks: Fill as required to maintain availability.
			1-500 gal. Tank and 1-1,000 gal. Tank at Building 2421	
			2-150 gal. Tank at Building 2110	
			1-1,000 gal. Tank at Building 2402	
5.4.3.6.3	Operate Gasoline Fuel System	The gasoline fuel storage tanks, 24,000 gallon Capacity, are located at Building 2201. Gasoline is received at that location and dispersed to resident agencies and for Contractor use. Gasoline for resident agencies is provided on an SWR	24,000 gal capacity underground storage tanks at Building 2201	Fill as required to maintain availability. Maintain at or above 20% capacity.
5.4.4	Building Structures			

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5.4.4.1	Operate Electrical Systems			Operate to maintain availability
5.4.4.1.1	Switch Boards & Panel Boards	Ensure the Switchboards and Panel boards are securely fastened during operation.	1,349 Boards	See 5.4.4.1
5.4.4.1.2	Motor Control Center	Motor Control Center consists of starter module circuit breakers, control transformers, wiring, relays, and other devices.	112 MCCs	See 5.4.4.1
5.4.4.1.3	Lighting Systems	Lighting systems consists of receptacles, switch plates, bulbs, lamps, lenses, reflectors, and luminaries.	124 Systems	See 5.4.4.1
5.4.4.1.4	UPS	Uninterruptible Power Supply (UPS) are 45 Kva and above.	76 UPS	See 5.4.4.1
5.4.4.1.5	Generators	Generators shall operate as originally intended if components are replaced with like components.	13 Generators	See 5.4.4.1
5.4.4.1.6	Cathodic Protection Systems	Cathodic protection system consists of active & passive systems with rectifiers.	1 System	See 5.4.4.1
5.4.4.1.7	Lightning Protection Systems	Lightning protection system consists of ground conductors, air terminals, and ground rods.	248 Systems	See 5.4.4.1

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5.4.4.1.8	Dry Type Transformers	Dry type transformers are 45 Kva and above	173 Transformers	See 5.4.4.1
5.4.4.2	HVAC and Refrigeration Equipment and Systems			
5.4.4.2.1	Operations			
	Information, Equipment/Systems	HVAC and Refrigeration Equipment and Systems consist of equipment identified in the Equipment Database (available in the TRL). These equipment items and systems include all peripheral and support equipment, parts, and components such as pumps, motors, actuators, valves, piping, expansion tanks, controls, instrumentation and other components necessary to provide a complete and operational system. See Table 5.1-1 for a description of the system, components and output		

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5.4.4.2.1 Cont.	Information, NASA Refrigerant Stock	<p>NASA currently owns a stock of refrigerants (Inventory Listing is available in TRL). The Government will not replenish this stock of refrigerant. The Contractor may use NASA owned refrigerant to replace refrigerant loss due to leakage, subject to the following restrictions.</p> <p>This refrigerant shall:</p> <ul style="list-style-type: none"> a. Only be used to charge equipment which has been numbered and entered into the MAXIMO Database. The refrigerant capacity for the equipment item must also be in the MAXIMO Database. b. Only be used to replace refrigerant up to 15% of equipment's total refrigerant capacity (lbs of refrigerant) within a 12 month period of time. c. Not be used to charge newly installed, retrofitted or refurbished equipment. d. Only be used to replace refrigerant in equipment which has been repaired and leak checked. 		

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5.4.4.2.1 Cont.	Information, Quality Control of Refrigerant	The Contractor may reuse refrigerants recovered at SSC, by the Contractor. The Contractor shall be responsible for insuring that reused refrigerants are free of contaminants prior to reuse. As a minimum, where recovered refrigerant is to be used in equipment from which it was not recovered, the Contractor shall filter the refrigerant and test for proper temperature/pressure relationships, moisture content and acid.		

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5.4.4.2.1.1	Operate HVAC and Refrigeration Equipment and Systems	<p>The Contractor shall operate HVAC and refrigeration equipment and systems. The Contractor shall operate, inspect, and monitor equipment/systems as required to optimize equipment life cycle costs, to meet output requirements (see Table 5.1-1), or to achieve the Availability requirements (see Annex 5.5) during operational hours (see the Building Operating Hours Summary).</p> <p>Equipment shall be operated as intended and designed and operated in the most energy efficient manner while meeting availability requirements (e.g., EMCS controlled equipment shall normally be cycled off during unoccupied and non-operational periods; heating boilers shall be shut-down during the cooling season; economizer</p>	24 Systems	Monitor/Operate equipment as needed to meet availability requirements and to optimize equipment life cycle costs.
5.4.4.2.1.1	Continuation Operate HVAC and Refrigeration Equipment and Systems	<p>cycles shall be used; optimum start/stop programs shall be used, etc.). During periods in which the</p> <p>EMCS controls fail, equipment shall be manually started and stopped at times normally started and stopped by the EMCS.</p>		

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5.4.4.2.1.2	Operate Automated Chemical Injection/Treatment Systems for open loop cooling tower systems	<p>The Contractor shall operate Chemical Injection/Treatment Systems to prevent excessive water usage, corrosion, algae buildup, biological growth, mineral deposits/scale, fouling, or deterioration of equipment.</p> <p>Contractor shall provide all treatment chemicals. All chemicals used shall be compatible with the sewage treatment systems in use at Stennis Space Center, shall not violate existing National Pollution Discharge Elimination System (NPDES) discharge permits. (See Annex 2 for site chemical usage and submittal requirements.)</p>	12 Units	<p>Conductivity shall be maintained between 1,500 and 2,400 mhos. Quarterly average corrosion rates shall be maintained at or below 4.0 mils/yr. for mild steel and 0.2 mils/yr. for copper (coupon tests examined quarterly, minimum). Biological Count of heterotrophic bacteria shall be maintained below 10,000 organisms per ml (test 1 time each 30 days, minimum). No visible signs of Algae growth shall exist .</p>

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5.4.4.2.1.2	Operate Automated Chemical Injection/Treatment Systems for open loop cooling tower systems	<p>Contractor shall provide all materials, chemicals and supplies to perform all testing and sampling as required to properly treat and verify proper treatment. Contractor shall meet the following minimum sampling and testing requirements</p> <p>Quarterly - Coupon tests for mild steel and copper corrosion rates. Monthly - Biological Count of heterotrophic bacteria. Weekly – Visual inspection for algae growth. Weekly – Tackle inspection for bacteria. Weekly – Record Conductivity</p>		
5.4.4.2.1.3	Provide Chemical Treatment of Closed Loop Chilled Water and Hot Water Heating Systems	<p>The Contractor shall chemically treat closed loop systems to prevent excessive corrosion, build-up of deposits, or deterioration of piping/equipment. Contractor shall provide all treatment chemicals. All chemicals shall be compatible with the sewage treatment systems in use at Stennis Space Center, shall not violate existing NPDES discharge permits. (See Annex 2 for site chemical usage and submittal requirements).</p>	Contractor Determined	Treatment level shall be maintained between 360 (minimum) and 1500 (maximum) ppm of nitrite as NO ₂ , continuously.

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5.4.4.2.1.3	Continuation Provide Chemical Treatment of Closed Loop Chilled Water and Hot Water Heating Systems	Contractor shall provide all materials, chemicals, and supplies to perform all testing and sampling as required to properly treat and verify proper treatment. Contractor shall perform sampling of nitrite (as NO ₂) concentrations quarterly (minimum).		Quarterly average corrosion rates shall be maintained below 3.0 mils/yr. for mild steel and 0.2 mils/yr. for copper.
5.4.4.2.1.4	Manage and Record NASA Owned Refrigerant Stock/Inventory	Manage the refrigerant stock to prevent pilferage, loss, or contamination of refrigerant. Maintain an inventory of the stock. The Contractor shall be responsible for replacement of contaminated or lost refrigerant, or refrigerant which can not be accounted for through refrigerant use records (refrigerant use records are covered under Annex 5.4.4.2.1.5 and 5.4.4.2.1.6).	1 ea record	Maintain refrigerant in proper containers and in a secure area(s). Maintain current and accurate records of refrigerant inventory, including locations and bottle numbers. Records shall be maintained for 3 years and shall be available for Government review upon request.

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5.4.4.2.1.5	Maintain use Records for Refrigerant from NASA Stock.	The Contractor shall maintain records for all refrigerant used from the NASA stock. These records shall provide an audit trail down to the date, type and weight of refrigerant added, and the MAXIMO Database equipment item number. Records shall clearly differentiate between NASA stock refrigerant and other refrigerant sources (see Annex 5.4.4.2.1.6 for additional records requirements).	1 ea record	Maintain records current, accurate, and available for Government review upon request.
5.4.4.2.1.6	Maintain Refrigerant Records for Refrigerant Use and Equipment Leakage Rates	The Contractor shall maintain records of SSC refrigerant use and equipment leakage rates in accordance with EPA regulations and requirements. Note: Some record requirements for NASA owned refrigerants (see Annex 5.4.4.2.1.5) may not match EPA regulations; where this is the case, the more stringent requirement shall apply.	1 ea record file or database	Maintain records current, accurate, and available for Government review upon request.

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5.4.4.2.1.7	Manage Refrigerant Leakage Rates and Develop Repair Plans	Develop Repair Plans and maintain records in accordance with EPA regulations. The Contractor shall act on behalf of and in accordance with both “Service Organization” and “Owner” requirements established in the EPA regulations to ensure that leaks are repaired within EPA time constraints. Repair costs and requirements are covered under Annex 5.3.	1 Plan	Maintain records current, accurate, and available for Government review upon request. Notify the Government of potential conflicts/problems (e.g., non-funded repairs). Notification shall be provided within 10 work days of discovery.
5.4.4.2.1.8	Disposal of Contaminated Refrigerant	<p>The Contractor shall be responsible for disposal of contaminated refrigerants generated by PM, CM or Operations (Annexes 5.2, 5.3, and 5.4). This includes handling, storage, and disposal.</p> <p>Note: This Annex is not intended to cover the costs for the recovery of refrigerant. The recovery of refrigerant will be evaluated by the Government as part of a PM, CM, or other activity (e.g., removal of refrigerant from a demolished air conditioner prior to a repair/replacement shall be part of the CM).</p>	Contractor Determined	Compliance with EPA regulations.

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5.4.4.2.1.9	Provide HVAC/Refrigeration Technician for Support of Programmatic or Scheduled Operations During Normal Working Hours	Technician shall be located within the area of assignment (e.g., test complex) beginning 30 minutes prior to the scheduled test firing or other scheduled activity. The Government will provide approximately 2-hour notification prior to start of test, but no less than 1-hour notification.	204 hours annually	No instances of failure to respond.
		Technicians shall check in with Program Operators (e.g. Test Area Operators), upon arrival at the site for briefing and specific instruction. Minimum requirements include logging of chiller and boiler parameters prior to tests (see 5.4.4.2.2.1 and 5.4.4.2.2.3), check-in with EMCS for alarming or equipment problems, investigate areas of concern as instructed by Program Operators, and report potential problems/concerns to the EMCS and to Program Operators, mitigate and repair (as approved by Program Operator) to prevent interruption of programmatic activities.		

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		Technician shall be equipped with transportation, tools, and supplies which shall include a vehicle, ladders, hand tools, multimeter, temperature and humidity measuring devices, refrigerant gauges, air flow and differential pressure measuring devices, and other tools as necessary to troubleshoot HVAC and Refrigeration systems		
5.4.4.2.1.9	Continuation Provide HVAC/Refrigeration Technician for Support of Programmatic or Scheduled Operations During Normal Working Hours	Historically, duration for each support activity is approximately 3 hours.		
5.4.4.2.2	Standing Work			
5.4.4.2.2.1	Maintain a Log of Centrifugal/Screw Compressor Chiller Parameters During Operating Periods	The Contractor shall log operating parameters for Centrifugal/Screw Compressor Chillers. Logged data shall include entering/exiting water temperatures, amp readings, loading, oil pressures, oil level, refrigerant pressures, purge unit run time (where applicable), general conditions and observations, date and time, logging technician, and any other pertinent data.	10 Units	Log Chillers Weekly

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		<p>Logged data shall be reviewed for evidence of equipment deterioration. Conditions threatening the reliability and safety of the equipment shall be reported for corrective action.</p>		<p>Log shall be accurate and current and shall be available for Government review upon request.</p>
		<p>Equipment shall have data logged within 8 hours of being returned to service after service/repair, change of season start-up, etc.</p>		<p>Log shall be maintained on record for 24 months.</p>
<p>5.4.4.2.2.1</p>	<p>Continuation Maintain a Log of Centrifugal/Screw Compressor Chiller Parameters During Operating Periods</p>	<p>Equipment log shall record date (within 5 work days) when equipment is removed from service for repairs, seasonal shut-down, etc.</p>		
		<p>Each equipment reset shall be recorded in the log, including the date, time, and alarm conditions. Parameters shall be logged after the equipment has been reset and has reached stable operating conditions.</p>		
		<p>Log Chillers daily during any periods in which the EMCS Host Visibility and Alarming is not available.</p>		

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5.4.4.2.2.2	Maintain a Log on Chiller Parameters at Buildings 1110, 1200, and 1201 During Operating Periods	The Contractor shall log operating parameters for Chillers. Logged data shall include entering/exiting water temperatures, amp readings, loading, oil pressures, oil level, refrigerant pressures, general conditions and observations, date and time, logging technician, and any other pertinent data.	4 Units	Log Chillers weekly

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5.4.4.2.2.2	Continuation Maintain a Log on Chiller Parameters at Buildings 1110, 1200, and 1201 During Operating Periods	Logged data shall be reviewed for evidence of equipment deterioration. Conditions threatening the reliability and safety of the equipment shall be reported for corrective action.		Log shall be accurate and current and shall be available for Government review upon request.
		Equipment shall have data logged within 8 hours of being returned to service after service/repair, change of season start-up, etc.		Log shall be maintained on record for 24 months.
		Equipment log shall record date (within 5 workdays) when equipment is removed from service for repairs, seasonal shutdown, etc.		
		Each Equipment reset shall be recorded in the log, including the date, time, and alarm conditions. Parameters shall be logged after the equipment has been reset and has reached stable operating conditions.		
		Log Chillers daily during any periods in which the EMCS Host Visibility and Alarming is not available		

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5.4.4.2.2.3	Maintain a Log on Reciprocating Compressor Chiller Parameters During Operating Periods	The Contractor shall log operating parameters for Chillers. Logged data shall include entering/exiting water temperatures, amp readings, loading, oil pressures, oil level, refrigerant pressures, general conditions and observations, date and time, logging technician, and any other pertinent data.	18 Units	Log chillers monthly.
		Logged data shall be reviewed for evidence of equipment deterioration. Conditions threatening the reliability and safety of the equipment shall be reported for corrective action.		Log shall be accurate and current and shall be available for Government review upon request.
		Equipment shall have data logged within 8 hours of being returned to service after service/repair, change of season start-up, etc.		Log shall be maintained on record for 24 months.
		Equipment log shall record date (within 5 workdays) when equipment is removed from service for repairs, seasonal shutdown, etc.		

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		Each Equipment reset shall be recorded in the log, including the date, time and alarm conditions. Parameters shall be logged after the equipment has been reset and has reached stable operating conditions.		
5.4.4.2.2.4	Maintain a Log on Gas-Fired Boilers During Operating Periods	The Contractor shall log operating parameters for gas-fired boilers. Logged data shall include entering/exiting water temperatures, stack temperatures, flame color, general conditions and observations, date and time, logging technician, and any other pertinent data.	51 Boilers	Log Boilers Weekly
		Logged data shall be reviewed for evidence of equipment deterioration. Conditions threatening the reliability and safety of the equipment shall be reported for corrective action.		Log shall be accurate and current and shall be available for Government review upon request.
		Equipment shall have data logged within 8 hours of being returned to service after change of season start-up, service, repairs, etc.		Log shall be maintained on record for 24 months.
		Equipment log shall record date (within 5 workdays) when equipment is removed from service for repairs, seasonal shutdown, etc.		

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		<p>Each Equipment reset shall be recorded in the log, including the date, time and alarm conditions. Parameters shall be logged after the equipment has been reset and has reached stable operating conditions.</p>		

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5.4.4.2.2.4	Maintain a Log on Gas-Fired Boilers During Operating Periods	Log Boilers daily during any periods in which the EMCS Host Visibility and Alarming is not available.		
5.4.4.2.2.5	Provide Quarterly Water Treatment Reports (DR 5-GA06)	The Report shall provide a quarterly report for each treated HVAC water system (e.g., cooling towers, chilled water, and hot water loops). The report shall provide results of all sampling and tests, including chemical concentrations of corrosion inhibitors, biocides, algaecides, or other treatment chemicals, monthly average corrosion rates for all open systems, along with any recommendations or conclusions. (See DR 5-GA06)	59 ea closed systems, 12 ea open systems	Conformance with DR. Report shall be maintained on record for 12 months (minimum) and available for Government review upon request.
5.4.4.2.2.6	Provide Annual NASA Refrigerant Inventory Report (DR 5-GA07)	The Report shall provide a listing by refrigerant type of the NASA owned Refrigerant Stock, for the Fiscal Year. The information shall include: 1. Quantities at start of Fiscal Year. 2. Quantities at the end of Fiscal Year. 3. Refrigerant quantities, types, and storage bottle numbers. (See DR 5-GA07)	1 Report	Conformance with DR. Report shall be maintained on record for 36 months (minimum) and available for Government review upon request.
5.4.4.2.3	Recurring Work			

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5.4.4.2.3.1	Develop/Maintain HVAC and Refrigeration System Operation Manuals and SOPs (See DR 5-GA09)	Documentation shall be updated and maintained as required for the operation and maintenance of the HVAC and refrigeration systems. (See DR 5-GA09)	1 Annual Revision	
5.4.4.2.3.2	Support Freeze Plan	Monitor ambient temperatures and provide operations support as required in the SSC Freeze Plan (portion of DR1-GA03, Emergency Preparedness Plan of the SSC Disaster Preparedness Plan) to implement the plan, and to monitor and inspect equipment as needed to preclude freeze damage.	2 Occurrences per Year	No instances of non-compliance with freeze plan.
5.4.4.3	Operate All Plumbing	The Contractor shall operate all plumbing systems (potable water, sanitary sewage, etc.) so that they meet the availability requirements and operational hours as designated in Annex 5.5 and the Operating Hours Summary (EMCS Operating Procedures available in the TRL).	Specified structures and facilities are identified in TRL.	Achieve the availability requirements given in Annex 5.5, Table 5.5-2, and operational hours as designated in the Operating Hours Summary (EMCS Operating Procedure, available in the TRL)

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5.4.4.4	Operate Elevators	The routine and periodic inspections/tests for elevators are accomplished by Annex 5.2 Item Number 5.2.2.2.8.1.2. The Contractor shall accomplish any additional operations required to achieve the availability requirements and operational hours as designated in Annex 5.5 and the Operating Hours Summary (EMCS Operating Procedure available in the TRL).	Contractor Determined See the Inventory of Vertical Transportation List in Exhibit 5.	Achieve the availability requirements given in Annex 5.5, Table 5.5-2, and operational hours as designated in the Operating Hours Summary (EMCS Operating Procedure available in the TRL).
5.4.4.5	Operate Built-In Cranes, Monorails, and Hoists	Provide operation of the Built-In Cranes, Monorails, and Hoists where the Contractor is listed as the responsible operator in the Inventory of Built-In Cranes, Monorails, and Hoists (Exhibit 1). Operations shall be in accordance with NASA-STD-8719.9 and SSC-SWI-8834-0001	See Exhibit 1, Inventory of Built-In Cranes, Monorails, and Hoists. The Contractor is only responsible for providing operations where the Inventory List shows the Contractor as the responsible operators.	Provide operations in accordance with NASA-STD-8719.9 and SSC-SWI-8834-0001.
5.4.4.6	Operate Fire Protection & Alarm Detection Systems	(Intentionally left blank)		Operate to achieve availability (Table 5.5-2).

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5.4.4.6.1	Fire Protection & Alarm Systems	Consists of alarm panels.	94 Systems	See 5.4.4.6
5.4.4.6.2	Facility RF Transceivers	Part of the Fire Alarm System	97 Transceivers	See 5.4.4.6
5.4.4.6.3	Sprinkler & Suppression Systems	Systems consist of Sprinklers, foam, dry chemical, and gas (CO ₂ and Halon) including piping, valves, tanks, pumps, gauges, and associated equipment.	105 Sprinkler Systems 5 Suppression Systems	See 5.4.4.6
5.4.4.6.4	Fire Hydrants	Fire Hydrants include post indicator valves.	146 Hydrants 20 Post Indicator Valves	See 5.4.4.6

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5.4.5	Marine Operations	<p>Marine Operations includes operation and operator maintenance of the Tugboat Clermont II, 3 work barges, navigation lock, bascule bridge, docks, navigational aids, mooring devices, monitoring and level control of the canal system, signage and the procurement and storage of marine materials, and supplies required for day to day marine operations at SSC and when off –site. The canal waterway system consists of approximately 6 miles of canals. The level of the water in the canals is regulated by pumping water from the Pearl River system into the canal system through the use of 4 vertical pumps located at the West End of the lock. Operation of the pumps is required during extended periods of dry weather and when there is a lockage. The high water level of the canal system is controlled automatically by flow over a spillway.</p> <p>The tugboat Clermont II is used primarily to transport propellant barges from the loading docks on Propellant Boulevard to the test stands which is a trip of from 1 hour to the B-Test Stand to 45 minutes to the A-1 and A-2 Test stands. The tug is also utilized to transport NASA owned barges to and from the Michoud facility in New Orleans, LA before and after hurricane season. Resident agencies are provided tugboat service on a time available basis. The current method of propellant delivery is</p>		See 5.4.4.6

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5.4.5	Continuation Marine Operations	<p>to load liquid oxygen and liquid hydrogen into their respective barges at the loading facilities on Propellant Boulevard and deliver them to the respective test stands. Although the capability exists to transit to Air Products and Chemical Corp. in New Orleans, LA to pick up barge loads of liquid hydrogen, this method of delivery is not presently utilized.</p> <p>The lock is filled from the canal system through the use of “tainer valves” which are opened to fill the lock to the level of the canal system by gravity feed. The tainer valves can also be utilized to minimize spillway flow during periods of high rainfall. Tainer valves are also utilized to drain water from the lock into the Pearl River system so that the level of the lock matches that of the river system. The upper and lower gates of the lock are operated by hydraulic rams. The hydraulic pressure is furnished by electric/hydraulic pumps located in the lock equipment building. There is a separate lock control building for the upper and for the lower gates. During hurricane warning periods, commercial and privately owned boats are allowed into the lock for protection against the storm on a first come/first serve basis.</p>		

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		<p>The Bascule Bridge is a twin span, 4-lane bridge,</p>		
5.4.5	Continuation Marine Operations	<p>which is operated automatically by programmable logic controller. Manual operation is possible from the control building by trained and certified operators. The bridge has 2 variable speed electric motor/gear drives on each span. The bridge can be operated with 1 motor. The second motors are installed in each bridge span for redundant capability.</p> <p>The waterway system is an extensive series of natural and dredged canals, which connect the three major test stands, the propellant area on Propellant Blvd, and the Engine Assembly Complex including B-3202 and the Data Buoy facility. The waterway system extends all the way to the Pearl River and includes docks, navigational aids and structures below the lock. There are pilings and other</p>		

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		<p>structures in the waterway system to aid in the safe maneuvering of the tug and barges. The waterway system includes all docks, pilings, timbers, bollards, navigational aids, dolphins, spillway and surface water of the canal system. The canal system average depth is 9 feet and is dredged periodically.</p> <p>All portions of the above are “mission critical” and require a high degree of availability and reliability. (See Annex 5.5)</p>		
5.4.5.1	Provide Marine Operations Plan (DR 5-GA11)	<p>Prepare a Marine Operations Plan for all facilities and equipment covered under this Annex. The Plan shall provide details as to how the Contractor intends to perform work necessary to meet all requirements for Marine Operations under this Annex, including operations required to meet Availability as defined in Annex 5.5. This plan shall also address how the Contractor intends to meet personnel requirements, including certifications, training, and special requirements to meet Coast Guard Regulations. When operations require specific skills and/or certifications, the Contractor shall submit planned methods for</p>	1 Plan	Plan shall be submitted for CO concurrence within 60 days of contract award.

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		addressing attrition and other contingency planning.		
5.4.5.2	Support the Tornado & Severe Weather Plan	Monitor weather conditions and provide operations support as required in the Tornado and Severe Weather Plan (Annex A of the Disaster Preparedness Plan MA-05) to implement the Plan. This is an annual plan required by DR 1-GA03.	Anticipate 4 occurrences per year	No instance of non-support
5.4.5.3	Recurring Work			

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5.4.5.3.1	Operate Lock Control Equipment and Controls	Operate and provide operator maintenance of the lock hydraulic system including pumps, motors, oil system, gate rams, and entire piping and tubing systems as part of this hydraulic power system. Operation includes calibration and operation of controls, electrical and electronic devices, and all devices associated with safe operation of the lock and lock control equipment	12 times/yr The lock control equipment shall be exercised no less frequently than once each month. Normal operation can be counted as part of this monthly minimum.	The lock shall be able to perform its intended function within 2 hours of a request to operate it. The request may come from the Government, other Contractors, or resident agencies.

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5.4.5.3.2	Operate Navigation Lock	Operation of this facility shall include all events of opening and closing the lock, adjusting and maintaining the water level, operation of controls, operation of tainer valves, and assisting in mooring boats and barges into and out of the lock. There is a special requirement to lubricate the pintal bearings of the lock gates every 30 days. This operation must be performed with the gates in motion to aid grease flow to the bearings. Failure to perform this function will result in seizing of the bearings. There will be a minimum of 12 lockages per year with approximately 5 of these occurring after hours. It is normal to have 24 hours notice prior to a lockage; however, the Contractor shall be able to support 3 lockages per year within 1-hour notice. Operator maintenance of the lock shall include maintenance of marine safety devices, lock mooring devices, and replenishment of operating fluids.	12 times/yr including maintenance and resident agency use.	The navigation lock shall be able to be operated (lock filled, water level adjusted to river level or canal level, and the gates operated within 2 hours of notification to operate).

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5.4.5.3.3	Operate Bascule Bridge	Operate the bascule bridge on request. Operators shall be trained and certified to operate this critical system. The bridge is of the bascule type and has North and South spans that are operated by electric motors which are assisted by counterweighing. The bridge controls are automatic through a programmable logic controller (PLC); however, the operators must be trained and certified to be able to operate the bridge in “manual” as well as “automatic” mode. The bridge is operated on demand for various test programs and resident agencies. It is normal practice to operate the bridge on demand except for the hours 6:30 am to 8:30 am and from 3:30 p.m. to 5:00 p.m. During these peak automobile traffic hours, auto traffic is given preference unless there is a critical programmatic requirement. The NASA Program Office for the test program affected or the Director of Center Operations and Support Directorate or the Director of the Propulsion Test Directorate will determine programmatic need. The bridge may be required to be opened up to 10 times per year of which 4 of these openings may be after hours. This includes requirements for maintenance.	10 openings/yr	The bridge shall be able to be opened (at least 1 span) within 2 hours of notification.

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5.4.5.3.4	Operate Tugboat Clermont II	<p>The Contractor shall assume complete operational control and authority for the NASA tugboat. The Contractor shall have a certificated Captain and boat driver(s) to perform work requirements on an as needed basis. The Captain shall assume full and unrestricted control of operational decisions, scheduling in support of test programs and other requirements, and be responsible to assure that the tug is maintained in accordance with Coast Guard regulations and standards for a marine vessel of this type and size. The tugboat shall be available to support the requirements of test programs and/or resident Agencies on as as-needed basis. Historically, 90% of the annual requirements for barge relocations have been accomplished during the hours 5:00 a.m. to 4:00 p.m. during normal weekdays. Approximately 10 of the anticipated 200 barge moves will be accomplished after normal working hours. Work that is started during normal working hours shall be completed, even if it requires work past normal working hours. Workdays in excess of 12 hours continuous are anticipated to occur 10 times per year. Sufficient trained and certified personnel must be available to support 24 hours per day operations for periods up to 4 consecutive days. This extended work period may occur up to 4 times per year. If the hydrogen</p>	200 movements/yr	<p>The tugboat shall be able to conduct barge movements during normal working hours with zero excursions. The Contractor shall be able to support barge movement after normal working hours with 2 hours advanced notice with zero excursions allowed. In the event that the NASA tug cannot support barge movements due to</p>

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5.4.5.3.4	Operate Tugboat Clermont II	transfer facility on Propellant Blvd. is unable to transfer hydrogen to the barges for any reason, it is anticipated that barges will be pushed to Air Products and Chemical Corp. in New Orleans, LA, and filled there and returned to SSC fully loaded. This round trip takes 15 to 20 hours and usually requires the marine crew to stay on the tugboat over night at Air Products. Night transits through the waterway system are discouraged due to safety considerations. It is likely that during good weather, 2 hydrogen barges can be pushed to Air Products at 1 time. This requires prior approval of the NASA Project Office or the CO. In addition to movement of the 3 liquid hydrogen and 6 liquid oxygen barges, the tug will be used to relocate the 3 work barges to be used for maintenance of the canal system. The tug will also be required to relocate barges from Michoud to SSC on demand and to assist other resident agencies at SSC.		mechanical malfunction or other unexpected event, the Contractor shall be able to supply alternate means to move barges within 48 hours of the time that the tug is determined to be unavailable for service.

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5.4.5.3.4.1	Operate Tugboat and other marine facilities to assist resident agencies and other Contractors	It is normal practice to assist resident agencies in the movement of material within the SSC waterway system and to and from Michoud. This is infrequent and is accomplished on a “time available” basis. On rare occasions the Contractor may be required to assist other Contractors with movement of material on the waterway system when such movement would be considered in the best interest of the Government. This work will be on a time available basis. On an infrequent basis, the marine personnel are requested to act as pilots for boats transiting the Pearl River and SSC water systems. They are not to serve as certificated pilots, only as advisors.	Contractor Determined	
5.4.5.4	Standing Work			
5.4.5.4.1	Operate Lock Pumping Station	The Contractor shall operate the 4 vertical, electrically driven pumps to maintain the canal level above the lock between 16 feet 4 inches to 16 feet 6 inches, as measured at the gauge on the canal lock wall upstream of the upper gates. The canal level shall not be allowed to fall below 16 feet 0 inches, because the cryogenic barges have a very limited ability to rise and fall with canal level changes. During periods of high rainfall, it shall	Operate and provide operator maintenance on the pumping system 12 times/yr for approximately 4 hours each time. Operation of the tainer valves to control	There shall be zero excursions of the canal system below the operating limit.

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5.4.5.4.1	Continuation Operate Lock Pumping Station	be normal practice to open the tainer valve system in order to limit flooding below the spillway. The high level of water in the canal system is controlled by the spillway system. The pumps, once started, can operate unattended as long as the level of the canal is carefully observed and kept within the limits above. This building shall not be used for storage of supplies or materials of any kind with the exception of material needed on a daily basis to operate the pumps.	excessive rainfall (more than 6 inches of rainfall in any 24-hour period or a rainfall accumulation of 10 inches within any 3-day period) will occur 7 times per year.	
5.4.5.4.2	Operate Lock Cathodic Protection System	The cathodic protection system, which protects the lock and bridge, shall be operated in accordance with standards set in Annex 5.2.2.2.8.4.7. This system operates unattended.	Nothing additional	No outages exceeding 24 hours. Maintain operational settings per Annex 5.2.2.2.8.4.7.
5.4.5.4.3	Maintain Logs	The Contractor shall maintain a log at each location of the Bascule Bridge and Lock. These logs shall provide historical information of openings, closings, maintenance activities performed with dates and times for all information.	2 logs	Logs shall be legible, contain all operational, maintenance data, and have entries up to date.

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5.4.5.4.3	Continuation Maintain Logs	The Contractor shall maintain a log on the bridge of the Tugboat Clermont II which provides dates and times of all maintenance activities, operational data, names of personnel doing work or operations, and initialed by the Captain as being performed in accordance with regulations and other pertinent data. This log shall also show consumables usage, fueling records, and any equipment malfunctions.	1 log	Log shall be legible and complete in every detail of operation
5.4.5.4.5	Submit Fuel Usage Report	The Contractor shall submit on a monthly basis a consumable usage report, which provides the amount of fuel used during the month. See DR 5-GA18.	Monthly	Report shall be submitted to the NASA CO before the 5 th working day after the end of each fiscal month. See DR 5-GA18.
5.4.6	Solid Waste Management			
5.4.6.1	Refuse Collection – Standing Work			
5.4.6.1.1	Schedule Update Report DR 5-GA12	Develop, submit, and maintain monthly schedule updates to verify compliance with Refuse Pickup Schedule.	Monthly	Nothing additional.

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5.4.6.1.2	Collect Refuse from Non-Bulk Containers	The Contractor shall pick up solid waste containers at locations and frequencies listed in the Refuse Pickup Schedule (See Exhibit 7) and deliver to a permitted landfill. The Contractor shall visually inspect all containers before pick up to ensure there are no materials or components in the containers that are not on the refuse WIS. If unauthorized dumping is detected, report immediately to the SSC Environmental Officer. Collect refuse spilled from under and within 10 feet of containers and refuse spilled from collection vehicles.	5,500 containers emptied annually	Empty containers during core hours. Return empty trashcans and lids to original position and location.

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5.4.6.1.3	Pick Up Refuse from Containers Handled Mechanically for Disposal	Containers holding 2 to 10 cubic yards are normally handled mechanically. A detailed listing of locations will be provided upon contract award. Provide an appropriate size container at the specific locations and establish a frequency of collection. Collect refuse spilled from, under, and within 10 feet of containers and refuse spilled from collection vehicles and deliver to a permitted landfill. Return containers to their original locations and ensure services are accomplished within the frequency of service parameters specified. NOTE: Quantities in individual containers will vary seasonally, and on occasion, special events/ circumstances (e.g., cardboard from deliveries, office moves, etc.) may inadvertently fill container before the anticipated collection date.	11,800 containers emptied annually, with approximately 30 tons of waste weekly transported to the landfill	Empty containers as necessary to ensure that they do not exceed 90% capacity, develop obnoxious odors but not less than monthly.
5.4.6.1.4	Pick Up Cardboard from Container Area	The Contractor shall pick up cardboard from containers at Buildings 1100 (two locations), 2101, 1000, 2204, 1105, 2104/2105, 2201, 2205, 3202, 1005, and 8100. In addition, the Contractor shall collect cardboard from all other refuse collection points where quantities of cardboard are occasionally generated but do not warrant the installation of a container. Administration of cardboard recycling program is in Annex 2.2.	12 locations with cardboard containers 36 to 48 tons of cardboard each year	Empty containers as necessary to ensure they do not exceed 90% capacity, but not less than monthly.

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5.4.6.2	Landfill Operations – Standing Work			
5.4.6.2.1	Class A Landfill and Class II Rubbish Landfill Operations	Operate in accordance with Landfill Operations Manual, Permit No. SW02401B0376, and the MDEQ Non-hazardous Waste Management Regulations.	Daily	Meet all requirements of Landfill Operations Manual, Permit No. SW02401B0376 and MDEQ Non-hazardous Waste Regulations.
5.4.6.2.2	Cardboard and Drum Compression	Compress all cardboard collected in 5.4.6.1.4, store and arrange for sale and/or recycling. Compress all previously rinsed drums in the drum crusher and place in the metal recycling program administered by requirements of Annex 2 and 6.	3 to 4 tons of cardboard per month; 100 drums on average per month	Less than 20% cardboard in debris/garbage disposed of in landfills. No drums in landfill except for unsalvageable crushed drums upon approval of SSC Environmental Officer.
5.4.6.2.3	Solid Waste Disposal Report, DR 5-GA13	Provide report per DR 5-GA13.	Monthly	Compliance with DR
5.4.7	Maintenance Engineering			

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5.4.7.1	Personnel Qualifications, Roof Maintenance	<p>Due to the criticality of the roofing systems, it is imperative that personnel assigned as craftsman and inspectors for roof maintenance be thoroughly familiar with repair procedures of the various systems. All inspectors and technicians assigned to these positions must meet the Roofing Industry's Educational Institute Requirements for Roofer ID (3 years of specialized experience in repair and maintenance of the roofing system).</p> <p>At a minimum, Maintenance Engineers shall provide the following:</p> <ul style="list-style-type: none"> a. Maintenance planning, both long and short term, based on experience and expert knowledge of SSC facilities and systems. b. Required inspections. c. The gathering of information for correct evaluation of problems. d. The determination of cause and the proper repair of correction of operation. 	Contractor determined	Submit qualifications within first 60 days of contract start for inspectors and technicians.

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5.4.7.1	Continuation Personnel Qualifications, Roof Maintenance	<ul style="list-style-type: none"> e. The mathematical design, with sketches or drawings, as required. f. The specifying of requirements, or method of operation, and selection of proper materials. g. The investigation of and reporting of unplanned utility system, and equipment outages or failures. h. Respond to requests from the Government for information regarding SFUSS condition and proposed solutions for failed equipment and systems. 		
5.4.7.3	Reserved			
5.4.7.4	Reserved			
5.4.7.5	Implement, Manage, and Operate the Existing Computerized Maintenance Management System (CMMS)	The CMMS software, workstation certifications, and maintenance history are Government owned and will be made available to the Contractor for the duration of the contract. The ADP hardware and software to support this system will be maintained by the ODIN Contractor.	Contractor determined	The CMMS system shall be maintained in a manner that minimizes downtime.

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5.4.7.6.	Establish a Work Management System for Receiving, Scheduling, Tracking, and Reporting All Maintenance and Repair Work	The system shall provide maximum visibility (network online access) to all generated, scheduled, in-progress, and completed maintenance and repair	Contractor determined	Information shall be available for Government review 24 hours a day, 7 days a week. At a minimum, the information shall be updated daily, no later than 7 a.m. each day. Receive work 24 hours a day, 7 days a week.
5.4.7.6.1	Establish a Central Work Control Center for Receiving Maintenance and Repair Work	Publish or otherwise notify customers of the location and phone number. Establish and publish a procedure for receiving calls outside normal business hours.	Contractor determined	Numbers shall be accounted for at all times.
5.4.7.6.2	Assign a Work Control Number to Maintenance and Repair Work Received for Tracking and Reporting Purposes	Each occurrence of maintenance and repair work shall be assigned a unique number distinguishable for other service performed under the terms of this contract.	Contractor determined	Input is correctly completed with 24 hours of receipt of change.

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5.4.7.6.3	Input and Update Data Required for Tracking of Received or Identified Maintenance and Repair Work	Include all information necessary to provide accurate network online visibility to all work. Update data whenever a change occurs, additional data becomes available or condition changes.	Nothing Additional	A complete audit trail shall exist for work performed on numbered equipment.

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5.4.7.6.4	Track Work Accomplished on All Numbered Equipment in the CMMS Database	Includes all work covered under the terms of this contract of operation, standing work, etc. Provide accurate network online visibility.	Nothing Additional	Retag equipment that has missing or illegible tags.
5.4.7.6.5	Maintain CMMS Program Identification on Equipment	Ensure equipment has a Maintenance ID tag attached. Ensure equipment has a corresponding ID in the CMMS database.	1 system Contractor determined	Place an equipment identification number on all new equipment. All documentation shall be up to date and available for review by the Government.
5.4.7.6.6	Reserved			
5.4.7.7	Maintain and operate existing, Government Owned, Predictive Testing and Inspection (P.T.&I) Program	The Contractor shall maintain the existing software current or replace with new software if the vibration and/or thermography equipment is replaced with a different system. The systems in use at the end of the contract term shall be provided to the Government.	3 man years per year	
5.4.7.8	Utilize and Update the Existing Government Owned ROOFER Software and Database	The ROOFER program, utilizing maintenance history prioritizes roof maintenance requirements.	1 database	Complete and accurate database

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5.4.7.9	Utilize and Update the Following System Databases: 1. Common Use Areas Database, Including Condition of Carpet, Interior Paint, Ceiling Tile, Restroom Partition, and Fixture Condition. 2. Facility Relamp Database. 3. Exterior Paint Database.	<p>These databases provide information on the condition of specific facilities and systems and maintenance planning.</p> <p>Information contained in these databases shall be updated to reflect current conditions a determined by the Facility Inspection Program.</p>	3 databases	Complete and accurate database
5.4.7.10	Schedules			
5.4.7.10.1	Prepare a 3-Month Schedule at the Beginning of Each Month, Available Online	<p>The Contractor shall prepare the 3-month schedule for all operation, recurring work, Contractor generated work orders, preventive maintenance, and other SWRs. The schedule shall include the work order number, location (specific location description to permit the Government to inspect the work), start date, and end date.</p>	12 schedules	The schedule shall be updated the first of each month.

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5.4.7.10.2	Prepare a Weekly Schedule, Available Online	The Contractor shall prepare a weekly work schedule that covers the same types and categories of work as the 3-month schedule specified above and shall contain the same information	52 schedules	The schedule shall be available online by 7:00 a.m., Friday for the following week. The schedule shall be updated as changes occur.
5.4.7.11	Collect and Report Historical Information on Trouble Calls and All Maintenance Work Orders DR 5-GA23	Historical cost information, that summarizes the content of the maintenance work at SSC, shall be provided no later than October 15 for the previous fiscal year. This information shall be provided for review in online reports and retained in Central Engineering Files.	Approximately 3,500 trouble calls per year.	No instance of undocumented trouble call work
5.4.8	Operate the Installation-Accountable Government Property (IAGP)	<p>All IAGP are to be used only to complete work under this contract. The use of Government furnished property and services for other purposes are prohibited.</p> <p>The Contractor shall maintain all current calibrations and certifications, which might be required for this equipment.</p> <p>NASA's Test Area requirements shall have the highest priority in the use of all IAGP.</p>	Attachment J-10 List 1 and 2	No instance of improper operation of equipment.

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5.4.8.1	Operate the Special Purpose Mobile Equipment (SPME)	<p>The Contractor is responsible to operate all Special Purpose Mobile Equipment.</p> <p>The Contractor shall also be responsible for refueling any or all of these items which are engine-driven, as necessary, to maintain this readily available condition.</p>	Exhibit 4	
5.4.9	Provide Non-destructive Evaluation Service Capability (NDE)	NDE includes extensive capabilities in the area of inspection and evaluation services. These capabilities must be readily available and be of state-of-the-art capability. The services required include such items as the following: leak inspections by mass spectrometer; radiograph filming and interpretation; ultrasonic examination; borescope inspection; magnetic particle inspection; dye penetrate inspection; hardness determination; radiation safety; and other inspection and evaluation work.		

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5.4.9	Continuation Provide Non-destructive Evaluation Service Capability (NDE)	The work includes capability to inspect welds up to 6 inches in thickness, pressure vessel certification, failure prediction, failure evaluation, corrosion detection and evaluation, leakage rate evaluation during component testing in the shops and in the field, and a multitude of other inspection efforts required to support cryogenic and high pressure gas systems and equipment operations. This capability extends to inspection of “flight” hardware as determined by the customer.		
		This performance requirement also includes the cost to maintain radiation sources including high-energy cobalt source and the certifications to maintain this capability.		
		The maintenance of all NDE equipment, certification fees, and all other costs associated with maintaining this capability in a high state of availability are included in this Annex.		
		The work schedule is not predictable and overtime is frequently required to support customer requirements.		

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5.4.9	Continuation Provide Non-destructive Evaluation Service Capability (NDE)	The Contractor must be certificated by the Mississippi State Board of Health, Division of Radiological Health and operate in accordance with the Mississippi State Board of Health Regulations for the Control of Radiation. The Contractor must obtain and maintain "Radioactive Material" certification and "Registration of Sources of Ionizing Radiation" (X-ray).	2 certifications	Certifications must be current and comply with State regulations.
		Leak inspection is split between the repair work being performed in the Fluid Component Processing Facility and at the gas and cryogenic systems located in the test complexes and site-wide systems.		Contractor shall respond to request within 1 hour of notification of requirement. Results of inspection shall be submitted within 24 hours.
		Radiograph work is mostly fieldwork and is the inspection of welding made during construction and/or maintenance and in the recertification of pressure vessels for failure prediction.		
		Pressure vessel inspection is performed on all pressure vessels in accordance with the NASA Pressure Vessel Recertification Program.		

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5.4.10	Energy Management			
5.4.10.1	Establish and Implement an Energy Management Program to ensure compliance with Federal Laws and Executive Orders, Agency and Center Mandates for SSC	<p>The Contractor shall propose an Energy Management Plan that accomplishes the end results of:</p> <p>The plan shall implement the energy management goals established by the Energy Policy Act of 2005 (EPACT), the SSC Energy Efficiency & Water Conservation Five Year Plan (SPLN-8500-002) and Executive Orders 12759, 13123, 13221, 13149 and 13101. Additionally, the plan shall implement the SSC Utilities Energy Consumption and Cost Allocation Procedures in accordance with the Facilities Maintenance and Energy Management Handbook. The plan shall describe how the Contractor will achieve energy goals for all Performance requirements. The plan shall be inclusive of new designs, renovations, and equipment replacements, procurements of energy goods or equipment and operations, and maintenance of Utility Systems.</p> <p>Life-Cycle Costs (LCC) as defined in 10 CFR 435 and 436 and Executive Order 13123 shall be integral part of plan. The plan shall comply with</p>	<p>1 Plan</p> <p>See DR5-GA22.</p>	<p>Initial plan to be approved and in place within 180 days after contract start. Thereafter, update any changes within 30 days.</p>

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5.4.10.1	Continuation Establish and Implement an Energy Management Program to ensure compliance with Federal Laws and Executive Orders, Agency and Center Mandates for SSC	the SSC Environmental Management System (EMS) A certification process must be included in the program which ensures compliance of design, construction, installation and operation with Federally Mandated Standards including 10 CFR 435 and 436.		
5.4.10.2	Provide the Energy Consumption and Cost Reports in accordance with DR 5-GA18	Submit to SSC's Energy Manager	See DR 5-GA18	Timely, accurate and complete reporting.

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5.4.11	Facilities Management			
5.4.11.1	<p>Establish and Implement a Facilities Management Program to ensure the integration of emergency preparedness and response for the facility, safety, maintenance and assure orderly operating environment of the facility</p>	<p>The Facility Manager Program shall accomplish the following functions:</p> <p>Provide management oversight and facilitation of the SSC Facility Management Program by working with the designated NASA Technical Monitor for facilities and the individual Facility Managers.</p> <p>Maintain current listing of building Facility Managers.</p> <p>Maintain a Facility Management Website complete with building discrepancy database.</p> <p>Assist Facility Managers with emergency preparedness, industrial health and environmental actions, safety issues, and coordinating all building maintenance.</p> <p>Appoint Facility managers for the FOS contractor appointed buildings and provide training for all Facility Managers.</p> <p>Keep Facility Manager Handbook current.</p>	1 Plan, with database, website and manual	Initial program to be approved and in place within 180 days after contract start. Maintain up to date data base and update manual changes within 30 days. All contractor assigned buildings with Facility Managers in place during contract phase-in.

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5.5 AVAILABILITY

5.5.1 General Information

5.5.1.1 Annex Description

This Annex identifies the Availability requirements for Structures, Facilities, Utility Systems/Subsystems and Installation-Accountable Government Property (SFUSS & IAGP) (see 5.1.2). The availability requirements of this Annex do not apply to SFUSS & IAGP that are maintained by "Demand Work". Availability is defined as the ability of SFUSS & IAGP to perform its intended function and deliver intended output during operating periods. The Government has adopted availability units as described in Table 5.5-1. A malfunction is defined as an event in which a SFUSS & IAGP fails to properly operate or loses intended redundancy, but which does not prevent the system from performing its intended function. The operational periods are defined in the Building Operating Hours Summary of the EMCS Operating Instructions (available in the TRL); this is defined as the times for which the SFUSS & IAGP are required to perform intended functions by providing the specified output or redundancy function. Malfunction, response time, and repair time allowances are described in Table 5.5-2.

5.5.1.2 Availability Unit Definitions

Table 5.5-1 describes and defines availability units and their criticality level. The Critical Systems Lists and the Critical Systems Line Drawings (found in the SSC Utility RCM Analysis Manuals for specified equipment and systems) identifies the criticality for each utility distribution system, subsystem and/or part of a subsystem. The MAXIMO Equipment Database identifies the criticality for numbered equipment items. Definitions for Criticality levels are provided in Annex 5.1.

5.5.1.3 Operating Hours, Outages, and Notifications

PM, operations, or other activities which require "off time", "down time", or "outages" of SFUSS & IAGP, shall be scheduled during the non-operating hours of the affected building/facility, area, or equipment as defined in the Building Operating Hours Summary EMCS Operating Procedures (available in the TRL). When operating hours are continuous, or when activities can not be accomplished within non-operating hours, the Contractor shall be responsible to provide temporary services or otherwise ensure that site/facility activities are not interrupted see Annexes 5.2 and 5.3. Activities requiring temporary services shall be coordinated with the affected customer and shall receive concurrence of the CO prior to commencement of work. When interruption of site/facility activities is unavoidable or when temporary services are not feasible, prior concurrence of the Contracting Officer (CO) shall be requested. When concurrence is provided, the Contractor will not accrue an availability loss.

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All scheduled “off time/down time,” whether off time is during or after normal working hours shall be coordinated with affected customer. Failure to coordinate and to provide a minimum of 24-hour notification shall result in availability loss (see Annexes 5.2, 5.3 & 5.4). Such notification shall provide the affected parties sufficient information and time to prepare for outages or request rescheduling of activities.

5.5.1.4 Availability Loss Accrual

Availability losses will be accrued due to unavailability of SFUSS & IAGP as defined in Table 5.5-1 and that are a result of PM, operations, CM, construction or other activities within the control of the contractor. Accrual of availability losses does not diminish the right of the Government to impact incentives applicable to other Annexes of this contract. Example: Failure to perform a required PM results in the loss of output of a utility system as defined in Table 5.1-1. An availability loss shall be accrued per the applicable system or equipment item as defined in this Annex; the incentive fee may be affected for non-performance of the applicable PM line item in Annex 5.2. An availability loss shall be accrued each time a SFUSS & IAGP fails to be available during a performance period. There is no limit on the quantity of availability losses that may be accrued against any SFUSS & IAGP. Example: An equipment item experiences an availability loss and is repaired/restored to operation within the designated repair time. The equipment subsequently experiences a second availability loss. A total of

2 availability losses shall be accrued against the equipment item.

Allowed time for response and repair is provided in Table 5.5-2, for which failure to meet will result in accrual of an additional availability loss. After the allowed repair time lapses, an additional availability loss shall be accrued every 24 hours until the repair is completed. Example: A Criticality Level II system with redundancy (7-day designated repair time) experiences an availability loss. The repair is completed on the 10th day following the loss. This incident may result in accrual of 3-4 Availability Losses (dependant on the definition provided in Table 5.5-1). The first may be accrued for the initial loss of availability, (again, dependant on the definition provided in Table 5.5-1) and the subsequent losses will be accrued for each additional 24 period past the required repair time.

When the repair time constraints can not be met, the contractor may establish temporary services to temporarily restore availability. In such cases, the contractor shall obtain CO concurrence on the method and the maximum time for which temporary services will be in use. Continued operation of temporary service beyond the concurred time allowance will result in accrual of a malfunction (unless prior concurrence of the CO is obtained). An additional malfunction will be accrued every 5 days until the system availability is restored, or CO concurrence is obtained on the continuation of temporary

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services. Costs for approved temporary services are covered under CM (see Annex 5.3).

5.5.1.5 Malfunction-Availability Accrual

Table 5.5-2 provides Malfunction Conversion and Response/Repair Time Requirements values for each SFUSS & IAGP Criticality Class Code. Each time the quantity of malfunctions occurring for an individual Criticality Level reaches the malfunction conversion value, an availability loss will be accrued. Example: A total of 12 malfunctions occur on a Criticality I Systems. This shall result in accrual of 4 availability losses against Criticality level I (from Table 5.5-2, Malfunction-Availability Equivalent is 3, therefore 12 malfunctions divided by 3 is equal to 4 availability losses).

A malfunction will be accrued toward defined availability units as defined in Table 5.5-1. The allowed time for response and repair is provided in Table 5.5-2, for which failure to meet shall result in accrual of an additional malfunction. After the allowed repair time has lapsed, an additional malfunction shall then be accrued every 24 hours until the repair is completed.

At times a malfunction or loss of one unit may result in loss of availability of one or more other availability units. In such cases, either a malfunction shall be applied to the system which experienced the malfunction, or an availability loss shall be accrued against 1 of the units which experienced a loss of availability. Selection of either option is at the Governments

discretion (see example 6 in 5.5.1.9). It is also the Government option as to which affected system accrues the availability loss.

5.5.1.6 Availability Incentive Fee

Table 5.5-3 defines the incentive fee that will be awarded to the Contractor upon accomplishing the designated levels of availability. Availability losses and malfunctions within each SFUSS & IAGP Criticality Class Code will be totaled for each performance of a 12-month period. The incentive will then be determined based on ranges of availability losses as presented in Table 5.5-3.

Maintaining SFUSS & IAGP availability is a contractual requirement and a primary responsibility of the Contractor. In such cases that the incentive fee within a criticality level may have been lost during a given performance period, the Contractor is still obligated to work diligently in maintaining SFUSS & IAGP availability without regard to the incentive fee status.

5.5.1.7 Repair Practice Constraints

The Contractor is expected to be resourceful in meeting the repair time constraints by using such methods as maintaining inventory of commonly used parts/supplies, expeditious purchase/delivery of parts, development of service contracts, use of temporary services, etc. When a repair can not be accomplished within the allowed time constraints due to

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circumstances beyond the control of the Contractor and temporary services are not feasible, the Contractor may obtain relief through a special written request to the CO for a Continuance (a request for deferral). When approved, the Contractor will not accrue additional availability losses for failure to meet repair times. If requested by the Government, such requests shall be accompanied by sufficient detailed information to demonstrate and allow the Government to verify that the Contractor exercised reasonable effort to accomplish the repair within the designated time constraints. Approval is strictly at the discretion of the CO; the burden of proof resides with the Contractor. The Contractor must also demonstrate a continuing effort to expedite the repair; failure to expedite may result in cancellation of the Continuance. If requested by the Government, submittals for a Continuance shall include a listing of repair parts, descriptions of work involved, extensive listings of suppliers (names, dates, and phone numbers), contacts for parts/services, explanations of the circumstances necessitating the Continuance, and a repair plan with projected completion date.

The Contractor shall not cannibalize site equipment in order to obtain repair parts. However, in emergency cases, when timely delivery of parts is not possible or parts are not available, relief from this requirement may be obtained through the Supply and Equipment Management Officer's concurrence in accordance with NASA Handbook 4200. The NASA Form 1617 shall be utilized to record the circumstances and approvals for this action.

The Contractor may obtain spare parts inventory (which shall be used for SSC SUFUSS & IAGP only) through cannibalizing site equipment determined to be "scrap or salvage" in accordance with NASA NPR 4300.1B NASA Personal Property Disposal Manual. The NASA Form 1617 shall be utilized to record the circumstances and approvals for this action. Approval of any cannibalization is strictly at the discretion of the Government and is subject to NASA standards regulating cannibalization. An inventory shall be maintained on such parts, and the inventory and parts shall be turned over to the Government at the end of the contract.

5.5.1.8 Document and Report

The Contractor shall document and maintain cumulative records (for each contract year) of all malfunctions and availability losses. Records shall be sufficient such that the Government can determine the date, time, duration, equipment, systems, building, type of malfunction/failure, cause, etc. Malfunctions and availability losses shall be reported to the Government per Annex 5.5.2.

5.5.1.9 Examples

The following examples are presented in order to clarify the accrual of availability losses and malfunction of various equipment and systems (also, see examples in previous sections of this Annex). The Government neither guarantees nor

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implies that these examples provide a comprehensive list covering all potential situations, circumstances, or scenarios that may occur.

EXAMPLES:

- 1)The primary pump in a sewage lift station fails; the secondary pump is able to handle the flow, and the lift station continues to perform its intended function. This situation is defined as a malfunction. The failure to repair the primary lift station in accordance with the repair times listed in Table 5.5-2 would result in the accrual of a malfunction for this appropriate Criticality Level.
- 2)When the repair in example 1 is completed and the lift station is restored to normal operation, then subsequently that pump or any other lift station component causes another malfunction. This situation is defined as another malfunction and must meet the repair time listed in Table 5.5-2 to avoid the accrual of a malfunction.
- 3)The potable water system during normal operations is supplied water from 2 well house systems, and a third well house system is available as backup. If 1of the operational well house systems fails and the potable water system output continues (i.e., pressure and flow are maintained per output requirements of this contract), then this would be defined as a malfunction. Failure to repair the well house in accordance with the repair times listed in Table 5.5-2 would result in the accrual of a malfunction for this appropriate Criticality Level.
- 4)If all 3 well house systems fail in example 3, including the backup, but system output remains; then all 3 incidences would be defined as malfunctions and must meet the repair times listed in Table 5.5-2 to avoid the accrual of any malfunction.
- 5)The condenser water pump fails, resulting in loss of an entire building chilled water system. This is defined as an Availability loss. Failure to repair the pump in accordance with the repair times listed in Table 5.5-2 would result in the accrual of an availability loss for that appropriate Criticality Level.
- 6)A construction activity under the direction of the Contractor damages a pipe serving make-up water to a mechanical room, resulting in loss of chilled water system and the hot water system during occupied periods of served buildings/areas. It is the Government's option as to which of the following would occur: Either the incident would be defined as a malfunction against the appropriate Criticality Level of either water piping system, or the incident would be defined as an availability loss for the hot water system. Regardless, the failure to make repairs in accordance with the repair times listed in Table 5.5-2 would result in the accrual of malfunction (availability loss).

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7) A pump bearing failure is detected through a PM or other activity prior to pump failure. An outage is coordinated, scheduled and receives CO concurrence. The system is then taken off-line, the repair completed, and the system restored to operation. No availability loss or malfunction would be accrued.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
5.5.2	Document and Report Availability Losses (DR 5-GA08)	The Contractor shall document and maintain cumulative records on all malfunctions and availability losses for each availability unit as defined in Table 5.5-1. Records shall be available on electronic format and shall be sufficient such that the Government can determine the date, time, equipment, systems, building, type of malfunction or failure, cause, repair time, etc. Electronic format shall allow sorting by building, system, equipment number where applicable, and date.	All SFUSS & IAGP Equipment	Records shall be maintained accurate and current and available for Government review upon request.
		Malfunctions and availability losses shall be reported per DR 5-GA08.		Reports shall be accurate and timely.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Electrical 13.8 kV	Electrical 13.8kV Distribution Circuits 11/21, 12/22, and 14/24.	Loss of any portion of a circuit will be defined as an Availability Loss. Other events which do not inhibit the circuit(s) from delivering continuous power will be defined as a Malfunction.
Electrical 13.8 kV	Electrical 13.8 kV substations.	Any failure in a building/facility substation high side switch, transformer, service entrance, or main disconnect that results in loss of power to the facility/building will be defined as an Availability Loss. Other events which do not inhibit the substation from delivering continuous power will be defined as a Malfunction.
Electrical	Exterior Lighting System	Failure of an exterior lighting system to provide the specified foot-candle levels (as defined in SSC 50-002) will be defined as an Availability Loss. Failure of a single component within a system (lamp, ballast, reflector, lens, light pole, conductor, conduit, photocell, timer or associated hardware) will be defined as a Malfunction.
Electrical	Electric Meters	Failure of an electric meter to provide accurate measurements will be defined as an Availability Loss. Other events which do not inhibit the meter from measuring accurately will be defined as a Malfunction.
Potable Water	Potable Water Distribution System	Failure of any portion of a potable water utility system (excludes interior systems) to provide a facility with a continuous supply of potable/fire water will be defined as an Availability Loss. Failure of a pipe, valve, fitting, valve box, valve/pipeline marker or insulation that does not inhibit the system from providing a continuous supply of water to a facility, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Potable Water	Well house complex #1, 2 & 3 (includes well, pumps, chlorine treatment, meter, etc.) and Pumphouse Complex #3.	Failure to maintain base side pressures at 55 - 65 psig (referenced at wells #1 & 2) and test site pressures at 75 - 85 psig (referenced at storage tank #3) will be defined as an Availability Loss. Failure of the water treatment system to provide the quality of water that meets the MS Dept. of Environmental Quality standards for chemical dosages and quality control of bacteria will be defined as an Availability Loss. Failure of pumps, motors, meters, gages, pressure tanks, chlorinators, chlorine cylinders, scales, piping, fittings, valves, insulation, chlorine alarm detection systems, etc., that do not inhibit the system from maintaining pressure or quality water, will be defined as a Malfunction.
Potable Water	Water storage system - elevated Tanks #1, 2 &3.	Failure of an elevated tank to maintain head pressures within the designed pressures and provide designed storage capacity will be defined as an Availability Loss. Other events or failures to the structural framing, gages, drain pipes, screens, vents, internal piping and cathodic protection, that do not inhibit the system from maintaining head pressure and adequate storage will be defined as a Malfunction.
Sanitary Sewage	Sewage Collection System (excluding Lift Stations.)	Excessive leakage or failure of any portion of a sanitary sewage system to provide continuous service, as designed and required to accomplish transport of wastewater from facilities to treatment systems, will be defined as an Availability Loss. Other events and failures to piping, valves, check valves, wet wells, dry wells, manholes, sump pumps, vents, blowers, compressors, grinders/commintors, controls and other appurtenances that do not inhibit the system from transferring sewage from a facility to a treatment process, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Sanitary Sewage	Sewage Collection System Lift Stations.	Failure of a lift station to provide continuous service, as designed and required to accomplish transport of wastewater from facilities to treatment systems, will be defined as an Availability Loss. Other events or failures to pumps, pump motors, fittings, etc. that do not inhibit the system from transferring sewage from a facility to a treatment process, will be defined as a Malfunction.
Sanitary Sewage	Sewage Treatment System.	Failure of a system to provide wastewater treatment and discharge water quality in compliance with state regulations and permit requirements will be defined as an Availability Loss. A reportable excursion, for which the State Dept. of Environmental Quality issues a warning, fine or takes other action, <u>will result in accrual of an Availability Loss</u> , regardless of repair time. Other events or failures to the main lagoon, polishing marsh, UV disinfection reactor, berms, levies, piping, valves, wiers, controls, and other appurtenances that do not inhibit the system from providing wastewater treatment and discharge water quality, will be defined as a Malfunction. A reportable excursion for which the State Dept. of Environmental Quality accepts the contractors explanation of causes, and for which the state issues no warnings, fines, or other actions, <u>will result in an accrual of a Malfunction</u> , regardless of repair time.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Sanitary Sewage	Rock-Reed System	Failure of a system to provide wastewater treatment and discharge water quality in compliance with state regulations and permit requirements will be defined as an Availability Loss. A reportable excursion, for which the State Dept. of Environmental Quality issues a warning, fine or takes other action, <u>will result in accrual of an Availability Loss</u> , regardless of repair time. Other events or failures to the septic tank, rock-reed filtration system, UV reactor, berms, levies, piping valves, vegetation and other appurtenances that do not inhibit the system from providing wastewater treatment and discharge water quality, will be defined as a Malfunction. A reportable excursion for which the State Dept. of Environmental Quality accepts the contractors explanation of causes, and for which the state issues no warnings, fines, or other actions, <u>will result in accrual of a Malfunction</u> , regardless of repair time.
Sanitary Sewage	Septic Tank/Field Drain System	Failure of any portion of the system to provide continuous availability of sewage flow and treatment from facilities (excludes facility interior systems) during normal working hours will be defined as an Availability Loss. Other events or failures to piping, septic tanks, or field drains
Sanitary Sewage	Continuation Septic Tank/Field Drain System	which do not inhibit the system from providing continuous availability will be defined as a Malfunction.
EMCS	Apogee Servers, Workstations, Communications Interface Accessories and Equipment.	Failure of the EMCS central operator station system and equipment to provide reliable, continuous and accurate operation will be defined as an Availability Loss. Other events or failures to equipment, interconnected wiring, connections, keyboards, monitors, printers, tape/disk drives, power protection devices, hardware, firmware, software and other appurtenances that do not inhibit the System Level Server and Workstations from providing reliable, continuous and accurate operation, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
EMCS	Field Control Cabinets (MBCs, RBCs, and SCUs).	Failure of a Field Control Cabinet to provide reliable, continuous and accurate operation will be defined as an Availability Loss. Other events or failures of components within a field control cabinet or interconnecting wiring that does not inhibit the cabinet from providing reliable, continuous and accurate operation, will be defined as a Malfunction.
Fuel Management	Fuel Management Monitoring System	Failure of the Fuel Management Monitoring System to monitor fuel storage tank conditions or report status and alarm condition to the PC Host/Central Console will be defined as an Availability Loss. Other events or failures to any interconnecting wiring, connections, keyboards, monitors, tape/disk drives, power protection devices, hardware, firmware, software and other appurtenances that do not inhibit the system from monitoring and reporting, will be defined as a Malfunction.
Natural Gas System	The Natural Gas System.	Failure of any portion of the Natural Gas System to provide natural gas to a facility (excludes facility interior systems) at the designed rate and pressure (based on the designated regulator settings) will be defined as an Availability Loss. Other events or failures to piping, pipe wrapping, fittings, gages, valves identification markers/labels, blow offs, regulators, valve stations, relief valves, cathodic protections, and other appurtenances, will be defined as a Malfunction.
Interior Electrical	Includes Electrical panels, switchboards (LVSWGR), MCCs, transformers, and appurtenances within a facility.	Failure of any portion of this equipment to provide continuous and reliable power will be defined as an Availability Loss. (Breaker resets will be defined as Availability Losses. Failure to reset a breaker and restore power in accordance with the time frames allowed in Table 5.5-2 will result in accrual of Availability Losses and may affect award incentive fee.) Other events or failure to panels, breakers, busswork, wiring, controls, outlets, transformers and other appurtenances that does not inhibit the equipment from providing continuous/reliable power, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Interior Lighting	Includes all lighting fixtures, ballasts, reflectors, and lenses within a facility.	Failure of an entire lighting circuit will be defined as an Availability Loss. Individual relamps are exempt from the Availability Table and should be handled as detailed in section 5.3.7.2 of the contract. Other events or failures of ballasts, lenses, wiring, reflectors diffusers, switches, mounting hangers, controls and/or associated hardware that do not inhibit the entire lighting system from providing adequate lighting conditions, will be defined as a Malfunction.
Emergency Lighting	Includes all lamps, reflectors, ballast, lens, emergency power supplies, wiring, and associated hardware within a facility.	Failure of an emergency lighting system to energize automatically upon loss of power or loss of normal lighting and provide enough illumination to allow easy and safe egress from the area involved, will be defined as an Availability Loss. Other events or failure of lamps, reflectors, ballast, lens, emergency power supplies, wiring and associated hardware, that does not inhibit the system from operating automatically and providing adequate illumination, will be defined as a Malfunction. NOTE: Relamps of emergency lighting fixtures will be defined as a Malfunction and must be relamped within 7 days to avoid accrual of a Malfunction against Award Incentive Fee calculations.
UPS	Includes UPS equipment, batteries, instrumentation and appurtenances.	Failure of a system to provide automatic emergency backup power upon failure or outage of the normal power source will be defined as an Availability Loss. Other events or failure of batteries, rectifiers, inverters, controls, transfer switching devices, protective and auxiliary devices, alarms, wiring, etc., that do not inhibit the system from providing backup power, when necessary, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Generator	Includes Stationary Emergency Generators, fuel tanks, instrumentation/controls and appurtenances.	Failure of a system to provide emergency backup power when required by design will be defined as an Availability Loss. Other events or failure of transfer switches, bypass switches, batteries, fuel systems, instrumentation/controls and other appurtenances that do not inhibit the system from providing required emergency backup power, will be defined as a Malfunction.
Chilled Water & Heating Water Systems	Includes chillers, boilers, pumps, piping, instrumentation, and peripheral equipment.	The uncommanded shutdown of a chiller (boiler), or the failure of a pump that results in the inability to maintain chilled (hot) water temperatures as defined by design, will be defined as an Availability Loss. (Chiller and Boiler resets will be defined as Availability Losses. Failure to reset equipment in accordance with the time frames allowed in Table 5.5-2 will result in accrual of Availability Losses and may affect award incentive fee.) Other events or failures to chillers, boilers, piping systems, pumps, cooling towers, instrumentation, controls and peripheral equipment, that does not inhibit the system from providing chilled (hot) water temperatures as defined, will be defined as a Malfunction.
Air Handling Equipment	Includes AHUs, HVUs, CRUs, DX units, RTUs, fans, blowers, hoods, unit heaters, instrumentation and peripheral equipment.	The uncommanded shutdown of a piece of described equipment will be defined as an Availability Loss. A hot/cold call received as a result of a fan failure will be defined as an Availability Loss. A hot/cold call received as a result of any other failure to the described equipment will be defined as a Malfunction. A hot/cold call that requires only a thermostat adjustment will not be affected by Availability. Other events, or failures to components, wiring, controls, etc., that does not cause the equipment to "shutdown" will be defined as a Malfunction.
Refrigeration Appliances & Coolers	Includes Equipment, instrumentation and appurtenances.	Any failure of refrigeration equipment to operate within design conditions will be defined as an Availability Loss. Other events, or failures to associated instrumentation/appurtenances, that does not inhibit the equipment from operating within design limits, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Interior Potable Water	Includes distribution piping, valves, pumps, fixtures and appurtenances within a facility.	Failure of any portion of an interior potable water distribution system to provide a continuous supply of potable/fire water will be defined as an Availability Loss. Other events or failures to eye washes, safety showers, hose reels, wash racks, etc., will be defined as a Malfunction. (NOTE: Interior leaking fixture valves will not be defined as a Malfunction.)
Interior Sanitary Sewer	Includes distribution piping, valves, pumps, instrumentation and appurtenances within a facility.	Failure of any portion of the system to provide continuous availability of sewage flow in a facility will be defined as an Availability Loss. Other events or failures to distribution piping, valves, pumps, instrumentation and appurtenances within a facility that does not inhibit the system from providing continuous availability of sewage flow within a facility, will be defined as a Malfunction. (NOTE: Interior drain stoppages, leaking valves or toilet blockages will not be defined as a Malfunction.)
Interior Natural Gas	Includes distribution piping, valves, regulators and appurtenances within a facility.	Failure of any portion of the interior Natural Gas System in a facility will be defined as an Availability Loss. Other events or failures to piping, fittings, gages, valves, regulators, relief valves, and other appurtenances, will be defined as a Malfunction. (NOTE: Leaking valves will not be defined as a Malfunction.)
Elevators	Includes elevator architectural/structural, mechanical, instrumentation and appurtenances.	Failure of an elevator to transport onboard passengers/freight will be defined as an Availability Loss. If a person(s) is stuck in the elevator, it will be defined as an Availability Loss. Other events or failures to the elevator system that do not inhibit the system from transporting onboard passengers/freight will be defined as a Malfunction.
Built-In Cranes	Includes all Built-In cranes, monorails, and hoists.	Failure of a piece of equipment to perform a lift when required, will be defined as an Availability Loss. Other events or failures to lifting equipment that do not inhibit the system from performing a needed lift, will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Fire Detection and Alarm	Alarm Systems for Fire Detection and Security for each facility throughout the site.	Failure of a system to adequately detect an alarm condition or process an alarm will <u>result in an accrual of an Availability Loss</u> . Other events or failures to initiating circuits, signaling circuits, detectors, signaling devices, radios, interface devices, wiring, antennas, auxiliary relays, annunciator panels, etc., that do not inhibit the system from detecting an alarm condition or processing an alarm, will be defined as a Malfunction.
Fire Protection System	Facility Fire Protection System provides for fire protection at each facility.	Failure of a system to provide for the continuous supply of fire protection water to a facility as designed, will result in <u>accrual of an Availability Loss</u> . Other events or failure of piping, valves, sprinkler heads, booster pumps, wet pipe sprinkler systems, dry sprinkler systems, deluge systems, flow switches, tamper switches, fire hydrants and associated hardware, that does not inhibit the system from supplying fire protection water as needed, will be defined as a Malfunction.
Marine	Marine Tugboat	Failure of the tugboat to transport propellant barges will result in <u>an accrual of an Availability Loss (criticality II)</u> . Failure of the tugboat to support transport of NASA owned barges (hurricane season) to/from the Michoud Assembly Facility or to support resident agency requests, will be accrued as an Availability Loss (criticality III). Other events will be defined as a Malfunction.
Marine	Bascule Bridge	Failure of the bridge to fully operate, when transporting propellant barges, will result in <u>an accrual of an Availability Loss (criticality II)</u> . Failure of the bridge to fully operate in support of any other activity will be defined as an Availability Loss (criticality III). Other events will be defined as a Malfunction.
Marine	Navigational Lock	Failure of the lock system to operate when transporting propellant barges, <u>will result in an accrual of an Availability Loss (criticality II)</u> . Failure of the lock system to operate in support of any other activity will be defined as an Availability Loss (criticality III). Other events will be defined as a Malfunction.

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<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
Marine	Canal System, Waterway Dolphins, Docks, Mooring Devices & Navigational Aids.	Failure of operational personnel to maintain the canal level above 16 feet, 0 inches, will be defined as an Availability Loss. Failure of a dock system or any mooring devices at a facility, to such an extent that the system is unable to support test activities, <u>will result in accrual of an Availability Loss (criticality II)</u> . Other failures of any dock system or any mooring devices to fully operate will be defined as an Availability Loss. Other events that do not inhibit the dock system or mooring devices to be fully operational will be defined as a Malfunction.
Marine	Marine equipment.	Failure of any marine equipment to be fully operational will be defined as an Availability Loss. Other events or failures that do not inhibit the equipment from being fully operational will be defined as a Malfunction.
Marine	Safety devices, Equipment	Failure of any safety devices/equipment to be fully operational will be defined as an Availability Loss. Other events or failures that do not inhibit the equipment from being fully operational will be defined as a Malfunction.
Marine	Piers, canal banks, drainage systems	Failure of any pier, canal bank or drainage system will be defined as an Availability Loss. Other events or failures will be defined as a Malfunction.
FCPF	Clean Line	Failure to maintain cleaning levels and/or failure to process a component through the clean line will be defined as an Availability Loss. Other events that do not inhibit the clean line from processing components will be defined as a Malfunction.
FCPF	Clean Room	Failure to maintain the Clean room to Federal Standard 209E will be defined as an Availability Loss. Other events will be defined as a Malfunction.
FCPF	Valve Testing Systems	Failure of a piece of equipment to test to design levels and equipment out of calibration will be defined as an Availability Loss. Other events will be defined as a Malfunction.

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TABLE 5.5-1

<u>SYSTEM</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
FCPF	Tagged Equipment	Failure of any tagged equipment to fully operate will be defined as an Availability Loss. Other events will be defined as a Malfunction.
FCPF	Freon Stills	Failure of a freon still to maintain cleaning levels will be defined as an Availability Loss. Other events will be defined as a Malfunction.
FCPF	Tubing Manufacturing	Failure of the tubing manufacturing system to fully operate will be defined as an Availability Loss. Other events will be defined as a Malfunction.
FCPF	Special Tooling, equipment.	Failure of special tooling and equipment will be defined as an Availability Loss. Other events will be defined as a Malfunction.
Machine Shop	All machine equipment	Failure of a piece of equipment in the machine shop that is needed to meet customer demands will be defined as an Availability Loss. Other events or failures that do not inhibit the machine shop from meeting customer requirements will be defined as a Malfunction.
Fabricating Shop	All fabricating equipment, welding machines, and special tooling.	Failure of a piece of equipment in the fabrication/welding shop that is needed to meet customer demands will be defined as an Availability Loss. Other events or failures that do not inhibit the fabrication/weld shop from meeting customer requirements will be defined as a Malfunction.
NDE	All equipment	Failure of a piece of equipment in the NDE Lab that is needed to meet customer demands will be defined as an Availability Loss. Other events or failures that do not inhibit the NDE Lab from meeting customer requirements will be defined as a Malfunction.

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Table 5.5-2**

Malfunction Conversion & Response/Repair Time Requirements

Criticality Level	Malfunction - Availability Equivalent ❶	Max Repair Time "Malfunction" ❷	Max Repair Time "Availability Loss"
I	3	7 Days	1 Day
II	4	7 Days	1 Day
III	6	14 Days	48 Hr.
IV	6	21 Days	3 Days
V	8	35 Days	21 Days

General Notes

- a. Units of time include non-working hours, weekends and holidays, unless specifically noted otherwise.
- b. 1 day constitutes 24 hours, beginning at the time of occurrence or discovery.
- c. Criticality Levels are defined in 5.1.6.
- d. For Sanitary Sewage Lagoons and Rock/Reed Systems, 5 malfunctions on a system are equivalent to an availability loss. A reportable excursion for which the State Department of Environmental Quality accepts the contractor's explanation of causes, and for which the state issues no warnings, fines or other actions, is defined as a malfunction. If the state issues warnings, fines or takes other actions, the excursion is defined as Availability Loss.

Notes

1. This number designates the number of malfunctions that will be equivalent to an availability loss (e.g., 8 malfunctions in a Criticality Level II system would be counted as 2 ea. available losses in determining incentive fee.)
2. Maximum time to complete repairs on fully redundant systems. These repair times also apply to all malfunctions.

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Table 5.5-3**

	Performance Incentive Fee (% of Total Incentive)											
	Quantity of Availability Losses											
Criticality Level	0	1	2	3	4	5	6	7	8	9	10	11
I	10%	5%	0	0*	0	0	0	0	0	0	0	0
II	35%	30%	20%	15%	10%	0	0*	0	0	0	0	0
III	30%	30%	25%	25%	15%	15%	10%	5%	0	0*	0	0
IV	20%	20%	20%	20%	15%	15%	10%	10%	5%	5%	0	0*
V	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	0	0*

* The quantity of Availability Losses is considered unacceptable. Contractor shall develop & present a plan to correct deficiencies & reduce Availability Losses.

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5.6 OPERATIONS AND MAINTENANCE

5.6.1 General Information

5.6.1.1 Annex Description

This Annex defines the anticipated workload and special requirements for maintenance engineering, operations engineering, and the implementation of required work for the Test Complex, Base, Resident Agencies and others. It is intended that sufficient work will be identified prior to the start of each fiscal year so that a core of dedicated engineers and craft persons will be available to perform Test Complex, Base, and Resident Agency work. This core level of work is identified in the Related Requirements and Information section of this Annex and the System Operation and Maintenance Responsibility Database (SOMRD) (see 5.1.2).

5.6.1.2 Planning

It is the intent of the Government that those maintenance activities that can be planned in advance (i.e. the design and implementation of the annual facility maintenance projects and design work for the Pressure Vessel Recertification Program) will have a work order issued prior to the start of each fiscal year. The Contractor shall work closely with the Contracting Officer to assure a clear understanding of the workload for each fiscal year.

5.6.1.3 Location of Services

The Contractor will be required to perform maintenance work

throughout Stennis Space Center. The metes and bounds of SSC are defined in the SSC Master Plan. Delineation of test complex, institutional base, and other areas are clearly defined in the Master Plan (see 5.1.2).

5.6.1.4 Bench Stock

The Contractor shall be responsible to procure and maintain a level of bench stock to support the various kinds of work defined in this Annex, such as machining, welding/fabrication, and in the processing of fluid components Fluid Component Processing Facility (FCPF). The requirements for bench stock are defined in the Related Requirements and Information of each sub-Annex of this Annex. This bench stock is not to be confused with warehouse bench stock as specified in **Annex 6**. Bench stock is defined as material which will turn over at least 3 times per year, cannot be readily obtained through normal purchasing procedures in time to support a need for work requirements, and is not carried as part of warehouse stock or there is a cost savings to the Government due to quantity discounts. Exception to the turnover rate can be made by the Government if the material cannot be obtained and certified for use within a turnover cycle of 4 months.

5.6.1.5 Restrictions, Limitations & Special Conditions

Access Control: The test complexes have strict procedures for daily access to perform work. Delays may be expected for access during testing or data operations. Digging in the test complexes is forbidden on test days without prior approval of the test stand managers. Obtaining permission for access from the test complex test stand engineers or manager is the

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responsibility of the Contractor. The Contractor is expected to be flexible to reassign workers to alternate work tasks when access is denied. The Contractor is required to meet the requirements for selected personnel of the Mission Critical Space Systems Personnel Reliability Program when working around or near space hardware.

5.6.1.6 Operation Plan (DR 5-GA15)

The Contractor will write and submit to the CO within 90 days of contract award an Operation's Plan. This Plan is to define how the Contractor will perform the work in this Annex.

5.6.1.7 Documentation

All work shall be accomplished by approved work order. The contractor shall maintain job files for each work request. Documentation shall include drawings or sketches, cost sheets, cost estimates, engineering calculations, bill of material, Certificate of Completion (COC), vendor data, parts books, work orders or other requirements documents, and other miscellaneous job information. This information shall be readily available to the Government and retained by the Government at end of contracting performance.

5.6.1.8 Reporting

The Contractor shall submit the following reports to the Government:

1. Daily, work schedule: This information will be integrated into the site wide **Master Schedule Data (See DR5-GA19)**. It is maintained by others.
2. Monthly: Work Order Completion Report; Backlog Report; Summary Report by Cost Center; Cost of Maintenance by Program and split out into the eight maintenance categories defined by the **NASA NPR Facilities Maintenance Management NPR 8831.2**. The Contractor shall be able to provide cost data for each facility (by facility number) and a lump sum cost for all facilities which do not have facility numbers.
3. Quarterly: Job Completion Report (status of work orders completed during the fiscal year quarter and a summary by backlog of work).

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5.6.2	PROVIDE MAINTENANCE AND OPERATION CAPABILITY	<p>The contractor shall maintain work capability sufficient to support anticipated base-load work in the test complexes. The crews assigned to support test programs are to be experienced and have a corporate knowledge of the procedures and systems and the knowledge and capability to perform the types of work in the test complexes. It is important that the crews be flexible to changes in work place and be capable of performing the type of work due to daily flexing of test schedules. Daily coordination with test stand managers is mandatory to avoid conflicts with test schedules and other testing functions. Workloads include a combination of very short turn-a-round repairs post test, repairs and fabrications in-situ between tests, and internal repairs and modifications. Overtime, demands for these crews can be high depending on customer requirements and the frequency of testing activities. It is normal practice to provide a repair crew within 1 hour of a breakdown or failure. These repair efforts can range from a few hours to 2 weeks or longer, and may involve an all out effort to complete the repair in order get the test stands back into service.</p>	<p>Historical annual work effort for craftwork is as follows: Base workload in test complex requires:- 15 labor years of welding- 6 labor years of carpenters/ laborers - 3 labor years of expediting/ tool crib effort. Historical peak workload is: - 30 labor years of welding/ fabrication - 12 labor years of carpenters/ laborers - 4 labor years of expediting/ tool crib effort.</p>	<p>The contractor shall be able to respond within 1 hour from notification and be able to provide 24 hours/day repair capability, within 7 days/week period, not to exceed 3 weeks. The contractor shall provide a crew on the job site and be prepared to work continuously until the job is completed. The contractor shall complete all work within schedule. Rework shall not be an excusable delay.</p>

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5.6.2.1	Provide Fabrication and Welding Capability	<p>The Contractor shall have the capability to perform shop and field fabrication for the manufacture repair and modification of on-site structures, piping, pressure vessels, equipment and other various fabrications, and assembled items. Welding procedures must be developed if not already available. The Contractor must be able to weld complicated structures and possess the capability to weld various steel alloys and other metals.</p> <p>The Contractor shall be able to provide capability to weld using SMAW (stick welding), GTAW (gas tungsten arc), GMAW (gas metal arc), Flex core, and use other techniques such as silver soldering, arc gouging, and oxygen/acetylene cutting to achieve exceedingly high quality end results. Welding shall pass radiograph, dye penetrate, ultrasonic, acoustic, and other inspection criteria equal to standards of the nuclear power industry. Welders must be certified in order to perform work on the particular work being accomplished. The work consists of fabricating and repairing piping, structures, and components utilizing the latest welding and fabricating techniques. The materials used may be of various metals and other materials including, but not limited to,</p>	<p>The workload for engineering is defined in 5.6.2.4</p> <p>Minimum Workload:</p> <p>100 work packages/year (average 385mh/work package including overtime). This equates to the minimum work load defined in the Related Requirements Section.</p> <p>The Contractor shall have the ability to augment the welders to achieve a work load of 150% of the minimum for a period of up to two weeks with a 7-day advance notice.</p>	<p>Unless otherwise stated on the approved engineering packages, all fabrication and welding shall be accomplished in accordance with the SSC Engineering Standards, ASME Unfired Pressure Vessel Code, Division I and II, ANSI or other industry standards. All welding shall be free from defects as determined by inspection procedures and defined in the standards and requirements documents.</p> <p>Initial acceptance rate for welds shall exceed 90%.</p>

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5.6.2.1	Continuation Provide Fabrication and Welding Capability	<p>stainless steels, aluminum, carbon steel, cast iron, copper, bronze, alloys, Teflon, and non-metallic.</p> <p>The Contractor shall be able to provide pressure vessels to ASME Division I and Division II standards and be ASME certified and stamped with a “U” code stamp for new pressure vessels and an “R” code stamp for repairs to pressure vessels. The work also includes extensive welding in field locations, including welding on and around flight hardware. The welding and fabrication work is normally performed from detailed engineering drawings, sketches, or from a work order that requires the development of a shop work package.</p> <p>Overtime work is common for repair work with 60-hour weeks occurring approximately 10% of the time. Note: this workload is for the test complexes only. Institutional Base work is defined in Annex 5.4</p>	<p>This peak work load may occur up to 4 times in 1 year. Historical work data:</p> <p>The welding/fabrication personnel have historically been part of the multi-craft capability as defined in Annex 5.6.2.5 with augmentation from the institutional base shop as required during periods of high work load.</p> <p>Maximum work load can be as high as: -Craft Labor straight time = 60,000 mh/yr - Craft Labor overtime = 8,000 mh/yr</p>	<p>A crew shall be available during normal business hours (Monday through Friday) with minimal overtime.</p> <p>The use of alternate work schedule shall be at the approval of COTR</p>

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5.6.2.1	Continuation Provide Fabrication and Welding Capability		Minimum work load is anticipated to be at least: Craft Labor straight time = 36,000 mh/yr Craft Labor overtime = 2,500 mh/yr	
5.6.2.1.1	Reserved			
5.6.2.1.2	Operational Requirements	The Contractor shall provide welding and fabrication capability to perform all requirements associated with fabrication of shapes, repair of structures and components, and fabrication of new structures Special Test Equipment (STE) as defined by the requirements from test programs, base activities and resident agencies at SSC. The Contractor shall determine staffing levels, skill mix, and perform the training and certification required to accomplish work elements identified in this Annex.	Contractor determined	Contractor shall complete all Work Plans within schedule and cost.

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5.6.2.1.2	Continuation Operational Requirements	Welding personnel certification requirements must provide assurance that the stringent requirements for precision and weld quality for test programs can be met. Work must pass rigid inspection criteria by methods such as dye-penetrant, ultrasound, hydrates, pneumostatic, acoustic, radiographic, and magnaflux inspections.		
		The requirements for quick turn-a-round repairs and fabrication are common. The Contractor must have in place a work control process and procedure that will assess the prioritization between multiple customers and communication on a daily basis with the customer leads on status and scheduling changes.		
		The contractor shall have the capability to perform field repairs and fabrication of items. The requirements for repairs and fabrications are frequently determined by others, but the method to meet the requirements is the responsibility of the contractor.		
		Major equipment currently available and utilized to perform fabrication and welding operations is listed in Attachment J-1, Institution Provided Government Property.		

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5.6.2.1.2	Continuation Operational Requirements	Fabrication and welding requirements include the preparation of detailed documents which list the steps required in the fabrication and repair activities. These documents and work plans are required prior to working on any critical system.		
5.6.2.1.3	Reserved			
5.6.2.1.4	Maintain Bench Stock	The Contractor shall be required to procure and maintain bench stock at the existing value at start of contract. Replenishment shall be by approved work order or by specific funding line item. Bench stock is the fabrication material such as pipe, plate, shapes, welding rod and wire, and other materials which are not unique to any particular job effort but does not include operating supplies. It is intended that bench stock will be a zero cost against shop overhead, which means that any usage must be charged against the shop orders and then reordered to keep the dollar level of the bench stock at the agreed to level. Historically, bench stock value is approximately \$75,000. Contractor shall be required to maintain level of clean items according to SSC cleaning standards in the bench stock.	Contractor Determined	Inventory level will be attained within 120 days after contract award. Dollar level of bench stock inventory shall be maintained plus or minus 20% from the inventory value. Inventory level shall not be more than 10% below the baseline value for more than 30 consecutive calendar days in any 6-month period. Inventory mix shall be continually adjusted to fit the current workflow through the shop.

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5.6.2.2	Provide Machining Capability	The nature of the mission of SSC requires that many parts and components are manufactured to special order or repaired as required. The Contractor shall have the capability to provide this service in a timely manner in accordance with customer requirements. The Contractor shall have the capability to provide precision machining support in materials such as stainless steel alloys, carbon steel, various alloys, and other metals and non-metallic materials such as Teflon. The work is accomplished by approved work order and as a normal practice is produced from detailed drawings. Tolerances must meet or exceed the accuracy given in the SSC engineering standards SSC Engineering Standard 66-505 or drawings. The contractor shall also be able to produce machined components from sketches or from verbal instructions from the requestor. The Contractor shall produce cost estimates as requested on the work order. This service is normally utilized for quick turn-a-round requirements which cannot be obtained from outside vendors or manufacturers in a timely or cost effective manner.	150 work packages per year. Work packages average 34 mh each. The contractor shall be able to work at 150% of this work rate for a period, not to exceed 2 weeks with 7 days of advance notice. This rate may occur up to 4 times/yr. The historical work load for machining is 3 labor years/year. Peak workload is 6 labor years/year.	Complete all work plans on schedule and in accordance with drawings or SSC engineering standards tolerances.
5.6.2.2.1	Reserved			

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5.6.2.2.2	Operational Requirements	<p>The Contractor shall provide sufficient capability to be able to supply accurately machined parts used in the support of test programs, base activities, other on-site contractors, and tenant agencies at SSC.</p> <p>Machining tolerance requirements are stringent for components used in test programs. Components must be manufactured to strict design criteria and pass rigid inspection criteria. It is normal for the machine shop to work to detailed engineering drawings, but sketches or verbal concept requirements may be utilized as deemed necessary. The machinists must be able to interpret sketches and verbal requirement definitions and then be able to manufacture the items in accordance with SSC Engineering Standards.</p> <p>The requirements for quick turn-a-round repairs are common. The Contractor must have in place a work control organization that can assess the prioritization between multiple customers and communication on a daily basis with the customer leads on status and scheduling changes.</p>	Contractor Determined	

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5.6.2.2.2	Continuation Operational Requirements	The major portion of work requirements involves work in a machine shop environment; however, there may be minimal requirements for field work. (An example might be to reface a flange surface on a piping system in the field.)		
5.6.2.2.3	Provide operation and maintenance of machine shop equipment	Maintain machine shop equipment and tooling. The list of major equipment is listed in Attachment J-1, Institution Provided Government Property. Should the Contractor elect not to utilize any piece or pieces of equipment, the Contractor shall provide a cost estimate to the Government to preserve the equipment in-situ such that the equipment will be preserved for a period of at least 5 years. The Contractor will assess and report on the operating condition of the equipment before it is taken out of service.	Nothing additional	Machine shop equipment and tooling and the work area shall be maintained free of corrosion. Equipment shall be capable of machining to accuracies expected from this age of equipment.
5.6.2.2.4	Maintain Bench Stock	The Contractor is required to procure and maintain bench stock at the existing value at start of contract. Bench stock for machining work includes such items such as bar stock, shapes, plate, forgings and other items that fall under the category of bench stock as defined in 5.6.1.4. The Contractor shall manage the bench stock in accordance with Annex 6 of this Contract.	Contractor determined	Inventory level will be attained within 120 days after contract award. Dollar level of bench stock inventory shall be maintained plus or minus 20% from the inventory value. Inventory level

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5.6.2.2.4	Continuation Maintain Bench Stock			shall not be more than 10% below the baseline value for more than 30 consecutive calendar days in any 6 month Inventory mix shall be continually adjusted to fit the current work flow through the shop.
5.6.2.3	Operate fluid component processing facility (FCPF)	The Fluid Component Processing Facility currently located in Building 2205 provides extensive component inspection, repair, cleaning, and packaging capability in the shop and in the field. The Contractor shall staff, operate, and maintain this facility in accordance with the sub-elements listed in this Annex.	16,000 tasks/yr. The average task is 2 mh for craft labor. Engineering services should be included in 5.6.2.4.2.	See below
5.6.2.3	Operate Fluid Component Processing Facility (FCPF)	Historic work load: 34,000 man-hours/year craft labor; and 13,000 man-hours/year engineering services. See Table 5.6-1.		
5.6.2.3.1	Reserved			

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5.6.2.3.2	Operate Systems and Equipment	The Contractor is responsible for operator maintenance of the installed and tagged equipment used by FCPF in performing work on components. Equipment used by FCPF is listed in Attachment J-1, Institution Provided Government Equipment.		Equipment and systems shall be operable.
5.6.2.3.2.1	Operate and Maintain Clean Line	The Contractor shall operate the clean line that uses chemicals to clean component parts. All materials and chemicals used to operate the clean line are to be charged to this Annex. The Contractor will have an operating procedure that clearly defines safe operation of this system.		Chemicals shall be controlled such that cleaning levels can be obtained.
		The clean room shall be operated by certified technicians and maintained to Federal Standard 209E, Class 10,000 . The Contractor shall prepare an internal operating procedure to assure that this system will maintain cleanliness of cleaned components.		Cleanliness level shall be maintained. All components shall be cleaned and certified in accordance with requirements as defined in DR6-RA01, engineering SSC Standards SSTD-8070-0089-FLUIDS and STP-8810-0018.

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5.6.2.3.2.3	Operate and Maintain Valve Testing Systems	The Contractor shall operate and maintain the pressure testing equipment for the certified pressure testing of relief valves and other components.		Equipment shall be in calibration and able to test to design level.
5.6.2.3.2.4	Operate and Maintain the Component Inspection Room	The Contractor shall operate and maintain an area utilized for the inspection, buy-off and packaging of cleaned components.		Area shall be orderly and components available for Government inspection.
5.6.2.3.2.5	Operate Installed and NASA Tagged Equipment	Operate and maintain the equipment listed in Attachment J-1, Institution Provided Government Equipment. If the Contractor elects not to use any piece of equipment, the Contractor shall furnish the Government with a cost estimate to preserve the equipment for a period of 5 years.		The Contractor shall be responsible for inventorying and maintaining the equipment at a 90% availability factor.
5.6.2.3.2.6	Operate Tubing Manufacturing System	The Contractor will operate and maintain the tubing manufacturing system that is used to make flared tubing. The FCPF shall have the capability of manufacturing, bending and installing high pressure tubing (up to 15,000 psi working pressure) up to 2 inches in diameter.		The equipment will be capable of a 95% availability factor.

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5.6.2.3.3	Capability Requirements: Repair Components and Other Devices on Demand	The FCPF will receive, inspect, provide ROM repair, test, clean, certify cleanliness, package and ship components/assemblies/ subassemblies and document all inspection, testing and repairs in accordance with SSC engineering standards. In addition to shop work, the FCPF crew will provide field labor to test, and/or remove components to the shop for testing and repair and reinstall the components in the field.	Contractor Determined	All work packages will be scheduled, prioritized in accordance with customer need date and completed within the schedule. Work shall meet or exceed standards, specifications or other requirements.
5.6.2.3.4	Shop Equipment and Tooling	See Attachment J-1, Institution Provided Government Equipment		

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5.6.2.3.5	Purchase and Maintain Soft Goods and Other Bench Stock	The Contractor shall be required to procure and maintain bench stock at the existing value at the start of the contract. Replenishment shall be by approved work order or by specific funding line item. Bench stock is defined as lox compatible soft goods, miscellaneous soft goods, component repair kits, Teflon, bags, tape, grease, miscellaneous bolts, washers and nuts, miscellaneous tubing fittings, and miscellaneous cleaning supplies which are not unique to any particular job effort but does not include operating supplies. It is intended that bench stock will be a zero cost against shop overhead, which means that any usage must be charged against the shop orders and then reordered to keep the dollar level of the bench stock at the agreed to level. Historically, bench stock value is about \$300,000.00.		Inventory level will be attained within 120 days after contract award. Dollar level of bench stock inventory shall be maintained plus or minus 20% from the inventory value. Inventory level shall not be more than 10% below the baseline value for more than 30 consecutive calendar days in any 6 month period. Inventory mix shall be continually adjusted to fit the current work flow through the shop

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5.6.2.4	Provide Engineering	<p>There are special requirements for engineering work for test programs and for test complex facility maintenance. These requirements are divided into three areas: Component Engineering, Area Engineering, and Field engineering. The special requirements for each of these requirements are listed in the sub-Annexes below: Historical Work Load Data:</p> <p>Component Engineering: Test Complex – 4.5 WYE Base – .5 WYE</p> <p>Area Engineering: Area Engineering – 1.5 WYE Rapid Designs – 3.5 WYE PVR Program – 3 WYE Drafting Support – 3 WYE</p> <p>Field Engineering Field Engineers – 3 WYE Expediting/Material Gathering – 2 WYE</p>	See Below	
5.6.2.4.1	Reserved			
5.6.2.4.2	Provide Engineering Services	See below		

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5.6.2.4.2.1	Provide Component Engineering Capability	<p>The requirements are:</p> <ol style="list-style-type: none"> 1 Maintain, update, and write specifications for components. These standards are called Standardized Control Drawings (SCDs or commonly called B00-Specs.). The responsibility for selection of components for the correct application and maintenance of all component site standards and procurement specifications falls within this organization. 2 This includes engineering in the FCPF, as such, makes all engineering decisions regarding repair techniques, application of components and piece parts, and disposition of Discrepancy and Corrective Action reports for components. Close interface with shop and quality personnel is required along with good customer relations. 3 This function coordinates the procurement of spare parts for various programs and base side. As part of this effort, maintain a data base on all backlogs of spares requirements, canvas customers annually on their requirements for the next year, and provide a prioritized listing of requirements for spares prior to the start of each fiscal year. The 	<p>400 tasks/yr for SCDs</p> <p>200 tasks/yr in FCPF</p> <p>1 annual task for spares requirements document</p>	<p>SCDs will be current and changes will be input within 3 months of requirement. Engineering decisions will be completed within 1 day for shop work. Customer coordination will be timely and technically in accordance with SSC standards.</p>

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5.6.2.4.2.1	Continuation Provide Component Engineering Capability	<p>requirements for spares shall be segregated by program. Synergy and commonality between programs shall be cost reduction emphasis. This function shall serve as the advocate for spares procurement and coordinate all annual requirements with the various NASA Program Offices and Construction Group. Construction and maintenance activities shall develop spare parts lists which are divided into large dollar spares, operating spares, and consumable startup items.</p> <p>4 This function coordinates spare procurements to meet customer needs dates, maintain data based on the status of each item and provides the customer with weekly or monthly updates in delivery information. Depending on the criticality of the customer requirements, this update procedure may be required daily but no less often than monthly.</p> <p>5 Review shop bench stock and assure that quantities and type of material are adequate to meet the customer needs.</p> <p>6 Provide cost estimates for repairs.</p>		

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5.6.2.4.2.2	Provide Area Engineering Capability	<p>The following functions are performed:</p> <ul style="list-style-type: none"> a. Provide design engineering and drafting for the Pressure Vessel Recertification Program; b. Plan and coordinate all facility maintenance projects; c. Provide support to field engineering for maintenance and construction projects; d. Provide coordination and corporate knowledge for all test complex facilities maintenance; e. Provide drafting support for design packages; f. Perform follow-on inspection, corrective action plans for safety discrepancies facility manager program, construction drawings; 	<ul style="list-style-type: none"> a. Designs: 40/year b. Write Shop Packages: 150/year c. Studies, & engineering evaluations: 50/yr d. Work Coordination: 130/yr e. Status Meetings: 52/yr f. Reports: 12/month g. Quick response 	

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5.6.2.4.2.2	Continuation Provide Area Engineering Capability	<p>and coordinate the Annual Facilities;</p> <p>g. Maintenance Inspection, Maintain the Backlog of Maintenance (BMAR) databases and develop the maintenance 5-year plan;</p> <p>h. All inspection assessment items shall be planned into the following :</p> <p style="margin-left: 40px;">a. Initiation of work order to perform;</p> <p style="margin-left: 40px;">b. Placed in the planned maintenance project list;</p> <p style="margin-left: 40px;">c. Local C of F project list;</p> <p style="margin-left: 40px;">d. Urgent matters shall be reported to the government.</p>	<p>/problem solving: 25/yr</p> <p>h. Pressure Vessel initial certifications: 15/yr.</p> <p>i. Recertification: 10/yr.</p> <p>j. Periodic inspections of pressure vessels: 75/yr.</p> <p>k. CADD: 300/yr.</p>	

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5.6.2.4.2.3	Provide Field Engineering Services	The Field Engineering function is responsible for managing, planning and implementing craft type work in the test complexes. These functions are critical functions and require extensive maintenance and construction experience on high pressure gas, liquid and cryogenic systems. The field engineer are responsible for assuring that work is accomplished in accordance with the work packages or designs and that the end product of the work meets or exceeds the requirements. Required personnel qualifications shall be compatible with Annex 3 .	380 tasks/year	Complete all tasks within schedule and cost.
5.6.2.5	Provide Multi-Craft Capability	Craft capability is required to implement repair and construction projects and to perform normal maintenance activities in the Test Complexes. The work is normally quick turn-on and completion in nature. The expediting, field warehouse, tool crib, bench stock, and storage yard. All of these activities are for quick response capability and to manage and implement the basic workload within the test complexes.	380 tasks/year plus 150 tasks/year for minor maintenance trouble calls.	All tasks shall be completed within the scheduled completion date and the quality of work shall be in accordance with specifications and site wide standards.

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5.6.2.5	Continuation Provide Multi-Craft Capability	<p>Minimum work load: 6 WYEs - carpenters/laborers, 5 WYEs electricians, 1 WYE tool crib person, 1-1/2 WYEs expeditor/runner, 3 WYEs painters. Demand work is additive to the minimum workload and is unknown for future requirements.</p> <p>In addition to the personnel in the test complex, support is required for rapid response from the base shops. For example, support is required from heavy equipment, carpentry, high voltage electrical, mechanical plumbing, roads and grounds, and other various shops.</p>		
5.6.2.5.1	Reserved			
5.6.2.5.2	Craft Capability Requirements	<p>Craft persons must be highly skilled in their respective trades and be trained and certified to operate equipment and perform work to detailed specifications, work plans and blueprints. Workers assigned to the test complex must be knowledgeable of the access control procedures.</p>		

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5.6.2.6	Reports and Submits	<p>5 year maintenance plan for test complexes. Annual facility inspection data sheets. Backlog of Maintenance (BMAR)-update 4 times/yr.</p> <p>Project Status List (monthly).</p> <p>Provide project list/spreadsheet by priority for all planned projects.</p> <p>Annual plans are as follows: Planned Maintenance Projects Local C of F Construction Projects C of F Projects</p> <p>Report to the government of any unfunded “urgent” issues</p>	See Annex 5.7	See Annex 5.7
5.6.2.7	Schedules			

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5.6.2.7.1	Prepare a 3-Week Schedule, Available Online	The Contractor shall prepare a 3-week work schedule (status of previous week, current week, and next week.) for all operation, recurring work, contractor generated work orders, preventive maintenance, predictive maintenance, corrective maintenance, grounds maintenance, construction activity, and other SWRs. The schedule shall include the work order number, location (specific location description to permit the Government to inspect the work), start date, and end date. It should be sorted by area (A-complex, B-complex, E-complex, and Support Facilities). Weekend work shall be included.	52 schedules	The schedule shall be available by 7:00a.m., every Monday and updated as changes occur.
5.6.2.7.2	Prepare a Daily Schedule, Available Online	The Contractor shall prepare a daily schedule that covers the same types and categories of work as indicated in section 5.6.2.7.1 and shall contain the same information.	Shall be provided in the same report delivered in section 5.6.2.7.1.	The schedule shall be available on line by 3:00 p.m. each afternoon for the next scheduled work day.

**TABLE 5.6-1
FABRICATING SHOP EQUIPMENT**

COMPONENT	NUMBER OF COMPONENTS PROCESSED (FY 06 ACTUAL)
HAND VALVES < 1.5"	519
HAND VALVES > 1.5"	20
MOTOR VALVE	75
LOX PUMP	0
RELIEF VALVE PILOT	1
RELIEF VALVE NON-PILOT	311
REGULATOR	241
SOLENOID VALVE	125
CHECK VALVE	117
BALL VALVE	32
SHUTTLE VALVE	1
PCV VALVE	6
FLEX FLOW VALVE	5
FILTER	67
EXPANSION JOINT	11
Z-BAFFLE	3
GATE VALVE	4
OTHER COMPONENTS	54

**TABLE 5.6-1
FABRICATING SHOP EQUIPMENT**

COMPONENT	NUMBER OF COMPONENTS PROCESSED (FY 06 ACTUAL)
TOTAL	1,592
OTHER ITEMS (QUANTITY)	
FLEX-HOXES	231
PIPE	144
TUBING	2,076
MISC.	24,833

Notes:

- Flex hoxes ranged in diameter from 0.25" to 2" with an average length of 12' (equivalent of 876 feet for FY97)
- Pipe ranged in diameter from 1.5" to 12" with an average length of 10' (equivalent to 300 feet in FY97)
- Tubing ranged in diameter from 0.25" to 2" with an average length of 6' (equivalent to 9,786 feet for FY97)

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5.7.1 Annex Description

This Annex identifies the requirements for Systems Engineering and for the annual visual inspection of the structures, facilities, utilities, systems and subsystems (SFUSS) at Stennis Space Center (See 5.1.2). to meet the intent of NPR 8831.2D. The results of the inspection are compiled and summarized in the Backlog of Maintenance and Repair (BMAR) databases. The BMAR databases shall also contain all equipment and facility systems that are no longer economical to repair or are within 5 years of expected service life. There are two databases, one for facilities and equipment within the Test Complex and the second for institutional facilities and equipment. The BMAR database shall then be used as a basis for the Annual work plans, from which the planned maintenance projects are funded.

This Annex also identifies specific maintenance that occurs on a recurring cycle of one or more years.

5.7.2 Definition of Terms

Backlog of Maintenance and Repair (BMAR): The unfunded facilities maintenance work required to bring facilities and collateral equipment to a condition that meets acceptable facilities maintenance standards.

Collateral Equipment: See definitions in Annex 5.1.

Common Use Areas: Facilities and/or portions of facilities, to which access is afforded and which are constructed, maintained

and operated specifically for, but not incidental to, the benefit of all SSC residents. Common use areas include entry and hallways, stairs and stairwells, restrooms, and vending areas within dedicated facilities. Access restrictions, for security or other reasons, do not alter this definition.

Equipment: For purposes of this Annex equipment is defined to mean collateral equipment.

Facilities: A facility is an enclosed structure to protect personnel, material or equipment from the elements and provide associated work or storage space. For purposes of this contract, a facility includes the utility systems inside the building/structure and extends five feet from the facility or as otherwise defined.

Architectural. Includes (interior/exterior): doors; windows; flooring (coatings and coverings); stairs and stairwells; interior walls, ceilings, and partitions.

Structural. Includes foundation; structural system; building shell; roof; external attachments (e.g. walkway covers, overhangs, loading docks, etc); and facilities water collection and drainage system.

Electrical: Includes: electrical wiring and lighting, hardware, and panels; power for equipment up to the point of disconnect, grounding or lightning arresting systems; alarm systems and communication equipment (excluding telephones).

Mechanical: Includes all equipment, components and controls associated with the following systems as well as

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components located outside the facility: HVAC; plumbing; compressed air; steam; fire suppression; gas; boilers, furnaces; and generators.

Building Specialty: Includes: installed equipment within the facility such as food service and processing equipment; appliances; elevators; automatic doors; roll-up doors; blast doors; vehicle gates; waste disposal equipment; shop equipment and hoists.

Institution or base: For purposes of this contract Institution and Base are used interchangeably. Institution refers to those facilities and equipment that are in the fee area, west of a line parallel to and 1000 feet west of D road and excludes all Test Complex structures, facilities and utilities, and the Army Complex.

Planned Maintenance Projects: A project which is approved and funded for a fiscal year as a result of the comprehensive inspection process (5.7.3.2 - 5.7.8) or as designated by the CO.

Structures: A structure is a constructed unit established for a designated objective. Structures that are part of or inside a facility are included with the facility. For purposes of this contract, structures are generally described as:

Allowing pedestrian and vehicular transportation.
Includes roads and parking areas, paved or gravel surfaces, curbs, shoulders, guard rails, medians, wheel stops, walkways, bridges, sidewalks, and associated hardware.

Preventing access and maintaining privacy. Includes fences, gates, barbed wire, grounding systems, planters, bollards, chains, and associated hardware and attachments.

Retaining or directing natural elements. Includes culverts, drainage systems, gravity storm water systems, retaining wall, bulkheads, landscaped borders, head walls, rip rapped areas, retention/detention ponds, spillways, canals, navigational lock, catch basins, and oil/water separators.

Providing information. Includes signs, pavement markings, flag poles, displays, historical markers, monuments and associated equipment.

Other: Boat ramps, docks, landfill, and associated equipment.

System Engineering: A system engineer is a technical expert with operational/maintenance authority and responsibility over an assigned system(s).

Test Complexes: For the purpose of this contract, all facilities, equipment and land east of a line parallel to and nominally 1,000 feet west of D road and extended to the ARMY complex.

Utility Systems: A utility is a system for collecting or distributing services between a common point and specific locations both above and below ground. See Annex 5.1, Table 5.1-1 for descriptions of utility systems.

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5.7.3	System Engineering	<p>The Contractor shall provide System Engineering for the following Systems:</p> <ul style="list-style-type: none"> a. Architectural/Structural b. Civil c. Electrical, Low Voltage d. Electrical, High Voltage e. HVAC f. Building Automation Systems (BAS or EMCS) Mechanical 	5 man-years of effort.	Maintain qualified System Engineering personnel. Accomplish all requirements items.
		<p>A System Engineer shall be a degreed engineer from an accredited university with 3 years minimum experience in the area of system(s) assignment, or shall be a system expert with a technical degree and 10 years minimum experience in the area of system(s) assignment.</p>		
		<p>See Annex 5.4 for additional High Voltage Engineer Operations Requirements.</p>		

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5.7.3	Continuation System Engineering	Systems Engineers shall be able to communicate effectively across a broad range of organizational levels, including managerial, supervisory, technical, and crafts personnel. Systems Engineers shall be capable of making effective technical and managerial decisions in regard to the operation and maintenance of their assigned system(s) and shall be knowledgeable regarding industry practices, tools, shops and training.		

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5.7.3	Continuation System Engineering	<p>Systems Engineers shall perform the following services:</p> <ul style="list-style-type: none"> a. Act as technical expert and manager over system(s); includes maintaining a broad knowledge of related work issues, such as environmental and safety requirements, systems integration, monitoring, and metering concepts. b. Maintain state-of-the-art technical expertise in assigned systems; maintain knowledge of current trends in industry through a review of technical publications, attendance of trade shows, manufacturer product briefings and literature, and other continuing education methods. c. Track and manage major activities for system(s), including preventative maintenance, corrective maintenance, operations, and monitor construction and modifications. d. Review and adjust priorities of corrective maintenance to comply with minimum requirements of contract. e. Prioritize the sequence of work to be accomplished by shops as needed to satisfy customer and program 		

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5.7.3	Continuation System Engineering	<p>critical objectives</p> <p>f. Review and adjust CMMS equipment information and system Critically Code assignments.</p> <p>g. Review CMMS and PT&I data to identify key areas for improvement in maintenance programs.</p> <p>h. Review and adjust CM methods and PM programs to optimize costs, comply with work quality and time constraints, and to maintain Availability; include (minimum) annual review of RCM and PT&I practices, recommend adjustments to content and frequency of tasks.</p> <p>i. Determine method of work accomplishment, such as use of site shop capabilities vs. outsources contract and repair vs. replacement.</p> <p>j. Ensure that all Maintenance work complies with configuration control requirements.</p> <p>k. Initiate work orders and monitor Design Engineering EMI Package development in support of Maintenance and Configuration control.</p> <p>l. Develop minor EMI/Sketch packages in support of</p>		

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5.7.3	Continuation System Engineering	<p>Maintenance activities.</p> <p>m. Prepare justifications and documentations to support System Engineering decisions.</p> <p>n. Prepare and deliver System Engineering technical and managerial presentations.</p> <p>o. Interface with and provide technical advice to Test Complex Area Engineers.</p> <p>p. Brief and keep NASA Technical Monitor(s) updated on system(s) status and key events.</p> <p>q. Review all Design Engineering EMI Packages associated with System Engineer assignment. Attend Design Reviews.</p> <p>r. Consult with Design Engineering, NASA Project Managers and Resident Agencies in establishing Project Requirements and resolving technical issues on refurbishments and new construction. Act as technical expert in consulting to provide for compliance with site standards, advocacy for LEED, Commissioning, Maintainability, and Sustainability and to integrate on-going lessons-learned from maintenance.</p>		

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5.7.3	Continuation System Engineering	<ul style="list-style-type: none"> s. Act as technical consultant to Construction Field Personnel. t. Assist in the troubleshooting and resolution of systems; recommend and locate outsource technical resources. u. Develop scope, work statements, specifications and packages for procurement of outsource technical consulting, operation/repair, or other services. v. Provide input for Impact Statements for addition and removal of systems' equipment from the contract. w. Provide training plans, tool requirements, and provide shop set-up technical recommendations relative to assigned system(s). x. Perform and oversee systems' equipment tagging and input into the CMMS. y. Perform Inspections and Planning in accordance with Annex 5.7 requirements. 		

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5.7.3.1	Inspections	Limitations and Restrictions In Resident Agency occupied buildings, inspection of interior architectural systems in a facility is restricted to common use areas (This restriction is not applicable to NASA occupied buildings).		
5.7.3.2	Develop a Comprehensive Inspection Plan and Schedule. Update the Schedule Annually and Whenever Changes occur (DR 5-FA03) Provide a Separate Schedule for the Test Complex and the base	The Contractor shall develop an inspection plan and schedule for all SFUSS. The plan shall include inspection criteria in the form of checklists specific to the system being inspected.	1 Plan	Provide the plan and schedules to the CO within 60 days of contract award.
			2 schedules – 1 for the Test complex and 1 for the Institution.	Updates shall be submitted to the CO annually, thereafter and 15 days prior to any change in the schedule.

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5.7.3.3	Conduct an Annual Inspection of SFUSS in Accordance with the Inspection Plan and Schedule Defined in 5.7.3.1.	The purpose of the inspection is to obtain maintenance and repair information. This inspection shall not relieve the Contractor from establishing and implementing a continual inspection program for the timely identification of an occurrence of maintenance and repair work within the scope of this contract.	Contractor determined.	All inspections shall be completed no later than 1 February of each year
		Conduct a thorough visual inspection of each and every component of the required system, entering all accessible areas including crawl spaces, manholes, suspended ceilings, etc.	Extent of SFUSS to be inspected is found in the following:	
		The inspection shall include code compliance issue. Identify all work necessary to bring the structures, facilities and utilities into compliance with health, fire, and safety codes.	SORD drawings located in the CEF	
		Individuals conducting inspections shall be technically knowledgeable of the system being inspected.		

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5.7.4	Record Deficiencies on Facility Inspection Sheets and the Backlog of Maintenance and Repair (BMAR) Databases	All deficiencies identified during the course of the inspections shall be recorded on Facility Inspection Sheets, Figures 5.7-1 and 5.7-2, and summarized in the existing institutional and test complex BMAR - databases and where indicated in this Annex, on drawings. ROM estimates shall be provided and will be used for planning purposes only.	Contractor determined	Submit Facility Inspection Sheets and supporting documentation such as drawings and inspection checklists, within 5 days of each inspection.
		See Exhibit 3 of this Annex for a description of the BMAR database and field values.	Previous BMAR databases and Facility Inspection Sheets are available in the TRL	

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5.7.4	Continuation Record Deficiencies on Facility Inspection Sheets and the Backlog of Maintenance and Repair (BMAR) Databases	<p>Review pertinent data/information sources such as maintenance history files, logs/reports, maintenance technicians, etc to ascertain overall condition and maintenance trends (equipment replacement, re-roofing, flooring replacement, paint, etc) and incorporate in the BMAR databases those structures, facilities, utilities, systems and equipment that should be replaced or that are within 5 years of expected service life. The Facility Inspection Sheet shall be used to document each record in the database. (DR 5-FA03).</p> <p>The Contractor shall remove duplicate records from the databases prior to submitting to the government.</p>		
5.7.4.1	Update the BMAR Databases	As work identified in the BMAR is accomplished the corresponding record shall be removed from the active database and archived.	Nothing additional	The BMAR databases shall be available for review on request.

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5.7.4.2	Record Defects on Drawings	Defects identified in the course of conducting the annual inspection shall be recorded on drawings for the following structures, facilities, and utilities: <ul style="list-style-type: none"> . Roofs . Roads . Parking Areas . Sanitary Sewer Collection System . Storm Water Collection System 	Nothing additional	Provide as supporting documentation as indicated in 5.7.4.
5.7.4.2	Record Defects on Drawings	Roof drawings reside in the ROOFER database. The ROOFER program is government owned software that is used to manage roof maintenance. Drawings for the other systems are generated by the Contractor to identify the location and specific information relating to the nature of the defects.		
5.7.5	Prioritize and Submit the BMAR Databases as Indicated			

**ANNEX 5.7
SYSTEM ENGINEERING
FACILITY MAINTENANCE AND OPERATIONS
FACILITY INSPECTION PROGRAM AND PLANNED MAINTENANCE**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
5.7.5.1	Provide Maintenance Planning/Test Complex (DR 5-FA01)	The Contractor shall prioritize those projects in the Test Complex BMAR database that should be considered for funding in the following fiscal year. Selection should take into consideration; mission impact, length of time a project has been deferred, and prioritization.	Planned Maintenance Plan submitted annually	Submit the Annual and 5-Year Planned Maintenance Plans and the BMAR database no later than March 1 of each year in an electronic spreadsheet format that is compatible with SSC site standards.
		Annual historical budget: \$1,000,000.	1 Five Year Plan submitted annually	
		The Contractor shall project requirements for Planned Maintenance Projects for 5 years.	BMAR database, current as of March 1 of each year	
5.7.5.2	Provide Maintenance Planning/Institutional	The Contractor shall prioritize the projects in each system. In addition, the contractor shall determine an overall ranking in order to establish the Annual Planned Maintenance Plan. Selection should take into consideration; mission impact, length of time a project has been deferred, and prioritization. Annual historical budget: \$800,000. All BMAR projects fall within the following systems	1 Annual Planned Maintenance Plan – submitted annually BMAR database, current as of March 1 of each year.	Submit the prioritized BMAR database and recommended Annual Planned Maintenance Plan in an electronic spreadsheet format consistent with SSC

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		<p>(SYSTEM is a field in the BMAR database with specific designated values – see Exhibit 3).</p> <ul style="list-style-type: none"> . Roofs . Sidewalks . Roads and Parking Lots . Sanitary and Storm Sewer Systems . Hi-voltage System . Electrical systems . Exterior Paint . HVAC . EMCS . Natural Gas Systems . Perimeter and Security Fencing . Mechanical Systems . Architectural 		<p>site software standards no later than March 1 of each year.</p>

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
5.7.6	Provide Cost Estimates for Each Planned Maintenance Project Approved by the Government for the Following Fiscal Year	The government will evaluate the Contractor's recommendations and will notify the Contractor which projects are approved for design and detailed cost estimate by May 1 of each year.	The Contractor shall cost the design and estimate of Planned Maintenance Projects based on the following historical budgets: Test Complex: \$1,000,000 Institution: \$800,000	Estimates for each project shall be submitted no later than August 1 of each year.
5.7.7	Programmed Maintenance			
5.7.7.1	Develop and Maintain Database Which Accurately Defines Each Programmed Maintenance Task	Programmed maintenance shall be identified, classified as to frequency required and a traceable record of accomplished tasks maintained. Programmed maintenance tasks shall be submitted to NASA Technical Operations Office at the start of each fiscal year for review.	Institution: Tasks/year Dependant on funding	Data base shall be updated monthly and be available for NASA review. Data base shall be developed and become part of the Contractor's maintenance program within 60 days after contract award.

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5.7.7.2	Annually Update the Programmed Maintenance Database to Include New or Modified Installations and Equipment	By the start of each Fiscal Year, the Contractor shall have an approved list of Programmed Maintenance items that will be accomplished during that Fiscal Year	1 Task	All New and Modified facilities, systems, equipment, and sub-systems shall be included in the data base by the October 1.
5.7.8	Accomplish Planned Maintenance Projects.	Annually, the Contractor shall develop a list of planned maintenance projects and submit the list to the CO for NASA review and approval. The list includes all planned projects for Institution and a separate list by Program for the various Test complexes. On completion of the NASA review, and the assignment of appropriate funding, the Contractor shall implement each of the projects in accordance with a schedule developed by the Contractor. All projects on the list will be completed and costed during the fiscal year unless a waiver is given.	Historical Annual Planned Maintenance Program Test Complex: \$1,000,000 Institution: \$800,000	Planned Projects shall be submitted to NASA for review in accordance with item Annex 5.7.5.1 . All approved projects will be completed and costed during the fiscal year.
5.7.9	Accomplish Demand Planned Maintenance Projects	Implement modifications, repairs, and maintenance projects as defined by SWR for NASA programs, resident agencies, and construction of Facilities (CoF) support.	Minimum 1,500 tasks	All approved projects shall be completed and costed in accordance with the Stennis Work Request. Documentation completed as

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				required by SSC standards. Satisfied customers.
		Averagee 54 hr.task based on historical information.	Maximum 1,900 tasks	

**ANNEX 5.7
FACILITY INSPECTION SHEET
FIGURE 5.7-1**

FACILITY INSPECTION SHEET

<input type="text"/>	IDENTIFICATION NUMBER	<input type="text"/>	EQUIPMENT NUMBER
<input type="text"/>	INSPECTOR	<input type="text"/>	FACILITY IDENTIFICATION NUMBER <small>as per real property records</small>
PROJECT TITLE: <input type="text"/>			

SYSTEM IDENTIFICATION:

This section may be customized for a specific system

SUB-SYSTEM/OR OTHER DATA:

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

This section may be customized for a specific system

LOCATION:

INSPECTORS' ASSESSMENT OF URGENCY TO REPAIR:

<input type="checkbox"/> EMERGENCY	<input type="checkbox"/> ROUTINE
<input type="checkbox"/> URGENT	<input type="checkbox"/> DISCRETIONARY
<input type="checkbox"/> PRIORITY	<input type="checkbox"/> DEFERRED

SKETCH

WHAT MAINTENANCE IS REQUIRED?:

(Draw a sketch if needed for clarification. Use a continuation sheet if additional space is required.)

This section may be customized for a specific system

DEFICIENCY / SOLUTION:

<input type="text"/>	ESTIMATED MANHOURS	<input type="text"/>	FUND SOURCE
<input type="text"/>	FY NEEDED	<input type="text"/>	ACTUAL COST
<input type="text"/>	CLOSE-OUT DATE	<input type="text"/>	

<input type="text"/>	Labor
<input type="text"/>	Material
<input type="text"/>	Engineering
<input type="text"/>	Documentation
<input type="text"/>	TOTAL ROM COST

ANNEX 5.8
GROUNDS MAINTENACE AND INTEGRATED PEST MANAGEMENT SERVICES

5.8.1 SCOPE OF WORK

5.8.2 GENERAL REQUIREMENT

5.8.2.1 Management and General Requirements

The Contractor shall furnish all resources as specified in **Annex 1**.

5.8.2.2 Drawings

Lists of drawings identifying exact locations of the areas to be maintained are specified in EMI NC/GM/1000R & NC/HB/2000. These drawings are located in the Central Engineering Files (CEF). The Contractor shall check all drawings upon receipt and shall promptly notify the CO of any discrepancies. The Contractor shall compare all drawings and field verify the maintenance areas and contract quantities before laying out the work and shall be responsible for any errors which may have been avoided otherwise.

5.8.2.3 Work Progression

Mowing, once begun in a designated area, shall be completed as specified prior to proceeding to another area unless otherwise directed by the CO.

5.8.2.4 Schedule

The Contractor shall schedule and arrange work so as to cause the least interference with the normal occurrence of Government business and mission in those cases. Where

interference is unavoidable, the Contractor shall make every effort to minimize the impact of the interference and its effects.

5.8.2.5 Controlled Access

The Test Complex, Area B, is a security-controlled area which requires access approval from the Test Complex Access Coordinator. The week prior to a scheduled service, access to the Test Complex shall be coordinated. If the test schedule causes previously approved access to be denied, the contractor shall coordinate a new date with the Test Complex Access Coordinator. If the new date is within 5 calendar days of the next scheduled mowing service, the contractor shall mow the area, skip the next scheduled date and then resume the normal mowing schedule.

5.8.2.6 Pesticides

The Contractor shall be licensed by the applicable state agency to provide pest control in the categories specified in this contract. All work shall be in accordance with federal, state, local and installation laws and regulations. All tanks, hoses, pumps, control valves, and gauges shall be free of visible deterioration, shall not leak, and shall operate at the manufacturers recommended rates and pressures. Equipment, which has failed, shall be replaced and/or repaired by the Contractor prior to resuming operations.

5.8.2.6.1 Control Methods

ANNEX 5.8
GROUNDS MAINTENACE AND INTEGRATED PEST MANAGEMENT SERVICES

The Contractor shall utilize only pesticides registered by the Environmental Protection Agency and applicable state lead agency for the use intended. All pesticides, rinse water, and containers shall be disposed of in accordance with label directions. Pesticides, rinse water, and container shall not be disposed of on the Center. Pesticide spills shall be cleaned, decontaminated, and reported to the Environmental Officer. Pesticides shall not be mixed or stored on site.

5.8.2.6.2 Security

All pesticides carried on vehicles shall be secured in locked compartments at all times. Vehicles shall not be left unattended at any time unless properly locked and secured.

5.8.2.6.3 Certifications

All work involving the handling and or use of pesticides shall be performed by a certified applicator.

5.8.3 DEFINITIONS

Debris: - Debris includes, but is not limited to, paper, cans, bottles, limbs and branches, pine straw and pine cones, leaves, rocks, and other similar items. Construction debris is excluded.

Integrated Pest Management: - The utilization of control measures coordinated for overall environmental protection so as to reduce pest numbers to a controlled level without adverse effects to the surroundings.

Maintenance Level: - A designation used to specify the frequency of services and type of grounds maintenance required.

Mowing - Mowing shall include cutting and trimming, within the designated area, all grasses, weeds and other vegetation, which is 1 inch, or less in diameter (at ground level).

Pruning: - Pruning is selectively removing unwanted growth to make a plant or tree grow or respond in a desired manner. Pruning differs from ‘shearing’. Pruning involves selection and judgment. ‘Shearing’ means clipping all growth on a plant at a uniform distance and shape.

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5.8.4	PLANS, REPORTS, AND SUBMITTALS			
5.8.4.1	Grounds Maintenance Plan and Work Plans	Develop, submit and maintain as required in the DR. Implement procedures and changes to insure SSC compliance with the Executive Memorandum titled “Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds.”(See DR 5-GA16)	1 Plan, annual work plan, and monthly work plans.	Plan to include all requirements in items 5.8.5.
5.8.4.2	Integrated Pest Management Plan and Work Schedules	Develop, submit and maintain as required in the DR. 5-GA17 . Utilization of beneficial predatory insects and other biological controls shall be considered whenever possible.	1 Plan, annual inspection schedule, monthly treatment schedules	Plan to include methods and procedures for items 5.4.3 and 5.6
5.8.4.3	Pesticide Labels, MSDS, and Usage Reports	DR 5-GA21	Per DR	Submit as required
5.8.4.4	RESERVED			
5.8.5	GROUNDS MAINTENANCE			
5.8.5.1	Dispose of Debris	All rubbish, debris and trash removed from the maintenance area shall be disposed of in the SSC landfill(s) in accordance with Landfill Operation Procedures.	Contractor determined	No instance of non-compliance

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5.8.5.2	Obstructions	Portable items such as trash containers and other similar items may require temporary relocation by the Contractor to properly maintain grounds areas. All drains, ditches, and pipes which become obstructed with accumulated grass clippings, soil, mulch, and other material resulting from performance of work shall be cleaned.	Contractor determined	No instance of non-compliance
5.8.5.3	Standing Work			
5.8.5.3.1	Remove Debris	Remove debris from parking lots, landfill, building entrances, and sidewalks.	1,415,000 SF	Area shall remain free of visible debris and litter
5.8.5.3.2	Accomplish Emergency Clean-up			
5.8.5.3.2.1	Corrective Action (Non Disaster)	Includes removal of debris such as fallen trees and branches that present an immediate danger to customers. Locations will be provided by the CO.	10 requests annually	Begin clean-up within 1 hour of notification
5.8.5.3.2.2	Emergency Clean-up as a Result of Hurricanes, Tornadoes, Floods, or other Disasters	This work requires immediate response and sustained effort to minimize the effects of the disaster on SSC operations.	As Required	Meet performance requirements in the SWR and/or minimize disaster effects.

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5.8.5.3.3	Building 2120 - Child Care Center; Replenish Wood Chips to Provide a Fall Zone Around Equipment	Add sufficient wood chips under and around play yard equipment to establish a depth of one foot. Do not bury debris.	1,300 SF	Accomplish annually, in April or May
5.8.5.3.4	Special Events			
	<p>Special Events Addressed in This Section Are Those That Occur from March 15 Through November 15</p> <p>Special Events Occurring at Other Times Shall Be Performed as Indeterminate Work (See 5.8.7).</p>	Special events to be held in a specific area will require coordination of clean-up, mowing, and trimming actions. When such coordination is required, the specific location and date will be provided by the CO no later than 4:00 p.m. Thursday of the week prior to the event. This work does not represent an increase over the grounds maintenance provisions of paragraph 2.5.4. The Contractor shall delay the maintenance of an area or substitute for the next scheduled maintenance as directed by the CO.	Nothing Additional	
	Remove Debris	The Contractor shall schedule/accomplish clean-up services to the area no earlier than 24 hours and no later than 3 hours prior to the scheduled event.	Nothing additional	No visible debris
	Mowing and Trimming	The Contractor shall schedule/accomplish mowing and trimming services to the area no earlier than 48 hours and no later than 24 hours prior to the scheduled event.	Nothing additional	

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5.8.5.3.4 Cont.	Relocate Event Articles	The contractor shall schedule/accomplish relocating trash receptacles, picnic tables, tables, grills, and other articles to the area no earlier than 24 hours and no later than 3 hours prior to the scheduled event	Nothing additional	
5.8.5.4	Recurring Work (DR5-DM01)	<p>Provide the following Grounds Maintenance Services during the period March 15 through November 15, unless otherwise specified.</p> <p>When not in use, maintenance equipment should be removed from high traffic areas.</p> <p>The total acreage to be maintained is categorized into 4 maintenance levels:</p> <ol style="list-style-type: none"> 1) Prime Cycle - Administrative Areas, Area A 2) Prime R/W Cycle - Prime right-of-way (R.O.W.), Area B buildings, and other base buildings 3) Secondary Cycle - Secondary R.O.W., Areas A and B 4) Secondary R/W Cycle - Unimproved areas, Areas A and B 		

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
5.8.5.4.1	Mowing	Mowing methods shall not include use of animals. Prior to mowing, the Contractor shall remove debris and trash from maintained areas. Mowing along major roads - HWY 607, Shuttle Parkway, Balch Blvd, and Saturn Drive shall not be permitted during the hours of 7:00-8:30 a.m. and 3:15-4:30 p.m., Monday through Friday. Roadway shoulders shall be maintained to include the areas from the bottom of the ditch, or the level of water if filled to the edge of the dirt, gravel, asphalt roadway surface, or concrete curb as applicable. Ditches shall be maintained to include the ditch bottom, if dry, or to the level of water if filled.		Mow the areas designated on the Grounds Maintenance Drawings at the frequencies indicated below:
5.8.5.4.1.1	Mowing, Prime Cycle	Any holes shall be filled prior to mowing. Mowing shall be accomplished free of scalping, rutting, bruising, and uneven and rough cutting. Grass clippings shall be uniformly distributed over the mowed area and shall not be windrowed or deposited in piles or clumps.	96 acres	Weekly, (5-7 calendar days)
5.8.5.4.1.2	Mowing, Prime R/W Cycle	Mowing shall be accomplished free of scalping, rutting, bruising, and uneven and rough cutting.	210.5 acres	Bi-weekly (14 - 16 calendar days)
5.8.5.4.1.3	Mowing, Secondary Cycle	See 5.8.5.4.1.2	365.5 acres	Monthly (28-31 calendar days)

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5.8.5.4.1.4	Mowing, Secondary R/W Cycle	See 5.8.5.4.1.2	413 acres	Annually (350-380 calendar days)
5.8.5.4.1.5	Mowing, Quarterly	See 5.8.4.1.2	5 acres	Quarterly (84 -93 calendar days)
5.8.5.4.2	Fertilize and Seed Prime Cycles	Required to sustain healthy plant growth and uniform color.	407 acres	Maintain healthy plant growth
5.8.5.4.3	Control Broad Leaf weeds Prime R/W Cycle	Maintenance procedures can include prevention as well as removal. Repair all scalped/stripped areas resulting from prevention/removal processes. Apply herbicides as necessary to meet requirements.	142 acres	Attain 70% control of broad-leafed weeds at a minimum.
5.8.5.4.4	Trimming			
5.8.5.4.4.1	Trimming; Area A All cycles	Trim around obstacles and along edges of adjacent raised surfaces, to include but not limited to, trees, shrubs, curbs, pavements, fire hydrants, and walls. Trimming shall be accomplished by use of mechanical equipment.	Nothing additional	Trimming shall be considered a part of the mowing activity and shall be accomplished concurrently.

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5.8.5.4.4.2	Trimming; Area B	Trimming around trees shall be accomplished by use of mechanical equipment Herbicide may be used to control vegetation around other obstacles to the extent shown on Test Complex Herbicide Spray Schedule and accompanying drawings.	Nothing additional	See 5.8.5.4.4.1 for mechanical trimming. See 5.8.6.1 for herbicide application
5.8.5.4.5	Edging - Specific Areas to Be Edged are Delineated in the Grounds Maintenance Drawings	Edge grass directly adjacent to sidewalks and curbs. Edge lawns to achieve a straight vertical edge where the grass meets the edge of the obstacle.	45,150 LF	Monthly (28-31 calendar days)
5.8.5.4.6	Maintain Ditches	Repair eroding ditches, ruts, and scalped areas on ditch slopes and eroding grounds and around headwall structures promptly and keep culverts and drop inlets free of all obstructions and weed growth.	2,500 LF	Year round. Maintain a free flowing condition with no debris or dead vegetation accumulations
5.8.5.4.7	Maintain Landscaped Areas These Services Shall Be Provided Between March 15 and November 15 Except as Noted	Specific locations are delineated on the Grounds Maintenance Drawings. Maintenance equipment shall be removed or stored out of sight when not in use. Landscaped areas include patio areas in Buildings 1020, 1002, and 1105.	70,500 SF	

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5.8.5.4.7.1	Remove Undesirable Vegetation	Undesirable vegetation includes but is not limited to: grass, weeds, fungus, thistle, dallis grass, clover, and other vegetation not initially planted or maintained for aesthetic value.	Nothing additional	Maintain landscaped areas free of undesirable vegetation
5.8.5.4.7.2	Fertilize Plant Beds	Apply fertilizer as necessary to sustain healthy plant growth.	Nothing additional	No visibly sick or dead plants
5.8.5.4.7.3	Remove Surface Debris	Includes debris litter the surface or partially buried (visible) debris.	Nothing additional	Year round. Clean areas no less than weekly. Area shall be free of visible debris and litter.

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5.8.5.4.7.4	Prune Hedges and Shrubs to Maintain Proper Size, Shape, and Appearance	Pruning of hedges and shrubs is required when new growth reaches 4” for fast growing shrubs and 6 inches for slow growing shrubs. Shrub trimming shall be performed in a manner that maintains or enhances the plant’s natural growth patterns.	Nothing additional	<p>Maximum shrub height shall be maintained as follows: Shrubs planted directly in front of windows shall not exceed the window sill height except for windows less than 4 feet above the ground for which shrubs shall not exceed four (4) feet.</p> <p>Shrubs planted in open landscaped areas, corners or near stop signs and other areas where the shrubs may hinder visibility shall not exceed 5 feet.</p> <p>All other shrubs shall not exceed 6 feet in height.</p>

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5.8.5.4.7.5	Apply Organic Mulch (e.g. decorative bark) in Planting Beds	Bark shall be pine or softwood bark mulch or better. When new bark is not required, turn and rake existing bark to present a fresh and clean aesthetic appearance.	Nothing additional	Apply bark to maintain a minimum of 2” and a maximum of 3” in March and October.
5.8.5.4.7.6	Maintain Plant Beds in the Atrium in Building 1100	Fertilize and water to maintain healthy plant growth. Prune trees and trim plants.	2,500 SF	Maintain healthy growth and aesthetic appearance, year round
5.8.5.4.7.7	Plant Annuals, Flower Beds in Area A, at the Gate Signs, and in the Test Complex area	Continually plant/maintain seasonal flowering plants	4,600 SF	Maintain a full garden appearance
5.8.5.4.7.8	Ground Cover in Landscaped Areas	Use of vines, as a ground cover shall not be permitted.	Nothing additional	Maximum height of ground cover shall not exceed 12 inches.

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5.8.5.4.8	Prune Trees	<p>Prune trees according to their natural growth habit.</p> <p>Pruning is to be done in a manner so as to:</p> <ul style="list-style-type: none"> a. Remove dead, damaged, or diseased wood, parasitic vegetation and structurally weak limbs that may cause a safety hazard. b. Remove branches to provide clearance over sidewalks, roadways, parking lots, driveways, buildings roofs, eaves, and windows. c. Remove branches to provide clearance for buses, and similar vehicles along streets d. Cut back branches that overhang or grow into power lines. Shape the entire tree rather than notch the top. e. Prevent growth of small trees in front of windows, over entranceways or walks and trees, which will obstruct vision at street intersections. 	<p>Areas A & B</p> <p>2,150 LF</p> <p>110,050 LF</p> <p>26,800 LF</p>	<p>Complete pruning of trees no later than April 1, annually.</p> <p><13.8Kv: 10 LF, either side of centerline,</p> <p>13.8Kv Single, circuit: 15 LF either side of centerline</p> <p>13.8Kv Dual circuit: 30LF either side of centerline.</p>

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5.8.5.4.9	Grass Planting and Sodding	The Contractor shall repair washed out and bare areas with a type of soil identical to that of the surrounding area and reestablishing grass by seeding or sodding.	Maximum 1,000 SF	Bahia grass shall not be used in any location at SSC.
		Bare spots exceeding 1/2 SF in Prime cycle areas shall be resodded.		
5.8.5.4.10	Prevent Erosion and Drainage Problems Such as Damming, Ponding, Flooding, etc	Corrective action required as a result of erosion outside the Contractor's control shall be performed per paragraph 5.7.	10,000 SF	No loss of ground cover due to Contractor negligence
5.8.5.4.11	Keep Fences Free of Vegetation, Child Care Facility 2120 and Summer Day Camp Area Building 2436	Trim grass away from fences on both sides. Herbicide shall not be used.	1,015 LF	Fences shall remain free of vegetation at all times.
5.8.5.5	Buffer Zone Signs	Clean signs and clear brush around the signs. The locations of the Buffer Zone signs are indicated on a drawing located in the Central Engineering Files at SSC.	30 signs annually	Perform annually (350-380 calendar days)
5.8.6	INTEGRATED PEST MANAGEMENT			
5.8.6.1	Herbicide Application			

ANNEX 5.8
GROUNDS MAINTENACE AND INTEGRATED PEST MANAGEMENT SERVICES

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARD</u>
5.8.6.1.1	<p>Herbicide Application, Areas A and B</p> <p>Apply non-selective and pre-emergence herbicide to prevent growth of vegetation.</p>	<p>Specific locations and quantities are shown on Herbicide Spray Schedule and accompanying drawings.</p> <p>-Sterilization may be required more than once annually to meet the minimum standard.</p> <p>Prevent growth of all vegetation in paved and unpaved parking and storage areas and cracks in paved roads, sidewalks, dock areas, and curb joints</p> <p>-Area B - Maintain a vegetation free strip extending one foot from the edge of all buildings, around poles, posts (including signs), fire plugs, manholes, valve pits and other mowing obstructions.</p> <p>-Maintain areas under pipelines and other areas not specifically noted here but shown in the drawings.</p>	<p>Area A –140,600 SF Parking Lots - 1,200,000 SF</p> <p>Area B-270,000 SF</p>	<p>Treated areas shall remain completely free of vegetation at all times. If a residual herbicide is used, it must be non-leaching with minimal toxicity</p>
5.8.6.1.2	Weed Control	<p>Use selective herbicides to control broad-leaved weeds in the lawn areas identified in item 5.8.5.4.3.</p>	Nothing additional	

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5.8.6.2	Pest Control	<p>Provide pest control services. Pests include any insects, arachnids, rodents, vertebrates, birds, animals, and reptiles that are nuisances or harmful to people or their desired surroundings. Termite infestations will be handled as indeterminate work (See 5.8.6.2.2.2).</p> <p>Even though specific guidelines/regulations and minimum performance standards have been established, the services to be performed will rely heavily on knowledgeable and experienced individuals who are capable of establishing an early prevention program to eliminate or greatly reduce pest infestations. No additional information is available. Pest infestations vary from season to season, year to year, and form a multitude of situations. The Contractor shall review all data available, analyze the geographical location/conditions, and standard industry practices to determine the size and scope of the required program to be offered.</p>	Contractor determined	
5.8.6.2.1	Work Identification			

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5.8.6.2.1.1	Continually inspect structures, facilities, and grounds to identify pest infestations.	As a minimum, includes work that is reasonably visible to any Contractor personnel performing any service. (i.e., janitors should report crawling infestations; grounds keepers should report moles and insect infestations; mechanics should report rodents, etc.	See below:	Conduct inspections with individuals technically knowledgeable and capable of identifying suspected pest infestations. Provide inspection services at a frequency required to control pest infestations.
5.8.6.2.1.1.1	Inspect Structures and Facilities	Includes all buildings and structures at SSC in Areas A and B.	1,485,000 SF	Inspect no less than annually.
5.8.6.2.1.1.2	Inspect Food Service Areas	Inspect all building containing food service areas. (Bldgs. 2201, 1100, 1002).	16,900 SF	Inspect no less than quarterly.
5.8.6.2.1.1.3	Inspect Medical Clinic	Inspect Medical Clinic in building 1100.	5,400 SF	Inspect no less than quarterly.
5.8.6.2.1.1.4	Inspect Atrium in Bldg 1100	Nothing additional.	5,750 SF	Inspect no less than monthly.
5.8.6.2.1.1.5	Inspect Building Exterior	Inspect all entrances and the eaves of single story buildings.	7,180 LF	Inspect no less than quarterly.

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5.8.6.2.1.2	Perform Pest Control Work Identified by NASA, Resident Agencies and Government Contractors	Accept identified/suspected pest control work from any individual.	Nothing additional	Respond to calls and take appropriate corrective action within 24 hours.
5.8.6.2.1.3	Inspect Sentriguard Baiting Systems	Nothing additional.		Inspect quarterly
5.8.6.2.2	Work Accomplishment and Completion			
5.8.6.2.2.1	Notify Building Occupants of Scheduled Treatments or Applications to the Interior of Assigned Facilities.	Identify the areas to be treated, times of application, pesticide to be used, and re-entry times (if applicable). In addition verbal or written notification, post warning signs, rope off areas, stage barriers, etc., to allow sufficient notice of upcoming treatments and prevent potential dangers or hazardous conditions.	Nothing additional	No applications shall begin without proper notification to the appropriate individuals.
5.8.6.2.2.2	Treat all Infestations, including:	Includes mechanical chemical or construction treatments and re-applications, as necessary, to remove all cases of infestations	1,987,866 SF	Applications, procedures, and chemicals shall not damage the integrity of the areas being treated or the surrounding area, and shall have minimal impact on customers.

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5.8.6.2.2.2 Cont.	Identify and Treat all Fireant Infestations in Areas A and B	Identify and eradicate all fireant populations. Area A is defined on the drawings as base and Area B is Test Complex.	440 acres	No more than 1 visible mound, 12 inches or greater in diameter per 1,000 SF of area
	Identify and Treat Poisonous Spiders in Areas A and B.	Identify and eradicate all black widow and brown recluse spider populations at: a. Building 4120, A-1 T/S, treat outside hardcore levels: 5, 6, 7, 8, 9, and 10. b. Building 4122, A-2 T/S, treat outside hardcore levels 5, 6,7,8,9, and 10. c. Building 4220, B T/S, treat outside hardcore levels: 8,9,10,11,12,13,14,15,16,17,18, and 19. Treat on top of B-1 cryogenic tanks. d. Building 3202 Warehouse area. e. Treat entrances to Buildings 4995, 4110, and 4210.	4 Requests Annually	No instance of non-compliance
	Identify and Treat all Infestations in the Atrium in Bldg 1100	Pesticide application shall be limited to Fridays after 4:30 pm.	Nothing additional	

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5.8.6.2.2.2 Cont.	Control Mosquito Population	Area A and Area B. All control of mosquito population shall be completed in other than core hours which is defined in (refer to definitions in Annex 1).	Nothing additional	Landing rate of less than 8 mosquitoes in 60 seconds in populated sections of Area A and Area B.
5.8.7	Grounds Improvements	Grounds improvement projects may include, but is not limited to, planting trees and updating mature landscaped areas.	As Requested Annual Historical: 400 man hours \$8,000 Material.	Meet performance requirements in the SWR.
5.8.8	Wetland Mitigation	Wetland mitigation may include, but is not limited to, planting trees and burning vegetation.	Nothing additional	Meet performance requirements in the SWR and in the time specified.
5.8.9	Resident Agency Requests	Ground maintenance activities in addition to defined requirements which may include, but not limited to, clean up grass cutting, planting, and pest management change of command activities support.	Nothing additional	Meet performance requirements in the SWR and in the time specified.
5.8.10	Carcass Disposal	Remove dead animals and dispose of appropriately.	Estimate 20 requests annually	Carcass shall be removed the same day the request is made.

**ANNEX 5
EXHIBIT 1
INVENTORY OF BUILT-IN CRANES, MONORAILS, AND HOISTS**

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<u>EONUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>CRITICAL</u>	<u>MI-PM</u>	<u>MI-LOAD TEST</u>	<u>MI INSPECTION</u>	<u>RECERT DATE</u>	<u>RESPONSIBLE OPERATOR</u>	<u>CAPACITY</u>	<u>WIRE ROPE/CHAIN</u>	<u>MFG</u>
0034846	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	6/18/2006	FOSC	4,000 LB	CHAIN	COLUMBUS MCKINNON
0036757	COME-LONG (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	1/31/2009	FOSC	1,500 LB	CHAIN	BEEBE BROS INC
0042378	COME-LONG (LDE)	4220	N		SMI-8830-0103	SMI-0114CC	4/10/2006	FOSC	1,500 LB	CHAIN	DUFF - NORTON / COFFING HOIST
00961572	#HE001 - CRANE SUSPENDED PERSONNEL CAGE (LDE)	2105	N		SMI-8830-0106		11/30/2006	FOSC	500 LB	N/A	
00961573	#HE002 - CRANE SUSPENDED PERSONNEL CAGE (LDE)	2105	N		SMI-8830-0106		11/30/2006	FOSC	500 LB	N/A	
00961574	#HE003 - CRANE SUSPENDED PERSONNEL CAGE (LDE)	2105	N		SMI-8830-0106		1/4/2006	FOSC	500 LB	N/A	
00961932	L-89 BOOM CRANE (LDE)	4220	N		SMI-8830-0123	SMI-8830-0107	5/5/2008	TEST CT.	1,000 LB	1/2" - Minimum Diameter: 0.469"	GREEN MARINE & INDUSTRIAL EQUIPMENT COMPANY
00962760	L-80 JIB CRANE (LDE)	2105	N		SMI-0144A2	SMI-8830-0107	9/10/2006	FOSC	4,000 LB	CHAIN	YALE
00962761	L-81 JIB CRANE (LDE)	2105	N		SMI-0144A2	SMI-8830-0107	9/10/2006	FOSC	4,000 LB	CHAIN	YALE
00962795	L-82 BRIDGE CRANE (LDE)	2205	N		SMI-8830-0126	SMI-8830-0104	10/31/2006	FOSC	8,000 LB	5/16" - Minimum Diameter: 0.297"	GAFFEY
00962796	L-83 BRIDGE CRANE (LDE)	2205	N		SMI-8830-0126	SMI-8830-0104	10/31/2006	FOSC	8,000 LB	5/16" - Minimum Diameter: 0.297"	GAFFEY
00963411	L-96 GANTRY CRANE - 5 TON (LDE)	4070	N		SMI-8830-0124	SMI-8830-0107	11/30/2008	TOC	10,000 LB	CHAIN	WALLACE PRODUCTS
00963631	L-98 GANTRY CRANE 2 TON (LDE)	1105	N		SMI-0144D	SMI-8830-0107	6/30/2009	FOSC	4,000 LB	CHAIN	WOODSTOCK
00963725	L-97 MONORAIL HOIST #1 (LDE)	4120	Y		SMI-8830-0198	SMI-8830-0199	4/30/2007	TEST CT.	40,000 LB	1/2" - Minimum Diameter: 0.469"	YALE
00963777	L-99 GANTRY CRANE 5 TON (LDE)	8305	N				8/1/2003	TOC	10,000 LB	CHAIN	WALLACE-TIER
00970565	HOIST, CHAIN (LDE)	4220						FOSC			
00970566	HOIST, CHAIN (LDE)	4220						FOSC			
00970567	L-102 HOIST, WIRE ROPE (LDE)	4008	Y		SMI-8830-0200	SMI-8830-0201	1/31/2007	TOC	6,000 LB	3/8" - Minimum Diameter: 0.344"	R&M MATERIAL HANDLING
00970597	L-93 A-FRAME WITH PNEUMATIC HOIST 2 TON (LDE)	2105	N		SMI-0144E	SMI-8830-0107	3/31/2009	FOSC	4,000 LB	CHAIN	HANDLING SYSTEMS
00971697	SCISSOR LIFT MODEL SLI-44896-E (LDE)	4120	N	ME-10	ME-10		7/31/2007	TEST CT.	2,000 LB	N/A	AIR TECHNICAL INDUSTRIES
00972629	HYDRAULIC ENGINE CRANE (LDE)	2201	N				3/21/2007	FOSC	2,000 LB	N/A	
00973862	L-84 BRIDGE CRANE (LDE)	4050	N					TOC	17,000 LB	" - Min Diameter: "	DIXIE CRANE
00973936	L-117 BRIDGE CRANE (LDE)	4080	Y		SMI-8830-0139	SMI-8830-0104	5/31/2007	TEST CT.	2,000 LB	1/4" - Minimum Diameter: 0.234"	P & H
00973937	L-118 BRIDGE CRANE (LDE)	4080	Y		SMI-8830-0138	SMI-8830-0104	5/31/2007	TEST CT.	20,000 LB	1/2" - Minimum Diameter: 0.469"	P & H
00974850	SPIDER, STAGING (LDE)	4122	N				4/30/2006	FOSC	1,000 LB	5/16" - Minimum Diameter: 0.297"	PLATFORM CRANE
00975663	TWO POST VEHICLE LIFT (LDE)	2105	N		SMI-8830-0186	SMI-8830-0187	2/1/2010	FOSC	7,000 LB	5/16" - Minimum Diameter: 0.297"	ROTARY LIFT
00975664	FOUR POST VEHICLE LIFT (LDE)	2105	N		SMI-8830-0188	SMI-8830-0189	3/31/2009	FOSC	40,000 LB	CHAIN	FORWARD LIFT
0133588	56 TON POWER LIFT (LDE)	2201						FOSC			VETTER INSTRUMENTS
0145568	COMELONG (LDE)	4302	N				4/27/2008	FOSC	6,000 LB	CHAIN	
0145623	COMELONG (LDE)	2201	N				7/31/2009	FOSC	1,500 LB	CHAIN	COLUMBUS MCKINNON
0289833	SPIDER, STAGING (LDE)	4302	N				6/20/2006	FOSC	500 LB	5/16" - Minimum Diameter: 0.297"	SPIDER STAGING INC.
0289843	SPIDER, STAGING (LDE)	4122	N				10/24/2002	FOSC	5/16" - Minimum Diameter: 0.297"	SPIDER STAGING INC.	
0397098	NB397098 HERCULES FL CRANE 2000LB (LDE)	2201	N				5/3/2008	FOSC	2,000 LB	N/A	
042100	HOIST, CHAIN (LDE)	2201	N		SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	6,000 LB	CHAIN	BEEBE BROS INC
0590346	FLOOR CRANE, PORTABLE (LDE)	2205	N				2/16/2010	FOSC	500 LB	1/4" - Minimum Diameter: 0.234"	LYMAN INC
0590975	COMELONG (LDE)	3201	N		SMI-8830-0103	SMI-0114C	4/30/2009	FOSC	4,000 LB	CHAIN	COLUMBUS MCKINNON
0591023	COMELONG (LDE)	3201	N		SMI-8830-0103	SMI-0114CC	1/3/2009	FOSC	6,000 LB	CHAIN	COLUMBUS MCKINNON
0591024	CRANE, PORTABLE FLOOR (LDE)	2105	N				11/30/2009	FOSC	4,000 LB	CHAIN	DE KOVAN MFG CO
0592691	SPIDER, STAGING (LDE)	4302	N				3/17/2007	FOSC	1,000 LB	5/16" - Minimum Diameter: 0.297"	SPIDER STAGING INC
0592904	SPIDER, STAGING (LDE)	4302	N				4/8/2006	FOSC	1000 LB	5/16" - Minimum Diameter: 0.297"	SPIDER STAGING INC
0594302	594302 - PORTABLE FLOOR CRANE (LDE)	2205	N				5/6/2008	FOSC	1,000 LB	N/A	RUGER EQUIP INC F-STRATTON EQ
071076	NL 71-76 - TRUCK, AERIAL LIFT W/BUCKET (LDE)	2201	N					FOSC	N/A		INTERNATIONAL HARVESTER /ALTEC
0752446	SPIDER- STAGING (LDE)	4302	N				6/20/2006	FOSC	650 LB	5/16" - Minimum Diameter: 0.297"	SPIDER STAGING INC.
081024	NL 81-24 - TRUCK, POLE (LDE)	2201	N					FOSC	N/A	1/2" - Minimum Diameter: 0.469"	INTERNATIONAL HARVESTER /ALTEC
1012317	HOIST, CHAIN (LDE)	3305	N		SMI-8830-0103	SMI-0114CNB	6/30/2006	TOC	500 LB	CHAIN	COLUMBUS MCKINNON
1173388	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	8/23/2009	FOSC	3,000 LB	CHAIN	BUDDGT
120077	NL120-77 - FORKLIFT (LDE)	2105	N		SMI-8830-0148	SMI-8830-0102	12/26/2005	FOSC	7,500 LB	N/A	CATERPILLAR INDUSTRIAL INC
120084	NL120-84 - FORKLIFT UPRIGHT- ELECTRIC 4000LB (LDE)	2204	N		SMI-8830-0146	SMI-8830-0102	4/30/2009	FOSC	4,000 LB	N/A	EATON YALE LTD SUSPENSION DIV
120087	NL120-87 - FORKLIFT (LDE)	2105	N		SMI-8830-0148	SMI-8830-0102	1/31/2009	FOSC	7,700 LB	N/A	YALE MATERIALS HANDLING CORP
120089	NL120-89 - FORKLIFT - ELECTRIC (LDE)	2203	N		SMI-8830-0147	SMI-8830-0102	11/30/2009	FOSC	4,000 LB	N/A	CLARK EQUIPMENT CO
120094	NL120-94 - TRUCK WALKIE REACH (LDE)	2105	N		SMI-8830-0146	SMI-8830-0102	3/31/2009	FOSC	2,600 LB	N/A	CLARK EQUIPMENT CO
120110	NL120-110 - FORKLIFT 36 VOLT ELEC (LDE)	2204	N		SMI-8830-0147	SMI-8830-0102	12/16/2009	FOSC	4,000 LB	N/A	YALE MATERIALS HANDLING CORP
120111	NL120-111 - FORKLIFT 36 VOLT ELEC (LDE)	2204	N		SMI-8830-0147	SMI-8830-0102	12/31/2009	FOSC	4,000 LB	N/A	YALE MATERIALS HANDLING CORP
120112	NL120-112 - FORKLIFT- ELECTRIC - CATERPILLAR (LDE)	2204	N		SMI-8830-0147	SMI-8830-0102	12/15/2006	FOSC	2,500 LB	N/A	CATERPILLAR INDUSTRIAL INC
120116	NL120-116 - FORKLIFT (LDE)	2105	N		SMI-8830-0148	SMI-8830-0102	5/31/2009	FOSC	28,000 LB	N/A	CLARK EQUIP CO INDUS TRUCK DIV
120118	NL120-118 - FORKLIFT, CLARK ELEC (LDE)	2204	N		SMI-8830-0146	SMI-8830-0102	11/30/2006	FOSC	2,600 LB	N/A	CLARK EQUIP CO INDUS TRUCK DIV
120119	NL120-119 - FORKLIFT, YALE ELEC (LDE)	2201	N		SMI-8830-0147	SMI-8830-0102	11/30/2009	FOSC	2,500 LB	N/A	YALE INDUS PROD F-EATON CORP
120120	NL120-120 - FORKLIFT, DIESEL 4000LB (LDE)	2205	N		SMI-8830-0148	SMI-8830-0102	5/31/2009	FOSC	4,000 LB	N/A	CATERPILLAR INDUSTRIAL INC
120121	NL120-121 - FORKLIFT, DIESEL 6000LB (LDE)	4301	N		SMI-8830-0148	SMI-8830-0102	1/31/2009	FOSC	5,450 LB	N/A	CLARK EQUIP CO INDUS TRUCK DIV
120122	NL120-122 - FORKLIFT (LDE)	2105	N		SMI-8830-0148	SMI-8830-0102	3/31/2009	FOSC	7,350 LB	N/A	YALE MATERIALS HANDLING CORP

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120122	NL120-122 - FORKLIFT (LDE)	2105	N	SMI-8830-0148	SMI-8830-0102	3/31/2009	FOSC	7,350 LB N/A	YALE MATERIALS HANDLING CORP
120124	NL120-124 - FORKLIFT- 4000 LB GASOLINE (LDE)	4220	N	SMI-8830-0148	SMI-8830-0102	11/30/2006	FOSC	4,000 LB N/A	YALE INDUS PROD F-EATON CORP
120126	NL120-126 - FORKLIFT- GASOLINE 6000 LB (LDE)	2204	N	SMI-8830-0148	SMI-8830-0102	4/30/2009	FOSC	4,775 LB N/A	CLARK EQUIP CO INDUS TRUCK DIV
120127	NL120-127 - FORKLIFT EXTENDER (LDE)	2205	N		SMI-8830-0110	2/28/2009	FOSC	1,500 LB N/A	HERCULES INC F-HERCULES INDUS
120129	NL120-129 - FORKLIFT- DIESEL (LDE)	2205	N	SMI-8830-0148	SMI-8830-0102	8/31/2009	FOSC	6,000 LB N/A	T C M MFG CO (DISCONTINUED)
120130	NL120-130 - FORKLIFT, HYSTER (LDE)	2204	N	SMI-8830-0148	SMI-8830-0102	11/9/2008	FOSC	6,000 LB N/A	T C M MFG CO (DISCONTINUED)
120131	NL120-131 - FORKLIFT- UPRIGHT- YALE (LDE)	2204	N	SMI-8830-0147	SMI-8830-0102	1/31/2009	FOSC	3,500 LB N/A	YALE INDUS PROD F-EATON CORP
120133	NL120-133 - FORKLIFT- ELECTRIC (HYSTER) (LDE)	2204	N	SMI-8830-0147	SMI-8830-0102	1/31/2009	FOSC	2,250 LB N/A	HYSTER CO
120134	NL120-134 - FORKLIFT, ELECTRIC (HYSTER) (LDE)	2204	N	SMI-8830-0147	SMI-8830-0102	2/28/2007	FOSC	3,000 LB N/A	HYSTER CO
120135	NL120-135 - FORKLIFT, ELECTRIC (HYSTER) (LDE)	2204	N	SMI-8830-0147	SMI-8830-0102	1/31/2009	FOSC	2,650 LB N/A	HYSTER CO
120144	NL120-144 - FORKLIFT (LDE)	2105	N	SMI-8830-0148	SMI-8830-0102	11/30/2006	FOSC	5,500 LB N/A	KOMATSU MFG CO LTD
120147	NL120-147 - FORKLIFT, ELECTRIC, STANDUP (LDE)	2205	N	SMI-8830-0147	SMI-8830-0102	1/16/2007	FOSC	1,200 LB N/A	PRIMEOVER CO THE
120152	NL120-152 - DRUM LIFTER (LDE)	2205	N		SMI-8830-0110	3/1/2007	FOSC	700 LB N/A	WESCO INTERNATIONAL INC
120160	NL120-160 - FORKLIFT, 6,000LB DIESEL (LDE)	2205	N	SMI-8830-0148	SMI-8830-0102	4/30/2009	FOSC	6,000 LB N/A	ATHEY PRODUCTS CORPORATION
120161	NL120-161 - FORKLIFT (LDE)	2105	N	SMI-8830-0148	SMI-8830-0102	4/30/2009	FOSC	6,000 LB N/A	ATHEY PRODUCTS CORPORATION
120164	NL120-164 - FORKLIFT, DIESEL 6,000 LB (LDE)	4010	N	SMI-8830-0148	SMI-8830-0102	11/30/2009	FOSC	6,000 LB N/A	CASE J I CO
120166	NL120-166 - FORKLIFT, STACKER (NASA#0824850) (LDE)	8304	N	SMI-8830-0147	SMI-8830-0102	8/31/2010	TOC	2,000 LB N/A	ROL-LIFT CORP
120168	NL120-168 - FORKLIFT (LDE)	2105	N	SMI-8830-0148	SMI-8830-0102	6/30/2007	FOSC	16,600 LB N/A	CLARK EQUIP CO INDUS TRUCK DIV
120184	NL120-184 - FORKLIFT, TRUCK (LDE)	2204	N	SMI-8830-0148	SMI-8830-0102	11/8/2006	FOSC	5,600 LB N/A	HYSTER CO
120185	NL120-185 - FORKLIFT, TRUCK (LDE)	2105	N	SMI-8830-0148	SMI-8830-0102	6/30/2007	FOSC	50,000 LB N/A	HYSTER CO
120188	NL120-188 - FORKLIFT, TRUCK (LDE)	2204	Y	SMI-8830-0148	SMI-8830-0102	12/23/2008	FOSC	800 LB @ 24" N/A	CATERPILLAR INDUSTRIAL INC
120189	NL120-189 - FORKLIFT, TRUCK (LDE)	4302	N	SMI-8830-0148	SMI-8830-0102	12/23/2008	FOSC	800 LB @ 24" N/A	CATERPILLAR INDUSTRIAL INC
120190	NL 120-190 - FORKLIFT ELECTRIC (LDE)	2204	N	SMI-8830-0147	SMI-8830-0102	1/31/2010	FOSC	4,000 LB N/A	HYSTER CO
1223794	COME-LONG (LDE)	3201	N		SMI-8830-0103	4/30/2009	FOSC	1,500 LB CHAIN	
1223795	COME-LONG (LDE)	3201	N		SMI-8830-0103	2/15/2009	FOSC	1,500 LB CHAIN	
130005	NL130-05 - CRANE MOBILE - (DRAGLINE) (LDE)	3201	N				FOSC		BEEBE BROS INC
130048	NL130-48 - LIFT A LOFT (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	2/28/2007	FOSC	500 LB N/A	FORD MOTOR CO THE
130073	NL130-73 - PERSONNEL LIFT- GENIE (LDE)	4110	N	SMI-8830-0145	SMI-8830-0101	8/31/2006	TEST CT.	300 LB N/A	LIFT-LOFT CORP
130077	NL130-77 - GENIE BOOM LIFT Z-3020 (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	3/31/2007	FOSC	500 LB N/A	GENIE INDUSTRIES
130079	NL130-79 - LIFT-LOFT PERSONNEL (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	2/28/2007	FOSC	350 LB N/A	LIFT-LOFT CORP
130080	NL130-80 - CRANE, MOBILE (BRODERSON) (LDE)	2105	Y	SMI-8830-0121	SMI-8830-0100	6/30/2006	FOSC	9,000 LB 9/16" - Minimum Diameter: 0.516"	BRODERSON MFG CO
130093	NL130-93 - CRANE, MOBILE (55 TON GROVE) (LDE)	2105	Y	SMI-8830-0119	SMI-8830-0100	2/28/2007	FOSC ee Load Chart)	3/4" - Minimum Diameter: 0.703"	GROVE MFG FANLIFT INC
130094	NL130-94 - LIFT, PERSONNEL (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	7/5/2007	FOSC	300 LB N/A	UP-RIGHT INC
130095	NL130-95 - LIFT, PERSONNEL (LDE)	2205	N	SMI-8830-0145	SMI-8830-0101	6/30/2007	FOSC	500 LB N/A	JLG INDUSTRIES, INC
130098	NL130-98 - LIFT-LOFT (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	7/31/2007	FOSC	500 LB N/A	LIFT-LOFT CORP
130099	NL130-99 - CRANE, MOBILE (AMERICAN) (LDE)	2105	N	SMI-8830-0122	SMI-8830-0100	3/31/2010	FOSC (see Load Chart)	11,200 LB 3/4" - Minimum Diameter: 0.703"	AMERICAN HOIST AND DERRICK COMPANY
130101	NL130-101 - CRANE, MOBILE (25 TON GROVE) (LDE)	2105	Y	SMI-8830-0120	SMI-8830-0100	7/31/2006	FOSC ee Load Chart)	1/2" - Minimum Diameter: 0.469"	GROVE MFG FANLIFT INC
130103	NL130-103 - LIFT, PERSONNEL (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	8/31/2006	FOSC	500 LB N/A	JLG INDUSTRIES, INC
130104	NL130-104 - MANLIFT (NASA#1912819) (LDE)	2201	N	SMI-8830-0145	SMI-8830-0101	5/31/2007	FOSC	300 LB N/A	AMERIQUE
130105	NL130-105 - CRANE, MOBILE (8.5 TON TEREX) (LDE)	2105	Y	SMI-8830-0113	SMI-8830-0100	11/30/2006	FOSC ee Load Chart)	9/16" - Minimum Diameter: 0.516"	TEREX CRANES INC.
130106	NL130-106 - CRANE, MOBILE (75 TON TEREX) (LDE)	2105	Y	SMI-8830-0112	SMI-8830-0100	8/31/2007	FOSC ee Load Chart)	3/4" - Minimum Diameter: 0.703"	TEREX CRANES INC.
130114	NL 130-114 - LIFT, PERSONNEL (LDE)	2105	N	SMI-8830-0145	SMI-8830-0101	5/31/2007	FOSC	500 LB N/A	GENIE INDUSTRIES
130117	NL130-117 - LIFT, MATERIAL (LDE)	2201	N		SMI-8830-0101	6/1/2008	FOSC	650 LB 3/16" - Minimum Diameter: 0.156"	SUMNER
130121	NL130-121 - LIFT, BOOM (LDE)	2105	N	SMI-8830-0145	SMI-8830-0101	5/31/2007	FOSC	500 LB N/A	GENIE INDUSTRIES
130124	NL130-124 - CRANE, PORTABLE (LDE)	2201	N				FOSC		TERN INC
1323216	CRANE, BUMPER (LDE)	2201	N	SMI-8830-0107		5/3/2006	FOSC	627 LB 3/16" - Minimum Diameter: 0.156"	SNO-WAY INTERNATIONAL INC
1539848	COME-LONG (LDE)	3407	N	SMI-8830-0103	SMI-0114CC	12/22/2008	TOC	4,000 LB CHAIN	HARRINGTON HOIST INC
1540018	SPIDER, STAGING (LDE)	4302	N				FOSC		SPIDER STAGING INC
1541303	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	4/27/2008	FOSC	6,000 LB CHAIN	COLUMBUS MCKINNON CP CM HOIST
1910029	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	6/30/2009	FOSC	4,000 LB CHAIN	COLUMBUS MCKINNON CP CM HOIST
1910033	COME-LONG (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	4/27/2008	FOSC	3,000 LB CHAIN	COLUMBUS MCKINNON CP CM HOIST
1910034	COME-LONG (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	6/30/2009	FOSC	3,000 LB CHAIN	COLUMBUS MCKINNON
1910650	BASKET PERSONNEL (LDE)	4302	N	SMI-8830-0106		1/31/2007	FOSC	600 LB N/A	US CRANE INC
1912426	PORTABLE FLOOR CRANE, 1/2 TON HYDRAULIC (LDE)	8101	N			5/29/2007	FOSC	1000 LB N/A	RUGER EQUIP INC F-STRATTON EQ
1912837	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	6/1/2008	FOSC	12000 LB CHAIN	DUFF - NORTON / COFFING HOIST
1912851	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	10,000 LB CHAIN	COLUMBUS MCKINNON
1912872	HOIST, CHAIN (LDE)	2201	N	SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	4,000LB CHAIN	DUFF - NORTON / COFFING HOIST
1932228	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	1/3/2009	FOSC	1,000 LB CHAIN	DUFF - NORTON / COFFING HOIST
1939635	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	1/31/2009	FOSC	1500 LB CHAIN	LITTLE MULE PRODUCTS
1939946	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	1/31/2009	FOSC	1500 LB CHAIN	LITTLE MULE PRODUCTS
1940444	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	4/27/2008	FOSC	4000 LB CHAIN	COLUMBUS MCKINNON
1940445	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	4/27/2008	FOSC	4000 LB CHAIN	COLUMBUS MCKINNON
1940666	COME-LONG (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	1/31/2010	VARIOUS	3,000 LB CHAIN	COLUMBUS MCKINNON
1940668	FALL, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	1/31/2010	VARIOUS	6,000 LB CHAIN	COLUMBUS MCKINNON
1940669	FALL, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	1/31/2010	FOSC	4,000 LB CHAIN	COLUMBUS MCKINNON
1940670	HOIST, CHAIN (LDE)	4302	N	SMI-8830-0103	SMI-0114CNB	5/20/2008	FOSC	2,000 LB CHAIN	YALE

**ANNEX 5
EXHIBIT 1
INVENTORY OF BUILT-IN CRANES, MONORAILS, AND HOISTS**

1940671	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114C	2/3/2008	FOSC	6,000 LB CHAIN	CHESTER HOIST INC.
1940672	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114C	2/3/2008	FOSC	6,000 LB CHAIN	CHESTER HOIST INC.
1940752	HOIST, CHAIN - ELECTRIC (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	6/18/2007	FOSC	4,000 LB CHAIN	JET EQUIPMENT & TOOLS INC
1940822	HOIST, CHAIN - ELECTRIC (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	2,000 lb CHAIN	COLUMBUS MCKINNON
1940823	HOIST, CHAIN - ELECTRIC (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	2,000 LB CHAIN	COLUMBUS MCKINNON
1940852	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	2,000 LB CHAIN	JET EQUIPMENT & TOOLS INC
1940853	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/15/2006	FOSC	2,000 LB CHAIN	JET EQUIPMENT & TOOLS INC
1940854	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	8/23/2009	FOSC	3,000 LB CHAIN	JET EQUIPMENT & TOOLS INC
1941005	FALL, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114C	6/30/2008	FOSC	10,000 LB CHAIN	COLUMBUS MCKINNON
1941006	FALL, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114C	6/30/2008	FOSC	10,000 LB CHAIN	COLUMBUS MCKINNON
1941007	FALL, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114C	6/30/2008	FOSC	10,000 LB CHAIN	COLUMBUS MCKINNON
1941008	FALL, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114C	6/30/2008	FOSC	10,000 LB CHAIN	COLUMBUS MCKINNON
1941254	HOIST, WIREROPE - ELECTRIC (LDE)	2201	N		SMI-8830-0103	SMI-0114W	6/14/2006	FOSC	528 LB 1/4" - Minimum Diameter - 0.234"	TRACTEL INC
1941434	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/26/2008	FOSC	1,500 LB CHAIN	COLUMBUS MCKINNON
1941462	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/27/2008	FOSC	4,000 LB CHAIN	INGERSOL-RAND CO
1941676	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	12,000 LB CHAIN	COLUMBUS MCKINNON
1941677	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/8/2006	FOSC	12,000 LB CHAIN	MANNESMANN DEMAG
1941678	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	4/30/2010	FOSC	4,000 LB CHAIN	JET EQUIPMENT & TOOLS INC
2155762	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CNB	1/31/2009	FOSC	3,000 LB CHAIN	JET EQUIPMENT TOOLS
2156995	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	12/1/2007	FOSC	3,000 LB CHAIN	TRACTEL INC
2156996	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	12/1/2007	FOSC	3,000 LB CHAIN	TRACTEL INC
2156997	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	12/1/2007	FOSC	6,000 LB CHAIN	TRACTEL INC
2156998	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	12/1/2007	FOSC	6,000 LB CHAIN	TRACTEL INC
2156999	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	12/1/2007	FOSC	12,000 LB CHAIN	TRACTEL INC
2157000	HOIST, CHAIN (LDE)	4302	N		SMI-8830-0103	SMI-0114CC	12/1/2007	FOSC	12,000 LB CHAIN	TRACTEL INC
2157135	HOIST, CHAIN (LDE)	4302	N					FOSC	2,000 LB CHAIN	HARRINGTON
2157215	L-119 HOIST - 1/2 TON CHAIN (LDE)	2201	N	SMI-0144E	SMI-8830-0107	SMI-0114CNB	5/21/2008	FOSC	1,000 LB CHAIN	COLUMBUS MCKINNON
2157795	CRANE, BUMPER (LDE)	2201	N		SMI-8830-0107		4/30/2010	FOSC	1,000 LB 3/16" - Minimum Diameter: 0.156"	STOWAY POWER CRANES
940703	PORTABLE FLOOR CRANE (LDE)	2201	N				4/30/2010	FOSC (om Retracted)	N/A	
96A10191	L-60 BRIDGE CRANE (LDE)	3203	N	SMI-8830-0133	SMI-8830-0104	SMI-0114W	9/30/2006	NMFS	6,000 LB 1/2" - Minimum Diameter: 0.469"	AM. CHAIN & CAB
96A10215	L-63 BRIDGE CRANE (LDE)	3203	N	SMI-8830-0132	SMI-8830-0104	SMI-0114W1	4/30/2009	NDBC	10,000 LB 7/16" - Minimum Diameter: 0.406"	CONCO
96A10221	L-64 BRIDGE CRANE (LDE)	3203	N	SMI-8830-0131	SMI-8830-0104	SMI-0114W1	9/9/2007	NDBC	20,000 LB 7/16" - Minimum Diameter: 0.406"	CONCO
96A10233	L-4 MONORAIL HOIST (LDE)	2205	N	SMI-0144C1	SMI-8830-0107	SMI-0114C	2/25/2007	FOSC	4,000 LB CHAIN	COLUMBUS MCKINNON
96A10237	L-32 JIB CRANE (LDE)	2205	N	SMI-0144A2	SMI-8830-0107	SMI-0114C	4/30/2010	FOSC	4,000 LB CHAIN	COLUMBUS MCKINNON
96A10238	L-00 MONORAIL HOIST (NASA#0590349) (LDE)	2205	N	SMI-0144E	SMI-8830-0107	SMI-0114C	3/12/2007	FOSC	4,000 LB CHAIN	ARO CORP THE
96A10239	L-78 JIB CRANE (LDE)	2205	N	SMI-0144A2	SMI-8830-0107	SMI-0114C	7/31/2010	FOSC	4,000 LB CHAIN	COLUMBUS MCKINNON
96A10240	L-5 BRIDGE CRANE (LDE)	2205	N	SMI-8830-0118	SMI-8830-0104	SMI-0114W	10/26/2008	FOSC	30,000 LB 9/16" - Minimum Diameter: 0.516"	MILWAUKEE ELECTRIC TOOL CORP
96A10250	L-7 BRIDGE CRANE (LDE)	2205	N		SMI-8830-0104	SMI-0114W1	6/30/2009	FOSC	30,000 LB 9/16" - Minimum Diameter: 0.516"	NORTHERN ENG
96A10257	L-68 BRIDGE CRANE (LDE)	3305	N	SMI-8830-0137	SMI-8830-0104	SMI-0114W2	5/31/2009	TOC	10,000 LB 3/8" - Minimum Diameter: 0.344"	STEWART CRANE
96A10262	L-14 BRIDGE CRANE (LDE)	3305	N	SMI-0144D	SMI-8830-0107	SMI-0114C1	10/30/2006	TOC	2,000 LB CHAIN	
96A10264	L-70 MONORAIL HOIST (LDE)	2201	N	SMI-0144B	SMI-8830-0107	SMI-0114W	1/31/2010	FOSC	10,000 LB 3/8" - Minimum Diameter: 0.344"	HITACHI
96A10267	L-79 JIB CRANE (LDE)	2201	N	SMI-0144A1	SMI-8830-0107	SMI-0114CNB	9/7/2008	FOSC	2,000 LB CHAIN	BUDGET
96A10268	L-67 MONORAIL HOIST (REPLACES ECN:1012394) (LDE)	8304	N	SMI-0144C1	SMI-8830-0107	SMI-0114CNB	1/25/2007	TOC	4,000 LB CHAIN	COFFING
96A10269	L-66 MONORAIL HOIST (LDE)	8304	N	SMI-0144C1	SMI-8830-0107	SMI-0114C	10/15/2006	TOC	2,000 LB CHAIN	INGERSOL-RAND CO
96A10270	L-58 BRIDGE CRANE (LDE)	3202	Y		SMI-8830-0104	SMI-0114W1	11/30/2006	TEST CT.	50,000 LB 9/16" - Minimum Diameter: 0.516"	STEWART TANK WORKS
96A10278	L-56 BRIDGE CRANE (LDE)	3202	Y	SMI-8830-0128	SMI-8830-0205	SMI-0114W1	7/31/2007	TEST CT.	50,000 LB 5/8" - Minimum Diameter: 0.578"	SHEPARD NILES
96A10291	L-01 JIB CRANE (LDE)	2205	N	SMI-0144A	SMI-8830-0107	SMI-0114W	4/30/2007	FOSC	4,000 LB 5/16" - Minimum Diameter: 0.297"	P&H
96A10292	L-10 BRIDGE CRANE (LDE)	2205	N	SMI-8830-0117	SMI-8830-0104	SMI-0114W	3/6/2007	FOSC	30,000 LB 5/8" - Minimum Diameter: 0.578"	MILWAUKEE ELECTRIC TOOL CORP
96A10302	L-65 BRIDGE CRANE (LDE)	3304	N	SMI-0144D	SMI-8830-0104	SMI-0114C1	4/30/2009	TOC	10,000 LB CHAIN	CHESTER HOIST
96A10305	L-44 BRIDGE CRANE (LDE)	4400	N	SMI-8830-0141	SMI-8830-0104	SMI-0114W2	5/31/2009	TOC	20,000 LB 7/16" - Minimum Diameter: 0.406"	CONCO
96A10308	L-45 MONORAIL HOIST (LDE)	2204	N	SMI-0144C1	SMI-8830-0107	SMI-0114C	6/30/2009	TOC	4,000 LB CHAIN	BUDGET
96A10311	L-48 MONORAIL HOIST (LDE)	2204	N	SMI-0144B	SMI-8830-0107	SMI-0114W	1/31/2009	USGS	4,000 LB 5/16" - Minimum Diameter: 0.297"	
96A10312	L-49 MONORAIL HOIST (LDE)	2204	N	SMI-0144C	SMI-8830-0107	SMI-0114W	12/12/2004	USGS	2,000 LB 1/4" - Minimum Diameter: 0.234"	P&H
96A10313	L-47 MONORAIL HOIST (LDE)	2204	N	SMI-0144C2	SMI-8830-0107	SMI-0114W	9/10/2007	USGS	4,000 LB 5/16" - Minimum Diameter: 0.297"	P&H
96A10314	L-57 BRIDGE CRANE (LDE)	3202	Y		SMI-8830-0104	SMI-0114W1	11/30/2006	TEST CT.	50,000 LB 5/8" - Minimum Diameter: 0.578"	
96A10330	L-54 MONORAIL HOIST (LDE)	8100	N	SMI-0144B	SMI-8830-0107	SMI-0114W	10/30/2006	NAVO	500 LB 3/16" - Minimum Diameter: 0.156"	YALE-CABLELEKI
96A10332	L-55 MONORAIL HOIST (LDE)	8100	N	SMI-0144B	SMI-8830-0107	SMI-0114W	5/15/2006	NAVO	500 LB 3/16" - Minimum Diameter: 0.156"	YALE
96A10335	L-69 MONORAIL HOIST (LDE)	8100	N	SMI-0144B	SMI-8830-0107	SMI-0114W	7/30/2006	NAVO	1,000 LB 1/4" - Minimum Diameter: 0.234"	SHAW BOX "DRESSER IND."
96A10347	L-25 JIB CRANE (LDE)	4220	N	SMI-0144F	SMI-8830-0107	SMI-0114WNB	8/31/2010	TEST CT.	500 LB 3/8" - Minimum Diameter: 0.344"	SHEPARD NILES
96A10348	L-26 BRIDGE CRANE ALSO L-27 (LDE)	4220	N	SMI-8830-0142	SMI-8830-0104	SMI-0114W2	7/31/2010	TEST CT.	30,000 LB 9/16" - Minimum Diameter: 0.516"	READING
96A10575	L-91 DERRICK MAIN (LDE)	4220	Y	SMI-8830-0151	SMI-8830-0105	SMI-0114WD	3/31/2007	FOSC	400,000 LB 1-1/8" - Minimum Diameter: 1.063"	AMERICAN
96A10576	FOUR-LEG BRIDLE SLING (LDE)	4220	Y		SMI-8830-0105	SMI-0114WSLG	3/31/2007	FOSC E	40,000 LB) 1-1/4" - Minimum Diameter: 1.156"	
96A10589	GANG PLANK HOIST (LDE)	3201						FOSC		SASGENDERRICK
96A10599	L-40 MONORAIL HOIST (LDE)	4122	Y	SMI-0144B2	SMI-8830-0107	SMI-0114W	4/30/2007	TEST CT.	20,000 LB 9/16" - Minimum Diameter: 0.516"	P&H
97A10629	L-85 BRIDGE CRANE (LDE)	4050	Y	SMI-8830-0140	SMI-8830-0206	SMI-0114W1	7/31/2007	TOC	20,000 LB 9/16" - Minimum Diameter: 0.516"	R&M MATERIAL HANDLING
97A10668	L-92 DERRICK AUXILIARY (LDE)	4221	Y	TS-1776SB		SMI-0114WDSB		FOSC	350,000 LB 1-1/8" - Minimum Diameter: 1.063"	AMERICAN
G033278	COMELONG (LDE)	2201	N		SMI-8830-0103	SMI-0114C	6/5/2006	FOSC	1,500 LB CHAIN	
G033318	HOIST, CHAIN (LDE)	2201	N		SMI-8830-0103	SMI-0114C	10/6/2006	FOSC	2,000 LB CHAIN	
G033531	HOIST, CHAIN (LDE)	2201	N		SMI-8830-0103	SMI-0114C	4/9/2007	FOSC	1,500 LB CHAIN	

**ANNEX 5
EXHIBIT 2
MAINTENANCE TASK SHEETS**

JOHN C. STENNIS SPACE CENTER

**MAINTENANCE TASK SHEET #MO-1
Marine Operations System**

Task #1
Frequency: Annual

Docks:
Construction dock
B-3202 to B-3200 dock including marine ops building
"Lox and hydrogen docks @ A-1, A-2 & B-Test Stands"
ASRM dock
Lox storage dock on D-road
Hydrogen storage dock on D-road

Step	Description
1	"Inspect fender piling for rot, damage and stability"
2	Inspect piling metal caps for mounting security and damage
3	Inspect toe railings (typ. 12 x 12 inch wood) along dock edge "for damage, rot and deterioration"
4	Inspect buffer railings (typ. 12 x 12 inch wood) between fender piling and dock for deterioration
5	Inspect mooring bollards for general condition and mounting security
6	"Inspect sheet piling for corrosion, deformation and damage"
7	Inspect ladders for damage and security of mounting
8	"Inspect gravel fill and/or concrete cap for smoothness, erosion or subsidence"
9	Inspect countersunk bolts and fasteners for corrosion and make certain they are countersunk below the surface of the timbers
10	"Inspect mooring cavils, cleats, bollards and posts for corrosion, security, "and for loose grout and fasteners for corrosion
11	"Inspect tug boat electrically operated ramp for cable fraying (replace if frayed), operate ramp through" full travel to assure correct operation. Lubricate fittings and Inspect hold-down bolts for looseness and security.

Canal

Step	Description
1	"Inspect dolphins for rot, damage and stability"
2	Sound canal and river system chanel to identify shoaling (from SSC to MiChoud)
3	"Inspect for bank erosion, animal habitats and vegetation overgrowth for other potential " causes of deterioration of the canal bank
4	"Inspect spillway for integrity, erosion, vegetation overgrowth, and animal habitats "
5	"Keep water surface free from floating vegetation, trash and water hyacinths"

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6	Keep drains into canal free from vegetation and sediment
7	Remove small trees and other vegetation from A-1 Test Stand flume
8	Maintain secondary roads around canal (graded and free from pot holes)

Roller Mooring Devices (all docks)

Step	Description
1	Clean and Paint corroded areas--
2	Removed old hardened grease from roller tracks and grease wheel bearings and other lubrication points
3	Inspect counterweight cable and attachments for fraying and replace if necessary
4	Inspect vertical shaft by ultrasound to check for any cracking (Repair any defective shafts under corrective maintenance)
5	"Inspect counterweights, counterweight tubes, fasteners, pulleys"
6	Inspect yokes and pintle ring for cracks and corrosion
7	Inspect mounting bolts for corrosion and wasting.
8	Deburr tracks (if required) and apply grease
9	Operate assembly for free operation and test for binding
10	Verify that device can be moved over its full range with less than 40 pounds of force applied to the pintle ring (verify upward and downward force). Adjust counterweight if excessive force is required.

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JOHN C. STENNIS SPACE CENTER

MAINTENANCE TASK SHEET #MO-2
Marine Operations System

CANAL PUMPING STATION (B-2311) (Ref. MI #MM-1600)

Task #1

Frequency: Quarterly

Step	Description
1	Operate all valves to assure freedom of motion
2	"Lubricate and or adjust packing glands on pumps, motors and valves"
3	"Inspect condition of pump shafts, couplings, lubricators and piping flange gaskets"
4	Inspect inlet and outlet screens and remove accumulated debris
5	"Inspect ventilation screens, ducts and motors an clean if required"
6	"Inspect for visible corrosion on piping, hand rails, grating, and spot paint if required"
7	"Remove vegetation overgrowth from sidewalks, piping control station, and building perimeter"
8	Adjust pump packing glands for correct leakage rate. If seals are of the mechanical type replace if leakage rate exceeds the maximum.
9	Inspect all electrical connections and devices with infared scanner with full load on pumps
10	"Inspect electrical cabinets and devices for corrosion, insect intrusion and for other" visible signs of structural damage.
11	Inspect pump motors for vibration and for unusual noises during operation, perform vibration analysis on pumps and motors
12	Assure hold down bolts of motors and pumps and other fasteners are tight and structurally sound
13	Inspect for general cleanliness of area and clean if required
14	Inspect lighting and report items for repair as per item number 5.3.6.1

Task #2

Frequency: Annual

Step	Description
1	Inspect all motor and pump assemblies for excessive load
2	Inspect all electrical and mechanical safety shutdown devices including switchgear
3	Estimate canal fill rate by comparing fill time to area of canal surface. Use this estimate to determine whether flow rate of pumps approaches design pump curves. Note any deterioration over time and use this metric and vibration data to determine when the pump units require removal for corrective maintenance.
4	Perform infrared scan of the MCC
5	Perform Electric Motor Testing (MCEmax) on pump motors

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**MAINTENANCE TASK SHEET #MO-3
Marine Operations System**

Lock

Task #1

Frequency: Quarterly

Step	Description
1	Operate upper and lower gates and lubricate bearings while gates are in motion. Verify that all gates operate without binding in bushings.
2	"Inspect safety railings, ladders and other carbon steel members for corrosion, integrity," and wasting.
3	Inspect hydraulic rams and other assemblies for excessive leakage and clean pits of debris and of oil and grease accumulation
4	Inspect condition of rip-rap and report any soil erosion
5	Remove any floating vegetation and trash from lock area water surface
6	Inspect and maintain roller mooring devices in accordance with Task Sheet 1
7	"Inspect structure for corrosion, leakage, rotting or damaged timbers, wasted fasteners," or other visible deterioration. Report condition.
8	Operate tainer valves and report if valves are leaking excessively
9	"Inspect lower gallery levels, sump pumps, electrical lines and lighting, " "structural members, valves and piping for deterioration and proper operation."
10	Inspect lighting and report items for repair as per item number 5.3.6.1

Task # 2

Frequency: Annual

Step	Description
1	Perform annual monolith inspection and report findings
2	Inspect gate seals for leakage
3	"Inspect lock gate bearings (non intrusive inspection), and bushings"
4	Inspect structure for leaks or abnormal deterioration
5	Operate lock controls and perform minor adjustments as required. Report any abnormal operation
6	"Inspect upper and lower lock control buildings, controls and structure"
7	Operate tainer valves and inspect for abnormal operation and leakage
8	Clean and inspect hydraulic rams and replace cylinder seals if required
9	Inspect cathodic protection system panel and test for proper operation per item number 5.2.2.2.8.4.7
10	Remove vegetation overgrowth on sidewalks and other areas
11	Remove overgrowth from drainage ditches
12	Inspect marine safety devices and replace if defective

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MAINTENANCE TASK SHEET #MO-4
Marine Operations System

Lock Control Building -- B-2310

Task #1

Frequency: Weekly

Step	Description
1	"Inspect hydraulic pumps, motors and associated piping and correct any minor oil leaks. Clean up spills."
2	Inspect lighting and report for repair as per item number 5.3.6.1

Task #2

Frequency: Quarterly

Step	Description
1	Inspect oil for moisture and replace filters if necessary
2	Lubricate motor bearings or check and top up oil levels
3	Clean corrosion from operating mechanisms
4	Inspect electrical switchgear in accordance with item number 5.2.2.2.8.4.1
5	Inspect cleanliness of building and clean if required.
6	Inspect for improperly stowed items and restow if required.
7	Inspect building interior and exterior for deterioration and corrosion and perform spot painting if required.
8	"Inspect doors, latches, hinges, windows and other openings for proper operation and repair if required."
9	Perform operational check of all equipment to assure that it is operating in accordance with design.

Task #3

Frequency: Annually

Step	Description
1	Perform annual facility inspection and report discrepancies found on DR 5-FA03.
2	Replace hydraulic oil filters
3	Perform infrared scan on the LV Switchgear and MCC
4	Perform vibration analysis on hydraulic pumps and motors
5	Perform electric motor testing (MCEmax) on hydraulic pump motors
6	Perform oil analysis on hydraulic oils

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MAINTENANCE TASK SHEET #MO-5
Marine Operations System

Lox (Oxygen) Docks (qty 15 total)

Note: PM and Operation of the lox dock ramps is not part of this contract.

Task #1

Frequency: Weekly

There are no requirements for weekly PM of the Lox Docks

Task #2

Frequency: Quarterly

Step	Description
1	"Inspect potable water system lines, valves and hoses for leaks and repair if required"
2	Inspect eye wash stations to assure that they operate correctly
3	Inspect structure for integrity and loose fasteners. Repair as required
4	Inspect lighting and report items for repair as per item number 5.3.6.1
5	Inspect structure for corrosion and spot paint if required
6	"Check safety chains, railings, steps and repair as required to assure personnel safety"
7	Clean trash from dock pit area.
8	"Inspect electrical wiring, conduit and connections for corrosion or damage and repair as required."

Task #3

Frequency: Annually

Step	Description
1	Perform annual facility inspection and report discrepancies found on DR 5-FA03.

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MAINTENANCE TASK SHEET #MO-6
Marine Operations System

Hydrogen Docks

Note: Operation and PM of the dock ramps are not included in this contract.

Frequency: Weekly

There are no requirements for weekly PM of the hydrogen Docks

Task #1

Frequency: Quarterly

Step	Description
1	"Inspect potable water system lines, valves and hoses for leaks and repair if required"
2	Inspect eye wash stations to assure that they operate correctly
3	Inspect structure for integrity and loose fasteners. Repair as required
4	Inspect lighting and report findings for repair as per item number 5.3.6.1
5	Inspect structure for corrosion and spot paint if required
6	"Check safety chains, railings, steps and repair as required to assure personnel safety"
7	Clean trash from dock pit area.
8	"Inspect electrical wiring, conduit and connections for corrosion or damage and repair as required."

Task #2

Frequency: Annually

Step	Description
1	Perform annual facility inspection and report discrepancies found on DR 5-FA03.

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MAINTENANCE TASK SHEET #MO-7
Marine Operations System

"OTHER DOCKS AND PIERS (CONSTRUCTION DOCK, D-ROAD DOCK, RP-1 DOCK, PIER AT MARINE OPS BUILDING)"

Frequency: Weekly

There are no requirements for weekly PM of these docks and piers

Task #1

Frequency: Quarterly

Step	Description
1	"Inspect fenders, timbers, pilings visually (without underwater inspection)"
2	Inspect mooring devices for integrity.
3	Inspect structure for integrity and loose fasteners.
4	Inspect lighting and report findings for repair as per item number 5.3.6.1
5	Inspect structure for corrosion and spot paint if required
6	"Check safety chains, railings, steps and repair as required to assure personnel safety"
7	Clean trash from dock pit area.
8	"Inspect electrical wiring, conduit and connections for corrosion or damage and repair as required."

Task #2

Frequency: Annually

Step	Description
1	Perform annual facility inspection and report discrepancies found on DR 5-FA03.

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MAINTENANCE TASK SHEET #MO-8
Marine Operations System

Bascule Bridge

Task #1

Frequency: Quarterly

Step	Description
1	Dust and wipe off top of control desk and vacuum inside
2	Check all indicating lamps for proper operation
3	Run diagnostic check on programmable logic controller
4	Verify automatic and manual operation
5	Check emergency stop when lowering bridge
6	Check amp readings while operating bridge. Record on PMIS
7	Check water level over sump pump motors. Verify operation of sump pumps
8	Check and clean if necessary sump and pump inlet for debris
9	Check sump pumps for excessive noise and/or vibration or evidence of overheating
10	Verify Span Position Indicator linkage is free and properly adjusted
11	Lubricate each position indicator wear point on the position indicator with light grease
12	"Check for evidence of moisture in the Span Position Transmitter housing(s), " inspect electrical connections and condition of paint
13	"Check searchlight for proper operation (360 degrees horizontal, 45 degrees vertical) "
14	Lubricate searchlight operating handle and brake release grip as required with SAE 30 oil
15	Check for evidence of moisture in Searchlight lamp (clean and replace gasket if required)
16	Check condition of all light seals
17	"Check red warning lights. Eng light burns steady, the other two flash alternately"
18	Check operation of roadway traffic control lights
19	Check operation of warning bells.
20	"Check lights in machinery rooms (North and South spand), sump pump locations and North and South walls"
21	Perform a complete functional test of bridge operation.

Task #2

Frequency: Semiannual

Step	Description
1	Verify span motor heaters are not overheating or defective
2	Clean vents and internals of Span Drive Motors
3	Tighten all nuts and bolts securely. Note loose grout or fastener deterioration.
4	Check Span Motor Brakes space heater for proper operation
5	Clean off motor exteriors
6	Check all Motor Brake nuts and bolts for tightness.
7	Check Motor Brake hand release operation

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8	Clean dirt and deposits from the Motor Brake mechanism
9	Maintain Span Motor Brake oil level.
10	Check Machinery Brake space heater for proper operation
11	Check all Machinery Brake bolts and nuts for security.
12	Re-install Span Motor Brake Cover
13	Check Machinery Brake hand release operation
14	Clean out dirt and deposits from the Machinery Brake mechanism
15	Check and maintain oil level at Machinery Brake (GE # D6B11A2)
16	Check electric to Control Limit Switch flex line for damage
17	Check operation of search light for proper operation. Search light must "operate 360 degrees horizontally and 45 degrees vertically, have evidence of " "lubrication, have tight seals on light."
18	"Check red navigation lights, center light must burn steady and other two "lights must flash alternately.
19	Check operation of roadway lights. They must flash and not have burned out "bulbs, have moisture in them or have defects of any type to the safe operation " the gates and warning lights.
20	Check operation of warning bells. No defects are allowed in the sound level or operation.
21	Inspect lights in machinery rooms on North and South Spans and report for repair as per item no. 5.3.6.1
22	Check light at sump pump locations and repair as necessary
23	Check lights on North and South walls and repair as necessary
24	Perform vibration analysis on Span Drive Motors

Task #3

Frequency: Annually

Step	Description
1	Run diagnostic program on Programmable Logic controllers.
2	Remove dirt from cabinet internals and exterior areas
3	"Inspect Span Drive motors for alignment, coupling wear and for abnormal noise " during operation
4	Inspect gear box of roadway gates and lubricate with multipurpose grease
5	Inspect condition of electrical contacts in roadway gates and replace if necessary
6	Inspect Span Limit Switches and adjust if necessary
7	Lubricate Cam Limit Switches with light oil
8	"Inspect Plunger Limit Switches for dirt, moisture and oxidation"
9	Lubricate pin and trip pawl pin of the Plunger Limit Switch
10	"Inspect Plunger Limit Switch wiring, and fasteners"
11	Inspect Overspeed Switch main drive sprocket for wear and alignment
12	Inspect Overspeed Switch for excessive heat or moisture
13	Lubricate Overspeed Switch drive chain and check mounting bolts for tightness
14	"Test Signal Horn for signal strength and operation. Inspect wiring, fasteners" and air system
15	Grease Signal Horn grease cups
16	Verify operation of control room AC unit and heater. Clean/replace filters
17	Clean control room heater coils and area around heater
18	Clean internals of motor control center and area surrounding
19	Inspect Motor Control Center in accordance with Electrical PM item number 5.2.2.2.8.4.2
20	Wipe down Motor Control Center exterior.
21	Verify operation of strip heaters in MCC
22	Inspect lights in machinery rooms on North and South Spans and report for repair as per item no.

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	5.3.6.1
23	"Inspect light panels for moisture, proper switch operation, verify panel " directory labeling
24	Inspect AC unit in Span Motor Control cabinet and clean filters as necessary.
25	Record Ohm readings on following motors: "QTY 4 -- machinery brakes, N.E. Pier, N.W. Pier, S.E Pier and S.W. Pier" "QTY 4 -- span motors, N.E. Pier, N.W. Pier, S.E Pier and S.W. Pier " "QTY 4 -- draw bar motors, N.E. Pier, N.W. Pier, S.E Pier and S.W. Pier" "QTY 4 -- pumps, N.E., N.W., S.E., and S.W. (Counter Balance Pit)"
26	Inspect and record condition of structure paint condition throughout
27	Perform a complete functional check of bridge operation
28	Perform infrared scan on the MCC
29	Perfrom infrared scan on the VFD's and Dynamic Brakes for Span Drive Motors
30	Perform electric motor testeing (MCEmax) on Span Drive Motors

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**MAINTENANCE TASK SHEET # M-8
Marine Operations System**

Pump

Task #1#1

Frequency- Quarterly (12 weeks)

Step	Description
1	Check pumps and components for excessive noise, vibration, overheating, etc.
2	Perform vibration analysis on pump and motor.
3	Based on vibration analysis results, lubricate, realign, etc, as required.
4	Provide a complete analysis evaluation of the vibration testing, and enter into the signature database.

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**MAINTENANCE TASK SHEET #MO-9
Marine Operations System**

Government Essential Equipment

Tugboat Clairemont II

Task # 1

Frequency: Weekly

Step	Description
1	"Inspect boat for signs of leakage of oil or water from hoses, stern tubes, fittings, valves" "tanks, hoses, piping and structure. "
2	Check all electronic equipment for proper operation
3	"Verify that all equipment operates in accordance with design limits. This includes but is not limited to: engines," "generators, HVAC system, steering system, starting air system, lighting and navigation aids," "winches, davits, instrumentation, fuel system, packing glands, valves and piping, watertight doors" "and windows, safety equipment, lubrication systems, thru hull fittings and valves, kitchen" "appliances, hydraulic oil systems, pumps and blowers, mooring lines, search light, markings and warning instructions," "personnel elevator, potable water system, and mooring system, shore power, ramp and dingy."
4	"Inspect for cleanliness, oil spillages, cleanliness of bilges, and proper stowing of material."
5	Inspect interior and exterior surfaces for signs of corrosion and deterioration. Spot paint exterior as required to eliminate corrosion areas.
6	"Maintain operating levels of oils, water and fuel to 90% of capacity or greater"

Task #2

Frequency: Quarterly

Step	Description
1	Inspect all equipment for tightness of nuts and foundation bolts and tighten as necessary.
2	Replace oil as necessary in accordance with manufacturer's instructions in all equipment.
3	"Lubricate gears on winches, bearings and check for cable fraying and corrosion"
4	Inspect condition of all hoses and replace if worn
5	"Inspect air compressor belts, air control lines, breather, tanks and change oil as required."
6	"Check shore power transfer panel for correct voltage, amps and grounding. Check for corrosion" and for secure connections. Repair as necessary.
7	"Perform megger check on all motors including: winch, fresh water pump, hydraulic pump," "air compressors, bilge pump elevator"
8	Maintain cleanliness of electrical cabinet internals and corrosion free.
9	Maintain all pumps seals free from leakage above manufacturer's standard
10	"Clean filters, AC filters, appliance screens and vents, Engine inlet filters, generator filters," "and replace as necessary oil, gas and hydraulic oil filters."
11	Perform maintenance painting on external surfaces to prevent the appearance of corrosion
12	Perform a thorough cleaning of internal compartments and clean and wax flooring
13	Inspect non-skid flooring and reapply non-skid coating as required by safety.

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14	"Inspect and replace as necessary, safety equipment, throwing rings, etc."
15	Inspect transmission oil and replace filters
16	Inspect engine vibration dampeners and replace if rubber shows extrusion.
17	Inspect insulation including turbo-charger blankets to assure that no hot surfaces are exposed.
18	Replace filter in AC unit
19	Inspect fire fighting equipment and replace if damaged.
20	Lubricate steering linkages
21	Check heat exchanger zinc plugs for corrosion and replace as required
22	Inspect gratings and other trip hazards and refasten if loose
23	Perform operational check of boat and certify that boat fulfills all conditions of Coast Guard regulations
24	Perform operational check of tug boat access ramp.

Task #3

Frequency: Annually

Step	Description
1	Perform annual maintenance painting to decks and other areas which show corrosion.
2	"Perform annual maintenance inspection to identify items needed for shipyard overhaul," "maintenance projects, and obsolescence replacement requirements."
3	Perform annual inspections on equipment internals to check for wear and deterioration
4	"Inspect electrical wiring, control wiring, panels and connections for deterioration"
5	"Inspect living quarters, perform annual cleanup and replace deteriorated or worn items."
6	Determine required date for next shipyard overhaul and identify maintenance items for this overhaul
7	Clean appliances interior and exterior
8	"Perform vibration analysis on propeller shafts, pumps, engines and generators"
9	"Perform oil analysis on main engines, generators and on hydraulic systems"

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**MAINTENANCE TASK SHEET #NG-1
SSC Natural Gas System**

Task #1

Frequency - Quarterly (13 weeks)

Step #	Step Description
1	Perform blow-down of pipeline at all positions to remove build-up of internal moisture.
2	Check Odorizer odorant level

Task #2

Frequency - Annually (52 weeks)

Step #	Step Description
1	Lubricate blowdown valves with plug grease.
2	Cycle all shutoff valves and lubricate with plug grease.
3	Perform "sniff" check of entire gas distribution system.

Task #3

Frequency - 5 years (260 weeks)

Step #	Step Description
1	Calibrate gas supply gauge
2	Calibrate building (user) pressure gauges on both sides of pressure regulator.

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MAINTENANCE TASK SHEET # PW-1
SSC Potable Water System

No. 1 Wellhouse Complex

Task #1

Frequency - Monthly (4 weeks)

Step #	Step Description
1	Perform Vibration Analysis on motor and pump assembly.

Task #2

Frequency - Semi-Annually (26 weeks)

Step #	Step Description
1	Lubricate water pump bearing with EP-2 grease.

Task #3

Frequency - Annually (52 weeks)

Step #	Step Description
1	Perform Motor Circuit Analysis on 30hp motor.
2	Lubricate motor with EP-2 grease.
3	Perform functional check of chlorine leak detection sensor.
4	Perform functional check of chlorine leak audible warning buzzer.

Task #4

Frequency - Biennial (104 weeks)

Step #	Step Description
1	Lubricate water meter register assembly with EP-2 grease.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed..

Task #5

Frequency - 5 years (260 weeks)

Step #	Step Description
1	Calibrate wellhead pressure gauge
2	Calibrate pump discharge pressure gauge

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MAINTENANCE TASK SHEET # PW-2
SSC Potable Water System

No. 2 Wellhouse Complex

Task #1

Frequency - Monthly (4 weeks)

Step #	Step Description
1	Perform Vibration Analysis on motor and pump assembly.

Task #2

Frequency -Semi-Annually (26 weeks)

Step #	Step Description
1	Lubricate water pump bearing with EP-2 grease.

Task #3

Frequency - Annually (52 weeks)

Step #	Step Description
1	Perform Motor Circuit Analysis on 30hp motor.
2	Lubricate motor with EP-2 grease.
3	Perform functional check of chlorine leak detection sensor.
4	Perform functional check of chlorine leak audible warning buzzer.

Task #4

Frequency - Biennial (104 weeks)

Step #	Step Description
1	Lubricate water meter register assembly with EP-2 grease.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed..

Task #5

Frequency - Five years (260 weeks)

Step #	Step Description
1	Calibrate wellhead pressure gauge.
2	Calibrate pump discharge pressure gauge.

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MAINTENANCE TASK SHEET # PW-3
SSC Potable Water System

No. 3 Wellhouse Complex

Task # 1

Frequency - Monthly (4weeks)

Step #	Step Description
1	Perform Vibration Analysis on motor and pump assemblies.

Task # 2

Frequency - Semi - Annually (26weeks)

Step #	Step Description
1	Lubricate water pump bearings with EP-2 grease.

Task # 3

Frequency - Annually (52 weeks)

Step #	Step Description
1	Perform Motor Circuit Analysis on 40hp motors.
2	Lubricate motors with EP-2 grease.
3	Perform functional check of chlorine leak detection sensor.
4	Perform functional check of chlorine leak audible warning buzzer.
5	Perform functional check of sump pump and float switch.

Task # 4

Frequency - Biennial (104 weeks)

Step #	Step Description
1	Lubricate water meter register assembly with EP-2 grease.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed..

Task # 5

Frequency - 5 Years (260 weeks)

Step #	Step Description
1	Calibrate all pressure gauges

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MAINTENANCE TASK SHEET # PW-4
SSC Potable Water System

No. 3 Elevated Tank Pumphouse Complex

Task # 1

Frequency - Monthly(4 weeks)

Step #	Step Description
1	Perform Vibration Analysis on motor and pump assemblies

Task # 2

Frequency - Semi - Annually (26 weeks)

Step #	Step Description
1	Lubricate pumps with EP-2 grease.

Task # 3

Frequency - Annually (52 weeks)

Step #	Step Description
1	Perform Motor Circuit Analysis on 15hp motors.
2	Lubricate motors with EP-2 grease.

Task # 4

Frequency - Biennial (104 weeks)

Step #	Step Description
1	Perform functional check of float switch.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed..

Task # 5

Frequency - 5 Years (260 weeks)

Step #	Step Description
1	Calibrate all pressure gauges

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MAINTENANCE TASK SHEET # SS-1
Domestic Wastewater System

Lift Station, Slide Mounted Pump Type

Task # 1

Frequency - Annually (52 weeks)

Step #	Step Description
1	Inspect open frame relay contacts for pitting or burning (if so equipped)
2	Inspect for effluent level decrease, after pump activated
3	Inspect for no backflow, after pump shutdown
4	Check "water in lubrication" warning light bulb
5	Check Lift Stations with non-corrosion resistant guide rails for corrosion

Task # 2

Frequency - Biennially (104 weeks)

Step #	Step Description
1	Verify gate valve operation by fully opening and closing each valve

Task # 3

Frequency - Quinquennially (260 weeks)

Step #	Step Description
1	Inspect and reverse impeller (grinder) blades, replace if necessary

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MAINTENANCE TASK SHEET # SS-2
Domestic Wastewater System

Lift Station, Secure Mounted Pump Type

Task # 1

Frequency - Weekly (1 week)

Step #	Step Description
1	Check for air leaks in air bubbler system
2	Blow down compressed air tank to remove accumulated water

Task # 2

Frequency -Monthly (4 weeks)

Step #	Step Description
1	Clean dehumidifier air intake, then adjust humidistat to verify unit operation
2	Verify no debris in sump pump inlet, then trip sump pump float switch to verify unit operation

Task # 3

Frequency - Semi-Annually (26 weeks)

Step #	Step Description
1	Lubricate pump bearings with multipurpose grease

Task # 4

Frequency - Annually (52 weeks), continued

Step #	Step Description
1	Replace compressor(s) air filter and checkout operation of air system
2	Inspect open frame relay contacts for pitting or burning
3	Clean sediment out of wet well with fire hose, while pump system is activated
4	During wet well clean out, inspect for drop in wet well effluent level , with pump running
5	During wet well clean out, inspect wet well for no backflow, after pump turns off
6	Check operation of primary and backup pressure switches during wet well clean out
7	Trip alarm limit switch (if equipped) and verify alarm light operation
8	Verify manual operation by placing selector switch in manual position and verifying pump operation
9	Check operation of alternators, by activating manual switches several times

Task # 5

Frequency - Biennially (104 weeks)

Step #	Step Description
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1	Inspect pump impeller blades for wear, shim as necessary
2	Functionally test gate valves by cycling open and closed

Task # 6

Frequency - Quinquennially (260 week)

Step #	Step Description
1	Perform motor circuit analysis on pump motor to determine motor health

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MAINTENANCE TASK SHEET # SS-3
Domestic Wastewater System

Lagoon System

Task # 1

Frequency - Weekly (1 week)

Step #	Step Description
1	Clear flow obstructions.
2	Remove trash & weeds
3	Monitor hyacinth & duckweed health

Task # 2

Frequency - Annually (52 weeks)

Step #	Step Description
1	Replace Ultra-Violet bulbs *
2	Analyze condition of sludge buildup and remove as necessary
3	Perform point-point functional checkout of control system

* Replacement UV bulbs shall be provided by the contractor.

**ANNEX 5
EXHIBIT 2
MAINTENANCE TASK SHEETS
JOHN C. STENNIS SPACE CENTER**

**MAINTENANCE TASK SHEET # SS-4
Domestic Wastewater System**

Septic Tank with Rockreed Filter

Task # 1

Frequency - Semi-Annually (26 weeks)

Step #	Step Description
1	Inspect rockreed filter and remove weeds and other contaminants from area

Task # 2

Frequency - Annually (52 weeks)

Step #	Step Description
1	Replace Ultra-Violet bulbs *

* Replacement UV bulbs shall be provided by the contractor.

**ANNEX 5
EXHIBIT 2
MAINTENANCE TASK SHEETS
JOHN C. STENNIS SPACE CENTER**

**MAINTENANCE TASK SHEET # SS-5
Domestic Wastewater System**

Septic Tank

Task # 1

Frequency - Quarterly (13 weeks)

Step #	Step Description
1	Inspect drain field for surfacing effluent. This is indicated by a spongy condition or the growth of green algae

**ANNEX 5
EXHIBIT 3
BACKLOG OF MAINTENANCE AND REPAIR DATABASES (BMAR)**

DESCRIPTION OF BACKLOG OF MAINTENANCE AND REPAIR DATABASES (BMAR)

The BMAR databases, Test Complex and Base, is a summary of deficiencies noted during the annual facility inspections. In addition, structures, facilities, utilities, systems and subsystems that are no longer economical to repair or are within 5 years of expected service life are included in the databases. Each record in the database is called a project, regardless of the estimated cost.

FIELD NAME	DESCRIPTION
Project Number	Required; A sequential project number automatically assigned through the BMAR Database
Project Title	Required; Contractor determined
Base/Test	Required; Designation of project – Test Complex or Base
Status	Contractor determined
Safety	Required; Safety related items are included in project
Condition Assessment Code	Required; Contractor determined 1 Bad 2 Poor 3 Fair 4 Good 5 Excellent
Inspector	Contractor determined
SWR	Contractor Determined – Once project is approved an SWR number will be assigned
Facility ID	Required; Real property number for the specific structure, facility or utility
Facility Discrepancy	Contractor Determined – Safety Discrepancy linked to the BMAR project
Work Element	Required; Restricted to the following values: (see definitions in NHB 8831.2A) A – Preventive Maintenance B – Predictive Testing and Inspection C – Grounds Maintenance D – Programmed Maintenance E – Corrective Maintenance (Repair) F – Trouble Calls (there should not be any trouble calls in the BMAR) G – Replacement of Obsolete Items (ROI) H – Service Requests
Equipment Number	Required for numbered equipment; A unique number assigned to equipment and maintained in the CMMS

**ANNEX 5
EXHIBIT 3
BACKLOG OF MAINTENANCE AND REPAIR DATABASES (BMAR)**

FIELD NAME	DESCRIPTION
Discipline	Required; restricted to the following values: ALTG Area Lighting ARCH Architectural Systems CAFE Cafeteria Equipment DEMAND Tenant Agency Equipment ELEC Low Voltage Electrical System EMCS EMCS System HVAC Heating Ventilation and A/C HVLT High Voltage Electrical System IAGP Installation Account Government Property MECH Mechanical Systems SPME Special Purpose Mobile Equipment TCSD Test Complex Service Division TESTCT Test Contractor
System	Required; restricted to the following values: HVAC All equipment and components associated with Heating, Ventilation and Air Conditioning EMCS All equipment and components associated with the Energy Management and Control System ELEC All electrical equipment and components except High Voltage HIVOLT Distribution 600 volts and greater M/S Except HVAC and equipment associated with sanitary and storm sewer systems, includes fire protection systems ROAD All road repair projects including signage PKLOT Parking lots including striping, wheel stops, etc ROOF All roofing related projects EXPAINTE All components of the Exterior Waterproofing System, such as exterior painting, caulking, sealing, etc SWALK Sidewalks NG All equipment and components associated with the natural gas system FENCE Perimeter and security fencing ARCH Architectural systems excluding exterior paint. Includes interior paint, floor covering, and ceiling tile in common use areas, windows, doors, interior and exterior stairs, etc. SEWER All equipment and components associated with the sanitary and storm sewer systems
Subsystem (Unit)	Contractor determined
Location Info	Contractor determined

**ANNEX 5
EXHIBIT 3
BACKLOG OF MAINTENANCE AND REPAIR DATABASES (BMAR)**

FIELD NAME	DESCRIPTION
Priority	<p>Required; Restricted to the following values</p> <ol style="list-style-type: none"> 1. Emergency; Safety of life or property threatened; immediate mission impact; loss of utilities 2. Urgent; Maintenance or repair work required for continued facility operation; should be completed to ensure continuous operation of the facility and to restore healthful environment. Not a life-threatening emergency. Respond upon completion of current work but within a specified period of time. 3. Priority; Work that is to support the mission on a priority basis or to meet project deadlines. Complete before starting new Priority 4 (routine) work. 4. Routine; Facilities maintenance work that can be routinely scheduled within the capability of the facilities maintenance organization. Complete in order of receipt and consolidate by facility or zone to obtain efficiency of operation. 5. Discretionary; Work that is desired but not essential to protect, preserve, or restore facilities and equipment. Typically, new work that is not tied to a specific mission milestone. 6. Deferred; Work that may be safely, operationally, and economically postponed; the work should be done, but cannot be scheduled because of funds shortage, work site access, or conditions outside the control of the maintenance organization.
Last Inspected	Required; Fiscal year the project was identified or last inspected
FY Required	Required; Contractor determined – once established this value cannot change unless the priority changes
Fund Source	<p>Government determined (primarily used to identify projects that are the Responsibility of a resident agency, Construction of Facilities, Local Construction funds) – when known the Contractor should fill in this field. Restricted to the following values:</p> <p>RES – Resident Agency COF – Construction of Facilities LC – Local Construction</p>
ROM Cost	Required; Contractor determined - Rough Order Magnitude cost estimate
Shop/Sub	Contractor Determined – Once project is approved crew/contractor will be determined.
Start/Finish Date	Contractor Determined – Once project is approved start/finish date will be determined.
Comments	Contractor determined

**ANNEX 5
EXHIBIT 4
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)**

ANNEX 5, EXHIBIT 4							
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)							
<u>DISCIPLINE</u>	<u>EONUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>PRIORITY</u>	<u>INSTALL DATE</u>	<u>PM/CM</u>	<u>CM ONLY</u>
SPME	0097166 1	TRAILER, BOAT	1100	5	4/6/2001		X
HVAC	0132870	AIR CONDITIONER, PORTABLE (SPOT COOLER 1)	2201	3		X	
HVAC	0132871	AIR CONDITIONER, PORTABLE (SPOT COOLER 2)	2201	3	1/1/1987	X	
SPME	031007	NL 31-07 - AMBULANCE	2201	1	12/15/1989		X
SPME	034015	NL 34-15 - FOUR WHEEL SCOOTER (GASOLINE)	2204	5	6/27/1988	X	
SPME	034017	NL 34-17 - VEHICLE- OFFROAD UTILITY (NASA#G033820)	2105	5	4/25/1989	X	
SPME	034022	NL 34-22 - VEHICLE- OFF ROAD UTILITY	8100	5	9/11/1992	X	
SPME	034023	NL 34-23 - VEHICLE- OFF ROAD UTILITY	8100	5	9/11/1992	X	
SPME	034025	NL 34-25 - FOUR WHEELER, HONDA	2403	5	3/15/1994		X
SPME	034040	NL 34-40 - FOUR WHEEL UTILITY VEHICLE	2403	5	9/27/2005	X	
SPME	034041	NL 34-41 - FOUR WHEEL UTILITY VEHICLE	2403	5	9/27/2005	X	
SPME	034042	NL 34-42 - FOUR WHEEL UTILITY VEHICLE	2201	4	8/12/2005	X	
SPME	034E11	NL 34-E11 - GOLF CART	2201	5	10/14/1980	X	
SPME	034E13	NL 34E-13 - GOLF CART EZ-GO	2204	5	6/10/1988	X	
SPME	034E18	NL 34E-18 - GOLF CART- EZ-GO	2204	5	6/28/1989	X	
SPME	034E20	NL 34E-20 - GOLF CART	2204	5	10/23/1991	X	
SPME	034E21	NL 34E-21 - GOLF CART- EZ-GO	2201	5	6/11/1992	X	
SPME	034E22	NL 34E-22 - GOLF CART	2205	5	8/2/1993	X	
SPME	034E24	NL 34E-24 - GOLF CART EZ-GO	2204	5	8/17/1994	X	
SPME	034E25	NL 34E-25 - TRUCK, UTILITY, ELECTRIC	4010	5	10/15/2002	X	
SPME	034E26	NL 34E-26 - TRUCK, UTILITY ELECTRIC	4010	5	10/15/2002	X	
SPME	034E27	NL 34E-27 - GOLF CART	4010	5	4/17/2003	X	
SPME	034E28	NL 34E-28 - TRUCK UTILITY, ELECTRIC	4010	5	1/1/1993	X	
SPME	034E29	NL 34E-29 - TRUCK UTILITY, ELECTRIC	4010	5	1/1/1993	X	
SPME	034E3	NL 34E-3 - GOLF CART	2204	5	10/3/1980	X	
SPME	034E30	NL 34E-30 - TRUCK UTILITY, ELECTRIC	4010	5	1/1/1993	X	
SPME	034E32	NL 34E-32 - TRUCK UTILITY, ELECTRIC	4010	5	1/1/1992	X	
SPME	034E34	NL 34E-34 - ELECTRIC CART	3226	5	8/17/1994	X	

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SPME	034E35	NL 34E-35 - ELECTRIC CART	3226	5	4/1/1992	X	
SPME	034E36	NL 34E-36 - ELECTRIC CART	3226	5	4/1/2001	X	
SPME	034E37	NL 34E-37 - ELECTRIC CART	3226	5	4/1/2001	X	
SPME	034E38	NL 34E-38 - ELECTRIC CART	3226	5	4/1/2001	X	
SPME	034E40	NL34E-40 - GOLF CART	4010	5	9/27/2005		X
SPME	034E5	NL 34E-5 - GOLF CART	2105	5	10/14/1980	X	
SPME	034E6	NL 34E-6 - GOLF CART	2205	5	10/14/1980	X	
SPME	034E9	NL 34E-9 VEHICLE, UTILITY, ELECTRIC	2201	5	8/27/2001	X	
SPME	051006	NL 51-06 - TRUCK- FIRE (ECN 0289804)	2201	1	10/16/1985	X	
SPME	051007	NL 51-07 - FIRE TRUCK	2201	1	5/30/2001		X
SPME	051008	NL 51-08 - TRUCK- MAINTENANCE	2201	5	10/16/1989		X
SPME	051012	NL 51-12 - TRUCK, FIRE	2201	1	1/26/1993	X	
SPME	051013	NL 51-13 - TRUCK FIRE	2201	1	3/24/1993	X	
SPME	051014	NL 51-14 - TRUCK, SERVICE	2201	3	8/19/1997	X	
SPME	051015	NL 51-15 - TRUCK, LADDER (ECN 1940402)	2201	1	6/22/1999	X	
SPME	051016	NL 51-16 - FIRE TRUCK	2201	1	10/7/2003		X
SPME	071076	NL 71-76 - TRUCK, AERIAL LIFT W/BUCKET (LDE)	2201	2	4/9/1986	X	
SPME	071082	NL 71-82 - CHEVY STEP VAN (NASA#0016134)	2205	5	9/30/1988		X
SPME	071087	NL 71-87 - TRUCK, FORD PICKUP	2207	5	2/7/1992	X	
SPME	071088	NL 71-88 - TRUCK, FORD PICKUP	2207	5	2/7/1992	X	
SPME	071097	NL 71-97 - TRUCK- 4 X 4 JIMMY (NASA#1542246)	2104	5	10/1/1992	X	
SPME	071099	NL 71-99 - TRUCK, FUEL	2105	5	11/6/2001	X	
SPME	071100	NL 71-100 - TRUCK, FOOD SERVICE	1100	5	5/8/2002	X	
SPME	071101	NL 71-101 - TRUCK, FOOD SERVICE	1100	5	5/8/2002	X	
SPME	071103	NL 71-103 - FUEL TANKER	2105	5	3/31/2006	X	
SPME	081023	NL 81-23 - TRUCK- DUMP	2105	5	2/9/1990	X	
SPME	081024	NL 81-24 - TRUCK, POLE (LDE)	2201	2	1/16/1990	X	
SPME	081028	NL 81-28 - WRECKER(NASA#1224232)	2105	5	1/15/1993	X	
SPME	081030	NL 81-30 - TRUCK, SERVICE (NASA#1323186)	2105	5	8/18/1993	X	

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SPME	081031	NL 81-31 - TRUCK- DUMP	2105	5	11/16/1994	X	
SPME	081033	NL 81-33 - 1 1/2 TON FLATBED TRUCK-NASA# 1540902	2105	4	11/16/1994	X	
SPME	081036	NL 81-36 - TRUCK, STAKE BODY	2105	5	5/18/1998	X	
SPME	081038	NL 81-38 - TRUCK, DUMP	2105	5	7/14/1999	X	
SPME	081040	TANKS & ATTACHMENTS TO GSA VEHICLE #	2105	5	12/12/2000		X
SPME	081044	NL 81-44 - TRUCK, WATER	2105	5	11/6/2001	X	
SPME	081045	NL 81-45 - TRUCK, BOX VAN	2105	5	11/6/2001	X	
SPME	081046	NL 81-46 TRUCK-DUMP	2105	5	10/4/2005	X	
SPME	091008	NL 91-08 - TRAILER 7' X 34'	2201	5	5/14/1986		X
SPME	091013	NL 91-13 - TRAILER, SEMI TANK	2403	5	8/28/1997		X
SPME	091030	NL 91-30 - TRAILER PIPE-POLE	3110	5	9/14/1964	X	
SPME	091031	NL 91-31 - TRAILER FOLD GOOSENECK 50 TON	2105	5	9/9/1965	X	
SPME	091068	NL 91-68 - TRAILER- W/TANK	2105	5	12/10/1985		X
SPME	091070	NL 91-70 - TRAILER W/ANTENNA(NASA#0133461)	2105	5	12/10/1985		X
SPME	091071	NL 91-71 - TRAILER, MOWER TRANSPORTER(ECN#0015173)	2403	5	7/5/1988		X
SPME	091072	NL 91-72 - TRAILER, MOWER TRANSPORTER(ECN#0015174)	2403	5	7/5/1988		X
SPME	091073	NL 91-73 - TRAILER 10'X30' (SMART TRA)	2201	5	8/29/1988		X
SPME	091077	NL 91-77 - TRAILER, TRUCK TILTING	2105	5	11/1/1991	X	
SPME	091078	NL 91-78 - TRAILER, ENCLOSED(MCI LOAN)-ECN:1011199	2105	5	11/13/1991	X	
SPME	091079	NL 91-79 - TRAILER, LOWBOY(NASA #1223798)	2105	5	5/28/1992	X	
SPME	091080	NL 91-80 - TRAILER	2105	5	6/3/1990	X	
SPME	091094	NL 91-94 - TRAILER LOWBED - NASA # 1539314	2105	5	7/14/1995	X	
SPME	091095	NL 91-95 -TRAILER-SEMI TANK 5000 GAL(NASA#0034627)	2105	5	4/2/1997	X	
SPME	091096	NL 91-96 - TRAILER, HYDRAULIC	2403	5	8/28/1997		X
SPME	091098	NL 91-98 - TRAILER, WELLS CARGO INC (ECN:0034722)	2201	3	3/9/1998	X	
SPME	091099	NL 91-99 - TRAILER, WELLS CARGO INC (ECN:1541319)	2201	3	3/9/1998	X	
SPME	091100	NL 91-100 - TRAILER, DROP DECK (NASA#1912664)	2105	5	4/14/1998	X	

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SPME	091102	NL 91-102 - TRAILER, PLATFORM (NASA#1939418)	2105	5	10/20/1998	X	
SPME	091105	NL 91-105 - TRAILER, UTILITY (NASA#1940664)	2403	5	11/23/1999		X
SPME	091106	NL 91-106 - TRAILER, TOOL	2109	5	3/17/2000		X
SPME	091107	NL 91-107 - TRAILER, WATER	2109	5	3/17/2000		X
SPME	091108	NL 91-108 - TRAILER, FLAT BED (2-AXLE)	2403	5	3/2/2000		X
SPME	091109	NL 91-109 - TRAILER	4010	5	5/19/2000		X
SPME	091111	NL 91-111 TRAILER, LOW BED (50 TON)	2105	5	10/1/2002	X	
SPME	091112	NL 91-112 - TRAILER	2105	5	7/29/2003		X
SPME	091113	NL 91-113 - TRAILER UTILITY	2105	5	5/17/2006	X	
SPME	110017	NL110-17 - SPRAYER HI-PRESS	2201	5	6/22/1999		X
SPME	110019	NL110-19 - SPRAYER- INSECT	2201	5	6/22/1999		X
SPME	110097	NL110-97 - SEWERODER RODER COIL	2201	5	8/1/1967	X	
SPME	110100	NL110-100 - MIXER CONCRETE TILE SIDE EISCH	2201	5	6/13/1975	X	
SPME	110110	NL110-110 - WELDING MACHINE ARC TWO WHEEL	2205	5	9/14/1976		X
SPME	110132	NL110-132 - CENTRIFUGAL PUMP (NASA#0593198)	2201	5	1/13/1982	X	
SPME	110133	NL110-133 - PUMP TRASH PORTABLE (NASA#0593203)	2201	5	1/13/1982	X	
SPME	110134	NL110-134 - POWER PLANT GENERATOR	2201	5	1/13/1982	X	
SPME	110136	NL110-136 - CENTRIFUGAL PUMP	2201	5	1/13/1982		X
SPME	110137	NL110-137 - LINCOLN WELDING MACHINE	2205	5	3/1/1984		X
SPME	110138	NL110-138 - LINCOLN WELDING MACHINE	4302	5	3/1/1984		X
SPME	110139	NL110-139 - WELDING MACHINE	2205	5	10/1/1984	X	
SPME	110147	NL110-147 - PORTABLE AIR COMP SN 30066	2201	5	12/6/1984	X	
SPME	110156	NL110-156 - WELDER, TRAILBLAZER, GAS(ECN1910808)	2205	5	2/26/1986	X	
SPME	110157	NL110-157 - WELDER, TRAILBLAZER, GAS(ECN: 2156333)	4120	5	1/1/1986	X	
SPME	110161	NL110-161 - GENERATOR 5000 WATT	2201	5	6/16/1986		X
SPME	110163	NL110-163 - AIR COMPRESSOR	2205	5	5/27/1987	X	
SPME	110166	NL110-166 - GEN.(#59413 A83)G32951	4302	5	5/27/1987		X
SPME	110174	NL110-174 - COMPRESSOR	4302	5	10/9/1987	X	
SPME	110175	NL110-175 - COMPRESSOR, PORTABLE AIR	2206	5	10/9/1987	X	

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SPME	110178	NL110-178 - GENERATOR	2201	5	6/20/1988	X	
SPME	110185	NL110-185 - GENERATOR- PORTABLE (GAS)	2201	5	2/11/2002		X
SPME	110193	NL110-193 - WELDER- LINCOLN TRL MTD (NASA#G034298)	2205	5	8/7/1989		X
SPME	110194	NL110-194 - WELDER- LINCOLN TRAILER MTD	2205	5	8/7/1989	X	
SPME	110195	NL110-195 - WELDING MACHINE	2205	5	8/11/1989		X
SPME	110196	NL110-196 - WELDING MACHINE (NASA#G034342)	2205	5	8/11/1989		X
SPME	110198	NL110-198 - GENERATOR (NASA#G034369)	2201	5	8/14/1989	X	
SPME	110200	NL110-200 - ARC WELDING SYSTEM	2205	5	8/14/1990		X
SPME	110205	NL110-205 - PUMP, GASOLINE NASA#1011066)	2201	5	7/5/1990	X	
SPME	110206	NL110-206 - PUMP ((NASA#1012137)	2201	5	3/1/1991	X	
SPME	110208	NL110-208 - WELDING MACHINE- MILLER ELEC	2205	5	12/19/1991		X
SPME	110211	NL110-211 - WELDING MACHINE- MILLER ELEC	2205	5	12/19/1991		X
SPME	110220	NL110-220 - WELDING MACHINE	2205	5	10/13/1992	X	
SPME	110221	NL110-221 - WELDING MACHINE	2205	5	10/13/1992	X	
SPME	110222	NL110-222 - GENERATOR (NASA#1322534)	2201	5	3/23/1993	X	
SPME	110223	NL110-223 - GENERATOR (NASA#1322588)	2201	5	4/9/1993	X	
SPME	110224	NL110-224 - GENERATOR (NASA#1323234)	2201	5	9/7/1993	X	
SPME	110226	NL110-226 - WELDER- DIESEL	2205	5	4/13/1994	X	
SPME	110227	NL110-227 - AIR COMPRESSOR	2105	5	4/28/1994	X	
SPME	110230	NL110-230 - TRAILER FOR PORTABLE 100 TON CHILLER	2201	5	4/28/1995		X
SPME	110234	NL110-234 - MILLER TRAILBLAZER	2205	5	8/12/1996	X	
SPME	110236	NL110-236 - WELDING MACHINE (NASA#1940587)	2205	5	1/27/1997	X	
SPME	110237	NL110-237 - WELDING MACHINE	2205	5	1/27/1997	X	
SPME	110239	NL110-239 - WELDING MACHINE (NASA#1910143)	2205	5	6/9/1997	X	
SPME	110240	NL110-240 - WELDING MACHINE-ARC (NASA#1910144)	2205	5	6/9/1997	X	
SPME	110245	NL110-245 - PUMP, CENTRIFUGAL (NASA#1910166)	2201	5	6/16/1997	X	
SPME	110246	NL110-246 - WELDING MACHINE (NASA#1912393)	4301	5	1/1/1997	X	
SPME	110247	NL110-247 - GENERATOR, 100KW	2105	4	9/21/1993	X	

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SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)**

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SPME	110248	NL110-248 - GENERATOR, EMERGENCY(ECN 1912807)	2201	5	5/21/1998	X	
SPME	110249	NL110-249 - GENERATOR, PORTABLE (ECN 0034872)	2201	5	1/1/1997		X
SPME	110250	NL110-250 - AERATOR, PORTABLE	2201	5	4/7/1999		X
SPME	110252	NL110-252 - POSITIONER, WELDING	2205	5	4/7/1999		X
SPME	110255	NL110-255 - GENERATOR	7020	3	11/17/1994	X	
SPME	110262	NL110-262 - WASHER, PRESSURE	2105	5	6/16/2000		X
SPME	110266	NL110-266 COMPRESSOR, AIR	2105	5	4/1/2001		X
SPME	110279	NL110-279 - AIR COMPRESSOR	2105	5	2/11/2002		X
SPME	110281	NL110-281 - GENERATOR (DIESEL) (2156555)	2201	5	6/27/2003	X	
SPME	110282	NL110-282 - GENERATOR (DIESEL) (2156556)	2201	5	6/27/2003	X	
SPME	110283	NL110-283 - GENERATOR (DIESEL) (2156557)	2201	5	6/27/2003	X	
SPME	110284	NL110-284 - GENERATOR DIESEL) (2156789)	2201	5	6/27/2003	X	
SPME	110289	NL110-289 - GENERATOR, DIESEL	2201	5	8/22/2005	X	
SPME	110290	NL110-290 - GENERATOR (PORTABLE) 2157918	2201	5	8/28/2005	X	
SPME	110291	NL110-291 - GENERATOR (TRAILER MOUNTED) (2157919)	2201	5	8/24/2005	X	
SPME	110293	NL110-293 GENERATOR (MSS0929)	2201	5	11/30/2005		X
SPME	110294	NL110-294 GENERATOR (MSS0930)	2201	5	11/30/2005		X
SPME	110299	NL110-299 - WELDING MACHINE, ARC	4302	5	6/2/2006		X
SPME	110300	NL110-300 WELDING MACHINE, ARC	2205	5	6/2/2006		X
SPME	110304	NL110-304 WELDING MACHINE, DIESEL	4302	5	7/5/2006		X
SPME	110305	NL110-305 WELDING MACHINE, DIESEL	2205	5	6/30/2006		X
SPME	120077	NL120-77 - FORKLIFT (LDE)	2105	5	1/5/1981	X	
SPME	120084	NL120-84 - FORKLIFT UPRIGHT- ELECTRIC 4000LB (LDE)	2204	5	9/27/1983	X	
SPME	120087	NL120-87 - FORKLIFT (LDE)	2105	5	1/1/1984	X	
SPME	120089	NL120-89 - FORKLIFT - ELECTRIC (LDE)	2203	5	8/1/1984	X	
SPME	120094	NL120-94 - TRUCK WALKIE REACH (LDE)	2105	5	7/8/1985	X	
SPME	120110	NL120-110 - FORKLIFT 36 VOLT ELEC (LDE)	2204	5	9/15/1987	X	
SPME	120111	NL120-111 - FORKLIFT 36 VOLT ELEC (LDE)	2204	5	9/15/1987	X	

**ANNEX 5
EXHIBIT 4
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)**

ANNEX 5, EXHIBIT 4							
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)							
<u>DISCIPLINE</u>	<u>EONUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>PRIORITY</u>	<u>INSTALL DATE</u>	<u>PM/CM</u>	<u>CM ONLY</u>
SPME	120112	NL120-112 - FORKLIFT- ELECTRIC - CATERPILLAR (LDE)	2204	5	9/16/1987	X	
SPME	120116	NL120-116 - FORKLIFT (LDE)	2105	3	3/9/1988	X	
SPME	120118	NL120-118 - FORKLIFT, CLARK ELEC (LDE)	2204	5	6/17/1988	X	
SPME	120119	NL120-119 - FORKLIFT, YALE ELEC (LDE)	2201	5	7/19/1988	X	
SPME	120120	NL120-120 - FORKLIFT, DIESEL 4000LB (LDE)	2205	5	10/31/1988	X	
SPME	120121	NL120-121 - FORKLIFT, DIESEL 6000LB (LDE)	4301	5	11/10/1988	X	
SPME	120122	NL120-122 - FORKLIFT (LDE)	2105	5	12/28/1988	X	
SPME	120124	NL120-124 - FORKLIFT- 4,000 LB GASOLINE (LDE)	4220	5	10/30/1989	X	
SPME	120126	NL120-126 - FORKLIFT- GASOLINE 6000 LB (LDE)	2204	5	12/20/1989	X	
SPME	120127	NL120-127 - FORKLIFT EXTENDER (LDE)	2205	5	8/3/1990	X	
SPME	120129	NL120-129 - FORKLIFT- DIESEL (LDE)	2205	5	8/3/1990	X	
SPME	120130	NL120-130 - FORKLIFT, HYSTER (LDE)	2204	5	8/3/1990	X	
SPME	120131	NL120-131 - FORKLIFT- UPRIGHT- YALE (LDE)	2204	5	1/9/1991	X	
SPME	120133	NL120-133 - FORKLIFT- ELECTRIC (HYSTER) (LDE)	2204	5	10/1/1991	X	
SPME	120134	NL120-134 - FORKLIFT, ELECTRIC (HYSTER) (LDE)	2204	5	10/24/1991	X	
SPME	120135	NL120-135 - FORKLIFT, ELECTRIC (HYSTER) (LDE)	2204	5	10/30/1991	X	
SPME	120144	NL120-144 - FORKLIFT (LDE)	2105	5	6/2/1993	X	
SPME	120147	NL120-147 - FORKLIFT, ELECTRIC, STANDUP (LDE)	2205	5	1/24/1994	X	
SPME	120160	NL120-160 - FORKLIFT, 6,000LB DIESEL (LDE)	2205	5	4/2/1997	X	
SPME	120161	NL120-161 - FORKLIFT (LDE)	2105	5	4/2/1997	X	
SPME	120164	NL120-164 - FORKLIFT, DIESEL 6,000 LB (LDE)	4010	5	9/18/1997	X	
SPME	120166	NL120-166 - FORKLIFT, STACKER (NASA#0824850) (LDE)	8304	5	5/5/1988	X	
SPME	120168	NL120-168 - FORKLIFT (LDE)	2105	5	11/9/1998	X	
SPME	120184	NL120-184 - FORKLIFT, TRUCK (LDE)	2204	5	10/17/2002	X	
SPME	120185	NL120-185 - FORKLIFT, TRUCK (LDE)	2105	5	6/20/2001	X	
SPME	120188	NL120-188 - FORKLIFT, TRUCK (LDE)	2204	5	9/28/2004	X	
SPME	120189	NL120-189 - FORKLIFT, TRUCK (LDE)	4302	5	9/28/2004	X	
SPME	120190	NL 120-190 - FORKLIFT ELECTRIC (LDE)	2204	5	9/15/2005	X	
SPME	130005	NL130-05 - CRANE MOBILE- (DRAGLINE) (LDE)	3201	5	5/27/1965		X

**ANNEX 5
EXHIBIT 4
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)**

ANNEX 5, EXHIBIT 4							
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)							
<u>DISCIPLINE</u>	<u>EQNUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>PRIORITY</u>	<u>INSTALL DATE</u>	<u>PM/CM</u>	<u>CM ONLY</u>
SPME	130018	NL130-18 - TRACTOR FRONT END LOADER	2105	5	6/11/1976	X	
SPME	130023	NL130-23 - TRACTOR LOADER/BACKHOE	2105	5	6/3/1976	X	
SPME	130033	NL130-33 - SWEEPER, MAGNETIC (NASA#0593629)	2105	5	5/11/1964	X	
SPME	130048	NL130-48 - LIFT A LOFT (LDE)	2201	4	2/25/1980	X	
SPME	130051	NL130-51 - TRENCHER SELF PROPELLED	2105	5	9/3/1981	X	
SPME	130069	NL130-69 - GRADER	2105	5	4/10/1986	X	
SPME	130072	NL130-72 - SWEEPER	2105	5	8/1/1986	X	
SPME	130073	NL130-73 - PERSONNEL LIFT- GENIE (LDE)	4110	5	9/25/1987	X	
SPME	130074	NL130-74 - HT SWEEPER S/N 124672	2403	5	10/21/1987		X
SPME	130077	NL130-77 - GENIE BOOM LIFT Z-30/20 (LDE)	2201	4	12/30/1987	X	
SPME	130079	NL130-79 - LIFT-A-LOFT PERSONNEL (LDE)	2201	5	10/19/1989	X	
SPME	130080	NL130-80 - CRANE, MOBILE (BRODERSON) (LDE)	2105	4	12/4/1990	X	
SPME	130086	NL130-86 - TRACTOR- CATERPILLAR(NASA# 0819064)	2105	3	11/8/1991	X	
SPME	130089	NL130-89 - EXCAVATOR, HYDRAULIC (NASA#1224492)	2105	3	9/15/1992	X	
SPME	130090	NL130-90 - DOZER- BULL(NASA# 1224932)	2105	5	10/21/1992	X	
SPME	130091	NL130-91 - COMPACTOR- GARBAGE(NASA#1322510)	2105	5	3/23/1993		X
SPME	130093	NL130-93 - CRANE, MOBILE (55 TON GROVE) (LDE)	2105	3	11/8/1993	X	
SPME	130094	NL130-94 - LIFT, PERSONNEL (LDE)	2201	4	3/28/1994	X	
SPME	130095	NL130-95 - LIFT PERSONNEL (LDE)	2205	3	5/3/1994	X	
SPME	130096	NL130-96 - END LOADER	2105	3	6/20/1994	X	
SPME	130097	NL130-97 - BACKHOE, CATEPILLAR	2105	5	7/14/1994	X	
SPME	130098	NL130-98 - LIFT-A-LOFT (LDE)	2201	4	9/29/1994	X	
SPME	130099	NL130-99 - CRANE, MOBILE (AMERICAN) (LDE)	2105	5	7/10/1996	X	
SPME	130100	NL130-100 - COMPACTOR- LANDFILL (NASA#1542245)	2105	3	2/25/1993	X	
SPME	130101	NL130-101 - CRANE, MOBILE (25 TON GROVE) (LDE)	2105	3	4/2/1997	X	
SPME	130102	NL130-102 - SCRAPER (NASA#1912185)	2105	5	2/24/1998	X	
SPME	130103	NL130-103 - LIFT, PERSONNEL (LDE)	2201	5	5/7/1998	X	
SPME	130104	NL130-104 - MANLIFT (NASA#1912819) (LDE)	2201	5	6/3/1998	X	
SPME	130105	NL130-105 - CRANE, MOBILE (8.5 TON TEREX) (LDE)	2105	5	6/9/1998	X	

**ANNEX 5
EXHIBIT 4
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)**

ANNEX 5, EXHIBIT 4							
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)							
<u>DISCIPLINE</u>	<u>EONUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>PRIORITY</u>	<u>INSTALL DATE</u>	<u>PM/CM</u>	<u>CM ONLY</u>
SPME	130106	NL130-106 - CRANE, MOBILE (75 TON TEREX) (LDE)	2105	5	6/9/1998	X	
SPME	130108	NL130-108 - GRADER, ROAD	2105	5	6/23/1999	X	
SPME	130113	NL 130-113 - STREET SWEEPER	2109	5	4/1/2003	X	
SPME	130114	NL 130-114 - LIFT, PERSONNEL (LDE)	2105	4	4/7/2003	X	
SPME	130115	NL 130-115 - LOADER, SCOOP TYPE	2105	5	5/30/2003		X
SPME	130119	NL 130-119 - DOZER - BULL	2105	5	3/25/2005	X	
SPME	130120	NL130-120 - EXCAVATOR - TRACK HOE	2105	3	4/12/2005	X	
SPME	130121	NL130-121 - LIFT, BOOM (LDE)	2105	4	4/26/2005	X	
SPME	130122	NL 130-122 - DOZER	2105	5	3/24/2006	X	
SPME	130123	NL 130-123 - LOADER - SCOOP TYPE	2105	5	5/17/2006	X	
SPME	140065	NL140-65 - TRACTOR AGRICULTURE 35 HP ENG	2105	5	11/24/1975	X	
SPME	140091	NL140-91 - TRACTOR	2403	5	3/9/1979		X
SPME	140120	NL140-120 - SELF PROP. VACUUM (BILLY GOAT)	2201	5	4/5/1985		X
SPME	140121	NL140-121 - TRACTOR- FORD	2403	5	6/22/1987	X	
SPME	140129	NL140-129 - ROTO HOE	2403	5	1/15/1989		X
SPME	140134	NL140-134 - FORD TRACTOR	2403	5	5/17/1988	X	
SPME	140142	NL140-142 - CHIPPER- LANDSCAPE	2403	5	9/3/1991	X	
SPME	140154	NL140-154 - MOWER	2403	5	4/7/2000	X	
SPME	140155	NL140-155 - TRACTOR	2403	5	4/7/2000	X	
SPME	140156	NL140-156 - TRACTOR	2403	5	4/17/2000	X	
SPME	140157	NL140-157 - TRACTOR	2403	5	4/14/2000	X	
SPME	140158	NL140-158 - TRACTOR	2403	5	4/4/2000	X	
SPME	140159	NL140-159 - MOWER RIDING	2403	5	4/26/2000	X	
SPME	140160	NL140-160 - MOWER RIDING	2403	5	4/26/2000		X
SPME	140161	NL140-161 - MOWER RIDING	2403	5	4/26/2000		X
SPME	140163	NL140-163 - MOWER RIDING	2403	5	4/26/2000	X	
SPME	140164	NL140-164 - MOWER RIDING	2403	5	4/26/2000		X
SPME	140165	NL140-165 - MOWER RIDING	2403	5	4/26/2000	X	
SPME	140166	NL140-166 - MOWER RIDING	2403	5	4/26/2000		X

**ANNEX 5
EXHIBIT 4
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)**

ANNEX 5, EXHIBIT 4							
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)							
<u>DISCIPLINE</u>	<u>EONUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>PRIORITY</u>	<u>INSTALL DATE</u>	<u>PM/CM</u>	<u>CM ONLY</u>
SPME	140167	NL140-167 - MOWER BATWING	2403	5	4/26/2000	X	
SPME	140168	NL140-168 - MOWER BATWING	2403	5	5/2/2000	X	
SPME	140169	NL140-169 - MOWER BATWING	2403	5	5/2/2000	X	
SPME	140170	NL140-170 - TILLER, GAS	2403	5	5/1/2000	X	
SPME	140171	NL140-171 - MOWER, BUSH HOG	2403	5	6/7/2000		X
SPME	140172	NL140-172 - MOWER, BATWING	2403	5	6/20/2000	X	
SPME	140173	TRACTOR (ATTACHMENTS 140-174, 140-175, 140-176)	2403	5	10/18/2000	X	
SPME	140174	NL140-174 - MOWER, FLAIL, REAR WING	2403	5	10/18/2000		X
SPME	140175	NL140-175 - MOWER, FLAIL, RIGHT WING	2403	5	10/18/2000		X
SPME	140176	NL140-176 - MOWER, FLAIL, LEFT WING	2403	5	10/18/2000		X
SPME	140177	NL140-177 - TILLER	2109	5	6/22/2001		X
SPME	140178	NL140-178 - MOWER, BUSHHOG	2109	5	2/28/2001		X
SPME	140179	NL140-179 - BOXBLADE	2403	5	3/20/2001		X
SPME	140180	NL140-180 - DISC, HARROW	2403	5	3/20/2001		X
SPME	140181	MOWER, BATWING	2403	5	3/27/2001	X	
SPME	140182	MOWER, BATWING	2403	5	4/9/2001	X	
SPME	140183	NL 140-183 GRINDER, STUMP	2109	5	1/27/2003	X	
SPME	140184	NL140-184 MOWER, LAWN WALK BEHIND	2109	5	2/5/2003	X	
SPME	140187	NL 140-187 - MOWER RIDING	2403	5	4/1/2005	X	
SPME	140188	NL140-188 - MOWER RIDING	2403	5	4/1/2005	X	
SPME	140189	NL140-189 - MOWER BATWING	2403	5	4/1/2005	X	
SPME	150003	NL150-03 - TANK, LIQUID STORAGE (NASA#0405908)	2105	5	5/20/2002		X
SPME	150004	NL150-04 - CAMPER, TOW	2201	5	1/29/1986		X
SPME	150005	NL150-05 - DARKROOM, TRAILER MOUNTED	4102	5	10/28/1985		X
SPME	150006	NL150-06 - MOBILE DARK ROOM	8101	5	4/8/1988		X
SPME	160001	NL160-01 - TUG CLERMONT II	3201	5	9/13/1983	X	
HVAC	1939904	AIR CONDITIONER, PORTABLE (SPOT COOLER 4)	2201	3		X	
HVAC	1939905	AIR CONDITIONER, PORTABLE (SPOT COOLER 3)	2201	3		X	
HVAC	2157681	AIR CONDITIONER, PORTABLE (SPOT COOLER 5)	2201	3	5/17/2005	X	

ANNEX 5
EXHIBIT 4
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)

ANNEX 5, EXHIBIT 4							
SPECIAL PURPOSE MOBILE EQUIPMENT (SPME)							
<u>DISCIPLINE</u>	<u>EQNUM</u>	<u>DESCRIPTION</u>	<u>BLDG</u>	<u>PRIORITY</u>	<u>INSTALL DATE</u>	<u>PM/CM</u>	<u>CM ONLY</u>
HVAC	2157682	AIR CONDITIONER, PORTABLE (SPOT COOLER 6)	2201	3	5/17/2005	X	
HVAC	2157683	AIR CONDITIONER, PORTABLE (SPOT COOLER 7)	2201	3	5/17/2005	X	
HVAC	2157684	AIR CONDITIONER, PORTABLE (SPOT COOLER 8)	2201	3	5/17/2005	X	
HVAC	2157685	AIR CONDITIONER, PORTABLE (SPOT COOLER 9)	2201	3	5/17/2005	X	

**ANNEX 5
EXHIBIT 5
INVENTORY OF VERTICAL TRANSPORTATION EQUIPMENT LIST**

**ANNEX 5, EXHIBIT 5
INVENTORY OF VERTICAL TRANSPORTATION EQUIPMENT LIST**

EQNUM	BLDG	TYPE	CAPACITY	MFR.	YEAR INST.	LAST INSP. DATE	DATE TESTED	SPEED	NO. FLRS	DOORS
940156	1000	DW	400 LBS	MONTGOME	1964	8/06	N/A	50	3	MD
96A09993	1000	PHE	6000 LBS	MONTGOME	1987	8/06	N/A	100	3	PD
96A09998	1002	PHE	4000 LBS	DOVER	1978	6-Aug	N/A	100	2	PD
00970887	1100	PHE	4500 LBS	DOVER	2000	8/06	N/A	125	3	PD
00970888	1100	PHE	4500 LBS	DOVER	2001	8/06	N/A	125	3	PD
00970889	1100	PHE	3500 LBS	DOVER	2001	8/06	N/A	150	3	PD
96A10003	1100	PCE	3500 LBS	WESTINGH	1992	8/06	06/02	250	3	PD
96A10008	1100	PCE	3500 LBS	WESTINGH	1992	8/06	06/02	250	3	PD
96A10013	1100	FHE	4000 LBS	WESTINGH	1994	8/06	N/A	50	3	MD
96A10018	1100	PHE	2100 LBS	DOVER	1992	8/06	N/A	150	3	PD
96A10023	1100	PHE	2100 LBS	DOVER	1992	8/06	N/A	150	3	PD
96A10028	1103	PHE	3500 LBS	DOVER	1987	8/06	N/A	125	2	PD
96A10033	1103	PHE	3500 LBS	DOVER	1987	8/06	N/A	125	2	PD
96A10038	1200	PCE	2500 LBS	MONTGOME	1994	8/06	06/02	200	4	PD
00962193	2204	PHE	2100 LBS	AMERICAN CRESENT	2001	8/06	N/A	125	2	PD
96A10043	3203	PHE	2000 LBS	DOVER	2005	8/06	N/A	125	3	PD
96A10048	3203	FCE	5000 LBS	OTIS	1965	8/06	N/A	150	6	PD
96A10064	4120	PCE	9000 LBS	TURNBULL	1992	8/06	06/02	300	12	PD
96A10069	4122	PCE	9000 LBS	OTIS	1992	8/06	06/02	300	12	PD
00971179	4220	PCE	9000 LBS	OTIS	2001	8/06	06/02	300	19	PD
00971180	4220	PCE	9000 LBS	OTIS	2001	8/06	06/02	300	19	PD
96A10086	4995	DW	500 LBS	OTIS	1964	8/06	N/A	50	2	MD
96A10054	8100	PHE	3500 LBS	U.S.ELEC	1981	8/06	N/A	125	3	PD

NOTES:

DW	DUMBWAITER	PD	POWER DOORS
FCE	FREIGHT CABLE ELEVATOR	MD	MANUAL DOORS
FHE	FREIGHT HYDRAULIC ELEVATOR		
PCE	PASSENGER CABLE ELEVATOR		
PHE	PASSENGER HYDRAULIC ELEVATOR		

**ANNEX 5
EXHIBIT 6
INVENTORY OF BACKFLOW PREVENTORS**

ANNEX 5, EXHIBIT 6			
INVENTORY OF BACKFLOW PREVENTORS			
<u>BLDG</u>	<u>ROOM</u>	<u>QUANTITY</u>	<u>SIZE</u>
1000		2	3/4"
		1	1"
	ZONE 99	1	2"
1002		1	3/4"
	2225	1	3/4"
1003		2	1"
1005	BOILER RM	1	1"
1009		2	3"
		1	1 1/4"
	EQ. RM	1	8"
1020	MECH RM	1	3/4"
1022		1	2 1/2"
		1	1"
1100		2	3/4"
		1	1 1/2"
	OUTSIDE OF MECH RM COURTY	1	1"
	RM 3016	1	3/4"
	RM 11111B	1	6"
1103		1	3/4"
	MECH RM	2	3/4"
	MECH RM	1	1"
	MECH RM	1	2"
1105		2	3/4"
	SO. EQ. RM	1	4"
1110		1	1"
1200		1	1"
	MECH RM	1	2"
1201	184	1	3/4"
	New Mech Rm	1	3/4"

**ANNEX 5
EXHIBIT 6
INVENTORY OF BACKFLOW PREVENTORS**

ANNEX 5, EXHIBIT 6			
INVENTORY OF BACKFLOW PREVENTORS			
<u>BLDG</u>	<u>ROOM</u>	<u>QUANTITY</u>	<u>SIZE</u>
1210		1	3/4"
2101		1	1 1/2"
	RM 137	1	3/4"
2102		1	3/4"
2105		1	1 1/2"
		1	3/4"
2203		1	3/4"
2204		1	1 1/2"
2205		2	1"
		1	1 1/2"
2206		2	3/4"
2505		2	2"
3201		1	3/4"
3202		1	1"
3203		2	3/4"
		1	3"
3225		1	6"
		1	1"
3226		1	6"
		1	1"
3305		2	3/4"
	EAST WALL	2	3/4"
4001		1	2"
4008		1	4"
4010		1	1"
		1	4"
4050		2	1"
		1	2"
4070		1	2"

**ANNEX 5
EXHIBIT 6
INVENTORY OF BACKFLOW PREVENTORS**

ANNEX 5, EXHIBIT 6			
INVENTORY OF BACKFLOW PREVENTORS			
<u>BLDG</u>	<u>ROOM</u>	<u>QUANTITY</u>	<u>SIZE</u>
		1	6"
4072		4	2"
4080	MER	1	3"
	MER	1	4"
4110		1	1"
4210		1	2"
4220		1	1 1/2 "
4221	EAST LOX DOCK	1	1"
	LEVEL 1 BY OXYGEN TANK	1	1"
	LVL 11 OUTSIDE	1	1"
	LVL 7	1	1"
	LVL 8	1	1 1/2 "
4400		1	3/4"
		1	1"
4995		1	1"
5005 TEST COMPLEX ASRM MAIN LI		1	6"
8100		1	1 1/2 "
	Room 132	1	3/4"
	Room 128A	2	1/2"
	Room 112K	1	1/2"
	Room 112H	1	3/4"
8105		1	3/4"
8110		3	3/4"
		1	1 1/2 "
		1	2 1/2 "
8201		1	3/4"
8301		1	3/4"
Total		104	

**ANNEX 5
EXHIBIT 7
REFUSE PICKUP SCHEDULE**

LOCATION	DAYS	QUANTITY		FREQUENCY/TIME					TOTAL WEEKLY	TOTAL WEEKLY
		DUMPSTER	BARRELL	M	T	W	TH	F	DUMPSTERS	BARRELS
1002 N.SIDE	5	3		AM	AM	AM	AM	AM	15	
1002 S. SIDE	5	1		AM	AM	AM	AM	AM	5	
1002 SHREDDER	2	1			AM		AM		2	
1005	5	2		AM	AM	AM	AM	AM	10	
1009	5	1		AM	AM	AM	AM	AM	5	
1020	5	2		AM	AM	AM	AM	AM	10	
1100	5	3		AM	AM	AM	AM	AM	15	
1100 S.Wing	5	1	5	AM	AM	AM	AM	AM	5	
1100 Cafeteria	5	3		AM	AM	AM	AM	AM	15	
1103	5	2		AM	AM	AM	AM	AM	10	
1105 N. Side	5	1		AM	AM	AM	AM	AM	5	
1110, 1105	5	2		AM	AM	AM	AM	AM	10	
1200	5	3		AM	AM	AM	AM	AM	15	
1200-VISITOR AREA	5		8	AM	AM	AM	AM	AM		40
1201	5	1		AM	AM	AM	AM	AM	5	
1210	5	1		AM	AM	AM	AM	AM	5	
2019	3	1		AM		AM		AM	3	
2040	5	1		AM	AM	AM	AM	AM	5	
2101	5	4		AM	AM	AM	AM	AM	20	
2104	5	2		AM	AM	AM	AM	AM	10	
2105	5	2		AM	AM	AM	AM	AM	10	
2108	5	1		AM	AM	AM	AM	AM	5	
2109	5	1		AM	AM	AM	AM	AM	5	
2120	5	1		AM	AM	AM	AM	AM	5	
2201	5		2	AM	AM	AM	AM	AM		10
2201, 2205, 2206	5	8		AM	AM	AM	AM	AM	40	
2204 S. SIDE	5	2		AM	AM	AM	AM	AM	10	
2204 Receiving Dock	5	1		AM	AM	AM	AM	AM	5	
2204 NO. SIDE	5	1		AM	AM	AM	AM	AM	5	

**ANNEX 5
EXHIBIT 7
REFUSE PICKUP SCHEDULE**

LOCATION	DAYS	QUANTITY		FREQUENCY/TIME					TOTAL WEEKLY	TOTAL WEEKLY
		DUMPSTER	BARRELL	M	T	W	TH	F	DUMPSTERS	BARRELS
2316	3	1		AM		AM		AM	3	
2406	3	2		AM		AM		AM	6	
2409	3	1		AM		AM		AM	3	
2411	5	2		AM	AM	AM	AM	AM	10	
2411	5		12	AM	AM	AM	AM	AM		60
2423	5	1		AM	AM	AM	AM	AM	5	
2425	1	1		AM					1	
2436	3	1		AM		AM		AM	3	
2501	1	1				AM			1	
3101	3	1		AM		AM		AM	3	
3101	3		1	AM		AM		AM		3
3200	3	1		AM		AM		AM	3	
3201	1	1		AM		AM		AM	1	
3202	3	2		AM		AM		AM	6	
3203	3	3		AM		AM		AM	9	
3204	3	1		AM		AM		AM	3	
3205	3	2		AM		AM		AM	6	
3225	3	1		AM		AM		AM	3	
3226	3	1		AM		AM		AM	3	
3300	3	1		AM		AM		AM	3	
3305	3	1		AM		AM		AM	3	
3407	3	1		AM		AM		AM	3	
4010	3	1		AM		AM		AM	3	
E-1 TEST STAND	3	3		AM		AM		AM	9	
4110	3	1		AM		AM		AM	3	
4110	3		1	AM		AM		AM		3
4120	3	3	1	AM		AM		AM		3
4122	3	1	1	AM		AM		AM	3	
4210	3		1	AM		AM		AM		3

**ANNEX 5
EXHIBIT 7
REFUSE PICKUP SCHEDULE**

LOCATION	DAYS	QUANTITY		FREQUENCY/TIME					TOTAL WEEKLY	TOTAL WEEKLY
		DUMPSTER	BARRELL	M	T	W	TH	F	DUMPSTERS	BARRELS
4210	3	1		AM		AM		AM	3	
4220 (East Pier)	3	1	1	AM		AM		AM	3	
4220 (West Pier)	3	3		AM		AM		AM		0
4301	3	1		AM		AM		AM	3	
4302	3	2		AM		AM		AM	6	
4400	3	1		AM		AM		AM	3	
4995	3	2	1	AM		AM		AM	6	
7001	3	1		AM		AM		AM	3	
7001	4		1	AM		AM		AM		4
8101	3	1		AM		AM		AM	1	
8201	3	2		AM		AM		AM	6	
8301	3	2		AM		AM		AM	6	
8306	3	1		AM		AM		AM	3	
8100. 8110	3	4		AM		AM		AM	12	
SERVICE STATION	3	1		AM		AM		AM	3	
SOFTBALL FIELD 1	3		4	AM		AM		AM		12
SOFTBALL FIELD 2	3		2	AM		AM		AM		6
MINI MART	2	1		AM				AM		
GUN ARCHERY CLUB	1	1	3					TOTAL WK	409	144
	282	112	44					TOTAL	21268	7488

**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

1	Develop and Accomplish Preventive Maintenance Program. (Annex 5.2)	15	RR, PI, UPI, VCC	Accomplish PM on Schedule	35	Use available resources to accomplish PM requirements effectively. Accomplish per Table 5.2-1	5
			RR, PI, UPI, VCC	Accomplish Minor Repairs	20	Complete all minor repairs at job site, with available resources	5
			RR	Provide PM Report (DR5-FA02)	15	Submit reports timely and accurately.	4
			PI, UPI, VCC	Quality of Accomplished Repairs	20	Work quality complies with specified standards.	5

**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 5 (OPERATIONS AND MAINTENANCE SERVICES)

2	Accomplish Corrective Maintenance	10	PI, UPI, RR	CM accomplished in accordance with Table 5.3-1	40	CM completed within specified response time requirements	7%
	(Annex 5.3)		PI, UPI, VCC	Provide Quality Work	35	Work quality complies with specified standards	5
			RR	Document and Prioritize CM	25	Report covers all specified reporting requirements. Assign work priority in accordance with definition in Annex 5.1	7%

**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 5 (OPERATIONS AND MAINTENANCE SERVICES)

3	Perform Operations (Annex 5.4)	5	PI, UPI, VCC, RR	Provide Proper System Operation	35	Systems are operating to specified output ranges, capacities, and efficiency	7
			RR, PI, UPI	Provide Qualified System Operators	35	Operator staffing within specified "watchstanding" requirement; operators are properly equipped and qualified	5
			RR	Manage and Document System Operation	30	Systems are operating to specified output ranges, capacities, and efficiency. Operating logs are complete, data is entered within specified time requirements and plans, procedures are submitted Use resources and manage effectively	7

**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 5 (OPERATIONS AND MAINTENANCE SERVICES)

4	Assure Availability (Annex 5.5)	50	RR	Document Results	10	Document covers all specified reporting requirements	See Tables Annex 5.5
			PI, UPI, VCC	Provide Availability	90	Perform intended function and deliver the intended output	

**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 5 (OPERATIONS AND MAINTENANCE SERVICES)

5	Provide management, Engineering and Craft Support for Test Complex Work (Annex 5.6)	10	PI, UPI, VCC, RR	Perform all work per customer requirement, maintain bench stock, provide timely reports and notifications to NASA, control costs	100	Complete all work on time, in accordance with engineering standards, provide adequate staffing for work load and maintain bench stock to satisfy historical and current work requirements. Provide all notifications and reports on time. Keep equipment in operating condition to meet work load.	7
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**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 5 (OPERATIONS AND MAINTENANCE SERVICES)

6	Accomplish Facility Inspection and Planned Maintenance Program (Annex 5.7)	5	PI, UPI, RR	Perform inspection of all structures, facilities, utilities, systems, and subsystems as SSC	10	Inspection covers all required facility components and systems	7
			PI, UPI, RR	Develop, Implement, and Document Planned Maintenance Program	90	Plan is timely/priority reflects maintenance requirements estimates and budget. Quality workmanship within cost and on schedule. Documentation complete and accurately indicate facility/systems condition and repair requirements.	7

**Annex 5.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGHT (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGHT (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

ANNEX 5 (OPERATIONS AND MAINTENANCE SERVICES)

7	Perform grounds Maintenance Integrated Management	5	PI, UPI, VCC	Provide Quality Work	60	Work Quality complies with specified standards	20%
	(Annex 5.8)		PI, UPI, VCC	Develop Work Plan and Document Work	30	Grounds Maintenance is completed within specified time requirements	15%
			RR		10	Report covers all specified reporting requirements	10%

ANNEX 5

EXHIBIT 2

MAINTENANCE TASK SHEETS

MAINTENANCE TASK SHEET (MTS) INDEX

MTS Number Description

Electrical

E-1 Air Break Switch, Pad Mounted

E-2 Fuse Cutout

E-3 Pole Mounted Gang Switch

E-4 Magne-Blast Circuit Breaker

E-5 SF6 Gas Switch (DELETE)

E-6 Transformer, Pad Mount

E-7 Transformer, Pole Mount

E-8 Recloser

E-9 Miscellaneous Distribution System

E-10 Area Lighting

E-11 Electric Meters

E-12 Switch Boards & Distribution Panel Boards

E-13 Motor Control Centers

Revision No: 1
Revision Date: 10/20/2006

<u>E-15</u>	<u>Dry Type Transformers, 45 KVA & Above</u>
<u>E-16</u>	<u>Uninterruptible Power Supplies (UPS) 7 KVA & above</u>
<u>E-17</u>	<u>Diesel Generators</u>
<u>E-18</u>	<u>Cathodic Protection</u>
<u>E-19</u>	<u>Lightning, Grounding, and Surge Protection</u>
<u>E-28</u>	<u>Spare Transformer – B4400</u>
<u>E-29</u>	<u>GNB Battery Charger- B3407</u>
<u>E-30</u>	<u>Variable Frequency Drives</u>
<u>E-31</u>	<u>Starters</u>

Emergency Electrical Lighting

<u>E-14</u>	<u>Sitewide Electrical Emergency Lighting</u>
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Fire Protection & Detection System

<u>E-20</u>	<u>Fire Alarm Central Console</u>
<u>E-21</u>	<u>Radio Frequency Transceivers (FIRE)</u>
<u>E-22</u>	<u>Facility Fire Alarm Panels</u>
<u>E-23</u>	<u>Facility Security Systems</u>
<u>E-24</u>	<u>Sprinkler & Suppression Systems</u>
<u>E-25</u>	<u>Fire Hydrants & Post Indicator Valves</u>
<u>E-26</u>	<u>Fire Protection & Detection Systems-Suppression Svs</u>
<u>E-27</u>	<u>Fire Protection & Detection Systems-Chemical Sys</u>

Elevator Systems

EL-1 **Electric Traction**

EL-2 **Electric Hydraulic**

EL-3 **Dumbwaiter**

Special Purpose Mobile Equipment

EQ-1 **Fire Truck**

EQ-2 **Tour Bus**

EQ-3 **Ambulance**

EQ-4 **Light & Heavy Duty Trucks**

EQ-5 **Reach-All Bucket Truck**

EQ-6 **Altec Pole Truck**

EQ-7 **Semi-Trailers**

EQ-8 **Forklifts, Gasoline & Diesel**

EQ-9 **Hydraulic Mobile Cranes**

EQ-10 **Personnel Lift**

EQ-11 **Caterpillar Excavator**

EQ-12 **Trashmaster Compactor**

EQ-13 **Utility Trailers**

EQ-14 **Caterpillar Tractor/Dozer**

EQ-15 **Front End Loaders**

EQ-16 **Portable Generator**

EQ-17 **Tractor**

EQ-18 **Four Wheeler**

Revision No: 1
Revision Date: 10/20/2006

<u>EQ-19</u>	<u>Mower, Toro Groundsmaster</u>
<u>EQ-20</u>	<u>Hydraulic Sweeper</u>
<u>EQ-21</u>	<u>Roto Hoe Tiller</u>
<u>EQ-22</u>	<u>Sod Cutter</u>
<u>EQ-23</u>	<u>Refuse Truck</u>
<u>EQ-24</u>	<u>Landscape Chipper</u>
<u>EQ-25</u>	<u>Flail Mower</u>
<u>EQ-26</u>	<u>Batwing Mower</u>
<u>EQ-27</u>	<u>Street Sweeper</u>
<u>EQ-28</u>	<u>John Deer BullDozer</u>
<u>EQ-29</u>	<u>John Deer TrackLoader</u>
<u>EQ-30</u>	<u>Caterpillar WheeledTractor-Scraper</u>

HVAC Systems

<u>M-1</u>	<u>Centrifugal Chiller</u>
<u>M-2</u>	<u>Reciprocating Chiller</u>
<u>M-3</u>	<u>Cooling Tower (Gear Drive)</u>
<u>M-4</u>	<u>Cooling Tower (Belt Drive)</u>
<u>M-5</u>	<u>Boiler (Gas)</u>
<u>M-6</u>	<u>Boiler (Electric)</u>
<u>M-7</u>	<u>Condenser Water Chemical Treatment System</u>
<u>M-8</u>	<u>Pumps (Chilled Water, Hot Water & Condenser Water)</u>
<u>M-9</u>	<u>Air Handling Unit</u>

Revision No: 1
Revision Date: 10/20/2006

M-10	Heating Ventilation Unit
M-11	Computer Room Unit
M-12	RTU, Packaged & Unitary Units (DX Type Units)
M-13	Unit Heater (Gas)
M-14	Fans, Blowers or Vents
M-15	Air Compressor
M-16	Kitchen Exhaust Hood
M-17	Walk-In Cooler (Refrigerator or Freezer)
M-18	Kitchen Exhaust Hood

Mechanical Equipment

ME-1	Oil and Water Separator – Bldg. 2105
ME-2	Oil and Water Separator – Bldg. 4400
ME-3	Oil and Water Separator – Bldg. 3305
ME-4	Engine Removal Platform-B1-B2-Level 7
ME-5	Engine Work Platform-Mini Platform-B1-Level 8
ME-6	Scissor Lift Platform-B1-Level 8
ME-7	Engine Removal & Work Platforms-A1-A2-Level 4 ½ & 5
ME-8	Mini-Platform-A2-Level 4 ½
ME-9	Scissor Lift Platform-A2-Level 4 1/2
ME-10	Scissor Lift Platform-A1-Level 4
ME-11	Roll-Up Overhead Doors (Air-Operated)
ME-12	Roll-Up Overhead Doors (Electric-Operated)

Revision No: 1
Revision Date: 10/20/2006

ME-13 Sliding Hangar Doors

ME-14 Structure Blast Doors

ME-15 Oil and Water Separator - Bldg. 2606

ME-16 Pressure Sandblast Cabinet

ME-17 Vehicle Wash System

Marine Operations Systems

MO-1 Docks

MO-2 Canal Pumping Station

MO-3 Locks

MO-4 Lock Control Building

MO-5 LOX (Oxygen) Docks

MO-6 Hydrogen Docks

MO-7 Other Docks & Piers

MO-8 Bascule Bridge / Pumps

MO-9 Tugboat Clermont II

Natural Gas System

NG-1 SSC Natural Gas System

Potable Water System

PW-1 Number 1 Well House Complex

PW-2 Number 2 Well House Complex

PW-3 **Number 3 Well House Complex**

PW-4 **Number 3 Elevated Tank Pump House Complex**

Domestic Wastewater System

SS-1 **Lift Station, Slide Mounted Pump Type**

SS-2 **Lift Station, Secure Mounted Pump Type**

SS-3 **Lagoon System**

SS-4 **Septic Tank with Rock Reed Filter**

SS-5 **Septic Tank**

SS-6 **Sump Pump**

SS-7 **Lift Station, Slide Mounted Pump Type, Landfill Leachate System**

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-1

13.8 KV System

AIR BREAK SWITCH, PAD MOUNTED

Task #1

Frequency-Semi-Annually (26 weeks)

Step	Description
1	Perform infrared and ultrasound analysis of switch contacts under load
2	Perform visual inspection of switch operating mechanism for significant degradation (Do Not Operate Switch).

Revision No: 1
Revision Date: 10/20/2006

Task # 2

Frequency - Six Years (312 weeks)

Step	Description
1	Inspect switch operating mechanism operation by opening and closing switch, criticality codes I, II, & III only
2	Inspect switch contacts for pitting or wear, criticality codes I, II, & III only

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	03/02	Revised Task 1 to perform infrared and ultrasound analysis. Deleted manual operation; deleted annual task; Revised Task 2 to be performed every 6 th year and to perform manual operation and visual inspection.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-2

13.8 KV System

Fuse Cutout

Task # 1

Frequency - Semi-annually (26 weeks)

Step	Description
1	Perform infrared analysis on fuse element, criticality codes I, II, & III only
2	Perform infrared analysis on cutout contact area, criticality codes I, II, & III only

Task # 2

Frequency - Annually (52 weeks)

Step	Description
1	Perform infrared analysis on fuse element, criticality code IV only
2	Perform infrared analysis on cutout contact area, criticality code IV only

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-3

13.8 KV System

Pole Mounted Gang Switch

Task # 1

Frequency - Semi-annually (26 weeks)

Step	Description
1	Perform infrared analysis on switch contacts & connectors, criticality codes I, II, & III only

Task # 2

Frequency - Annually (52 weeks)

Step	Description
1	Perform infrared analysis on switch contacts & connectors, criticality code - IV only

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-4

13.8 KV System

MAGNE-BLAST CIRCUIT BREAKER

Task # 1

Frequency - Biennially (104 weeks)

Step	Description
1	Wipe clean silver plated contacts & primary disconnect studs. Lubricate with D50H47
2	Lubricate operating mechanism by applying a light coat of machine oil SAE 20 or SAE 30 to the sleeve bearings; main crank shaft and driving pawl lever, roller and needle bearings.
3	Wipe clean & apply D50H47 to ground surfaces such as latches, rollers, props, etc.
4	Clean moisture, dust and smoke residue from bushings & all other insulation surfaces.
5	Inspect arc chutes for damage or contamination in the throat area.
6	Check operation of unit heaters.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-5

13.8 KV System

SF6 Gas Switch

Task # 1

*Frequency - Annually (52 weeks) - **DELETED***

Step	Description
1	Perform infrared analysis of switch case and connectors
2	Inspect switch external linkage
3	Inspect switch grounding components
4	Check SF6 Gas pressure gage for out of tolerance reading

Task # 2

*Frequency - Quinquennially (260 weeks) - **DELETED***

Step	Description
1	Conduct resistance tests on switch contacts
2	Megger switch phase to phase and phase to ground

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/04	All Tasks / All steps deleted; maintenance performed under MTS E-6 and E-9 (See Alan Phillips)

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-6

13.8 KV System

TRANSFORMER, PAD MOUNT

Task #1

Frequency - Annually (52 weeks)

Step	Description
1	Perform infrared analysis of connectors/terminals, case, & cooling fins/tubes.
2	Inspect transformer grounding components
3	Inspect transformer for evidence of corrosion
4	Check fans (if installed)
5	Inspect transformer for oil leaks & top off as necessary
6	Inspect pressure, level, & temperature gages for abnormal readings

Task #2

Frequency - Triennial (156 weeks)

Step	Description
1	Perform gas in oil analysis

Task #3

Frequency - Six Years (312 weeks)

Step	Description
1	Measure winding resistance & compare to historical data
2	Conduct power factor test

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-7

13.8 KV System

Pole Mounted Transformer

Task # 1

Frequency - Annually (52 weeks)

Step	Description
1	Perform infrared analysis, criticality codes I, II, & III only

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-8

13.8 KV System

Recloser

Task # 1

Frequency - Quarterly (13 weeks)

Step	Description
1	Check battery voltage and charging current at test terminals or on meter

Task # 2

Frequency - Annually (52 Weeks)

Step	Description
1	Perform infrared analysis on recloser case and electrical connections
2	Trip recloser from controller panel to check trip solenoid
3	Cycle recloser to check solenoid fuse, rotary solenoid, closing solenoid, & high voltage contractor
4	Check operation of manual closing mechanism

Task # 3

Frequency - Triennially (156 Weeks)

Step	Step Description
1	Inspect recloser per manufacturers recommendations

Task # 4

Frequency - During Scheduled Removals

Step	Step Description
1	Bench check recloser current transformers

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-9

13.8 KV System

Miscellaneous Distribution System

Task # 1

Frequency - Annual (52 weeks)

Step	Step Description
1	Perform infrared analysis on critical lines, fittings, connectors, etc. Criticality codes I, II, & III only

Task # 2

Frequency - Quinquennial (260 weeks)

Step	Step Description
1	Inspect wooden poles for rot or other degradation
2	Rap the pole sharply with a hammer weighing about 3 pounds, starting near the ground line and continuing upwards circumferentially around the pole to a height of approximately 6 feet. Prod the pole as near the ground line as possible using a pole prod or a screwdriver with a blade at least 5 inches long.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	10/04	Revised Task #2 Step 2

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-10

Area Lighting

Task # 1

Frequency - Annually (52 weeks)

Step	Step Description
1	Functionally check operation of photocell controls. Replace if inoperative.
2	Functionally check operation of luminaries. Check for ballast noise and lamp are strike. Replace defective lamps, ballasts, or fuses.
3	Functional check shall be ground level with area lighting units energized.
4	Wire brush, paint and touch-up rusted or corroded areas on pole and/or luminaire body.

For Inoperative Area Lighting Units: Based on 2% Failure Rate/Year

Step	Step Description
1	Inspect each luminary housing, lens, reflector, for security of mounting and cleanliness.
2	Check ballast compartment for loose connections, frayed wiring and excessive heat. Correct all discrepancies. Restore unit to operational condition.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-11

13.8 KV System

ELECTRIC METERS

Task # 1

Frequency -Quinquennially (260 weeks)

Step	Description
1	Calibrate Kwh meters installed at all locations on the 13.8 KV Electrical Distribution system .

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-12

13.8 KV System

LV Switchgear (including Switchboards) and Distribution Panelboards

Task #1

Frequency- Annually (52 weeks)

Step	Step Description
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Switchgear and Switchboard Criticality Level I - V

1	Inspect interior and exterior for damage, clean as necessary. Verify cover(s) and latch(s) operational.
2	Perform infrared analysis of Switchgear and Switchboard.

Task #2

Frequency-Triennial (156 weeks)

Step	Step Description
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Switchgear and Switchboard Criticality Level I and II

1	Test the instantaneous and long time delay trip function of all drawout circuit breakers in Switchgear. Measure Insulation Resistance and Contact Resistance. Record Results.
2	Test the instantaneous trip function of all <u>main</u> molded case circuit breakers in switchboards, 600 amperes and larger. Measure Insulation Resistance and Contact Resistance. Record Results.
3	Perform a spot insulation resistance test on each (phase to phase and phase ground) bus in switchgear using a megohmmeter.
4	Test the Auto-Transfer Function of the Low Side Main/ Tie Breakers at B4400, B4120, B4122, B4210, B4110, B4995 and B4220/4221.

Task #3

Frequency-Six Years (312 weeks)

Step	Step Description
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Switchgear and Switchboard Criticality Level III - V

1	Test the instantaneous and long time delay trip function of all drawout circuit breakers in Switchgear. Measure Insulation Resistance and Contact Resistance.
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	Record Results.
2	Test the instantaneous trip function of all <u>main</u> molded case circuit breakers in switchboards, 600 amperes and larger. Measure Insulation Resistance and Contact Resistance. Record Results.
3	Perform a spot insulation resistance test on each (phase to phase and phase ground) bus in switchgear using a megohmmeter.
	Distribution Panelboards Criticality Level I-III
4	<i>Inspect panel interior and exterior for damage, clean as necessary.</i> <i>Verify panel cover and latch operational.</i>
5	Perform infrared analysis of panel.
6	Ensure panel scheduled is posted. If schedule is missing, obtain latest copy from Maintenance Engineering or CEF and post in panel. If panel schedule is not available, issue a CM work order to trace circuits, to create a panel schedule, and file a copy with CEF. Note on panel schedule, "Warning - Panel Schedule May Not Be Accurate."

Definitions:

Switchboard. A large single panel, frame, or assembly of panels on which are mounted, on the face or back, or both, switches, over-current and other protective devices, buses, and usually instruments. Switchboards are generally accessible from the rear as well as from the front and are not intended to be installed in cabinets.

Distribution Panelboard. A single panel or group of panel units designed for assembly in the form of a single panel; including buses, automatic over-current devices, and equipped with or without switches for the control of light, heat, or power circuits; designed to be placed in a cabinet or cutout box placed in or against a wall or partition and accessible only from the front.

Metal-enclosed medium voltage switchgear can contain either drawout electrically operated circuit breakers or stationary electrically operated circuit breakers in individual three-pole grounded metal compartments. Metal-clad switchgear is compartmentalized to isolate all components such as instrumentation, main bus, and both incoming and outgoing connections with grounded metal barriers. Switchgear can also contain associated control, instruments, metering, relaying, protective, and regulating devices as necessary.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	Removed 13.8 KV System Designation
2	2/01	Removed Panel boards from Description Headings in Tasks 2 (all) and 3 (Steps 1, 2, &3), Added Specific Tests, and Revised
Amperage Rating of MCCB		
3	8/01	Test Auto-Transfer Function

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-13

Motor Control Centers

Task #1

Frequency- Annually (52 weeks)

Step	Description
1	Perform IR analysis of MCC circuit breakers, starter relamp and overload relamp.
2	Check functionality of panel lamps and replace as necessary.

Task #2

Frequency- Triennial (156 weeks)

Step	Description
1	Clean cubicle, inspect contractor and overload relay for damage or wear.
2	Conduct insulation resistance tests on components and bus network.
3	Operate "Hand-Off-Auto" switch and verify functionality.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-14

Emergency Electrical Lighting

Sitewide Electrical Emergency Lighting

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Perform functional check and visually check indicator lights for proper operate. Operate for a minimum of thirty (30) seconds. Replace bulbs as required.
2	Verify proper operation of automatic battery charger. (High-Rate Charging-red light; Ready Mode-yellow light)
3	Inspect battery terminals for cleanliness and corrosion. Clean the battery as required.
4	Inspect all electrical connections for tightness.
5	Inspect the main power cable and plug where applicable for defective insulation, and correct any discrepancies noted.
6	Visually inspect exit lights for burned out bulbs and replace as required.

Fluorescent Fixtures with Emergency Battery Packs

Task #2

Frequency- Semiannual (26 weeks)

Step	Description
1	Perform a walk-through inspection of all battery-equipped fluorescent fixtures to confirm charging indicator light is on at normal brightness.
2	Replace any defective, bulbs, battery pack or charging switch unit.
3	Verify all emergency lights are operational and maintain configuration for (30) thirty seconds. Correct all discrepancies.

Emergency Lighting Systems with Battery Banks, Chargers

Task #3

Frequency- Annual (52 weeks)

Step	Description
1	Perform all quarterly and semi-annual cycle maintenance tasks.
2	Perform a 90 minute test per NFPA 101.
3	Perform load test on battery bank per equipment specifications and system requirements. Correct all discrepancies.
4	Return all equipment to normal configuration.

Revision No: 1
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-15

Dry Type Transformers, 45 Kva and Above

Task #1

Frequency - Annually (52 weeks)

Step	Description
1	Criticality Level I Check transformer air flow, remove any obstructions and clean unit of dust or dirt buildup.
2	Measure and record primary and secondary voltages and currents.
3	Perform IR analysis.
4	Inspect terminal voltage taps and mounting hardware for looseness or physical degradation. Verify transformer ground.
5	Verify number of wires and sizes for both primary and secondary side.

Task #2

Frequency - Triennial (156 weeks)

Step	Description
1	Criticality Level II – III Check transformer air flow, remove any obstructions and clean unit of dust or dirt buildup.
2	Measure and record primary and secondary voltages and currents.
3	Perform IR analysis.
4	Inspect terminal voltage taps and mounting hardware for looseness or physical degradation. Verify transformer ground.
5	Verify number of wires and sizes for both primary and secondary side.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation
2	6/05	Removed insulation resistance test

Uninterruptible Power Supplies (UPS) 7 Kva Above

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-16

Task #1

Frequency- Monthly

Step	Step Description
1	Replace air filters, where applicable.
2	Check LEDs.
3	Check cooling fan operations.
4	Measure rectifier output voltage.
5	Perform general inspection to include appearance and cleanliness of battery bank and battery rack. Visually inspect Cables/Straps for Corrosion. Clean as necessary. Inspect for cracks or electrolyte leakage. Replace as necessary.
6	On Wet Cell Systems – Check Electrolyte Level of each cell. Add electrolyte as necessary.

Task #2

Frequency- Quarterly

Step	Step Description
1	On Wet Cell Systems – Measure, Record, Trend, and Evaluate Cell Voltages, Cell Temperatures, Specific Gravity, Cell to Cell and Terminal Connection Resistances. Evaluate need for equalization charge. Perform equalization charge as necessary.

Task #3

Frequency- Semi-Annually

Step	Step Description
1	Perform self-diagnostics test as recommended by manufacturer.
2	On Sealed Cell Systems – Measure, Record, Trend, and Evaluate Cell Voltages, Internal and Strap/Cable Impedances – Replace as necessary.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation
2	2/01	Incorporated Batteries

Revision No: 1
Revision Date: 10/20/2006

Task #4

Frequency- Triennially (156 weeks)

Step	Step Description
1	Place unit on maintenance bypass and safe. Inspect all internal power cables for overheating or other damage. Inspect all PC board connections and replace any defective inverter power assemblies. Note: Depending on power up access, an infrared scan of the unit can be substituted for visual inspection.
2	Inspect cooling fans for dust or dirt buildup, clean as necessary. Check for any impediments to rotations.
3	On Sealed Cell Systems – Evaluate trending information to determine need for battery replacement. Replace if necessary.

Task #5

Frequency – Five Years (260 weeks)

Step	Step Description
1	On Wet Cell Systems – Perform Battery Performance Capacity Test – Take Corrective Actions as necessary.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation
2	2/01	Incorporated Batteries

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-17

Diesel Generators

Task #1

Frequency- Monthly (4 weeks)

Step	Description
1	Operate generator under load, check voltage and frequency.
2	Inspect visible wiring for damage.

Frequency- Semi-Annually (26 weeks)

Step	Step Description
1	Wipe down generator, remove all dirt and debris.

Frequency- Annually (52 weeks)

Step	Step Description
1	Perform IR analysis on generator.
2	Perform vibration analysis on generator.
3	Blow dust out of interior of generator.
4	Check all electrical connections, inspect insulation for fraying or heat damage.

Frequency- Six Years (312 weeks)

Step	Step Description
1	Insulation resistance test stat or windings.
2	Insulation resistance test rotor windings.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-18

Cathodic Protection

Impressed Current Rectifier

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Clean interior unit.
2	Read and record output voltage and current values. Compare with previous readings. If readings are out of specified values, adjust rectifier output per manufacturer recommendations.
3	Inspect unit for arc damage or other component deterioration.
4	Check filter fuses (if so equipped). If fuse blows after replacement, replace capacitor.

Frequency- Annually (52 weeks)

Step	Description
1	Establish baseline and conduct annual infra-red tests of rectifier assembly (Look for variations from baseline – hot or cold spots).
2	Rectifiers with selenium rectifiers installed, conduct stack tests (forward voltage drop and reverse current leakage tests).
3	Rectifiers with silicon rectifiers installed, check surge suppression circuit for proper operation.
4	Check filter fuses (if so equipped). If fuse blows after replacement, replace capacitor.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-18

Impressed Current Anodes

Task #2

Frequency- Annually (52 weeks)

Step	Step Description
1	Inspect areas of the protected system and impressed current anodes for corrosion and condition of anodes, record results.
2	Measure anode to structure current and structure to soil potential and record results. Adjust rectifier taps to obtain a structure to soil potential of 0.85 V DC.

Sacrificial Anode System

Task #3

Frequency- Annually (52 weeks)

Step	Step Description
1	Inspect areas of the protected system and sacrificial anodes for corrosion and condition of anodes, record results.
2	Measure structure to soil potential and anode to soil potential and record results.
3	Measure anode to structure current and record results.

Task #4

Frequency- As Possible (During any planned excavations of buried systems)

Step	Step Description
1	Inspect excavated portions of buried systems during repair, modifications or other tasks that expose system components. Record inspection results for future actions and system history.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-19

Lightning, Grounding, and Surge Protection

Task #1

Frequency- Annually (52 weeks)

Step	Description
1	Inspect all conductors and system components are securely fastened to their mounting surfaces and are protected against mechanical displacement.
2	Check for loose connections that may result in high-resistance joints.
3	Check for parts of the system that may have been weakened by corrosion or vibration.
4	Check for any visual indication of damage to surge suppression (over voltage) devices.
5	Inspect to determine if the effectiveness of the lightning protection system has been altered due to additions to, or changes in, the structure.
6	Record results of the general condition of air terminals, conductors, and other system components.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Removed 13.8 KV System Designation

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-20

Fire Protect & Detect

Fire Alarm Central Console

Task #1

Frequency- Triennial (156 weeks)

Step	Description
1	Perform manufacturer recommended preventative maintenance inspection schedule.

**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET #E-21
Fire Protect & Detect**

Radio Frequency Transceivers - Fire

Task #1

Frequency- Triennial (156 weeks)

Step	Description
1	Perform manufacturer recommended preventative maintenance inspection schedule.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-22

Fire Protection & Detection Systems

Facility Fire Alarm Panels

Task #1

Frequency- Semi-Annually(26 weeks)

Step	Description
1	Notify Security Dispatcher at Building 2201 and Building occupants.
2	Check alarm lamps of the area control panel.
3	Check audible/visual circuits, place control panel in alarm for functional check, then reset to normal configuration.
4	Verify alarm sent to Security Dispatcher
5	Measure and record battery voltage under full load conditions with battery charger disconnected.
6	Correct all discrepancies and return system to normal configuration.
7	Notify Security Dispatcher - test complete.

Facility Fire Alarm Panels

Task #2

Frequency- Annually(52 weeks)

Step	Description
1	Notify Security Dispatcher at Bldg 2201 and Building occupants.
2	Check audible/visual circuits.
3	Operate each manual pull station. Verify area control panel is in alarm and reset after each manual pull station.
4	Activate each smoke detector. Verify area control panel is in alarm and reset after each smoke detector test.
5	Verify alarm sent to Security Dispatcher.
6	Place a "trouble" on area control panel; disable audible/visual devices.
7	Place each zone into alarm sequentially; reset the panel.
8	Measure and record battery voltage under full load conditions with battery charger disconnected.
9	Verify the conditions of the batteries; replace batteries if not operating properly.
10	Correct any discrepancies and return system to normal configuration.
11	Notify Security Dispatcher - test complete.
12	Review computer printout; verify alarms are in the same sequence as was performed in steps 3 and 4 above, and that the text matches schedule.

Revision No: 1
Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET #E-22
 Fire Protection & Detection Systems**

Facility Fire Alarm Panels

Task #3

Frequency- Tri-Annually(156 weeks)

Step	Description
1	Notify Security Dispatcher at Building 2201 and Building occupants.
2	Check audible/visual circuits.
3	Operate each manual pull station. Verify area control panel is in alarm and reset after each manual pull station
4	Activate each smoke detector. Verify area control panel is in alarm and reset after each smoke detector test.
5	Verify alarm sent to Security Dispatcher.
6	Place a "trouble" on area control panel; disable audible/visual devices.
7	Place each zone into alarm sequentially; reset the panel.
8	Measure and record battery voltage under full load conditions with battery charger disconnected.
9	Verify the conditions of the batteries; replace batteries if not operating properly.
10	Correct any discrepancies and return system to normal configuration.
11	Notify Security Dispatcher - test complete.
12	Review computer printout; verify alarms are in the same sequence as was performed in steps 3 and 4 above, and that the text matches schedule.

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET #E-23
 Fire Protection & Detection Systems**

Facility Security Systems

Task #1

Frequency-Semi-Annually(26 weeks)

Step	Description
1	Notify Security Dispatcher at Building 2201 and building occupants.
2	Activate Security System. Verify area control panel is in alarm and reset security system after test.
3	Verify alarm sent to Security Dispatcher.
4	Correct all discrepancies and return system to normal configuration.
5	Notify Security Dispatcher - test complete.

Facility Security Systems

Task #2

Frequency-Annually(52 weeks)

Step	Description
1	Notify Security Dispatcher at Building 2201 and building occupants.
2	Activate Security System. Verify area control panel is in alarm and reset security system after test.
3	Verify alarm sent to Security Dispatcher.
4	Correct all discrepancies and return system to normal configuration.
5	Notify Security Dispatcher - test complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-24

Fire Protection & Detection Systems

Sprinkler and Suppression Systems

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Notify Security of the location where testing and checks will be conducted.
2	Check system and all components for visual damage.
3	Verify Hydraulic nameplate is attached.
4	Verify exterior alarms are identified.
5	Clean strainers and filters.
6	Record sprinkler supply pressure.
7	Record sprinkler system pressure.
8	Perform main drain flow test. Record valve size, system pressure and supply pressure while flowing.
9	Ensure water flow alarm devices activate.
10	Ensure exterior alarms activate.
11	Perform inspectors test flow.
12	Record time to ring alarm from main drain or inspectors test flow valve.
13	Record time to ring alarm from flow switch or pressure switch.
14	Correct any discrepancies if possible. If not, document and advise Shift Fire Dept. Lieutenant
15	Notify Security when tests are complete.

Task #2

Frequency- Annual (52 weeks)

Step	Description
1	Notify Security of the location where testing and checks will be conducted.
2	Inspect alarm and check valves internally.
3	Lubricate and operate control valves through their full range and return to normal position. (Note: When opening post indicator valves, open until spring or torsion is felt in the rod. Turn post indicator and OS&Y valves back 1/4 turn from fully open position)
4	Verify tamper switches and/or locks are in place and work properly.
5	Perform Quarterly PM or Main drain test after operating control valves.
6	Correct all discrepancies if possible. If not, document and advise Shift Fire Dept. Lieutenant
7	Notify Security when tests are complete.

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CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	8/00	Deleted Annual Frequency (Steps duplicate of Semi-Annual)
Total revision of all steps in Semi-Annual Frequency		
2	3/04	Changed Semi Annual to Quarterly; to better meet NFPA 25 standards. Removed steps 2, 3, 4, 7 Steps 1, 7 were changed to “Notify Security...” instead of “Notify Fire Dept...” Added new steps (2-5) Added Annual frequency to maintain control, alarm, and check valves.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-25

Fire Protection & Detection Systems

Fire Hydrants

Task #1

Frequency- Annually (52 weeks)

Step	Description
1	Consult NFPA 25 – to compute water flow.
2	Remove caps and open hydrant. Ensure water discharge is directed away from areas that may be damaged by the water.
3	Inspect for damage. Lubricate caps. Threads must be in good condition. Identify any leaks.
4	Lubricate operating nut and stem with appropriate oil or grease for the hydrant. Verify valve and operating nut/stem work smoothly.
5	Verify that barrel drains are working properly.
6	Notify Shift Fire Dept. Lieutenant of any discrepancies & ensure proper entries are made on the work order. Make proper entries in daily log and/or records

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	3/04	Added steps 4 & 5

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-26

Fire Protection & Detection Systems

CO₂ SUPPRESSION SYSTEM

TASK #1

WEEKLY

1	Record tank pressure and liquid level gauge readings in the system's data logbook. If tank shows a level loss of more than 10 percent from previously logged reading, inspect system for leakage. If the minimum gas requirements (10,500 lbs) are not provided, contact system engineer to refill tank. If tank pressure is out of the normal range (250 – 315 psig), inspect refrigeration unit for proper operation and/or inspect system for leakage.
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TASK #2

MONTHLY

1	Inspect gauges and refrigeration unit for proper operation.
2	Inspect tank, valves, and piping for leaks, cracks in insulation, and damage.

TASK #3

SEMI-ANNUALLY

1	Inspect entire system (tank, valves, piping, refrigeration unit, gauges, etc.) for leaks, cracks in insulation, and damage.
2	Remove man way access panel and check man way insulation for water/ice buildup. Inspect for signs of leakage around man way and repair as required.
3	Refrigeration System: A. Check voltage and amperage B. Check disconnect switch for good contact when closed C. Inspect fuses, fuse holders, and fuse size D. Remove all junction box covers and inspect wiring E. Inspect refrigeration pressure switch contacts and check switch for proper operation (on at 305 psig, off at 295 psig) F. Check dual refrigerant pressure control for proper operation (off at +6 psig, on at +18 psig, off at 300 psig) G. Check oil level in compressor H. Clean condenser coil I. Check refrigerant level J. Check moisture indicator for a dry system indication K. Check suction pressure (15-22 psig at 60 degrees F or above)

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	L. Check discharge pressure
4	Check operation of Abnormal Pressure alarm and Low Actuation Pressure alarm

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-27

Fire Protection & Detection Systems

KITCHEN HOOD WET CHEMICAL SYSTEM

TASK #1

MONTHLY

1	Verify the extinguishing system is in proper location for maximum fire suppression
2	Verify manual actuators are unobstructed
3	Verify tamper indicators and seals are intact
4	Verify no damage or corrosion exists that may prevent operation
5	Verify the pressure gauge(s), if provided, is in operable range
6	Verify nozzle blow-off caps are intact and undamaged
7	Verify the hood, duct, and protected cooking appliances have not been replaced, modified, or relocated

TASK #2

SEMI-ANNUALLY

1	Verify the hazard this system covers has not changed
2	Inspect all detectors, expellant gas container(s), releasing devices, piping, hose assemblies, nozzles, signals, and all auxiliary equipment
3	Verify the agent distribution system is not obstructed
4	Inspect chemical containers and other system components for corrosion and damage

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-28

TRANSFORMER, SPARE B4400

Task #1

Frequency - Weekly

Step	Description
1	Inspect transformer for oil leaks (notify FOSC Environmental Personnel if leaks are found)
2	Inspect level, & temperature gages for abnormal readings
3	Verify positive pressure (but less than 5 psig) on transformer (have Plumbing Shop adjust pressure regulator as needed)
4	Inspect pressure gauge for the nitrogen purge for the amount of nitrogen left in bottle (coordinate with Plumbing Shop for repair of leaks in the nitrogen purge tubing and/or change out of nitrogen bottle)

Task #2

Frequency - Annually (52 weeks)

Step	Description
1	Perform gas in oil analysis

Task # 3

Frequency - Triennial (156 weeks)

Step	Description
1	Measure winding resistance & compare to historical data
2	Conduct power factor test

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-29

GNB Battery Charger

Task #1

Frequency- Semi-Annually (26 weeks)

Step	Step Description
1	Place unit on maintenance bypass and safe. Inspect all internal power cables for overheating or other damage. Inspect all PC board connections and replace any defective inverter power assemblies. Note: Depending on power up access, an infrared scan of the unit can be substituted for visual inspection. Inspect fuses and breakers.
2	Inspect cooling fan(s) and charger cabinet for dust or dirt buildup, clean as necessary. Check for any impediments to fan(s) rotation(s).

Task #2

Frequency- Annually (52 weeks)

Step	Step Description
1	Measure and record A.C. Input Voltages.
2	Measure and record D.C. Output Voltages.
3	Measure and record Float and Equalize Voltages at the Output Terminals.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
Basic	8/01	Initial Release

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-30

Variable Frequency Drives

Task #1

Frequency- Annually (52 weeks)

Step	Description
1	Perform IR analysis of variable frequency drive.
2	Check functionality of panel lamps and replace as necessary.

Task #2

Frequency- Triennial (156 weeks)

Step	Description
1	Clean cubicle, check connections, inspect contactor and overload relay for damage or wear, inspect DC bus capacitors, check circulating fans, and verify heat sink temperature.
2	Take voltage measurements on bus network and components.
3	Operate “Hand-Off-Auto” switch and verify functionality.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #E-31

Starters

Task #1

Frequency- Annually (52 weeks)

Step	Description
1	Perform IR analysis of starter.
2	Check functionality of panel lamps and replace as necessary.

Task #2

Frequency- Triennial (156 weeks)

Step	Description
1	Clean cubicle, inspect contactor and overload relay for damage or wear.
2	Operate "Hand-Off-Auto" switch and verify functionality.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #EL-1

Elevator Systems

Electric Traction

Task #1

Frequency – Monthly (4 weeks)

Step	Description
1	Check firefighters' recall key switch for proper operation.
2	Check for presence of fire extinguisher in equipment room, for proper pressure range and replace extinguisher if required.

Task #2

Frequency-Semi-Annually (26 weeks)

Step	Description
1	Check for proper operation of door opening and closing devices.
2	Check for proper landing/level between car and building floors.
3	Check car operating control devices for proper operation.
4	Check car lighting for proper operation.
5	Check car emergency signal and telephone for proper operation.
6	Check for structural integrity and secure mounting of car, guide rail brackets and rails, wire rope attachments, sheaves, drive hoist components and limit switches.
7	Check gear box oil level and refill as required.
8	Lubricate motor to drum drive components as required.
9	Lubricate guide rails, door linkages and sheave bearings as required.
10	Lubricate hoist and governor wire ropes as required.
11	Check that the car top and machine room are clean and dry.
12	Check the inspection switch on top of the car for proper operation.
13	Check stop switches for proper operation.
14	Perform insulation resistance test on drive motor. A reading below 1 megohm requires additional inspection or repairs.
15	Check buffers for bent or broken parts.
16	Check wire rope per ASME 17.1, Safety Code for Elevators and Escalators, and change if required.
17	Check that counterweight does not contact buffers during elevator operation.
18	Check sump pump for proper operation.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	2/06	MTS completely revised to agree with elevator code.

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #EL-1 Elevator Systems

Electric Traction

Task #3

Frequency-Annually (52 weeks)

Step	Description
1	Check for proper operation of door opening and closing devices.
2	Check for proper landing/level between car and building floors.
3	Check car operating control devices for proper operation.
4	Check car lighting for proper operation.
5	Check car emergency signal and telephone for proper operation.
6	Check electrical connections from power supply to drive motor.
7	Check for structural integrity and secure mounting of car, guide rail brackets and rails, wire rope attachments, sheaves, drive hoist components and limit switches.
8	Check gear box oil for dirt, grease or other impurities and drain/refill as required.
9	Lubricate motor to drum drive components as required.
10	Lubricate guide rails, door linkages and sheave bearings as required.
11	Lubricate hoist and governor wire ropes as required.
12	Check that the car top and machine room are clean and dry.
13	Check the inspection switch on top of the car for proper operation.
14	Check stop switches for proper operation.
15	Perform insulation resistance test on drive motor. A reading below 1 megohm requires additional inspection or repairs.
16	Check buffers for bent or broken parts.
17	Check wire rope per ASME 17.1, Safety Code for Elevators and Escalators, and change if required.
18	Check condition of limit switches and brake solenoid.
19	Check drive brake mechanism for loose or worn components, evidence of binding, lining wear, proper lubrication and check drum to lining clearance.
20	Check that counterweight does not contact buffers during elevator operation.
21	Check sump pump for proper operation.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	2/06	MTS completely revised to agree with elevator code.

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #EL-2 Elevator Systems

Electric Hydraulic

Task #1

Frequency – Monthly (4 weeks)

Step	Description
1	Check firefighters' recall key switch for proper operation.
2	Check for presence of fire extinguisher in equipment room, for proper pressure range and replace extinguisher if required.

Task #2

Frequency-Semi-Annually (26 weeks)

Step	Description
1	Check for proper operation of door opening and closing devices.
2	Check for proper landing/level between car and building floors.
3	Check car operating control devices for proper operation.
4	Check car lighting for proper operation.
5	Check car emergency signal and telephone for proper operation.
6	Check for structural integrity and secure mounting of car, guide rail brackets, guide rails, cylinder/pillar brackets, drive hoist components and limit switches.
7	Check hydraulic tank oil level and refill as required.
8	Check hydraulic pumping system for oil leaks and condition of lines.
9	Check the car jack cylinder for proper lubrication.
10	Lubricate guide rails and door linkages as required.
11	Check that the car top and machine room are clean and dry.
12	Check the inspection switch on top of the car for proper operation.
13	Check stop switches for proper operation.
14	Check buffers for bent or broken parts.
15	Check that counterweight does not contact buffers during elevator operation.
16	Check sump pump for proper operation.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	2/06	MTS completely revised to agree with elevator code.

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #EL-2

Elevator Systems

Task #3

Frequency-Annually (52 weeks)

Step	Description
1	Check for proper operation of door opening and closing devices.
2	Check for proper landing/level between car and building floors.
3	Check car operating control devices for proper operation.
4	Check car lighting for proper operation.
5	Check car emergency signal and telephone for proper operation.
6	Check electrical connections from power supply to hydraulic pump motor.
7	Check for structural integrity and secure mounting of car, guide rail brackets, guide rails, cylinder/pillar brackets, drive hoist components and limit switches.
8	Perform PT&I analysis of hydraulic tank oil and fill/replace as required.
9	Check hydraulic pumping system for oil leaks and condition of lines and fittings at relief valve pressure for minimum of 30 seconds.
10	Verify that the relief valve will bypass full hydraulic pump flow.
11	Check oil pressure switch for proper operation.
12	Check the car jack cylinder for proper lubrication.
13	Hold car in raised position for 15 minutes to check for jack cylinder movement.
14	Lubricate guide rails and door linkages as required.
15	Check that the car top and machine room are clean and dry.
16	Check the inspection switch on top of the car for proper operation.
17	Check stop switches for proper operation.
18	Check buffers for bent or broken parts.
19	Check that counterweight does not contact buffers during elevator operation.
20	Check sump pump for proper operation.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	2/06	MTS completely revised to agree with elevator code.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #EL-3 Elevator Systems

Dumbwaiter

Task #1

Frequency-Annually

Step	Description
1	Check for proper operation of door/gate opening and closing devices.
2	Check for structural integrity and secure mounting of car, guide rail brackets, guide rails, wire rope attachments, sheaves, drive hoist components and limit switches.
3	Check gear box oil for dirt, grease or other impurities and drain/refill as required.
4	Lubricate motor to drum drive components as required.
5	Check drive brake mechanism for loose or worn components, evidence of binding, lining wear, proper lubrication, and check drum to lining clearance.
6	Check that the car top and machine room/pit are clean and dry.
7	Lubricate guide rails, door/gate linkages and sheave bearings as required.
8	Check call buttons/controller for loose terminal connections and components, burned or frayed wiring, dust buildup and proper operation of indicator lights.
9	Check electrical connections from power supply to drive motor.
10	Check limit switches and brake solenoid wire condition and terminal connections.
11	Perform insulation resistance test on drive motor. A reading below 1 megohm requires additional inspection or repairs.
12	Check wire rope for corrosion, abrasions, abnormal wear, cuts or other physical damage and replace if required. Omit steps 13, 14 and 15 if rope is replaced.
13	Check wire ropes for uniformity of tension.
14	Check actual rope diameter of a rope lay and replace the wire rope if the nominal diameter (inches) is reduced from 1/4 (0.25) to 7/32 (0.219). Omit step 15 if the rope is replaced.
15	Replace the wire rope if a rope lay contains 12 – 18 broken wire equally distributed among the strands, has 6-12 broken wires that predominates one or two strands, or has one or more valley breaks in the rope lay.
16	Lubricate the wire rope as required.
17	Perform a no-load operational test of safety devices and stop switches.
18	Check for proper landing/level between car and building floors.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/05	Deleted steps 1-2 and added new steps 1-17

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-1 Special Purpose Mobile Equipment

Fire Truck

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Lubricate chassis and drive train
2	Check engine oil level

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Lubricate motor fittings if applicable

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission and rear axle oil and filters
2	Repack wheel bearings
3	Replace engine antifreeze
4	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-4 to Task #3

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-2 Special Purpose Mobile Equipment

Tour Bus

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check tire condition and air pressure.
2	Check engine, brake, transmission, power steering, coolant and battery fluid levels.
3	Check battery terminal connections.
4	Check interior and exterior lights.
5	Check instrument panel cluster for proper operation
6	Check braking systems for proper operation.
7	Check heating/air conditioning air filter and change if required.
8	Check the heating/air conditioning system for proper operation.
9	Check wheelchair lift for proper operation.

Task # 2

Frequency – Semi-Annually (26 weeks)

Step	Description
1	Change engine oil and filter.
2	Lubricate steering, suspension and driveline zerk fittings as required.

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission and differential oil.
2	Check/clean transmission filter and change if required.
3	Change engine coolant.
4	Change fuel filter.
5	Change engine air filter.
6	Check brake pads, shoes, rotors, drums, lines, hoses and parking brake system components and repair/replace as required.
7	Check engine belts.
8	Check engine exhaust system.

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9	Operate wheelchair lift to check clearances, roll stop, landing, handrails and for loose/missing snap rings or bracket/cotter pins.
10	Lubricate wheelchair lift pivot and slide points as required.
11	Check wheelchair lift for proper operation and check microswitches and solenoids.
12	Check wheelchair lift hydraulic fluid level and condition.
13	Check wheelchair lift for secure mounting of cylinders and for leaks.
14	Check wheelchair lift power cable and connections to battery.
15	Perform wheelchair lift rated load test (800 lbs.) per appropriate job plan.

Task # 4

Frequency – Three Year (156 weeks)

1	Replace engine spark plugs.
2	Change engine PCV valve.
3	Lubricate/repack wheel bearings.
4	Check NGV fuel tanks, fittings and lines.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-4 to Task #3
2	6/05	Deleted Task #1 steps 1-2 and added 1-9; Added new Task #2 step 2; revised Task #3 steps 1 and 3 verbiage and deleted step 4, added new step 2 and steps 4-15; added Task #4.

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-3 Special Purpose Mobile Equipment

Ambulance

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Lubricate chassis and drive train
2	Check engine oil level

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Lubricate motor fittings if applicable

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission and rear axle oil and filters
2	Repack wheel bearings
3	Replace engine antifreeze
4	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	8/00	Deleted
2	12/00	Added Step-4 to Task #3

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-4 Special Purpose Mobile Equipment

Light & Heavy Duty Trucks

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check engine oil

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	For automatic transmission change transmission oil and filter
2	Change engine antifreeze
3	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-3 to Task #3

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-5 Special Purpose Mobile Equipment

Reach-All Bucket Truck

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check oil levels at axles, transmission, power take off case and engine crankcase
2	Check fluid levels in gear reduction boxes
3	Apply Heavy Duty Multipurpose Grease to the following Zerk fittings: A. Turntable bearing B. Turntable drive gearbox C. Lower boom pivot pin D. Lift cylinder pivots E. Elbow cylinder pivots F. Upper boom pivot pin G. PTO shaft H. Outrigger cylinder pivots I. Outrigger arm pivots
4	Apply Heavy Duty Multipurpose Grease to Turning Gear toothed surfaces
5	Check gearcase oil level on turntable drive gearbox; fill with SAE-140 oil
6	Check platform leveling gearbox oil level; fill with SAE-140 oil
7	Apply one or two drops of oil to Control valve linkage pivots.
8	Check engine oil level

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Send vehicle off-site for PM on Hydraulics, Dielectric Testing and Load Test

Task # 3

Frequency – Annually (52 weeks)

Step	Step Description
1	Change oil in differentials, transmission and power take off case as per manufacturer’s specifications
2	Drain and flush hydraulic reservoir; refill per manufacturer’s specifications
3	Drain and flush cooling system

4	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.
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CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-4 to Task #3

Revision No: 1
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-6 Special Purpose Mobile Equipment

Altec Pole Truck

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check oil levels at axles, transmission and power take off case and engine crankcase

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Perform on the chassis winch and turntable winch: A. Check gear box oil level; fill as required. B. Lubricate outboard shaft bearings. C. Lubricate worm bearings
3	Perform on the outriggers: A. Lubricate outrigger valve handle linkage B. Lubricate outrigger leg outer surface
4	Perform on the Turntable: A. Check rotation gear box oil level B. Lubricate rotation bearing bull gear teeth C. Lubricate rotation box pinion gear teeth D. Lubricate rotary joint E. Lubricate rotation gear box pinion shaft upper bearing F. Lubricate rotation bearing ball race
5	Lubricate lift cylinder pivot bearings
6	Lubricate 2 nd stage winch rope rollers
7	Lubricate 2 nd stage boom outer surfaces
8	Lubricate 3 rd stage slide bearing pivot point
9	Lubricate auger stow switch plunger
10	Lubricate boom stow switch plunger
11	Perform on pole guide: A. Lubricate pole guide tilt pivot pins B. Lubricate pole guide rack and gear teeth
12	Apply anti-seize lubricant to transferable tip pins and bosses

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13	Perform on the auger assembly: A. Lubricate auger stowage bracket latch B. Lubricate auger wind-up cable
14	Perform on the digger assembly: A. Check digger motor oil level B. Lubricate digger link detent paddle C. Lubricate digger link pivot pins

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Replace engine antifreeze
2	Drain differentials, transmission and power take off case and refill as per manufacturer’s specifications
3	Drain and flush hydraulic reservoir; refill per manufacturer’s specifications
4	Clean/change reservoir filler hole strainer
5	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-5 to Task #3

**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # EQ-7
Special Purpose Mobile Equipment**

Semi-Trailers

Task # 1

Frequency – Semi annually (26 weeks)

Step	Description
1	Lubricate kingpin and plate, ball receptacle if applicable, gooseneck fittings, front dolly gear boxes, brake linkage and chassis components per manufacturer's specifications
2	Lubricate air brake slack adjusters

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-8 Special Purpose Mobile Equipment

Forklifts, Gasoline and Diesel

Task # 1

Frequency – Semi annually (26 weeks)

Step	Description
1	Lubricate all grease fittings with multipurpose grease
2	Check transmission oil level
3	Check differential oil level
4	On Clark forklift NL 120-116 only, check oil level in the wheel planetary hub
5	Change engine oil and filter
6	Check lubricant in steering box
7	Check fluid level of hydraulic tank
8	Apply grease, multipurpose to mast slide bars with brush

Task # 2

Frequency – Annually (52 weeks)

Step	Description
1	Drain transmission and replace transmission filter and refill
2	Drain and flush cooling system
3	Check hydraulic fluid for metal shavings and other contamination
4	Drain and flush hydraulic system, if required, replace hydraulic fliter and refill. Operate hydraulic system to remove air.
5	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-5 to Task #2

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-9 Special Purpose Mobile Equipment

Hydraulic Mobile Cranes

Task # 1

Frequency – Monthly (40 hour)

Step	Description
1	Boom and Cab: A. Lubricate fittings and slider pads with multipurpose grease B. Lubricate swing gear with wire rope grease C. Check swing reducer gear oil level
2	Engine: A. Check oil level

Task # 2

Frequency – Quarterly (100 hour)

Step	Description
1	Carrier: A. Lubricate fittings with multipurpose grease B. Check the clutch master cylinder fluid lever
2	Engine: A. Change the crankcase oil and filter

Task # 3

Frequency – Semiannual (200 hour)

Step	Description
1	Collector Ring: A. Lubricate the collector ring base with multipurpose grease
2	Carrier: A. Remove and replace the hydraulic tank filters B. Check fluid levels of the main and auxiliary transmissions C. Check the rear axles fluid levels D. Drain fuel tank of water or sediment
3	Engine:

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	A. Lubricate alternator bearings B. Lubricate the throttle control mechanism
4	Jib Attachment: A. Lubricate bearings on the jib pulley using multipurpose grease

Task # 4

Frequency – Annual (500 hour)

Step	Description
1	Winches: A. Check fluid level
2	Carrier: A. Drain and refill the hydraulic tank B. Repack all axle wheel bearings with heavy duty grease
3	Engine: A. Lubricate the over-speed governor B. Replace engine antifreeze C. Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.
4	Differential: A. Drain and refill the rear differential
5	Transmission: A. Drain and refill the main and auxiliary transmissions
6	Proof test as specified in MI CP-1001

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added B&C to Step-3 on Task #4

JOHN C. STENNIS SPACE CENTER

MAINTENANCE TASK SHEET # EQ-10

Special Purpose Mobile Equipment

Personnel Lift

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Chassis and Drive Train: A. Apply multipurpose grease to swing bearing and all grease fittings B. Check oil level in wheel hubs C. Apply spray-dry graphite to the swing pinion and swing bearing gears D. Check oil level in winch drive E. Extend axles and apply spray-dry graphite or moly-lube
2	Gasoline Engine: A. Check engine oil level
3	Hydraulic and Boom System: A. Check hydraulic oil level on the sight gauge

Task # 2

Frequency – Annually (52 weeks)

Step	Description
1	Chassis and Drive Train: A. Change fluid in winch drive and power hubs
2	Gasoline Engine: A. Change engine oil and filter B. Replace engine antifreeze C. Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.
3	Hydraulic and Boom System: A. Drain hydraulic system and flush if fluid shows dirt or contamination B. Remove and replace hydraulic oil filter

CHANGE RECORD

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1	12/00	Added B&C to Step-2 on Task #2
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-11 Special Purpose Mobile Equipment

Excavator

Task # 1

Frequency – Quarterly

Step	Description
1	Check engine oil
2	Check oil level in final drives
3	Check oil level in swing drive
4	Lubricate the swing bearing grease fittings located under the boom base
5	Check the hydraulic oil tank level
6	Apply multipurpose grease to all fittings

Task # 2

Frequency – Semi annually

Step	Description
1	Check radiator coolant level
2	Drain water and sediment from fuel tank
3	Lubricate the swing internal gear

Task # 3

Frequency – Annually

Step	Description
1	Change radiator coolant
2	Change engine oil and filter
3	Change the oil in the final drives
4	Change the oil in the swing drive
5	Drain hydraulic oil and run oil through the hydraulic oil filterization system to clean oil
6	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-6 to Task #3
2	04/06	Removed "Caterpillar" from title

Revision No: 1
Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-12
 Special Purpose Mobile Equipment**

Trashmaster Compactor

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Lubricate fittings on compactor (including center articulation joint, steering cylinders, blade lift cylinders and blade pivot points) with general purpose grease
2	Check transmission fluid condition and level
3	Check differential oil level
4	Drain crankcase oil, replace oil and filter and refill with SAE-15W40 diesel oil
5	Drain water and sediment from fuel-water filter
6	Check front and rear planetary wheel end oil level
7	Check hydraulic tank level
8	Check coolant cleanliness and specific gravity. Replace and flush if necessary
9	Perform Hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

Task # 2

Frequency – Annually (52 weeks)

Step	Description
1	Drain transmission, remove and replace filter. Check transmission fluid condition. Replace and flush if necessary.
2	Drain and flush hydraulic system, change hydraulic filter and refill

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<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Step-9 to Task #1

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**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # EQ-13
Special Purpose Mobile Equipment**

Utility Trailers

Task # 1

Frequency – Semi annually (26 weeks)

Step	Description
1	Lubricate the spring hanger bushings with grease
2	Lubricate landing gear with grease
3	Apply oil to parking brake hinge points and cables

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-14 Special Purpose Mobile Equipment

Caterpillar Tractor/Dozer

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check diesel engine crankcase oil level
2	Lubricate track roller frame inner bearings (2 fittings) with multipurpose grease with molybdenum
3	Lubricate track roller frame outer bearings (2 fittings) with multipurpose grease with molybdenum
4	Lubricate track cylinder support and upper trunnion bearings (8 fittings) with multipurpose grease with molybdenum
5	Check hydraulic control system oil level
6	Lubricate dozer blade tilt brace (2 fittings) with multipurpose grease with molybdenum
7	Lubricate dozer blade tilt ball and socket (2 fittings) with multipurpose grease with molybdenum
8	Lubricate sprocket hub bearings with multipurpose grease with molybdenum
9	Check final drives (each side) oil level
10	Check cable control gear case oil level
11	Check transmission, bevel gear and steering clutch compartment oil level

Task # 2

Frequency – Annually (52 weeks)

Step	Description
1	Check hydraulic control system filter elements
2	Drain diesel fuel tank moisture and sediment and wash cap
3	Check diesel engine valve lash; adjust if necessary
4	Drain, flush and refill cooling system
5	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	12/00	Added Steps-4&5 to Task #2

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**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # EQ-15
Special Purpose Mobile Equipment**

Front End Loaders

Task # 1

Frequency – Monthly (4 weeks)

Step	Description
1	Lubricate fittings per mfg specification
2	Check hydraulic fluid level (with bucket on ground)
3	Check transmission fluid level
4	Lubricate loader control level linkage assembly
5	Check engine oil level

Task # 2

Frequency – Quarterly (13 weeks)

Step	Description
1	Change engine oil and filter
2	Change final drive lube levels
3	Check fluid level at front and rear differentials
4	Check radiator coolant

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Drain hydraulic system sump, install new steering filter and refill
2	Drain transmission, install new filter and refill
3	Drain front and rear differentials and refill
4	Drain, flush and refill cooling system
5	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
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1	12/00	Added Steps-4&5 to Task #3
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**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # EQ-16
Special Purpose Mobile Equipment**

Portable Generator

Task # 1

Frequency – Quarterly

Step	Description
1	Check crankcase oil level/ add SAE-30 engine oil diesel
2	Check radiator coolant level
3	Check generator bearing oil level; SAE-30 engine oil

Task # 2

Frequency – Semi annually

Step	Description
1	Check crankcase oil level and cleanliness

Task # 3

Frequency – Annually

Step	Description
1	Drain crankcase and replace oil filter. Refill crankcase with SAE-30 engine oil diesel.
2	Change generator bearing oil; SAE-30 engine oil.
3	Drain and refill cooling system (if applicable)
4	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.
5	Connect generator to load bank and operate under 80% rated load for minimum of 10 minutes.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	Changed frequency from bi-weekly to quarterly
2	12/00	Added Steps 3&4 to Task#3
3	4/05	Added Step 5 to Task #3

Revision No: 1
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JOHN C. STENNIS SPACE CENTER

MAINTENANCE TASK SHEET # EQ-17

Special Purpose Mobile Equipment

Tractor

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replace as required
2	Change engine oil and filter
3	Check and replace air filter as necessary

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings
3	Check all fluid levels and replace as required
4	Check and replace air filter as necessary

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission oil and filter
2	Service cooling system
3	Change engine oil and filter
4	Service hydraulic system
5	Grease all fittings
6	Service steering system
7	Inspect and repair/replace safety devices such as lights, flashers, tires, etc.
8	Replace air filter
9	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-9 to Task#3

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**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-18
 Special Purpose Mobile Equipment**

Four Wheeler

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replace as required

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings
3	Check and replace air filter as required

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings
3	Check and replace air filter as required

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-19
 Special Purpose Mobile Equipment**

Mower, Toro Groundmaster 345

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check fluid levels and replace as required
2	Change engine oil and filter
3	Check and replace air filter as necessary

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings
3	Check fluid levels and replace as required
4	Check and replace air filter as necessary

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change engine oil and filter
2	Service cooling system
3	Grease all fittings
4	Service hydraulic system
5	Service steering system
6	Inspect and repair/replace safety devices such as lights, flashers, tires, etc.
7	Replace air filter
8	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-8 to Task#3

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**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-20
 Special Purpose Mobile Equipment**

Hydraulic Sweeper, MTD HT76280

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replace as required

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings
3	Check all fluid levels and replace as required

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission oil and filter
2	Service cooling system
3	Change engine oil and filter
4	Service hydraulic system
5	Grease all fittings
6	Service steering system
7	Inspect and repair/replace safety devices such as lights, flashers, tires, etc.
8	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-8 to Task#3

Revision No: 1
 Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-21 Special Purpose Mobile Equipment

Roto Hoe Tiller

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replace as required

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission oil and filter
2	Change engine antifreeze
3	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-3 to Task#3

Revision No: 1
Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-22
 Special Purpose Mobile Equipment**

Sod Cutter KT013

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replace as required

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission oil and filter
2	Change engine antifreeze
3	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-3 to Task#3

Revision No: 1
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**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-23
 Special Purpose Mobile Equipment**

Refuse Truck

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replace as required

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission oil and filter
2	Change engine antifreeze
3	Check all doors, packing devices, and lifting arms
4	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-4 to Task#3

Revision No: 1
 Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-24
 Special Purpose Mobile Equipment**

Landscape Chipper TM40066

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check engine oil

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change transmission oil and filter
2	Change engine antifreeze
3	Service hydraulic system
4	Service cooling system
5	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added
2	12/00	Added Step-5 to Task#3

Revision No: 1
 Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-25
 Special Purpose Mobile Equipment**

Flail Mower AGGK

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check all fluid levels and replenish as required

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change engine oil and filter
2	Apply grease to fittings

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-26
 Special Purpose Mobile Equipment**

Batwing Mower

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check gearbox oil

Task # 2

Frequency – Semi annually (26 weeks)

Step	Description
1	Change gearbox oil as necessary
2	Apply grease to fittings
3	Service hydraulic system

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Change gearbox oil and filter
2	Apply grease to fittings
3	Service hydraulic system

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/00	New MTS added

JOHN C. STENNIS SPACE CENTER

MAINTENANCE TASK SHEET # EQ-27

Special Purpose Mobile Equipment

Street Sweeper

Task # 1

Frequency – Monthly

Truck chassis and engine

Step	Description
1	Check engine oil.

Auxiliary Engine

Step	Description
1	Check engine oil.
2	Clean radiator cooling fins and frontal area.

Sweeper Mechanism

Step	Description
1	Lubricate impeller & intake seals with petroleum jelly or equivalent.
2	Check impeller, impeller housing liner, and impeller housing bolts for wear.
3	Grease side broom turnbuckle with a lithium-based grease.
4	Grease side broom link bushing.
5	Check for tears or wear in all hoses and curtains.
6	Inspect water nozzles.
7	Adjust side broom disc angle as needed.

Task # 2

Frequency – Quarterly

Truck chassis and engine

Step	Description
1	Check all fluid levels and replace as required.
2	Check brakes and brake system.
3	Check all lights.
4	Check coolant system and perform hydrometer check.
5	Check air filter.
6	Check tires.

Auxiliary Engine

Step	Description
1	Check belts and hoses.
2	Check coolant system and perform hydrometer check.
3	Check all fluid levels and replace as required.
4	Check air filter.

Sweeper Mechanism

Step	Description
1	Check dirt shoe wear, replace when 80% worn.
2	Grease impeller shaft bushings with lithium based grease. (Do not use power gun or over grease)

Task # 3

Frequency – Semi-Annually

Truck chassis and engine

Step	Description
1	Change engine oil & filter.

Auxiliary Engine

Step	Description
1	Change engine oil & filter.

Task # 4

Frequency – Annually

Truck chassis and engine

Step	Description
1	Change transmission fluid & filter.
2	Check wheel bearings.

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-28
 SPECIAL PURPOSE MOBILE EQUIPMENT**

John Deere Bull Dozer

Task # 1

Frequency – Quarterly (13 weeks)

Step	Description
1	Check engine oil
2	Check oil level in final drives
3	Check oil hydraulic oil level
4	Check transmission oil level
5	Check winch oil level
6	Drain final fuel filter sediment
7	Drain water separator sediment
8	Clean dust un-loader valve (bottom of air cleaner assembly)
9	Grease blade and ball socket (2 fittings) with molybdenum multipurpose grease
10	Grease blade linkages (9 fittings) with molybdenum multipurpose grease
11	Grease attachment points for elevator rams (parallel to tracks 4 fittings per side) with molybdenum multipurpose grease

Task # 2

Frequency – Semi Annually (26 weeks)

Step	Description
1	Change engine oil and filter (SAE 15W-40 approx. 15 qt)
2	Replace final fuel filter
3	Replace primary fuel filter
4	Check coolant level and condition in radiator
5	Check air intake hose for cracks and loose clamps
6	Check battery terminals and electrolyte level
7	Inspect serpentine belt

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-28
 SPECIAL PURPOSE MOBILE EQUIPMENT**

Task # 3

Frequency – Annually (52 weeks)

Step	Description
1	Clean crankcase ventilation tube
2	Change final drives oil (SAE 80W-90 approx 9 qt per side)
3	Clean or replace winch hydraulic breather filter
4	Replace Dust Un-loader valve
5	Change engine air filters
6	Clean or replace cabin air filter

Task # 4

Frequency – Two Years (104 weeks)

Step	Description
1	Change hydraulic oil and filter (SAE 15W-40 approx 8.5 gal)
2	Change Transmission oil and filter (SAE 15W-40 approx 11.3 gal)
3	Drain, flush, and refill cooling system
4	Change winch oil and filter (SAE 80W-90 approx 10 gal. 9 gal through fill port located on top of winch, and 1 gal through dipstick)

Task # 5

Frequency – Five Years (260 weeks)

Step	Description
1	Change Engine Vibration Damper

CHANGE RECORD

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JOHN C. STENNIS SPACE CENTER

MAINTENANCE TASK SHEET # EQ-29

Special Purpose Mobile Equipment

John Deere Compact Track Loader

Task # 1

Frequency – Quarterly

Step	Description
1	Check engine oil
2	Check hydraulic tank oil level (check at sight glass)
3	Clean radiator and oil cooler
4	Check coolant level
5	Drain fuel and water separator filter
6	Lubricate boom linkage, cylinder pivots, and Quik-Tatch with multipurpose grease with molybdenum
7	Adjust track sag.

Task # 2

Frequency – Annually

Step	Description
1	Change engine oil and filter (13 qt - SAE 30)
2	Replace fuel and water separator filter
3	Replace in-line fuel filter
4	Replace primary air cleaner element
5	Replace hydraulic oil tank breather element
6	Replace hydraulic oil filter
7	Perform hydrometer check to ensure cooling system protection is minimum of 0°F. Adjust as required.

Task # 4

Frequency – Two Years

Step	Description
1	Change hydrostatic planetary oil (0.58 qt)
2	Replace secondary air cleaner element
3	Change hydraulic tank oil
4	Drain, flush, and refill cooling system

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-30 SPECIAL PURPOSE MOBILE EQUIPMENT

Caterpillar Wheeled Tractor-Scraper

Task # 1

Frequency – Quarterly (13 weeks)

Wheeled Tractor

Step	Description
1	Check engine crankcase oil level.
2	Check radiator coolant level.
3	Clean engine air precleaner.
4	Check engine air filter service indicator.
5	Clean engine air filter primary element.
6	Check engine air filter secondary element.
7	Check battery electrolyte level.
8	Check hydraulic system oil level.
9	Check transmission oil level.
10	Check differential and final drive oil level.
11	Drain air tank moisture and sediment.
12	Lubricate drive shaft universal joint.
13	Lubricate hitch.

Scraper

Step	Description
1	Drain fuel tank water and sediment.
2	Check wheel bearing oil level.
3	Lubricate elevator chain adjustment idler.
4	Lubricate elevator chain idler.
5	Lubricate elevator linkage.
6	Lubricate floor rollers.
7	Lubricate ejector guide rollers.
8	Lubricate elevator chain roller.
9	Lubricate elevator speed reducer.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # EQ-30 SPECIAL PURPOSE MOBILE EQUIPMENT

Caterpillar Wheeled Tractor-Scraper

Task # 2

Frequency – Semi Annually (26 weeks)

Wheeled Tractor

Step	Description
1	Obtain engine oil sample.
2	Change diesel engine crankcase oil & filter.
3	Clean radiator & hydraulic oil cooler fins.
4	Clean hydraulic tank breaker relief valve.
5	Obtain hydraulic system oil sample.
6	Clean fuel tank cap & strainer.
7	Check fuel system primary filter.
8	Obtain transmission oil sample.
9	Check belts for cracks, missing pieces, frayed areas or wear.
10	Obtain differential & final drive oil sample.
11	Check differential & final drive oil level.
12	Check moisture indicator on in-line refrigerant dryer.

Scraper

Step	Description
1	Check wheel bearing oil level.
2	Check/adjust ejector carrier rollers.
3	Check/adjust ejector guide rollers.
4	Check/adjust ejector support rollers.
5	Check/adjust clearance between elevator flight & cutting edge.
6	Check cutting edges and end bits.
7	Check/adjust draft arm wear plates.
8	Check/adjust elevator chain.

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # EQ-30
 SPECIAL PURPOSE MOBILE EQUIPMENT**

Caterpillar Wheeled Tractor-Scraper

Task # 3

Frequency – Annually (52 weeks)

Wheeled Tractor

Step	Description
1	Replace engine air filter secondary element.
2	Replace fuel system secondary filter.
3	Check fuel injection timing.
4	Clean/replace transmission oil filter & magnetic screen.
5	Change transmission oil.
6	Clean differential & final drive breather.
7	Clean suction screen (torque converter scavenge).
8	Replace ether starting aid cylinder.
9	Replace air dryer desiccant.
10	Clean/replace cab air filter.

Task # 4

Frequency – Two Years (104 weeks)

Wheeled Tractor

Step	Description
1	Change cooling system coolant.
2	Add cooling system coolant additive.
3	Check crankshaft vibration damper.
4	Check engine valve lash.
5	Check engine valve rotators.
6	Change hydraulic system oil.
7	Replace hydraulic system oil filter.
8	Change differential and final drive oil.
9	Check in-line refrigerant dryer.
10	Check accumulator (axle suspension).
11	Change wheel bearing oil.

Scraper

Step	Description
1	Change elevator speed reducer oil.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-1

Centrifugal Chiller

Task #1

*Frequency-Semi-Quarterly (45 days) – compressor speeds 5000 rpm
& greater*

Quarterly (13 weeks) – compressor speeds below 5000 rpm

Step	Description
1	Log chiller condition upon arrival to job site and prior to the start of any work.
2	Perform vibration analysis per vibration analysis specifications in EXHIBIT II , including evaluation of the data from the analysis, and compiling a report of the findings and recommendations.
3	Perform leak check for refrigerant.

Task #2

Frequency- Semi-Annually (26 weeks)

Step	Description
1	Pull oil sample and perform an oil analysis per specifications in attachment EXHIBIT II , including evaluation of the data and a report of the findings and recommendations.
2	Change oil and replace filters as required, based on oil analysis. Filters shall be replaced on frequency no greater than 36 months (Analysis quarterly report shall indicate the date of the last oil change). Only OEM specified oils shall be used (No substitutes shall be allowed).

Task #3**Frequency- Annually (52weeks)**

Step	Description
1	Log chiller condition upon arrival to job site and prior to the start of any work.
2	Obtain refrigerant sample and perform a refrigerant analysis to check for acid and/or moisture. Verify compliance with ARI 700; change filter-dryers and/or refrigerant as required to bring refrigerant within ARI standard (Confirmed by analysis).
3	Functionally test, check, clean, tighten, and calibrate all safeties, interlocks, electrical connections/controls, gauges and meters associated with the chiller and chiller motor control center switch gear and starter.
4	Functionally test all motor electrical safety voltage and current devices, i.e., dash pot relays, single-phase protection devices, and voltage protection relays. Perform both load test and voltage test to devices to assure functionality and calibration. Perform thermography on motor controller and associated wiring connections (from line feed terminals to the equipment load).
5	Visually inspect compressor motor and oil pump motor terminals and connections. Meg test compressor and oil pump motor. Perform Motor Current Signature Analysis on compressor motor.
6	Check all refrigerant, oil, chilled water, and condenser water operating temperatures, pressures and flows associated with the chiller during normal operation and verify that all are within manufacturer's recommended parameters. Verify chilled water and condenser water flows are within manufacturer's design. Test the operation of all flow switches, high/low oil switch, high/low compressor discharge and suction refrigerant pressure switches, and operation of all pump auxiliary contacts.
7	Inspect and leak check/test for any refrigerant or oil leaks.
8	Check for proper superheat and subcooling, (refrigerant charge).
9	Verify and test for proper operation of gear case and oil sump heaters. Verify for proper control of temperature.
10	Verify proper operation of the vane control system. Check for free and smooth operation.
11	Start and stop chiller and verify for proper sequence of operation relative to transition of motor starters and post and pre lube oil pump motor operation. Verify operation of start/stop and anti-recycle timers.
12	Verify working condition of all indicator and alarm lights.
13	Functionally check for the proper operation of all chiller auxiliary equipment. Verify proper operation of chilled water pump, condenser water pump and cooling tower.
14	Functionally check operation of the condenser water tube brush cleaning system n(where applicable).
15	Functionally check operation of the condenser water cooling tower bypass valve.
16	Functionally test and calibrate the local refrigerant leak detection, refrigerant emergency exhaust fan and alarm system (where applicable).

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17	Functionally test and verify for proper operation of the chiller purge system and replace refrigerant dryers (where applicable).
18	Functionally test and verify for proper operation of the chiller hot gas bypass system and associated controls (where applicable).
19	Check the equipment room, the chiller, the piping system and associated equipment for rust and corrosion. Clean, paint and repair damaged or corroded surfaces and insulation.
20	Remove trash, dust and debris from equipment cabinets, surfaces and equipment room.
21	Provide a complete inspection/analysis report relative to all work/task performed upon completion. Provide also a report of all discrepancies found as a result of all inspections and analysis along with corrective actions taken and/or recommended corrections or modifications.

Task #4

Frequency- 5 Years (260 weeks)

The following requirements shall be performed on each chiller every five (5) years (maximum allowed time span between analysis for a chiller). This work shall be scheduled such that the procedures will be performed on approximately the same number of chillers each fiscal year, and all chillers shall be covered over a five year period.

Step	Description
1	Clean and check chiller tubing banks: chilled water tubing and condenser water tubing (where applicable).
2	Perform eddie current tubing analysis.
3	Provide a complete inspection/analysis report relative to all work/task performed upon completion. Provide also a report of all discrepancies found as a result of all inspections and analysis along with recommended additional testing, corrections or modifications.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	2/01	Revised Task 1 to delete Steps 3 and 4. Added Task 2, Steps 1 and 2. Changed Task 2 to Task 3. Changed Task 3 to Task 4.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-2

Reciprocating Chiller

Frequency- Annual (52weeks)

Step	Description
1	Log chiller condition upon arrival to the job site and prior to start of any work. Inspect for vibrations, unusual noises, etc.
2	Pull oil sample and perform a complete oil analysis. Compile a report of the findings and evaluation of the data from the analysis (Shall meet requirements of EXHIBIT II).
3	Obtain refrigerant sample and perform a refrigerant analysis to check for acid and/or moisture.
4	Change oil and filter elements (oil and refrigerant), as determined by oil and refrigerant analysis.
5	Check all refrigerant, oil, chilled water, and condensing water operating temperatures, pressures and flows associated with the chiller during normal operation and verify that all are within manufacturer's recommended parameters. Verify chilled water and condenser water flows are within manufacturer's design. Test the operation of all flow switches, high/low oil switch, high/low compressor discharge and suction refrigerant pressure switches, and operation of all pump auxiliary contacts. Calibrate as needed.
6	Check all motor electrical connections, safety voltage and current devices, starters, etc. Perform thermography on motor controller and associated wiring and connections (from line feed terminals to the equipment load).
7	Meg test compressor motors.
8	Check motor shafts and alignment, as applicable.
9	Lubricate rotating and moving components, as applicable.
10	Switch the lead-lag compressor, as applicable.
11	Check for refrigerant and oil leaks.
12	Clean air cooled condenser coils (where applicable).
13	Check for proper refrigerant charge, superheat and subcooling.
14	Functionally check controls: chilled water temperature, hot gas bypass, low ambient controls, condenser water cooling tower bypass, pump interlocks, etc., as applicable.
15	Check the equipment room, the chiller and associated equipment for rust and corrosion. Clean, paint and repair damaged or corroded surfaces and insulation.
16	Remove trash, dust and debris from the equipment cabinets, surfaces and equipment room.
17	Check chilled water piping system and peripheral equipment for proper operation, for damage, leaks, rust and corrosion. Clean, paint and repair damaged or corroded equipment and components as applicable.

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Task #2

Frequency- 5 Years (260 weeks)

The following requirements shall be performed on each chiller every five (5) years (maximum allowed time span between analysis for a chiller). This work shall be scheduled such that the procedures will be performed on approximately the same number of chillers each fiscal year, and all chillers shall be covered over a five year period.

Step	Description
1	Clean and check chiller tubing banks: chilled water tubing and condenser water tubing (where applicable).
2	Perform eddie current tubing analysis.
3	Provide a complete inspection/analysis report relative to all work/task performed upon completion. Provide also a report of all discrepancies found as a result of all inspections and analysis along with recommended additional testing, corrections or modifications.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-3

Cooling Tower – gear drive

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Perform Vibration Analysis (per EXHIBIT III). Initiate corrective actions as applicable.

Task #2

Frequency- Annual (52 weeks)

Step	Description
1	Check equipment and piping for leaks.
2	Clean towers including inside basins, packing, eliminators, structural components and tower exterior, removing scale, corrosion and debris.
3	Check tower (interior and exterior) and piping for rust, corrosion and leaks. Clean paint and repair surfaces, insulation and sealants.
4	Check bearings and rotating equipment: vibration, noise, overheating, etc.
5	Check fan assembly: Fan, screens, louvers, stack, etc.
6	Lubricate motors and other moving components (where applicable)
7	Check gear oil (where applicable). Replace as required (5 year maximum time span between gear oil change out).
8	Check sump heaters and electrical pipe trace heating (where applicable).
9	Check electrical connections. Perform thermography on motor starter panel.
10	Functionally verify proper operation of controls and instrumentation.
11	Check make-up water valve operation.
12	Remove trash and debris from cooling tower pad/area.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-4

Cooling Tower – belt driven fan

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Check belts: vibration, noise, alignment, wear, etc. Perform adjustments and replace belts as required. Perform vibration analysis (per EXHIBIT III).

Task #2

Frequency- Annual (52 weeks)

Step	Description
1	Check equipment and piping for leaks.
2	Clean towers including inside basins, packing, eliminators, structural components and tower exterior, removing scale, corrosion and debris.
3	Check tower (interior and exterior) and piping for rust, corrosion and leaks. Clean paint and repair surfaces, insulation and sealants.
4	Check bearings and rotating equipment: vibration, noise, overheating, etc.
5	Check fan assembly: Fan, screens, louvers, stack, etc.
6	Lubricate motors and other moving components (where applicable).
7	Check sump heaters and electrical pipe trace heating (where applicable).
8	Check electrical connections.
9	Functionally verify proper operation of controls and instrumentation.
10	Check make-up water valve operation.
11	Remove trash and debris from cooling tower pad/area.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-5

Gas Boiler/Heating Water

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Functionally test, check, clean, tighten, and calibrate all safeties, interlocks, electrical connections/controls, gauges, meters and fittings associated with the boiler.
2	Inspect water piping for leaks.
3	Lubricate motors and other moving components, as applicable.
4	Clean interior of boiler and remove loose scale, soot, slag or similar deposits.
5	Examine interior of boiler for corrosion or damage. Check refractory, insulation and expansion joints for cracking and damage. Repair as applicable.
6	Check tube ends for corrosion and leakage. If leaks are found, investigate re-rolling or re-beding before planning for replacement.
7	Check exterior surfaces of boiler for corrosion or damage. Clean, paint, refinish, re-insulate or otherwise repair surfaces, as applicable.
8	Check pressure relief valves.
9	Check gas piping and valves for leaks using soap solution.
10	Check breaching and stack for integrity and tightness.
11	Remove dust, trash and debris from boiler cabinets, surfaces and form the boiler room.
12	Check combustion ventilation to assure unobstructed.
13	Conduct combustion efficiency test and adjust burner for efficient safe operation. Combustion measurements required are %CO, %CO2, %O2, stack temperature, and boiler room temperature. Combustion shall be checked under all operating conditions (e.g., within a given mechanical room, combustion shall be tested with individual boiler operation and simultaneous operation).
14	Provide a complete inspection/analysis report relative to all work/task performed upon completion. Also provide a report of all discrepancies found as a result of all inspections and analysis along with recommended corrections or modifications.

CHANGE RECORD

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1	8/00	Deleted monthly frequency

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-6

Electric Boiler/ Heating Water

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Functionally test, check, clean, tighten, and calibrate all safeties, interlocks, heating elements, electrical connections/controls, gauges, meters and fittings associated with the boiler.
2	Inspect water piping for leaks.
3	Lubricate motors and other moving components, as applicable.
4	Clean interior of boiler and remove loose scale and other deposits.
5	Examine interior of boiler for corrosion or damage. Repair as applicable.
6	Check exterior surfaces of boiler for corrosion or damage. Clean, paint, refinish, reinsulate or otherwise repair surfaces, as applicable.
7	Check pressure relief valves.
8	Remove dust, trash and debris from boiler cabinets, surfaces and form the boiler room.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-7

Condenser Water Chemical Treatment System

Task #1

Frequency- Bi-Weekly (2 weeks)

Step	Description
1	Inspect the chemical floater located in the cooling tower cold-water basin. Verify the chemical floater is secure and is in operational condition. Secure and/or replace floater as required.
2	Verify the chemical floater contains an adequate number of bromine pellets. Add chemical bromine pellets as required.
3	Check level of corrosion inhibitor and level of biocides in each chemical container. Have container filled and/or replace with new pails as required.

Task #2

Frequency- Quarterly (13 weeks)

Step	Description
1	Functionally check operation of the chemical injection sensors and controls. Verify proper calibration/operation of sensors, injector pumps, blow down valves, etc. Verify proper EMCS controls and field sensor readings.
2	Check chemical containers, suction and discharge lines for leaks and chemical product. Prime chemical lines, tighten fittings and replace deteriorated tubing and fittings as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/02	Added new Task 1 frequency Bi-Weekly, added Task 2 Quarterly cycle.
1a	2/03	Administrative change to correct error, Step 3 in Quarterly cycle moved to Step 3 in Bi-Weekly cycle.

Revision No: 1
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-8

Pump

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Check pumps and components for excessive noise, vibration, overheating, etc.
2	Perform vibration analysis on pump and motor (shall meet requirements of EXHIBIT II).
3	Based on vibration analysis results, lubricate, realign, etc, as required.
4	Provide a complete analysis evaluation of the vibration testing, and enter into the signature database.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-9

Air Handling Unit

Task #1

Frequency- Quarterly

Step	Description
1	Check equipment for proper operation.
2	Replace throw-away filters or clean permanent filters.

Task #2

Frequency-Annual

Step	Description
1	Clean and flush cooling coils, condensate drain pans and drain lines.
2	Clean heating coils, dampers, screens, plenums, etc., as applicable.
3	Check electrical connections.
4	Check fans and motors for excessive noise, vibration, heat, etc.
5	Lubricate electrical motors, as applicable.
6	Functionally check controls.
7	Check belts, replace as required.
8	Check guards and covers.
9	Check piping and valves for leaks.
10	Check for rust and corrosion. Clean, paint and repair damaged or corroded surfaces and insulation.
11	Remove trash, dust and debris from equipment and equipment room.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	03/01	Changed Task 1 frequency from a Quarterly cycle to a Semi-Annual cycle.
2	05/01	Changed Task 1 frequency from a Semi-Annual cycle to a Quarterly cycle.

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-10

Heating Ventilation Unit (HVU)

Task #1

Frequency-Annual (52 weeks)

Step	Description
1	Inspect heating coils, dampers, screens, plenums, etc., clean as required
2	Check electrical connections.
3	Check fans and motors for excessive noise, vibration, heat, etc.
4	Lubricate electrical motors, as applicable.
5	Functionally check controls.
6	Check belts, replace as required.
7	Check guards and covers.
8	Check piping and valves for leaks.
9	Check for rust and corrosion. Clean, paint and repair damaged or corroded surfaces and insulation.
10	Check equipment for proper operation.
11	Replace throw away filters or clean permanent filters.
12	Remove trash, dust and debris from equipment and equipment room.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	9/00	Added semi-annual requirements to annual and deleted semi-annual frequency

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-11

Computer Room Unit (CRU)

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Check unit for proper operation.
2	Replace throw-away filters or clean permanent filters.

Task #2

Frequency- Semi-Annual (26 weeks)

Step	Description
1	Check fans, compressors and motors for excessive noise, vibration, heat, etc.
2	Check cooling coils, heating coil/elements and condensate pans and drain lines.
3	Check condenser unit (where applicable).
4	Clean and check humidifier (where applicable).
5	Check belts.
6	Check piping and valves for leaks.

Task #3

Frequency- Annual (52 weeks)

Step	Description
1	Clean and flush coils, condensate pans and drain lines.
2	Clean condenser coils, heating coils/elements, dampers, screens, plenums, etc., as applicable.
3	Clean and functionally check humidifier (where applicable).
4	Check electrical connections.
5	Lubricate electrical motors, as required.
6	Functionally check controls.
7	Check guards and covers.
8	Check refrigerant charge (where applicable).
9	Check for rust and corrosion. Clean, paint and repair damaged or corroded surfaces and insulation.
10	Remove trash, dust and debris from equipment and equipment room, as applicable.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-12

RTU, Packaged and Unitary Units (DX type units)

Task #1

Frequency- Quarterly (13 weeks)

Step	Description
1	Check equipment for proper operation.
2	Check for signs of refrigerant leakage or loss, as applicable.
3	Replace throw-away filters or clean permanent filters.

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Clean and flush coils, condensate pans and drain lines.
2	Clean condenser coils, heating coils/elements, dampers, screens, plenums, etc., as applicable.
3	Check electrical connections.
4	Check fans, compressors and motors for excessive noise, vibration, heat, etc.
5	Lubricate electrical motors, as required.
6	Functionally check controls.
7	Check belts, as applicable.
8	Check guards and covers.
9	Check piping and valves for leaks.
10	Check refrigerant charge.
11	Check for rust and corrosion. Clean, paint and repair damaged or corroded surfaces and insulation.
12	Remove trash, dust and debris from equipment and equipment room, as applicable.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-13

Gas Unit Heater

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Functionally check controls and operation of the unit.
2	Visually inspect the unit for corrosion or damage which could lead to improper combustion or fire hazards.
3	Clean, paint and repair damaged or corroded surfaces and insulation.

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-14

Fan, Blower or Vent

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Functionally check operation of the unit.
2	Visually inspect the unit for corrosion or damage. Clean, paint and repair damaged or corroded surfaces and insulation.
3	Inspect belts (where applicable) and replace as required.
4	Replace throwaway filters or clean permanent filters (where applicable).

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	10/02	Added Step 4

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #M-15

Air Compressor

Task #1

Frequency-Quarterly (13 weeks)

Step	Description
1	Check oil. Inspect for contamination and add or change oil if necessary.
2	Check for oil leaks.
3	Drain tank and check all filters/traps. Functionally check operation of automatic tank blowdown (where applicable).
4	Check belts and sheaves.
5	Lubricate motor and other rotating components, as applicable.
6	Check electrical connections, contacts and components.
7	Check suction filter.
8	Check high pressure relief valve.
9	Check high pressure shut-off switch.
10	Check unloader and check valve.
11	Check operation of refrigerant air dryer (where applicable).
12	Check operation of drain trap on air dryer (where applicable).
13	Inspect for rust and corrosion. Touch up paint and repair as required.
14	Remove any dust and debris.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-16

Kitchen Exhaust Hood

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Functionally check operation of the unit.
2	Visually inspect the unit for corrosion or damage. Clean, paint and repair damaged or corroded surfaces and insulation.
3	Inspect belts (where applicable) and replace as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	9/00	Deleted Step 3. MTS M-18 (New) now contains this step

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-17

Walk-in Cooler (Refrigerator or Freezer)

Task #1

Frequency- Annual (52 weeks)

Step	Description
1	Functionally check operation of the unit.
2	Check refrigerant.
3	Check doors for proper sealing.
4	Verify proper entryway heating element operation (where applicable).
5	Clean condenser coils.
6	Inspect evaporator coils and clean as required.
7	Visually inspect the unit for corrosion or damage. Clean, paint and repair damaged or corroded surfaces and insulation.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # M-18 HVAC

KITCHEN EXHAUST HOOD

Task # 1

MONTHLY/QUARTERLY**

1	Clean hood and filters to remove grease and dust build-up to the bare metal.
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Task # 2

SEMI-ANNUALLY

1	Clean entire exhaust system (hood, filters, ductwork, fan, and other appurtenances) to remove grease and dust build-up to the bare metal.
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CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	9/00	New MTS containing step 3 from MTS M-16
2	3/04	Revised Task #1 to MONTHLY/QUARTERLY.

****Specific frequency determined by amount of grease and/or dust build-up observed during maintenance.**

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-1

Oil/Water Separator System – Bldg. 2105

Task #1

Quarterly

1	<p>Grit Pit:</p> <ul style="list-style-type: none"> A. Remove floating debris B. Check for accumulation of mud and grit. Remove as required.
2	<p>Sump Pumps:</p> <ul style="list-style-type: none"> A. Inspect piping and supports B. Inspect valves and actuators C. Inspect electrical connections and controls D. Inspect for obstructions in sump, screen, and piping E. Verify auto/manual operation F. Verify check valve operation
3	<p>500 Gallon Storage Tank:</p> <ul style="list-style-type: none"> A. Inspect tank for corrosion, damage, and leaks B. Check for sediment build-up in storage tank using sampling tube. Remove when 8 to 10-inch accumulation is present. Notify Environmental Specialist prior to removing/disposing of sediment.
4	<p>Oil/Water Separator:</p> <ul style="list-style-type: none"> A. Inspect tank shell and piping for corrosion, damage, and leaks B. Inspect hatch cover gasket on waste oil compartment C. Check for water accumulation in waste oil compartment. If present, pump water into sump by diesel storage tanks for flow back through separator. D. Check for oil in separation chamber E. Operate rotary pipe skimmer to skim off accumulated oil into waste oil compartment F. Check for sediment build-up in separation chamber using sampling tube. Remove when 5 to 6-inch accumulation is present. Notify Environmental Specialist prior to removing/disposing of sediment. G. Inspect coalescing tubes for damage and dirt build-up. Clean as required. Notify Environmental Specialist prior to removing/cleaning coalescing tubes. H. Inspect effluent weir plate for proper adjustment/elevation. If oil is present at effluent weir plate, transfer oil back into separation chamber. I. Check level of waste oil compartment using tank gauge stick. Remove

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	when 35 to 38-inch oil accumulation level is present. Notify Environmental Specialist prior to removing/disposing of oil.
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Task #2
Annually

1	Oil/Water Separator: A. Remove and clean (steam or pressure wash) separator coalescing tubes. Notify Environmental Specialist prior to removing/cleaning coalescing tubes. B. Remove sediment build-up in separation chamber. Notify Environmental Specialist prior to removing/disposing of sediment.
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-2

Oil/Water Separator System – Bldg. 4400

Task #1

Quarterly

1	Inspect separator unit, storage tank, centrifugal pump, piping, and valves for corrosion, damage, and leaks
2	Inspect man-way cover gasket
3	Inspect electrical connections and controls
4	Verify auto/manual operation of centrifugal pump
5	Verify auto/manual operation of oil high-level alarm
6	Inspect and clean float switches (internal) as required
7	Check oil level of 3000-gallon waste oil storage tank using Veeder-Root system (EMCS or inside Bldg. 4400). Remove when 2000 to 2100-gallon level is present. Notify Environmental Specialist prior to removing/disposing of oil.
8	Check water level in separator containment area. Drain when 5 to 6-inch accumulation is present. Remove algae and sediment as required.

Task #2

Annually

1	Check for sediment build-up in separator tank using sampling tube. Remove when 10 to 11-inch accumulation is present. Notify Environmental Specialist prior to removing/disposing of sediment.
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-3

Oil/Water Separator System – Bldg. 3305

Task #1

Quarterly

1	Inspect separator unit, storage tank, pumps, piping, and valves for corrosion, damage, and leaks
2	Inspect electrical connections and controls
3	Check surge pit for floating debris. Remove as required.
4	Clear gate valve by opening to full-open position. Reset flow rate for approximately 3 GPM (valve open 1-1/4 turns from full-close position).
5	Verify operation of pumps in Compartments "C" and "E" by lifting float switches.
6	Verify operation of pump in separator waste oil storage tank by activating "Water Return Switch" on control panel.
7	Switch 'off' surge pit pump.
8	Drain Compartment "C" by lifting pump float switch.
9	Switch 'off' separator unit at converter box.
10	Inspect skimmers and float switch extensions for grease and oil build-up. Clean as required.
11	Inspect pumps, screens, and piping for obstructions.
12	Fill separator with <u>clean</u> water (put water in through Compartment "C" and back fill). Do not use water from surge pit.
13	Switch 'on' separator unit at converter box.
14	Check water level in 265-gallon waste oil storage tank. Activate "Water Return Switch" on control panel to remove any water off bottom of tank.
15	Check level in 265-gallon waste oil storage tank with tank gauge stick. Remove when tank is near capacity (5 to 10 inches from top). Notify Environmental Specialist prior to removing/disposing of oil.
16	Verify operation of separator alarm system by lifting float switch in 265-gallon waste oil storage tank.
17	Switch 'on' surge pit pump.

Task #2

Annually

1	Check for sediment build-up in surge pit using sampling tube. Remove when 5 to 6-inch accumulation is present. Notify Environmental Specialist prior to removing/disposing of sediment.
2	Check for sediment build-up in 2000-gallon tank using sampling tube. Remove when 10 to 12-inch accumulation is present. Notify Environmental Specialist prior to removing/disposing of sediment.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-4

Engine Removal Platform – B1 and B2 Test Stands (Level 7)

Task #1

Semi-Annually

1	Notify stand engineer before maintenance begins.
2	If applicable, check manual platform locks for damage or excessive corrosion.
3	If applicable, check pneumatic platform locks for damage or excessive corrosion; grease as required.
4	Check air supply lines and components for leaks.
5	Check drive motor/reduction gear for loose lines and air leaks. Check oil level.
6	Check sheave assemblies and cable support rollers for damage or wear; grease as required.
7	Check cable and cable tension devices for damage or wear; grease as required.
8	Check platform wheels for freedom of rotation; grease as required.
9	Check tracks for damage or debris.
10	Check handrails, structural members, and hardware for damage or excessive corrosion.
11	Check cylinder-type buffers for proper compression. The cylinder rod should move slowly into the cylinder when force is applied and fully extend when force is removed.
12	Perform an operational check on platform after maintenance is complete. A. Check cable for proper tension during operation. B. Check cable rollers and sheave assemblies for freedom of rotation. C. Check wheels for ease of rolling and proper tracking. D. Operate platform through a complete cycle (run fully open and closed). E. Operate platform pneumatic locks through several cycles. F. Return platform to normal operational status.
13	Notify stand engineer after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-5

Engine Work Platform – B1 Test Stand (Level 8)

Mini-Platform – B1 Test Stand (Level 8)

Task #1

Semi-Annually

1	Notify stand engineer before maintenance begins.
2	If applicable, check manual platform locks for damage or excessive corrosion.
3	If applicable, check pneumatic platform locks for damage or excessive corrosion; grease as required.
4	Check air supply lines and components for leaks.
5	Check platform drive cylinder for loose lines and air leaks; grease as required.
6	Check platform wheels for freedom of rotation; grease as required.
7	Check tracks for damage or debris.
8	Check handrails, structural members, and hardware for damage or excessive corrosion.
9	Perform an operational check on platform after maintenance is complete. A. Check platform drive cylinder for proper operation. B. Check wheels for ease of rolling and proper tracking. C. Operate platform through a complete cycle (run fully open and closed). D. If applicable, operate platform pneumatic locks through several cycles. E. Return platform to normal operational status.
10	Notify stand engineer after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-6

Scissor Lift Platform – B1 Test Stand (Level 8)

Task #1

Semi-Annually

1	Notify stand engineer before maintenance begins.
2	Check structural members and hardware for damage or excessive corrosion.
3	Check oil level in air supply oiler.
4	Check air supply lines and components for leaks.
5	Check oil level in hydraulic oil tank.
6	Check air drive motor, coupling, and hydraulic pump for security and leaks.
7	Check for oil leaks; rework as required.
8	Clean up any traces of oil and empty oil from hydraulic waste container as required.
9	Lubricate fulcrum pins and pivot point grease fittings (10 each). Do not over lubricate; clean up excess grease.
10	Check all fasteners, pivot points, fulcrum pins, rolling surfaces, and rollers for wear.
11	Check hydraulic hoses for damage or wear.
12	Perform operational check on scissor lift after maintenance is complete. A. Operate scissor lift through full range of travel (up and down). B. Check for any unusual noise during operation. C. Verify scissor lift operates smoothly. D. Return scissor lift to operational status.
13	Notify stand engineer after maintenance is complete.

Task #2

Annually

1	Perform load test.
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-7

Engine Removal Platform – A1 and A2 Test Stands (Level 4-1/2) Engine Work Platform – A1 and A2 Test Stands (Level 5)

Task #1

Semi-Annually

1	Notify stand engineer before maintenance begins.
2	Check oil level in air supply oilers.
3	Check air supply lines and components for leaks.
4	Drain water from air filter canister using bottom drain cock.
5	Check drive motor/reduction gear for loose lines and air leaks. Check oil level.
6	Check chain(s); adjust/rework/grease as required.
7	Check chain sprockets for wear or missing teeth; grease as required.
8	Check pinion gear and rack for worn or missing teeth and proper meshing of teeth.
9	Check platform wheels for freedom of rotation; grease as required.
10	Check tracks for damage or debris.
11	Check handrails, structural members, and hardware for damage or excessive corrosion.
12	If applicable, check air hose reels for proper tension to re-reel hose from a fully extended position. There should be no slack on hose when completely retracted.
13	If applicable, check air hose for damage or wear.
14	Check pillow block bearings (6 each) on main shaft; grease as required.
15	Check couplings on drive motor and main shaft for wear and proper tightness.
16	Check spring-type buffers for broken or frozen springs; grease as required.
17	If applicable, check cylinder-type buffers for proper compression. The cylinder rod should move slowly into the cylinder when force is applied and fully extend when force is removed.
18	If applicable, check cam roller rail guides (4 each) for freedom of rotation; grease as required.
19	Perform an operational check on platform after maintenance is complete. A. Check air supply oilers for proper lubrication (about 3 drops/minute). B. Check chain for proper tension during operation. C. Check wheels for ease of rolling and proper tracking. D. Operate platform through a complete cycle (run fully open and closed). E. Operate platform pneumatic locks through several cycles. F. Return platform to normal operational status.
20	Notify stand engineer after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-8

Mini-Platform – A2 Test Stand (Level 4-1/2)

Task #1

Semi-Annually

1	Notify stand engineer before maintenance begins.
2	Check oil level in air supply oilers.
3	Check air supply lines and components for leaks.
4	Drain water from air filter canister using bottom drain cock.
5	Drain oil/fluid from muffler defogger using bottom drain cock. Do not drain oil/fluid onto decking; use appropriate container to catch oil/fluid.
6	Check drive motor/reduction gear for loose lines and air leaks. Check oil level.
7	Check chain; adjust/rework/grease as required.
8	Check chain sprockets for wear or missing teeth; grease as required.
9	Check pinion gear and rack for worn or missing teeth and proper meshing of teeth.
10	Check platform V-groove wheels for freedom of rotation; grease as required.
11	Check tracks for damage or debris.
12	Check handrails, structural members, and hardware for damage or excessive corrosion.
13	Check air hose and electrical cable reels for proper tension to re-reel hose from a fully extended position. There should be no slack on hose/cable when completely retracted.
14	Check air hose and electrical cable for damage or wear.
15	Clean up any traces of oil found on the mini-platform.
16	Perform an operational check on platform after maintenance is complete. A. Check air supply oilers for proper lubrication (about 3 drops/minute). B. Check chain for proper tension during operation. C. Check wheels for ease of rolling and proper tracking. D. Operate platform through a complete cycle (run fully north and south). E. Operate platform pneumatic locks through several cycles. F. Verify PS-6 Proximity Switch (indicates platform is fully extended) is operating and set properly. G. Verify PS-3 Proximity Switch (indicates platform is retracted to stored position) is operating and set properly. H. Return platform to normal operational status.
17	Verify each of the following switches is operating and set properly: A. PE-1 Photoelectric Switch Source and PED-1 Photoelectric Switch Detector (indicates diffuser below level that will impede travel of platform) B. PS-4 Proximity Switch (indicates east service platform centered over test stand) C. PS-5 Proximity Switch (indicates east service platform fully retracted to stored position)
18	Notify stand engineer after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-9

Scissor Lift Platform – A2 Test Stand (Level 4-1/2)

Task #1

Semi-Annually

1	Notify stand engineer before maintenance begins.
2	Check structural members and hardware for damage or excessive corrosion.
3	Check oil level in hydraulic oil tank.
4	Check for oil leaks; rework as required.
5	Clean up any traces of oil found on lift platform.
6	Check roller bushings, axle pin, clevis, and pivot pins for wear.
7	Check hydraulic hoses and electrical cords for damage or wear.
8	Check rollers for looseness and wear.
9	Check retaining rings at all axles, pivot points, and clevis.
10	Check fluorescent light fixture mounted under lift platform. Rework as required.
11	Check foam rubber padding around lift platform. Rework as required.
12	<p>Perform operational check on scissor lift after maintenance is complete.</p> <p>A. Position scissor lift and mini-platform so there is no interference with level 5 platform (level 5 platform needs to be retracted) during operation.</p> <p>B. Operate scissor lift through full range of travel (up and down) using both the floor mounted operating foot pedals and the platform mounted foot pedals.</p> <p>C. Check for any unusual noise during operation.</p> <p>D. Verify scissor lift operates smoothly.</p> <p>E. Verify PS-2 Proximity Switch (indicates scissor lift is in fully down position) is operating and set properly.</p> <p>F. Verify PS-7 Wobble Stick Limit Switches (4 each) (indicates lift platform is within 2 inches of enclosed nozzle surface) are operating and set properly.</p> <p>G. Check operation of auxiliary lowering valves located on lift table and trolley.</p> <p>H. Return scissor lift to operational status.</p>
13	Notify stand engineer after maintenance is complete.

Task #2

Annually

1	Perform load test.
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-10

Scissor Lift Platform – A1 Test Stand (Level 4)

Task #1

Semi-Annually

1	Notify required personnel before maintenance begins.
2	Raise platform to full up position.
3	Place blocks between rollers & frame to ensure platform does not lower.
4	Shut off electrical power at disconnect switch. Lockout/tagout disconnect as required.
5	Check structural members & hardware for damage or excessive corrosion.
6	Check oil level in hydraulic oil tank; fill as required.
7	Check drive motor, coupling, & hydraulic pump for security & leaks.
8	Check for oil leaks; rework as required.
9	Clean up any traces of oil as required.
10	Lubricate fulcrum pins & pivot point grease fittings. Do not over lubricate; clean up excess grease.
11	Check all fasteners, pivot points, fulcrum pins, rolling surfaces, & rollers for wear.
12	Check hydraulic hoses for damage or wear.
13	Remove lock/tag from electrical disconnect & turn on electrical power to platform. Remove blocks between rollers & frame.
14	Perform operational check on scissor lift after maintenance is complete. A. Operate scissor lift through full range of travel (up & down). B. Check for any unusual noise during operation. C. Verify scissor lift operates smoothly. D. Return scissor lift to operational status.
15	Notify required personnel after maintenance is complete.

Task #2

Annually

1	Perform load test.
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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-11

Roll-Up Overhead Doors (Air-Operated) A Test Stands (Level 5), B Test Stand (Level 8)

Task #1

Semi-Annually

1	Notify required personnel before maintenance begins.
2	Place door in closed position. Close air valve; lock & tag as necessary.
3	Inspect weather seals for damage or excessive wear.
4	Check all hardware for damage or excessive corrosion.
5	Inspect drive sprockets for proper alignment & shaft mounting; repair as required.
6	Inspect for loose bolts & security of chain & spring mounting; repair as required.
7	Check operation of emergency hand chain; repair as necessary.
8	Check gearbox oil level; fill as required.
9	Clean dirt & debris from drive chains; lubricate as required.
10	Check oil level of air system oilers; fill as required.
11	Drain & clean air system condensation line trap. Remove lock & tag; open air valve.
12	Perform operational check on door after maintenance is complete. A. Operate door through full range of travel (up & down). B. Check door limit switches for proper operation (if applicable). C. Check drive chains for vibration & looseness. D. Check door frame for proper tracking. E. Check clutch & brake for proper operation; adjust as necessary. F. Return door to operational status.
13	Notify required personnel after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-12

Roll-Up Overhead Doors (Electric-Operated)

Task #1

Semi-Annually

1	Notify required personnel before maintenance begins.
2	Place door in closed position. Lock & tag electrical disconnect as necessary.
3	Check all hardware for damage or excessive corrosion.
4	Inspect drive sprockets for proper alignment & shaft mounting; repair as required.
5	Inspect for loose bolts & security of chain & spring mounting; repair as required.
6	Check operation of emergency hand chain; repair as necessary.
7	Check gearbox oil level; fill as required.
8	Clean dirt & debris from drive chains; lubricate as required.
9	Inspect electrical cables, conduit, control boxes, & disconnect for security of mounting & damage; repair as required.
10	Inspect motor for proper mounting, proper alignment, & any damage; repair as required.
11	Perform operational check on door after maintenance is complete. A. Operate door through full range of travel (up & down). B. Check door limit switches for proper operation. C. Check safety edge limit switch for proper operation. D. Check drive chains for vibration & looseness. E. Check door frame for proper tracking. F. Check clutch & brake for proper operation; adjust as necessary. G. Return door to operational status.
12	Notify required personnel after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-13

Sliding Hangar Doors

Task #1

Semi-Annually

1	Notify required personnel before maintenance begins.
2	Check torque limiter for dirt, oil, moisture, and wear. Keep grease and dirt away from lining. Check for proper operation. If slippage is observed, adjust as required.
3	Check chain for excessive slack. Adjust as necessary so that chain sag does not exceed 1 inch.
4	Clean dirt and debris from drive chains; lubricate chain and roller as required.
5	Check gearbox oil level; fill as required.
6	Check interleaf cable system by inspecting inside and outside cable for sag and stretch. If cable sags more than 1 inch on slack side when door is operating, tighten cable at both ends (equal amount). If take ups are at end of travel, replace cables.
7	Inspect electrical cables, conduit, control boxes, and disconnect for security of mounting and damage; repair as required.
8	Perform operational check on door after maintenance is complete. A. Operate door through full range of travel (open and closed). B. Check pilot door interlock switch for proper operation. C. Check door limit switches for proper operation. D. Check safety edge limit switch for proper operation. E. Check chain for vibration and looseness. F. Check door for proper rolling and tracking. G. Return door to operational status.
9	Notify required personnel after maintenance is complete.

Task #2

Annually

1	Check all hardware for damage or excessive corrosion.
2	Check rollers in top guides for binding.
3	Clean dirt and debris from track area.
4	Inspect reel collector rings and brushes for wear, arcing, weak springs, loose connections, and other damage.
5	Check reel assembly for damage and security of mounting.
6	Check electrical cable guide rollers for binding. Apply drops of oil on roller pins.

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-14

Structure Blast Doors

Task #1

Annually

1	Notify required personnel before maintenance begins.
2	Check all hardware for damage or excessive corrosion.
3	Visually check operation of locking device and door hinges.
4	With door in closed position, check to ensure proper gasket compression; adjust door as required.
5	Check gasket for soundness; replace as necessary.
6	Lubricate locking device and door hinges.
7	Notify required personnel after maintenance is complete.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-15

Oil/Water Separator System – Bldg. 2606

Task #1

Semi-Annually

1	Clean inlet area: A. Close inlet valve to stop the flow of influent to the separator. B. Remove separator cover. C. Remove water from separator through drain or hose.
2	Remove separated oil and sediment build-up from OWS. Notify Environmental Specialist prior to removing/disposing of oil.
3	Remove plate pack. Flush with pressure water hose and use vacuum to pickup sludge and water. It is only necessary to remove all sludge from between the plates and any very heavy oil coating.
4	Examine tank interior for damage and repair any damage to internal coating.
5	Restart separator: A. Ensure plate packs and polishing pack are in original position. B. Ensure that there are not obstructions in the water outlet piping. C. With the coalescer access cover off, fill the tank with clean water, establishing flow from the effluent opening. Check for leaks (internal or external); fix as required. D. Open inlet valve to allow the influent oil water mixture into the OWS tank. E. Replace the coalescer access cover and bolt down liquid tight.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-16

Pressure Sandblast Cabinet

Task #1

Monthly

1	Clean dust collector cartridge filters per manufacturer manual or by removing from cabinet and hand cleaning.
2	Check abrasive/sandblast material for contamination (paint or other particles) by opening the valve at the bottom of the pressure vessel and collecting a sample. Clean or replace material as required.
3	Visually check the abrasive/sandblast hose and all fittings, including the nozzle, for wear and replace as required. Replace the nozzle if the orifice diameter has increased from 0.25 to 0.375 inches or more.
4	Check the rubber gloves for wear and replace as required.
5	Check the operator view window for clarity and replace Mylar covers if vision is not clear.
6	Check the cabinet lighting for proper operation.

Task #2

Annually

1	Clean dust collector cartridge filters per manufacturer manual or by removing from cabinet and hand cleaning.
2	Check abrasive/sandblast material for contamination (paint or other particles) by opening the valve at the bottom of the pressure vessel and collecting a sample. Clean or replace material as required.
3	Replace the abrasive/sandblast hose and all fittings, including the nozzle.
4	Replace the rubber gloves.
5	Check the operator view window for clarity and replace Mylar covers if vision is not clear.
6	Check the cabinet lighting for proper operation. Replace fluorescent lamps and cover as required.
7	Replace the pressure pot relief valve.

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # ME-17

Vehicle Wash System

Task #1

Frequency – Quarterly

Step	Description
1	Check for proper operation of brush drive & arms.
2	Check for proper mounting of motors & bearings & check for leaks.
3	Check for proper condition of brush pads.
4	Check flexible electric & water lines for wear.
5	Lubricate bearings & swivel joints as required.
6	Check gear box oil & refill/replace as required.
7	Check detergent level & refill as required.
8	Operate wash system to check rinse arches & clean nozzles as required.
9	Operate wash system to check for proper brush movement by driving a vehicle through.

CHANGE RECORD

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-1

Marine Operations System

Task #1

Frequency- Annual (52 weeks)

Docks:

Construction dock (1)

B-3202 to B-3200 dock including marine ops building (1)

“Lox and hydrogen docks @ A-1, A-2 & B-Test Stands” (7) LOX (7) Hydrogen

ASRM dock (1)

Lox storage dock on D-road (4)

Hydrogen storage dock on D-road (2)

Step	Description
1	“Inspect fender piling for rot, damage and stability”
2	Inspect piling metal caps for mounting security and damage
3	Inspect toe railings (typ. 12 x 12 inch wood) along dock edge “for damage, rot and deterioration”
4	Inspect buffer railings (typ. 12 x 12 inch wood) between fender piling and dock for deterioration
5	Inspect mooring bollards for general condition and mounting security
6	“Inspect sheet piling for corrosion, deformation and damage”
7	Inspect ladders for damage and security of mounting
8	“Inspect gravel fill and/or concrete cap for smoothness, erosion or subsidence”
9	Inspect countersunk bolts and fasteners for corrosion and make certain they are countersunk below the surface of the timbers
10	“Inspect mooring cavils, cleats, bollards and posts for corrosion, security, “and for loose grout and fasteners for corrosion
11	“Inspect tug boat electrically operated ramp for cable fraying (replace if frayed), operate ramp through” full travel to assure correct operation. Lubricate fittings and Inspect hold-down bolts for looseness and security.

Canal

Step	Description
1	“Inspect dolphins for rot, damage and stability”
2	Sound canal & river system channel to identify shoaling (from SSC to Michoud)
3	“Inspect for bank erosion, animal habitats and vegetation overgrowth for other potential “ causes of deterioration of the canal bank
4	“Inspect spillway for integrity, erosion, vegetation overgrowth, and animal habitats “
5	“Keep water surface free from floating vegetation, trash and water hyacinths”

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6	Keep drains into canal free from vegetation and sediment
7	Remove small trees and other vegetation from A-1 Test Stand flume
8	Maintain secondary roads around canal (graded and free from pot holes)

Roller Mooring Devices (all docks)

Step	Description
1	Clean and Paint corroded areas
2	Removed old hardened grease from roller tracks and grease wheel bearings and other lubrication points
3	Inspect counterweight cable and attachments for fraying and replace if necessary
4	“Inspect counterweights, counterweight tubes, fasteners, pulleys”
5	Inspect yokes and pintle ring for cracks and corrosion
6	Inspect mounting bolts for corrosion and wasting.
7	Deburr tracks (if required) and apply grease
8	Operate assembly for free operation and test for binding
9	Verify that device can be moved over its full range with less than 40 pounds of force applied to the pintle ring (verify upward and downward force). Adjust counterweight if excessive force is required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	Added quantities
2	10/01	Remove Step 4 under Rolling Mooring Devices

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-2 Marine Operations System

CANAL PUMPING STATION (B-2311) (Ref. MI #MM-1600)

Task #1

Frequency: Quarterly

Step	Description
1	Operate all valves to assure freedom of motion
2	“Lubricate and or adjust packing glands on pumps, motors and valves”
3	“Inspect condition of pump shafts, couplings, lubricators and piping flange gaskets”
4	Inspect inlet and outlet screens and remove accumulated debris
5	“Inspect ventilation screens, ducts and motors an clean if required”
6	“Inspect for visible corrosion on piping, hand rails, grating, and spot paint if required”
7	“Remove vegetation overgrowth from sidewalks, piping control station, and building perimeter”
8	Adjust pump packing glands for correct leakage rate. If seals are of the mechanical type replace if leakage rate exceeds the maximum.
9	This step deleted. PM on electrical equipment will be performed using appropriate MTS - i.e. MCC using MTS E-13.
10	This step deleted. PM on electrical equipment will be performed using appropriate MTS - i.e. MCC using MTS E-13.
11	Inspect pump motors for vibration and for unusual noises during operation. Perform vibration analysis on pump and motor (shall meet requirements of EXHIBIT II). Based on vibration analysis results, lubricate, realign, etc., as required. Provide a complete analysis evaluation of the vibration testing, and enter into the signature database.
12	Assure hold down bolts of motors and pumps and other fasteners are tight and structurally sound
13	Inspect for general cleanliness of area and clean if required
14	Inspect lighting and report items for repair on work order.

Task #2

Frequency: Annual

Step	Description
1	Inspect all motor and pump assemblies for excessive load
2	Inspect all electrical and mechanical safety shutdown devices including switchgear
3	Estimate canal fill rate by comparing fill time to area of canal surface. Use this estimate to determine whether flow rate of pumps approaches design pump curves. Note any deterioration over time and use this metric and vibration data to determine when the pump units require removal for corrective maintenance.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	<p>(QUARTERLY)</p> <p>Step-8: Added missing text "... of the mechanical type replace if leakage rate exceeds the maximum."</p> <p>Step-9: Deleted- work to be performed on different MTS.</p> <p>Step-10: Deleted- work to be performed on different MTS.</p> <p>Step-11: Added steps 2,3, and 4 from MTS M-8.</p> <p>Step 14: Changed "...as per item number 5.3.6.1" to "...on work order."</p>

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-3 Marine Operations System

Lock

Task #1

Frequency: Quarterly

Step	Description
1	Operate upper and lower gates and lubricate bearings while gates are in motion. Verify that all gates operate without binding in bushings.
2	“Inspect safety railings, ladders and other carbon steel members for corrosion, integrity,” and wasting.
3	Inspect hydraulic rams and other assemblies for excessive leakage and clean pits of debris and of oil and grease accumulation
4	Inspect condition of rip-rap and report any soil erosion
5	Remove any floating vegetation and trash from lock area water surface
6	Verify proper operation of floating bits.
7	“Inspect structure for corrosion, leakage, rotting or damaged timbers, wasted fasteners,” or other visible deterioration. Report condition.
8	Operate tainer valves and report if valves are leaking excessively. Lubricate pivot points, bearing, and bushings.
9	“Inspect lower gallery levels, sump pumps, electrical lines and lighting, “structural members, valves and piping for deterioration and proper operation.”
10	Inspect lighting and report items for repair on work order.

Task # 2

Frequency: Annual

Step	Description
1	Perform annual monolith inspection and report findings
2	Inspect gate seals for leakage
3	“Inspect lock gate bearings (non intrusive inspection), and bushings”
4	Inspect structure for leaks or abnormal deterioration
5	Operate lock controls and perform minor adjustments as required. Report any abnormal operation
6	“Inspect upper and lower lock control buildings, controls and structure”
7	Operate tainer valves and inspect for abnormal operation and leakage
8	Clean and inspect hydraulic rams and replace cylinder seals if required
9	This step deleted. PM on cathodic protection system will be performed using MTS E-18.
10	Remove vegetation overgrowth on sidewalks and other areas
11	Remove overgrowth from drainage ditches

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12	Inspect marine safety devices and replace if defective
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CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	<p>(QUARTERLY)</p> <p>Step 6: Revised to read “Verify proper operation of floating bits.”</p> <p>Step 8: Added “Lubricate pivot points, bearing and bushings.”</p> <p>Step 10: Changed “...as per item number 5.3.6.1 “to “...on work order.”</p> <p>(ANNUAL)</p> <p>Step 9: Deleted- work to be performed on different MTS (E-18).</p>

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-4 Marine Operations System

Lock Control Building - B-2310

Task #1

Frequency: Weekly

Step	Description
1	“Inspect hydraulic pumps, motors and associated piping and correct any minor oil leaks. Clean up spills.”
2	Inspect lighting and report for repair on work order.

Task #2

Frequency: Quarterly

Step	Description
1	Inspect oil for moisture and replace filters if necessary
2	Lubricate motor bearings or check and top up oil levels
3	Clean corrosion from operating mechanisms
4	This step deleted. PM on electrical switchgear will be performed using MTS E-12 and E-13.
5	Inspect cleanliness of building and clean if required.
6	Inspect for improperly stowed items and restow if required.
7	Inspect building interior and exterior for deterioration and corrosion and perform spot painting if required.
8	“Inspect doors, latches, hinges, windows and other openings for proper operation and repair if required.”
9	This step deleted. Operational check performed as part of MTS MO-3.

Task #3

Frequency: Annually

Step	Description
1	This step deleted. Perform annual facility inspection and report discrepancies found on DR 5-FA03.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	<p>(WEEKLY) Step 2: Changed- "...as per item number 5.3.6.1" to "...on work order." (QUARTERLY) Step 4: Deleted- work to be performed on different MTS (E-12 & E-13). Step 9: Deleted- work to be performed on different MTS (MO-3). (ANNUAL) Step 1: Work will be scheduled as a separate task.</p>

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET #MO-5
 Marine Operations System**

Lox (Oxygen) Docks (qty 11 total)

Note: PM and Operation of the lox dock ramps is not part of this contract.

Task #1

Frequency: Weekly

There are no requirements for weekly PM of the LOX Docks

Task #2

Frequency: Quarterly

Step	Description
1	“Inspect potable water system lines, valves and hoses for leaks and repair if required”
2	Inspect eye wash stations to assure that they operate correctly
3	Inspect structure for integrity and loose fasteners. Repair as required
4	Inspect lighting and report items for repair on work order.
5	Inspect structure for corrosion and spot paint if required
6	“Check safety chains, railings, steps and repair as required to assure personnel safety”
7	Clean trash from dock pit area.
8	“Inspect electrical wiring, conduit and connections for corrosion or damage and repair as required.”

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	(QUARTERLY) Step 4: Changed “...as per item number 5.3.6.1” to “...on work order.
2	10/00	(ANNUAL) Delete per NASA – Rich Harris.

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-6 Marine Operations System

Hydrogen Docks

Note: Operation and PM of the dock ramps are not included in this contract.

Frequency: Weekly

There are no requirements for weekly PM of the hydrogen Docks

Task #1

Frequency: Quarterly

Step	Description
1	“Inspect potable water system lines, valves and hoses for leaks and repair if required”
2	Inspect eye wash stations to assure that they operate correctly
3	Inspect structure for integrity and loose fasteners. Repair as required
4	Inspect lighting and report findings for repair on work order.
5	Inspect structure for corrosion and spot paint if required
6	“Check safety chains, railings, steps and repair as required to assure personnel safety”
7	Clean trash from dock pit area.
8	“Inspect electrical wiring, conduit and connections for corrosion or damage and repair as required.”

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	(QUARTERLY) Step 4: Changed “...as per item number 5.3.6.1” to “...on work order.”
2	10/00	(ANNUAL) Delete per NASA – Rich Harris

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-7 Marine Operations System

“OTHER DOCKS AND PIERS (CONSTRUCTION DOCK, D-ROAD DOCK, RP-1 DOCK, PIER AT MARINE OPS BUILDING)”

Frequency: Weekly

There are no requirements for weekly PM of these docks and piers

Task #1

Frequency: Quarterly

Step	Description
1	“Inspect fenders, timbers, pilings visually (without underwater inspection)”
2	Inspect mooring devices for integrity.
3	Inspect structure for integrity and loose fasteners.
4	Inspect lighting and report findings for repair on work order.
5	Inspect structure for corrosion and spot paint if required
6	“Check safety chains, railings, steps and repair as required to assure personnel safety”
7	Clean trash from dock pit area.
8	“Inspect electrical wiring, conduit and connections for corrosion or damage and repair as required.”

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	(QUARTERLY) Step 4: Changed “...as per item number 5.3.6.1” to “...on work order.”
2	10/00	(ANNUAL) Delete per NASA – Rich Harris

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JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-8 Marine Operations System

Bascule Bridge

Task #1

Frequency: Biweekly

Step	Description
1	Perform complete functional check of bascule bridge operation.

Task #2

Frequency: Quarterly

Step	Description
1	Dust and wipe off top of control desk and vacuum inside.
2	Run diagnostic check on programmable logic controller.
3	Verify automatic and manual operation.
4	Check emergency stop when lowering bridge.
5	Check amp readings while operating bridge. Record on Work Order.
6	Check water level over sump pump motors. Verify operation of sump pumps.
7	Check sump and pump inlet for debris. Clean as necessary.
8	Check sump pumps for excessive noise and/or vibration or evidence of overheating.
9	Check searchlight for proper operation. Searchlight must operate 360° horizontally and 45° vertically and have tight seals on light.
10	Lubricate searchlight operating handle and brake release grip as required with SAE 30 oil.
11	Check red warning lights. End light burns steady; the other two flash alternately (Roadway Gates).
12	Check operation of roadway traffic lights. Verify lights flash and have no burned out bulbs, no moisture in them or defects of any type. Check strobes in SE/NW lights for proper operation.
13	Check operation of warning bells.
14	Check lights in machinery rooms on North and South spans, sump pump locations, and North and South walls. Report needed repairs on Work Order.
15	Check operation of approach warning lights.
16	Check navigation lights and lamp changers for proper operation; relamp as required.
17	Check air conditioning unit in span motor control cabinet for proper operation (VFD cabinets) and clean filters as required.
18	Test signal horn for proper operation and add grease to grease cups as required. Inspect wiring, fasteners and air system.
19	Check panel mate for general faults; clear as required.

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20	Check span locking bars for proper operation; lubricate as required.
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Task #3

Frequency: Semiannually

Step	Description
1	Verify span motor heaters are not overheating or defective
2	Clean vents and internals of span drive motors
3	Tighten all nuts and bolts securely. Note loose grout or fastener deterioration.
4	Check span motor brakes space heater for proper operation
5	Clean off motor exteriors
6	Check all motor brake nuts and bolts for tightness.
7	Check motor brake hand release operation
8	Clean dirt and deposits from the motor brake mechanism
9	Maintain span motor brake oil level.
10	Check machinery brake space heater for proper operation
11	Check all machinery brake bolts and nuts for security.
12	Re-install span motor brake cover.
13	Check machinery brake hand release operation
14	Clean out dirt and deposits from the machinery brake mechanism
15	Check and maintain oil (SAE-10 wt hydraulic) level at machinery brake.
16	Check electric to control limit switch flex line for damage

Task #4

Frequency: Annually

Step	Description
1	Remove dirt from cabinet internals and exterior areas.
2	Inspect span drive motors alignment, coupling wear and for abnormal noise during operation.
3	Inspect gear box of roadway gates and lubricate with multipurpose grease.
4	Inspect condition of electrical contacts in roadway gates and replace if necessary
5	Inspect span limit switches and adjust if necessary.
6	Verify operation of control room AC unit and heater. Clean/replace filters.
7	Inspect lighting panels for moisture, proper switch operation and verify panel directory labeling.
8	Record Ohm readings on following: Qty 4 -- machinery brakes, NE Pier, NW Pier, SE Pier and SW Pier Qty 4 -- span motors, NE Pier, NW Pier, SE Pier and SW Pier Qty 4 -- span motor brakes, NE Pier, NW Pier, SE Pier and SW Pier Qty 4 -- draw bar motors, NE Pier, NW Pier, SE Pier and SW Pier Qty 4 -- pumps, NE, NW, SE, and SW (Counter balance pit)
9	Inspect and record condition of structure paint condition throughout.
10	Grease shaft couplings, speed reducers, floating bearings, fixed bearings,

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	trunnion bearings, bascule bridge main gears, rack cover anchor bearings, and upper track wheels.
11	Check span buffers; add oil as required (SAE-10 hydraulic oil).
12	Lubricate all open gears with open gear lubricant.
13	Check motor brake pads on all motor brakes.
14	Check proximity switch mounting brackets for distortion; replace as required.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	<p>(SEMI-ANNUAL) Step 21: Changed "...as per item number 5.3.6.1" to "...on work order."</p> <p>(ANNUAL) Step 18: Deleted – work to be performed on a different MTS. Step 19: Same as Step 18. Step 20: Same as Step 18. Step 21: Same as Step 18. Step 22: Changed "...as per item 5.3.6.1" to "...on work order."</p>
2	10/01	<p>Added biweekly task. Revised task numbers as necessary. (QUARTERLY) Deleted Steps 2, 10, 11, 12, and 15. Revised step numbers as necessary. Revised Steps 7, 9, and 13. Added new Steps 15-20. (SEMIANNUALLY) Deleted redundant steps already listed under Task 2, Steps 17-23. Revised oil type in Step 15. (ANNUALLY) Deleted redundant steps already listed under Tasks 2-3, Steps 1 and 27. Deleted Steps 7-15, 17-21, and 24. Revised step numbers as necessary. Revised Step 8 to record Ohm readings for span motor brakes. Added new Steps 10-14.</p>

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #MO-9 Marine Operations System

Government Essential Equipment
Tugboat Clermont II
Task # 1
Frequency: Weekly

Step	Description
1	“Inspect boat for signs of leakage of oil or water from hoses, stern tubes, fittings, valves” “tanks, hoses, piping and structure. “
2	Check all electronic equipment for proper operation
3	“Verify that all equipment operates in accordance with design limits. This includes but is not limited to: engines,” “generators, HVAC system, steering system, starting air system, lighting and navigation aids,” “winches, davits, instrumentation, fuel system, packing glands, valves and piping, watertight doors” “and windows, safety equipment, lubrication systems, thru hull fittings and valves, kitchen” “appliances, hydraulic oil systems, pumps and blowers, mooring lines, search light, markings and warning instructions,” “personnel elevator, potable water system, and mooring system, shore power, ramp and dingy.”
4	“Inspect for cleanliness, oil spillages, cleanliness of bilges, and proper stowing of material.”
5	Inspect interior and exterior surfaces for signs of corrosion and deterioration. Spot paint exterior as required to eliminate corrosion areas.
6	“Maintain operating levels of oils, water and fuel as required.

Task #2
Frequency: Quarterly

Step	Description
1	Inspect all equipment for tightness of nuts and foundation bolts and tighten as necessary.
2	Replace oil as necessary.
3	“Lubricate gears on winches, bearings and check for cable fraying and corrosion”
4	Inspect condition of all hoses and replace if worn
5	“Inspect air compressor belts, air control lines, breather, tanks and change oil as required.”
6	“Check shore power transfer panel for correct voltage, amps and grounding. Check for corrosion” and for secure connections. Repair as necessary.
7	“Perform megger check on all motors including: winch, fresh water pump,

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	hydraulic pump,” “air compressors, bilge pump elevator”
8	Maintain cleanliness of electrical cabinet internals and corrosion free.
9	Maintain all pumps seals free from leakage above manufacturer’s standard
10	“Clean filters, AC filters, appliance screens and vents, Engine inlet filters, generator filters,” “and replace as necessary oil, gas and hydraulic oil filters.”
11	Perform maintenance painting on external surfaces to prevent the appearance of corrosion
12	Perform a thorough cleaning of internal compartments and clean and wax flooring
13	Inspect non-skid flooring and reapply non-skid coating as required by safety.
14	“Inspect and replace as necessary, safety equipment, throwing rings, etc.”
15	Inspect transmission oil and replace filters
16	Inspect engine vibration dampeners and replace if rubber shows extrusion.
17	Inspect insulation including turbo-charger blankets to assure that no not surfaces are exposed.
18	Replace filter in AC unit
19	Inspect fire fighting equipment and replace if damaged.
20	Lubricate steering linkages
21	Check heat exchanger zinc plugs for corrosion and replace as required
22	Inspect gratings and other trip hazards and refasten if loose
23	Perform operational check of boat and certify that boat fulfills all conditions of Coast Guard regulations
24	Perform operational check of tug boat access ramp.

Task #3

Frequency: Annually

Step	Description
1	Perform annual maintenance painting to decks and other areas which show corrosion.
2	“Perform annual maintenance inspection to identify items needed for shipyard overhaul,” “maintenance projects, and obsolescence replacement requirements.”
3	Perform annual inspections on equipment to check for wear and deterioration
4	“Inspect electrical wiring, control wiring, panels and connections for deterioration”
5	“Inspect living quarters, perform annual cleanup and replace deteriorated or worn items.”
6	Determine required date for next shipyard overhaul and identify maintenance items for this overhaul. August 2000 and every 5 years thereafter.
7	Clean appliances interior and exterior
8	“Perform vibration analysis on propeller shafts, pumps, engines and generators”
9	“Perform oil analysis on main engines, generators and on hydraulic systems”

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	6/00	(WEEKLY) Step 6: Changed "...to 90% of capacity or greater" to "...as required." (QUARTERLY) Step 2: Deleted "...in accordance with manufacturers instruction." (ANNUAL) Step 3: Deleted "...internals..." Step 6: Added "...August 2000 and every 5 years thereafter."

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET #NG-1

SSC Natural Gas System

Task #1

Frequency - Quarterly (13 weeks)

Step	Description
1	Perform blow-down of pipeline at all positions to remove build-up of internal moisture.
2	Check Odorizer odorant level

Task #2

Frequency - Annually (52 weeks)

Step	Description
1	Lubricate blowdown valves with plug grease.
2	Cycle all shutoff valves and lubricate with plug grease.
3	Perform “sniff” check of entire gas distribution system.

Task #3

Frequency – 2 years (104 weeks)

Step	Description
1	Certify system relief valves

Task #4

Frequency - 5 years (260 weeks)

Step	Description
1	Calibrate gas supply gauge
2	Calibrate building (user) pressure gauges on both sides of pressure regulator.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/03	Added new Task 3 Frequency – 2 Year cycle

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # PW-1

SSC Potable Water System

No. 1 Wellhouse Complex

Task #1

Frequency - Quarterly

Step	Description
1	Perform Vibration Analysis on motor and pump assembly.

Task #2

Frequency - Semi-Annually

Step	Description
1	Lubricate water pump bearing with EP-2 grease.

Task #3

Frequency - Annually

Step	Description
1	Perform Motor Circuit Analysis on 30hp motor.
2	Lubricate motor with EP-2 grease.
3	Perform functional check of chlorine leak detection sensor.
4	Perform functional check of chlorine leak audible warning buzzer.

Task #4

Frequency - Biennial

Step	Description
1	Lubricate water meter register assembly with EP-2 grease.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed..

Task #5

Frequency - 5 years

Step	Description
1	Calibrate wellhead pressure gauge
2	Calibrate pump discharge pressure gauge

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/01	Task #1 frequency changed from monthly to quarterly

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # PW-2

SSC Potable Water System

No. 2 Wellhouse Complex

Task #1

Frequency - Quarterly

Step	Description
1	Perform Vibration Analysis on motor and pump assembly.

Task #2

Frequency -Semi-Annually

Step	Description
1	Lubricate water pump bearing with EP-2 grease.

Task #3

Frequency - Annually

Step	Description
1	Perform Motor Circuit Analysis on 30hp motor.
2	Lubricate motor with EP-2 grease.
3	Perform functional check of chlorine leak detection sensor.
4	Perform functional check of chlorine leak audible warning buzzer.

Task #4

Frequency - Biennial

Step	Description
1	Lubricate water meter register assembly with EP-2 grease.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed.

Task #5

Frequency - Five years

Step	Description
1	Calibrate wellhead pressure gauge.
2	Calibrate pump discharge pressure gauge.

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/01	Task #1 frequency changed from monthly to quarterly

Revision No: 1
Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # PW-3
SSC Potable Water System**

No. 3 Wellhouse Complex

Task # 1

Frequency - Quarterly

Step	Description
1	Perform Vibration Analysis on motor and pump assemblies.

Task # 2

Frequency - Semi - Annually

Step	Description
1	Lubricate water pump bearings with EP-2 grease.

Task # 3

Frequency - Annually

Step	Description
1	Perform Motor Circuit Analysis on 40hp motors.
2	Lubricate motors with EP-2 grease.
3	Perform functional check of chlorine leak detection sensor.
4	Perform functional check of chlorine leak audible warning buzzer.
5	Perform functional check of sump pump and float switch.

Task # 4

Frequency - Biennial

Step	Description
1	Lubricate water meter register assembly with EP-2 grease.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed..

Task # 5

Frequency - 5 Years

Step	Description
1	Calibrate all pressure gauges

Revision No: 1
Revision Date: 10/20/2006

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/01	Task #1 frequency changed from monthly to quarterly

Revision No: 1
Revision Date: 10/20/2006

**JOHN C. STENNIS SPACE CENTER
 MAINTENANCE TASK SHEET # PW-4
 SSC Potable Water System**

No. 3 Elevated Tank Pumphouse Complex

Task # 1

Frequency - Quarterly

Step	Description
1	Perform Vibration Analysis on motor and pump assemblies

Task # 2

Frequency - Semi - Annually

Step	Description
1	Lubricate pumps with EP-2 grease.

Task # 3

Frequency - Annually

Step	Description
1	Perform Motor Circuit Analysis on 15hp motors.
2	Lubricate motors with EP-2 grease.

Task # 4

Frequency - Biennial

Step	Description
1	Perform functional check of float switch.
2	Perform functional check of normally open gate valves by cycling closed, then open.
3	Perform functional check of normally closed gate valves by cycling open, then closed.

CHANGE RECORD

<u>REV #1</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	11/01	Task #1 frequency changed from monthly to quarterly

Revision No: 1
 Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # SS-1

Domestic Wastewater System

Lift Stations

Task # 1

Frequency – Semi-Annually

Step	Description
1	Inspect for sufficient effluent level decrease, after pump activated
2	Inspect check valves for no backflow, after pump shutdown
3	Verify proper operation of floats including high level alarms and feed back to EMCS (if equipped with EMCS monitoring)
4	Check “water in lubrication” or “seal failure” warning light bulb
5	Verify gate valve operation by fully opening and closing each valve
6	Check all components for significant corrosion
7	Visually check surroundings for sink holes, leaks, or other concerns.

Frequency – Annually

Step	Description
1	Inspect open frame relay contacts for pitting or burning (if so equipped)
2	Inspect for sufficient effluent level decrease, after pump activated
3	Inspect check valves for no backflow, after pump shutdown
4	Verify proper operation of floats including high level alarms and feed back to EMCS (if equipped with EMCS monitoring)
5	Check “water in lubrication” or “seal failure” warning light bulb
6	Check all components for significant corrosion
7	Visually check surroundings for sink holes, leaks, or other concerns.
8	Replace impellers (selected lift stations only)

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	7/18/06	Changed annual frequency to semi-annually, added Steps 3 and 6. Removed Biennially step and added to semi-annual. Removed Quinquennially step. Added step 8 on Annually.

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # SS-2 Domestic Wastewater System

Lift Station, Secure Mounted Pump Type

Task # 1

Frequency - Weekly (1 week)

Step	Description
1	Check for air leaks in air bubbler system
2	Blow down compressed air tank to remove accumulated water

Task # 2

Frequency -Monthly (4 weeks)

Step	Description
1	Clean dehumidifier air intake, then adjust humidistat to verify unit operation
2	Verify no debris in sump pump inlet, then trip sump pump float switch to verify unit operation

Task # 3

Frequency - Semi-Annually (26 weeks)

Step	Description
1	Lubricate pump bearings with multipurpose grease

Task # 4

Frequency - Annually (52 weeks), continued

Step	Description
1	Replace compressor(s) air filter and checkout operation of air system
2	Inspect open frame relay contacts for pitting or burning
3	Clean sediment out of wet well with fire hose, while pump system is activated
4	During wet well clean out, inspect for drop in wet well effluent level , with pump running
5	During wet well clean out, inspect wet well for no backflow, after pump turns off
6	Check operation of primary & backup pressure switches during wet well clean out
7	Trip alarm limit switch (if equipped) and verify alarm light operation
8	Verify manual operation by placing selector switch in manual position and verifying pump operation

Revision No: 1
Revision Date: 10/20/2006

9	Check operation of alternators, by activating manual switches several Times
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Task # 5

Frequency - Biennially (104 weeks)

Step	Description
1	Inspect pump impeller blades for wear, shim as necessary
2	Functionally test gate valves by cycling open and closed

Task # 6

Frequency - Quinquennial (260 week)

Step	Description
1	Perform motor circuit analysis on pump motor to determine motor health

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	04/17/06	Maintenance Task Sheet SS-2 “Lift Station, Secure Mounted Pump Type” is cancelled. Concurred by Lladro Sylvester email of April 14, 2006.

**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # SS-3
Domestic Wastewater System**

Lagoon System

Task # 1

Frequency - Weekly (1 week)

Step	Description
1	Clear flow obstructions.
2	Remove trash & weeds
3	Monitor hyacinth & duckweed health

Task # 2

Frequency - Annually (52 weeks)

Step	Description
1	Replace Ultra-Violet bulbs *
2	Analyze condition of sludge buildup and remove as necessary
3	Perform point-point functional checkout of control system

Replacement UV bulbs shall be provided by the contractor.

**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # SS-4
Domestic Wastewater System**

Septic Tank with Rockreed Filter

Task # 1

Frequency - Semi-Annually (26 weeks)

Step	Description
1	Inspect rockreed filter and remove weeds and other contaminants from area

Task # 2

Frequency - Annually (52 weeks)

Step	Description
1	Replace Ultra-Violet bulbs *

Replacement UV bulbs shall be provided by the contractor.

**JOHN C. STENNIS SPACE CENTER
MAINTENANCE TASK SHEET # SS-5
Domestic Wastewater System**

Septic Tank

Task # 1

Frequency - Quarterly (13 weeks)

Step	Description
1	Inspect drain field for surfacing effluent. This is indicated by a spongy condition or the growth of green algae

This is the non-maint job plans

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # SS-6 Domestic Wastewater System

Sump Pump

Task # 1

Monthly (4 weeks)

1	Inspect piping and supports
2	Inspect valves and actuators
3	Inspect electrical connections and controls
4	Inspect for obstructions in sump, screen, and piping
5	Verify auto/manual operation
6	Verify check valve operation
7	If applicable, verify EMCS indications of level alarm and power interrupt

Task # 2

Quarterly (13 weeks)

1	Clean motor and sump pit area as required
2	Clean and lube float switch linkage as required
3	Clean and check float for damage
4	If applicable, inspect and clean non-float level switches as required
5	Inspect pump seals for leakage

Task # 3

Annually (52 weeks)

1	Perform motor current signature analysis (if rated five (5) horsepower and above)
2	Lubricate motor bearings
3	Lubricate pump shaft bearings
4	Lubricate discharge valve stems

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	04/01	(a) Task 2, Step 4 - Added additional step as follows: If applicable, inspect and clean non-float level switches as required. Renumbered existing step 4 to step 5. (b) Task 3, Step 1 – Added current signature.

Revision No: 1
Revision Date: 10/20/2006

JOHN C. STENNIS SPACE CENTER MAINTENANCE TASK SHEET # SS-7

Domestic Wastewater System

Lift Station, Slide Mounted Pump Type, Landfill Leachate System

Task # 1

Monthly

1	Flush piping under cell at north end of Cells #3 and #4 until water pumped at Lift Stations #47 and #48 is clean/clear
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Task # 2

Quarterly

1	Operate pumps in Lift Station #46 until leachate holding tank is empty
2	Position front end loader with bucket under hatch on bottom of tank
3	Open tank hatch and clean sediment/debris from tank
4	Verify operation of tank inlet check valve
5	Verify operation of check valve on pumps at Lift Station #46
6	Remove and clean strainers at inlet to pumps at Lift Station #46
7	Inspect pumps, valves, and piping for leaks; repair as required
8	Inspect pressure valves; replace as required

CHANGE RECORD

<u>REV #</u>	<u>REV DATE</u>	<u>DESCRIPTION OF REVISION</u>
1	8/28/06	Deleted Semi-Quarterly steps to remove pumps.

ANNEX 6.1
LOGISTICS AND TRANSPORTATION

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LOGISTICS AND TRANSPORTATION**

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ANNEX 6.1

LOGISTICS AND TRANSPORTATION

6.1 LOGISTICS

6.1.1 GENERAL INFORMATION

6.1.1.1 Annex Description

This Annex identifies logistics services that include supply management, equipment and disposal management, transportation and drayage, and acquisition services required at Stennis Space Center. Even though specific guidelines, regulations, and minimum performance standards have been established, the services to be performed will rely heavily on knowledgeable and experienced individuals who are innovative and resourceful in their approach. The Contractor will require thorough knowledge of the NASA legacy systems and their conversion to the Integrated Enterprise Management Program. Those systems include: NASA Supply Management System (NSMS), NASA Equipment Management System (NEMS), NASA Property Disposal Management System (NPDMS), NASA On-Line Supply Catalog (NOSC), and the FOS Management Information Control System (MICS).

6.1.1.2 Scope of Work

The Contractor shall furnish all personnel, supervision, and management necessary to provide support services in this Annex.

6.1.1.3 Automated Systems Responsibilities

Problems with the automated systems are the responsibility of the ODIN Contractor and should be reported to the ODIN Help Desk. However, some software associated with the supply and

property systems may be maintained by the Information Technical Services (ITS) Contractor.

6.1.1.4 Limitations, Restrictions, or Other Exceptions

The Contractor shall ensure that all services protect the integrity of the Government's property and supplies. Contractor employee's private vehicles shall not be used to transport Government property. Throughout the receipt, inspections, acceptance, storage, and delivery process, the Contractor shall ensure that Contractor property, material, or supplies are not commingled with Government property, material, or supplies.

6.1.1.5 Workload Data

The Contractor shall maintain records for workload data given in this Annex to include monthly actual and average, if requested, workload data for the current fiscal year. The data shall be electronically available for this Annex by the tenth day of the following month.

6.1.1.6 Authorizations

It is the Contractor's responsibility to request a letter of delegation from the SSC Supply and Equipment Management Officer (SEMO) authorizing specific personnel to receive Government property on behalf of the Government. It is also the Contractor's responsibility to request a letter of delegation from the SSC Transportation Officer authorizing specific trained personnel to sign for freight for SSC. The employee's name and signature must be included in the request.

ANNEX 6.1 LOGISTICS AND TRANSPORTATION

6.1.1.7 System Interface Responsibilities

The Contractor shall provide qualified personnel to provide functional direction, management oversight, and system testing capabilities to fully integrate the NASA legacy systems with the FOS Financial Information System (FIS) systems; improve logistics support to SSC users and provide an Integrated Enterprise Management Program (IEM) liaison. Contractor shall track and report cost savings realized through system enhancements and better utilization of government assets; coordinate programming activities from the ITS and FOS Management Information Control System (MICS) to include bar coding the SSC inventories; provide access of cataloging and disposal information via the web; implement electronic material requests (MRs); full utilization of government assets to alleviate procurements; further cross utilization of satellite warehouses and conversion of legacy systems to the IEMP.

**ANNEX 6.2
LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING**

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ANNEX 6.2
LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING

6.2.1 Annex Description

This Annex identifies the requirements of supply operations including management of NASA's material inventory at the John C. Stennis Space Center (SSC) for such functions as cataloging, procurement, replenishment, record reconciliation, physical inventory, maintenance of stores stock, program stock, standby stock, and bench stock assets within the NASA Supply Management System (NSMS); warehouse operations which include maintenance and operations of a warehouse system that facilitates the storage, stock selection, bin maintenance, bin replenishment, and issue of stores stock, critical spares, and bench stocks within satellite warehouse operations; shipping and receiving operations to include outbound shipments of hazardous materials, household goods moves, and critical spares as identified by the SSC requestors; issue of materials including maintenance of shelf-life and traceable items and management of custodial storage items. These operations should be run by personnel knowledgeable in the management of Government material in accordance with NASA Procedural Requirements, ISO 9001/2000 and ISO 14001, utilizing NSMS and NASA On-Line Supply Catalog (NOSC). Management of the materials includes economical and safe use of equipment and facilities; assembly and location of portable storage, pallets and racks; development and maximum economical utilization of available storage space, always considering stock-level changes. Personnel shall be certified in the use of forklifts, fall protection harnesses and other equipment and shall maintain current certifications at all times. Maintain a single point of contact to manage the issue and maintenance of assets designated as standby stock and custodial storage. Ensure

mission critical stock is on-hand to support each mission/program. Ensure Emergency Storm Supplies are on-hand as required by NASA. The Contractor shall establish and maintain a Government approved purchasing system for SSC stock replenishment in accordance with the Federal Acquisition Regulation (FAR) and the NASA FAR Supplement, performing market surveys in accordance with FAR 7 and FAR 6 (See Annex 1). The Contractor shall be responsible for maintaining and updating selected Cataloger/Commodity Managers Tables in NSMS as necessary. The cataloging functions in support of NSMS include the identification, cataloging, and standardization of installation property, material, and supplies. The Contractor shall transmit and receive cataloging data from Federal, Military, and other civilian agency sources, as well as interfaces with the Defense Logistics Service Center (DLSC) to maintain registration with DLSC of the SSC items. The Contractor shall maintain and operate a uniform catalog system as set forth in the Federal Logistics Information System (FLIS) Manual, and Volumes 1-15. Contractor personnel shall be knowledgeable in the utilization and maintenance of the Federal Catalog System (FCS). Contractor shall promote the use of the NASA On-line Supply Catalog (NOSC) and provide training to users as required.

6.2.1.1 Hours of Operation

Normal hours of warehouse operations are 7:30 a.m. to 4:30 p.m., Monday through Friday. Hours of operations for the Satellite warehouses will normally be 7:00 a.m. to 3:30 p.m., unless otherwise requested by the customer in the area.

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LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING

6.2.2.1.1 Supply Publications Library

The Contractor shall maintain links to cataloging support libraries, including current manufacturer's brochures and catalogs, Federal websites to obtain military specifications, qualified products, and access to the SSC engineering standards and drawings. The Contractor shall comply with the following: Applicable Federal and Military Standards and Specifications; Department of Transportation Hazardous Materials Regulations; Domestic and International Dangerous Goods Regulations; State and Local Statutes; and NASA/SSC directives and procedural requirements.

6.2.2.2 Identification of Commodity Class Managers

The Contractor shall notify the SSC SEMO or designated Technical Manager's Representative with the names of the Cataloger/Commodity Managers, their commodity class ranges, and phone numbers. Notify the SSC SEMO or designated Technical Manager's Representative each time a change occurs. Notification will be made on the same workday as the change occurs.

6.2.2.3 NASA Supply Management System (NSMS) and NASA On-Line Supply Catalog (NOSC)

The Contractor shall operate NSMS and NOSC, NASA supply systems that include, the total tracking and visibility of a complete catalog of stock items and asset information such as availability, warehousing, usage history, procurement lead

times, reorder points, replenishment, economic order quantity, demand history, shelf life, manufacturer's lot information, serialization, ownership, record reconciliation, hazardous material control and coding, affirmative procurement data, shelf-life codes, Material Safety Data Sheet (MSDS) numbers, accounting data, potential excess, receipts, issues, due ins, due outs, backorders, and total item management capabilities with manual overrides. NOSC provides the ability to order items from the Inventory on-line directly into NSMS.

6.2.2.4 Limitations, Restrictions, or Other Exceptions

The Contractor shall ensure that all services protect the integrity of Government property, supplies and, equipment.

6.2.2.5 Documentation

The Contractor shall organize and maintain Supply related documentation and files including, but not limited to, Material Requests (MR's), Bench Stock Requests, Reports of Discrepancy, SSC Material Assessment Forms, physical inventory folders, warehouse denial and inventory adjustment vouchers and corresponding documentation, excess disposal vouchers and corresponding documentation, receiving reports, freight bills, custodial storage files and a variety of NSMS reports. Files shall be accurate and current at all times and maintained in an orderly, easily accessible manner.

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LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING

6.2.2.6 Record Reconciliation and Adjustment of Accountable Records

The Contractor shall respond to requests made by personnel from the NASA SEMO, Institutional Services Division, Financial Management Division (FMD), or any other department involved with the reconciliation of accountable records by researching individual transaction records in NSMS to ensure accuracy of input as compared to documentation. The Contractor shall adjust transactions in NSMS ensuring comments are made in NSMS to record explanation of problem and resolution. The Contractor shall return the response to the applicable requesting office.

6.2.2.7 Program Stock

The Contractor will comply with the requirements for the receipt, storage, and issue of Program Stock items at SSC. There are approximately 19,607 line items of Program Stock. The Contractor shall maintain current ownership data within the NSMS for program stock managers.

6.2.2.8 Authorized Signatures

The Contractor shall issue stock to personnel identified within the NASA/SSC Authorized Signature system only. The Contractor shall not accept authorized signature information directly from the using organization.

6.2.2.9 Packing & Shipping

The Contractor's shall provide a complete Packing and Shipping Service. The Contractor is responsible for packing and shipping all Government equipment, materials, and other forms of Government property from SSC. The Contractor shall make shipments to all domestic and international destinations as required by the Government. Actual shipping cost is not at Contractor's expense. The core duty hours for these services to be provided are Monday through Friday, 7:30 a.m. to 4:00 p.m. In addition to the core hour requirement, the Contractor shall provide skeleton service in the packing and shipping department until 4:30 p.m. to service late arriving shipment requirements. The Contractor shall provide qualified personnel to sign the shippers Certification or Shippers Declaration for all shipments containing hazardous materials. The Contractor shall ensure that shipments containing hazardous materials are prepared for shipment only by personnel who have been trained in accordance with Subpart H of Part 172 in Title 49, Code of Federal Regulations (CFR)

**ANNEX 6.2
LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
6.2.3	Operate a Packing and Shipping Department	<p>The Contractor shall operate packing and shipping services that includes complete preparation of items and materials for shipment from SSC. The Contractor shall receive all equipment and materials for shipment from the customer. The Contractor shall inspect all equipment, materials, and items to ensure that all NASA Control Numbers, part numbers, serial numbers, and other identification numbers correspond with the shipping document as recorded on the DD1149 or SSC Shipping Notice. The Contractor shall select appropriate packaging for hardware, software, materials, and equipment to ensure safe delivery to the world-wide destination by all modes of transportation.</p> <p>Assemble and utilize fiberboard boxes as required; utilize existing pallets or wood crates as necessary for machinery and delicate or sensitive items; provide and utilize pre-fabricated reusable containers as required. Contractor shall notify requestor if wooden crates are going to have to be fabricated by the on-site Carpenter Shop at requestor's expense. Ensure all packing, packaging, marking labeling, and crating is consistent with Military and Federal standards and specifications,</p>		

**ANNEX 6.2
LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
6.2.3	Continuation Operate a Packing and Shipping Department	NASA Policy Directives, Department of Transportation (DOT) regulations, Domestic and International Dangerous Goods Regulations; MIL-STD 129 Military Standard, Marking for Shipment and Storage; MIL-STD 2073, Military Standard, Department of Defense (DOD) Material Procedure For Development and Application of Packaging Requirements; NASA Requirements for Packaging, Handling, and Transportation for Aeronautical and Space Systems, Equipment, Associated Components, and all applicable commercial standards. Label packages as appropriate (Fragile, Handle With Care, etc.).		
6.2.3.1	Verify Freight Bills for Payment	The Contractor shall verify the accuracy of each freight bill received at SSC.	4,800 freight bills annually	Verify all bills within 5 days of the end of the billing month.
		The Contractor shall be responsible for processing Department of Defense (DD) Form 1149, Requisition and Invoice/Shipping Document, through the Contractor's Traffic Management and Equipment Management sections. Processing includes, but is not limited to, verification of authorized signatures and acquisition documents, and tagged equipment verification.	500 DD Form 1149's per year with 200 of those processed as customer walk through.	

**ANNEX 6.2
LOGISTICS AND TRANSPORTATION
SHIPPING/RECEIVING/WAREHOUSING**

<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS AND INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
6.2.3.1	Continuation Verify Freight Bills for Payment	<p>Upon receipt of DD1149, the Contractor shall accomplish the following steps:</p> <p>a. Verify there is a contract or purchase order number which authorizes the shipment of all equipment being sent for repair, test, or relocation to destinations other than another NASA Center.</p> <p>b. Ensure the DD 1149 Form is signed by the SEMO or designee. If no signature is present, inform the customer immediately the form cannot be accepted without an approved signature.</p> <p>c. If any items on the document are NASA tagged equipment, the Contractor shall research the NASA Equipment Management System (NEMS) to ensure the equipment is in the system and the dollar value of the item(s) on the DD 1149 Form match the dollar value in NEMS. If the dollar values do not match, the Contractor shall change the amount on the DD 1149 Form to match the NEMS dollar value.</p> <p>d. Submit the document to the Supply and Equipment Management Officer (SEMO) or designee for signature.</p>		

NNS07AB21C

Attachment J-1

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6.2.3.1	Continuation Verify Freight Bills for Payment	<p>e. Assign a "Voucher" number to the DD1149 Form and record the appropriate information on the log.</p> <p>f. Forward the document to the Traffic Manager for shipment</p>		
6.2.3.2	Prepare Routine Shipments	The Contractor shall prepare all routine shipments of equipment and materials from SSC. Routine shipments are those shipments that do not have a date stated on the shipping document.	1,000 shipments per year.	<p>The Contractor shall properly package, prepare, and ship all routine shipments within 2 workdays of receipt.</p> <p>Obtain the carrier's representative's signature on all bills of lading for all shipments.</p>

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6.2.4	Receiving Operations	<p>The Contractor will perform receiving operations at SSC which includes a central receiving function responsible for the total processing and inspection of inbound Government shipments into SSC and subsequent delivery to customers or to supply warehouse locations. This operation shall be run by personnel knowledgeable in the receipt and inspection of inbound Government freight, certified in the proper use of forklifts and pallet jacks, handling of chemicals, radioactive materials and other materials requiring special handling. Such personnel must be designated by the SEMO as authorized receiving agents for the United States Government. The receiving function includes the identification of controlled equipment and the subsequent tagging processing of non-stock receipts for Center personnel and replenishment of the supply warehouses by designated receipts. Receipt for stock supply will be entered accurately in the NSMS and the subsequent transaction number from NSMS will be annotated on the receiving or acquisition document for each item. Receipt of customer requested items shall be properly staged for pick-up or delivery within 2 days of receipt.</p>		

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6.2.4.1	Receive Inbound Freight	<p>The Contractor is responsible for receiving all inbound freight shipments consigned to SSC. The Contractor shall perform initial receipt and in checking inspection of all inbound freight and process all transportation documentation. The inspection shall include: annotating and resolving any visible overages, shortages, or damages (OS&D); ensuring the number of pieces reflected on the delivery document matches the number actually received; routing the material to the customer or to inspection; and ensuring material received has proper and expeditious disposition.</p>	30,000 Line Items per year.	See below.
		<p>The Contractor shall review documents to determine if shipment is properly consigned.</p>		Shipments not properly consigned will be refused.
		<p>The Contractor shall identify incoming material against the applicable documentation. All freight not identifiable to a document will be considered “frustrated” freight. The Contractor shall segregate frustrated shipments pending correct paperwork.</p>		Appropriate paperwork shall accompany freight through receipt processing.

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6.2.4.1.1	Receipt of Medical Items	The receipt of medical items or drugs shall be rigidly controlled. The Contractor shall notify the SSC Medical Officer for pickup of receipt and store the material in a secure location until pick up.	Nothing Additional	Notification to the SSC Medical Officer and secure storage action shall be accomplished the same workday as medical items or drugs are received.
				All film will be processed through delivery prior to close of business the same workday the film is received.
				All material requiring refrigeration will be moved to applicable storage location within 4 work hours of receipt processing.

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6.2.4.1.3	Receipt of Chemicals	The Contractor shall physically segregate chemicals and caustic substances from other stock during the inspection process, additionally ensuring they are physically segregated for compatibility purposes. The Contractor shall follow proper procedures needed for receipt/storage of hazardous materials and ensure required Material Safety Data Sheets (MSDS) accompany the material.	Nothing Additional	Segregation of chemicals and caustic substances from other stock shall begin immediately upon physical receipt, and shall be adhered to continuously as long as the Contractor is in possession of the material. If MSDS does not accompany freight as required, a Stennis Corrective Action Report (SCAR) will be initiated by QA to resolve within 4 work hours of delivery.

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6.2.4.1.4	Receipt of Radioactive Material	Upon arrival of radioactive material, the Contractor shall verify the material with accompanying documentation. The Contractor shall store the material in a refrigerator designated for radioactive material, where it shall remain until pick up. The Contractor shall contact the consignee for pick up.	Nothing Additional	Receipt verification, proper storage, and contact of the consignee shall be accomplished within 4 work hours of receipt of freight.
6.2.4.1.5	Receipt of Explosives	Class A and B explosives shall be off-loaded at consignee area. The Contractor shall accompany the shipment to the consignee area to process the receipt. Materials shall be kept in an explosive container until delivery.	Nothing Additional	Delivery and receipt processing of Class A and B explosives shall be accomplished within 30 minutes of notification of delivery of freight.
6.2.4.1.6	Receipt of Pilferable Items	The Contractor shall ensure pilferable items are secure during the entire receipt process to guard against theft. Pilferable items shall be stored in a secure location until delivered to destination.	Nothing Additional	Processing, delivery and/or storage of pilferable items shall be completed within 2 workdays of receipt.

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6.2.4.1.7	Receipt of Precious Metals	The Contractor shall ensure precious metals remain in constant surveillance from the time of receipt until pick up. Immediately after inspection, the Contractor shall notify SSC Security for escort, and shall secure the freight until arrival by SSC Security to escort the delivery.	Nothing Additional	Processing of precious metals shall be accomplished within 4 work hours of receipt.
6.2.4.1.8	Receipt of Personal Items	The Contractor shall notify the recipient for pick up of personal items obtained with personal funds.	Nothing Additional	Notify the recipient of personal items within 3 workdays.
6.2.4.1.9	Receipt of Special Equipment	The Contractor shall unload, inspect, and process large, unique, hazardous, or delicate shipments at the ultimate point of usage or storage to eliminate duplicate handling and possible damage.	Nothing Additional	Unloading, inspection, and processing of large, unique, hazardous, or delicate shipments at the point of usage or storage shall be accomplished the same workday as receipt of freight.
6.2.4.2	Returns	The Contractor shall maintain a database to record and track material returns. The database shall contain the following elements: stock number, stock status, warehouse or demand item, noun, quantity, location of material, document number, organization	500 returns per year	Input information into database within 1 work day of material return.

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6.2.4.2	Continuation Returns	returning the item, reason for return, disposition, date returned, and date of disposition. The Contractor shall segregate returned material from normal receipts until disposition is determined.		
6.2.4.3	Identification and Condition	Upon receipt of critical spare items, whether from new purchase or from turn-in, the Contractor shall inspect each item to validate the identity and condition to ensure there has been no damage during shipment and to determine if test and certification is required. Catalog specifications and SCD requirements must match to material being received. The Contractor shall perform receiving inspection, verify proper documentation, and affix a quality stamp on the Receiving Report.	10,000 line items inspected per year	Identification and Condition should be validated within 8 work hours, if item is a new receipt and within 4 work hours if item is a customer turn-in. Items failing to meet requirements will have a corrective action initiated same day.
6.2.4.4	Receipt of NASA procured Equipment/System items	The Contractor will enter receipt information into NASA's IEMP program for NASA procured items.	600 line items received per year	Inputs into IEMP within 2 days of receipt.
		The Contractor shall enter into NSMS all receipts that are to replenish SSC supply inventory or are direct delivery stock items to customers.	9,000 line items per year.	Enter receipts into NSMS at the time of receipt. Stage for delivery to

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6.2.4.4	Continuation Receipt of NASA procured Equipment/System items			warehouse or customer within 1 workday of receipt being processed in NSMS.
6.2.5	Processing Incoming Stock in NSMS	(Intentionally Left Blank)		Contractor shall maintain the NASA performance standard of 2 workdays for receipt processing time.
6.2.6	Stock Replenishment	The Contractor shall maintain stock levels on all inventory items to support this Center at an optimum level. Stock levels on store stock items shall be determined by monthly demand as calculated by NSMS, and levels on all standby stock shall be determined by requirement.	Approximately 3,600 line items annually.	The Contractor shall meet the NASA standard fill rate of 90%.
		The Contractor shall coordinate with customers to confirm requirements for the item with hazardous content, prior to ordering.	Nothing additional.	As required.
		The Contractor shall review all Military/Federal (MIL/FED) order requirements by utilizing the NSMS "Order Notice Review" function, selecting items for transmittal to depots, inputting valid	Approximately 3,600 line items annually.	Review order notices, make necessary changes and initiate orders

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6.2.6	Continuation Stock Replenishment	priority codes and quantities, making all necessary changes prior to transmittal, making cancellations of item when deemed appropriate, and following up on all delinquent orders. Additional NSMS reports to be used to maintain required levels are the "Due-in/Due-out, "the "On-hand Balance Less than		for nightly batch run on a daily basis. Review and initiate follow-up action on "Due in and Due-out
		Level," and the "Delinquent Delivery, and the Reorder Notice" Reports. "		Report". Weekly
		The Contractor shall transmit MIL/FED orders to various federal depots and receive status updates on all orders by utilizing Defense Automatic Addressing System Center (DAASC) and Defense Asynchronous Message Entry System (DAMES) software to download from NSMS and upload status into NSMS.	Approximately 1,300 annually.	Transmit MIL/FED orders on a daily basis after such orders have been reviewed and confirmed by the Item Manager (IM.)
		The Contractor will be required to obtain and maintain a Position of Trust clearance for all personnel who will be interfacing with the DOD replenishment systems.		Contractor to provide completed clearance within 45 days of contract start.
		The Contractor shall complete a Standard Form (SF) 364, Report of Discrepancy (ROD), on discrepant MIL/FED receipts regardless of dollar value if the receipt is an overage, an unacceptable substitute,	Approximately 60 line items annually.	Completed ROD shall be sent to the appropriate depot within 2 workdays

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6.2.6	Continuation Stock Replenishment	<p>damage, or a medical item.</p> <p>The Contractor shall prepare a ROD for shortages only if the dollar amount is greater than \$50 for General Services Administration (GSA) items or greater than \$100 for MIL/FED items.</p>		after initial receipt.
		<p>The Contractor shall initiate and document follow-up action on any ROD not responded to within 30 calendar days. Notify the SEMO or designated representative of any ROD's not responded to within 30 calendar days.</p>	Approximately 10 line items annually.	Follow-up action shall be taken within 2 workdays after 30 calendar days with no response.
		<p>The Contractor shall review all commercial order requirements utilizing the NSMS "Reorder Notice Report" for all stock items, including bench stock. The Contractor shall establish due-ins and follow up on all delinquent orders utilizing the NSMS "Due-in/ Due-out" and the "Delinquent Delivery" Reports." The Contractor shall purchase required stock items in accordance with the Federal Acquisition Regulation (FAR).</p>	Approximately 3,600 line items annually.	Review all commercial orders on a daily basis. Initiation of acquisition process will be completed within 1 workday of notification of the need to replenish.

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6.2.6	Continuation Stock Replenishment			Follow-up of all delinquent orders shall be made within 4 workdays of routine requests and 2 workdays of work stoppage requests.
6.2.7	Affirmative Procurement Program	<p>The Contractor shall implement and utilize the Affirmative Procurement Program for purchasing recycled products as mandated by Executive Order 13101, in accordance with the standards set forth in the FAR, NASA Supplements.</p> <p>Ensure purchases fulfill the minimum standards set forth in the Affirmative Procurement Program</p> <hr/> <p>The Contractor shall coordinate with the cataloging function to input recycle codes for designated items to ensure accurate reporting of products with recovered content.</p> <p>At the time of purchase and upon receipt verify with documentation per vendor. Reference DR 6-GA19.</p>	Approximately 3,600 line items annually.	

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6.2.7	Continuation Affirmative Procurement Program	The Contractor shall verify items with recovered content meet minimum percentages as found in Environmental Protection Agency (EPA) 530-SW-91-011, 40 CFR Parts 250, 252, 253, 248, and 246.		
6.2.8	Management of Inventory	The Contractor shall manage the inventory of all stocked assets in accordance with NASA Series 4100 Policy, Procedural Requirements, and NASA Materials Inventory Manual. This includes designation of controlled items or other items requiring specific consideration.	100,000 transactions annually	Complete all transactions to meet NASA performance standards
6.2.8.1	Adding New Line Items	<p>The Contractor shall review requests for stockage, SSC Form 217, Request for Additional SSC Inventory Support, to ensure they meet the criteria as stated in the NASA Series 4100 Procedural Requirements.</p> <p>Upon receipt of a SSC Form 217, the Contractor shall review for appropriate signatures. The Contractor shall assign a control number and record the SSC Form 217 data on the log.</p> <p>If the item already exists in stock, the Contractor shall notify the customer of the stock number.</p> <p>If item is not in stock, the Contractor shall forward for approval signatures.</p>	Approximately 550 line items annually	<p>Forward SSC Form 217's to the SSC SEMO or designated Technical Manager's Representative for approval within 2 workdays of receiving request.</p> <p>For approved SSC Form 217's create asset record and initiate purchase within 5 workdays</p>

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6.2.8.1	Continuation Adding New Line Items			of receipt of approved form.
		<p>If the item is hazardous, the Contractor shall ensure that stocking of item is approved by the NASA Environmental Management Officer or designee.</p> <p>On program stock items, verify approved levels, specifications, nomenclature, and justification, with accurate approvals, mission-related items, repairable items, building and system component in which item is to be used. For stock items, the Contractor shall complete a SSC Form 217 and submit to the SSC SEMO or designated Technical Manager's Representative for approval.</p>		
		<p>Upon receipt of an approved SSC Form 217's the Contractor shall activate asset records determined to meet criteria for stockage through NSMS; establish initial purchase in accordance with the economic order quantity (EOQ) or approved stock level and within budgetary constraints.</p>		New catalog record shall be created within 5 workdays after receipt of approved SSC Form 217.
		<p>Notify customer of new stock number or disapproved request.</p>		
		<p>The Contractor shall be responsible for the imaging of components and attaching those images to the catalog record in NSMS for display in NOSC.</p>	Approximately 6,000 transactions per year.	

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6.2.8.2	Excessing Line items	The Contractor shall review stores stock and bench stock items which have been in the NSMS inventory for at least 12 months, with little or no usage, for retention or elimination. The Contractor shall contact users of potential excess items, create excess transactions, document the reason for excess action, and complete the process through the first level of approval for the accurate transfer of applicable items to disposal.	Approximately 1,000 line items per year subject to review.	Review the Complete Excess Report annually.
				Initiate disposal action and appropriate transaction in NSMS within 5 workdays.
		The Contractor shall discontinue assets through NSMS that have been considered excess or no longer meets the criteria for stockage according to the NASA Series 4100.1.	Approximately 300 line items per year.	Discontinue asset within 5 workdays of confirmation of discontinuance of stockage.
		Upon receipt of an excess disposal document, the Contractor shall select stock to fill the request. The Contractor shall prepare and physically stage material for movement to Redistribution.		
		The interface between NSMS and the NASA Property Disposal Management System (NPDMS) will be utilized for excess transactions from Supply Management.		
The Contractor shall take action to complete all suspense transactions, receipts and issues, through the NSMS functions "Suspended Receipts Browse	Approximately 50 transactions per month.	Review and release suspended transactions within 2		

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6.2.8.2	Continuation Excessing Line Items	Select" and "Release Suspended Issues." The Contractor shall use appropriate instruction codes on all applicable issues and receipts.		weeks or discovery.
6.2.9	Physical Inventories	The Contractor shall develop and make available to the SSC SEMO or designated Technical Manager's representative and annual fiscal year (FY) schedule, that facilitates the inventory of store stock, program stock, standby stock, and bench stock. In accordance with NASA Series 4100 Procedural Requirements. The schedule must conform to the NSMS Inventory program and must be administered through NSMS.	1 schedule per year.	Schedule shall be complete and available at least 30 calendar days prior to the beginning of the FY.
		The Contractor shall conduct inventories according to the approved schedule. Inventory control records, freeze records, and count sheets will be generated in NSMS.	Approximately 4 inventories per year - dependent on schedule.	Schedule shall be complete and available at least 30 calendar days prior to the beginning of the FY.

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6.2.9	Continuation Physical Inventories	The Contractor shall begin the count process when the freeze on records takes place. The Contractor shall utilize NSMS suspense functions for issue and receipt activity during the inventory process. First and second counts shall be accomplished by the Contractor and the same person shall not count the same item both counts. Data entry into NSMS of all count results shall be accomplished by the Contractor only after physical issue and receipt activity on frozen items has been considered. Third count shall be accomplished by non-warehouse staff.	Nothing additional.	Contractor shall assure that every line item is inventoried at least once within a five year cycle.
		The Contractor shall operate the supply system in an efficient and effective manner throughout the inventory process, ensuring customer support is maintained.	Nothing additional.	
		Contractor shall be responsible for compiling the semi-annual performance measures and providing the 1619 reports for all inventories performed during the reporting period.	See DR 6-LS01	
6.2.10	Maintenance and Standardization	The Contractor shall maintain and standardize the SSC on-line catalog in NSMS. Contractor shall maintain NOSC.	16,000 inputs annually	

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6.2.11	Perform Federal Catalog Activities	The Contractor shall perform Federal Cataloging activities to ensure that all SSC items authorized for cataloging are included and maintained in the FCS, have Federal Item Identification, and are assigned National Stock Number (NSN) or Local Stock Numbers. Ensure that NSMS catalog records are complete and up-to-date to ensure accurate ordering and maintenance.	5,000 updates annually 500 User Registration requests per year. 27 User Withdraws per year. SSC Form 217	Contractor shall convert Local Stock numbers to Federal numbers as identified through DLSC updates semi-annually. Upon notification by GSA, complete appropriate actions in NSMS in 2 workdays.
6.2.11	Perform Federal Catalog Activities	<p>The Contractor shall perform Log Add User/Log Withdraw User (LAU/LDU) actions using an appropriate diskette formatted per DLSC, to maintain the accuracy between the Master Catalog Record, NSMS and DLSC's Simplified File Maintenance (SFM) Basic Catalog Tape Record. The Contractor shall use this process to update the DLSC master file of NSN's in stock and NSN's to be added or withdrawn.</p> <p>The Contractor shall prepare a transmittal letter to GSA to submit the diskette.</p>		<p>Notify item management and warehouse functions within 1 workday of NSMS updates.</p> <p>Forward diskette and transmittal letter to GSA.</p>

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6.2.11	Continuation Perform Federal Catalog Activities	Upon receipt of a Department of Defense (DD) Form 1685, Collaborations from Other Cataloging Activities , the Contractor shall determine if SSC is a user of the item and return to requesting activity.	20 forms per year.	Research and response to DD Form 1685 shall be completed within 2 workdays from receipt of the DD1685.
		Upon notification of catalog record change, the Contractor shall update NSMS record.		NSMS shall be updated within 30 work days of notification of record change. Notify the item manager and warehouse functions within 5 work days of NSMS updates.
		The Contractor shall ensure all information has been updated using the information from the semi-annual tapes.	2 tapes per year	Complete verification of updates using semi-annual tapes and update NSMS within 30 work days after receipt of tapes.

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6.2.12	Update NSMS/NOSC	<p>The Contractor shall perform file maintenance to update the NSMS catalog to ensure the catalog system is current.</p> <p>Upon notification from the item management function, or receipt of listings from the military or Federal depots requesting action, or when operations warrant such changes, the Contractor shall process catalog maintenance actions. These actions include, changes in stock number, classification, identification, source, interchangeability, equivalency, shelf life data, hazardous codes, packaging, unit price, unit of order, and container marking, for items existing in and to be added to SSC stores stock or critical spares.</p>	5,000 inputs per year.	Update NSMS within 30 workdays of receipt of list or identification of situation requiring updates.
6.2.13	Customer Assistance	<p>The Contractor shall provide customer assistance in all areas of cataloging.</p> <p>Upon request, the Contractor shall perform physical material inspection of items to determine if the item is correctly identified.</p> <p>The Contractor shall respond to requests on part number listings, telephone requests, and Safety Alert Forms and requests.</p>	<p>See below.</p> <p>1,000 *line items per year.</p> <p>1,000 *line items to research per year.</p>	<p>See below.</p> <p>These will be accomplished as requested.</p> <p>Respond to part number listings within 4 workdays of receipt.</p>

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6.2.13	Continuation Customer Service		2,300 telephone requests per year.	Respond to telephone requests within 4 work hours of request.
			10 Safety Alert line *items per year.	Respond to Safety Alerts within 1 workday of receipt.
6.2.14	Shelf Life	The Contractor shall be responsible for the management of shelf life material for SSC Supply items. The Contractor shall use the NSMS shelf life program to track shelf life information and expiration dates on those items designated as subject to shelf life control from the time of receipt at SSC through storage, issue, and delivery to the customer.	360*line items subject to shelf life control (annual average).	Continuous and accurate tracking of shelf life data and expiration dates.
		The Contractor shall ensure the NSMS catalog record indicates if an item is subject to shelf life control as determined by either the manufacturer of the item or by the Defense Logistics Supply Center (DLSC).		
		The Contractor shall ensure the NSMS catalog record indicates if an item is subject to shelf life control as determined by either the manufacturer of the item or by the Defense Logistics Supply Center (DLSC).		

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6.2.14	Continuation Shelf Life	<p>The Contractor shall ensure that, in accordance with NASA Series 4100, NASA Materials Inventory Management Manual, shelf life material has sufficient shelf life remaining when received at SSC. Both the manufactured date and shelf life expiration date shall be entered into NSMS. The Contractor shall mark the shelf life expiration date on all shelf life material before it is stored and locations will be marked as containing shelf life material. Issues will be made based on the first in, first out (FIFO) method. Material will be labeled with a SSC Shelf-life Sticker indicating the expiration date, purchase order and item description.</p>		<p>75 percent of shelf life must be remaining upon receipt at SSC. Material shall be physically identified as subject to shelf life controls and locations marked as containing shelf life controlled material prior to storage action and throughout the storage process.</p>
		<p>The Contractor shall run the NSMS "Expiring Shelf Life Report" monthly covering records that will expire within 60 calendar days. The Contractor shall use the report to verify if material for that expiration date is in location and annotate count on the listing. The Contractor shall update the NSMS shelf life program with the information, take out any shelf life date with zero quantity in location, and perform excessing to assure items are received in property disposal with 30 days life remaining.</p>	<p>Review 150 expiring shelf life records per year.</p>	<p>Complete review and any required actions shall be completed within 10 workdays after the end of the month.</p>

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6.2.15	Inventory Reconciliation	The Contractor shall utilize the inventory adjustment in NSMS to initiate, document research, and adjust the accountable records. The Contractor shall initiate and accomplish inventory adjustments by Stock Number in NSMS any time it becomes known the on-hand quantity does not match the NSMS balance and immediate research and corrective action cannot be taken. (Immediate research and corrective action is defined as research that is initiated at the time the discrepancy is discovered, and results in a recount that resolves the discrepancy or another specific action, such as a document reversal or transaction adjustment, etc.). Upon discovery the asset will be frozen immediately, research conducted and discrepancy resolved.		Initiate warehouse denial by close of business the same day after discovery of the discrepancy.
		The Contractor shall perform thorough research and documentation on all adjustments.		Total research, analysis, and resolutions to be completed within 5 workdays of initiation
		The Contractor shall provide any additional documentation requested by the SEMO that may that arise during the approval.		All analysis and documentation should be thorough and in a format suitable for NASA management signature

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6.2.16	Customer Service Desk	The Contractor shall staff a Customer Service Desk to provide services including, but not limited to, status of NSMS supply requisitions, issues from stock, incoming receipts, purchase order placement, outbound shipments, prices, delivery dates, and form preparation instructions.	1,000 customer request calls per year.	Provide accurate and efficient assistance to ensure processes flow in an accurate and prompt manner.
6.2.17	Testing NASA Supply and Equipment Management System (NSMS) & NASA On- line Supply Catalog (NOSC)	Contractor shall perform tests to NSMS upon notice of new system releases.	3 releases annually. Approximately 20 hrs testing per release.	Testing of NSMS releases to be completed within one week of release being installed.
6.2.18	Document Control	The Contractor shall perform computer input and inquiries, organize and maintain a variety of SSC Supply related document files, verify receipts, and distribute documentation resulting from overnight and on-line requests into NSMS.	45,000 documents annually	Maintain an accurate, effective, easily accessible and retrievable filing system of accountable NSMS documentation. Provide accurate and timely data input and verification.

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6.2.19	Issues from SSC Inventories	Upon receipt of a Material Request or Bench Stock Ticket, the Contractor shall process requests for supplies into NSMS. The Contractor shall verify, through SSC ARS system, if the documents contain the proper authorizing signatures prior to processing. If the appropriate signatures are not present, notify the customer and return the request via ARS or by mail.	48,000 line items issued per year.	Valid requests shall be accurately processed in NSMS on the same workday as received prior to 3:00 p.m. Next day processing for those received after 3:00 p.m. If proper signatures are not present, mail the document to the customer on the same workday as the request is received or return in ARS.
6.2.19.1	Issues from SSC Benchstocks	Upon receipt of a NSMS generated Issue Notice or Bench Stock ticket, the Contractor shall select stock to fill request and prepare and physically stage material for customer delivery or pick up.	48,000 line items issued per year.	Within 1 workday after MR or other approved issue document is received in the warehouse. Correct material shall be pulled with counts and units of issue being accurate.

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6.2.19.2	Work Stoppage Requests	<p>The Contractor shall provide a work stoppage counter for customers with properly signed documents to walk up and receive immediate service. The Contractor shall ensure documents contain proper signatures. The Contractor shall check for asset freeze, on-hand quantity, or asset control prior to issue.</p> <p>If the customer chooses to hand carry the requested supplies, the Contractor shall pull the supplies immediately.</p>	1,500 line items per year.	Work stoppages shall be completed within 15 minutes if the customer hand carries the supplies.
6.2.20	Acquisition and Management, Gas Cylinders	<p>The Contractor shall establish and maintain a Government approved program for the JIT acquisition of gasses in accordance with the Federal Acquisition Regulation and compliance with safety standards.</p> <p>The Contractor shall process JIT requests for gasses after verifying appropriate approvals. The Contractor shall receive requests for picking up empty cylinders. The Contractor shall initiate pick up and delivery of cylinders via the JIT subContractor.</p>	<p>850 gas cylinder purchases per year. Nothing additional.</p> <p>Nothing additional.</p>	<p>See below.</p> <p>Within 1 workday of receiving request.</p>

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6.2.20	Continuation Acquisition and Management, Gas Cylinders	The Contractor shall assure JIT subContractor products are supplied in accordance with the provisions of NASA Series 5300 coordinating with the Quality Assurance on required specifications including Material Safety Data Sheets (MSDS) and Certificate of Gas Analysis requirements.	Nothing additional.	Purchase shall be initiated within 1 workday of request and be input into NSMS within 4 hours of placing order.
6.2.20.1	Gas Cylinder Receipt Processing	The Contractor shall establish procedures with the JIT subContractor for receipt of incoming gasses to assure accurate records are maintained for billing purposes.	850 receipts per year.	See below.
		The Contractor shall inspect to ensure the correct quantity is received against each order. Verify accurate information is provided, customer signatures, receipt date and serial number on each. bottle is clearly defined on the packing list	Nothing additional.	Upon inspection and prior to receipt, verify completely and accurately all information on item being received.
		The Contractor shall make accurate and complete distribution of all documentation. A copy of the certificate of Gas Analysis shall accompany the cylinder and be provided to the requestor at time of receipt.	Nothing additional.	

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6.2.20.2	Data Base for Tracking Gas Cylinders	The Contractor shall maintain and utilize the data records in the Management Information Control system (MICS) application for the tracking of all gas cylinders. The data elements include, but are not limited to, purchase order (PO) number, date of PO, cylinder identification numbers, location, user, customer charge number and disposition.	1,700 entries per year	Provide current and accurate tracking and status of all gas cylinders located at SSC. Database will be updated within 2 days of transaction.
6.2.21	Restricted Issue – Program Stock	Activity on restricted material shall be processed in NSMS under the appropriate ownership code designated for that specific program manager.	900 Project Ids & ownerships	Material shall be tracked under the correct ownership code at all times.
6.2.22	Program Stock Issues	The Contractor shall process issues per the NASA Series 4100 Procedure Regulations. The Contractor shall ensure all requesting paperwork contains the signature of the Program Manager or Official Designee for that project. If a problem exists, the Contractor shall contact the Program Manager for resolution.	5,000 Issues per year.	Issues must be completed 2 workdays after request for issue is received
		Program stock will be issued retaining the serial/trace number that is being issued. For repairable items the item will be tracked to assure return to the warehouse within 45 days to assure program integrity.		

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6.2.23	Customer Service	The Contractor shall respond to oral or a written (Contractor discretion) customer service request, which may include, part number verification, asset availability, inventory count, and requests to physically view material.	1,300 requests per year.	Assistance shall be provided within 8 work hours after request is made.
6.2.24	Emergency Storm Supplies	<p>The Contractor shall review annually the Post Storm Emergency Supplies Listing, provided to the Contractor by the NASA Emergency Preparedness Officer, for any quantity and content changes. Any changes shall be marked on the listing. Reference SSC Emergency Preparedness Plan – SPLN-1040-0003.</p> <p>The Contractor shall maintain and distribute Hurricane kits in accordance with the above named plan. Hurricane kits are located in Bldg. 2204. The Contractor shall ensure all specified quantities of items are located in the kits and economical utilization, rotation of batteries, and other shelf life contents has occurred</p>	<p>50 line items subject to annual review.</p> <p>Maintain 20 kits at all times.</p> <p>Verification shall commence in May before hurricane season begins.</p>	<p>Return annotated listing to SSC SEMO or designated Representative as requested.</p> <p>Kits will be maintained at 100% of required contents.</p> <p>Rotation of shelf life contents shall be completed annually, at least 30 calendar days prior to the beginning of the hurricane season.</p>

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6.2.25	Critical Spares Re-certification	In accordance with the NASA Series 4100, NASA Materials Management Manual , and the Federal Property Management Regulation, Subchapter E, Subpart 101-27.304, the Contractor shall perform a biennial review of items designated as critical spares. A listing will be furnished to the appropriate Engineering Division for review. The Contractor shall indicate on the listing which items shall be retained, any changes in levels, additions, and deletions. The Contractor shall return the annotated listing to the SEMO or designee.	The biennial listing will contain 15,000 *line items for review.	
6.2.26	Critical Spares Listing	The Contractor shall identify and make available for SEMO or designee's approval, items considered to be Program critical. The annotated listing shall be returned to SEMO within 45 workdays after the Contractor receives the listing. All necessary changes will be marked legibly. Program Critical list shall be available for approval within 10 days after contract start and shall be updated within 2 workdays anytime a change occurs. The Contractor shall procure all designated program critical items, taking into account considerations such as lead times, uniqueness, and availability so as to maintain a 90% stock level.	3,500 line items per year.	

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6.2.27	Custodial Storage Request	The Contractor shall manage materials/equipment in Custodial Storage warehouses in accordance with NASA Series 4200, NASA Equipment Management Procedural Requirements. Management includes, but is not limited to, the addition, removal, tracking, inventory, review, and processing of custodial storage items and related documentation. The Contractor shall maintain a Case File Folder for every case file in temporary Storage.	400 case files to maintain annually.	Provide continuous tracking and visibility of temporary storage material/equipment.
		Documentation in the folder includes, but is not limited to, NASA Form 1602, NASA Equipment Management system (NEMS) Transaction Document or SSC Temporary Storage Document, processed on the case file, a copy of all inventories associated with the case, retention level letters and responses. Data in the file is cumulative. Submission of the folder is required to SEMO or designated representative during the annual retention review process. Folders shall be current at all times.	1 Master Case File Listing per year.	Forward Master Case File by ownership.

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6.2.27	Continuation Custodial Storage Request	The Contractor shall maintain and update a database containing case file number (Contractor assigned), responsible organization, property custodian, equipment control number (ECN), if applicable, identification and quantity of each stored item. The database should have sort capabilities and be able to print reports to consolidate data. Annually, the Contractor shall forward one copy of the Master Custodial Storage Listing to the applicable Program manager for review and validation of the held items.		
		The Contractor shall process requests from the SEMO or Designee to remove or add items for temporary storage on SSC Custodial Storage Request Form, for non-tagged material/equipment; or NASA Form 1602, for tagged equipment. The Contractor shall review items to be stored and recommend storage location and any special packing requirements. A case file number will be assigned and a case file created. Copies of the NASA Form 1602 will be forwarded to Equipment Management upon receipt.	300 requests for adds or removals per year.	Total issue or receipt shall be completed within 5 workdays from the initial receipt of request with data input into the system by the second day of that process.

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6.2.27.1	Inventory – Custodial Storage	The Contractor shall perform a physical inventory of each case file annually. The Contractor shall complete a Custodial Storage Inventory Report and retain it in the Case File Folder. The data elements of the Inventory Report include, item description, count, location, and case file number.	400 case files annually	The Inventory shall be completed prior to responsible organization review for retention and/or with the responsible program manager. responsible program manager.
6.2.27.2	Retention Justification	All items in custodial storage must have retention justified annually by the responsible organization. The Contractor shall generate a Custodial Storage Case File Listing and submit it to the applicable program manager for review.	400 case files annually	Submit the listing at least 1 month prior to anniversary date of material receipt in custodial storage.
		If no response is received, the Contractor shall contact the using organization. If contact does not result in the required response, the Contractor shall notify the SEMO with the following information: case file number, property custodian, organization code, phone number, date review letter was sent to organization, and expired and inventory date.	Nothing Additional	Contact manager if no response is received for 2 weeks after response due date. Notify SEMO in 1 week if non-response continues.

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6.2.28	Warehousing Material	The Contractor shall warehouse material for storage and future issue. The Contractor shall establish controls to ensure placement of material in a storage location in a safe and secure manner, providing easy access, identification, and retrieval. Material may include pilfer able, shelf life, and hazardous material items.	9,000 line item receipts per year	Completely warehouse material within 2 workdays after delivery to warehouse.
		The Contractor shall verify that identity, quantity, and unit of issue of incoming material to be stored conform to receiving paperwork. Resolve any discrepancies.		
		The Contractor shall place the material in a storage location. The Contractor shall ensure items requiring refrigeration are promptly moved to refrigerated storage		Material shall be placed in a safe, secure manner, providing easy identification and access.
6.2.29	Deliver Inbound Freight	Provide delivery of inbound freight staged in warehouse and deliver to customer on-site and pick-up inbound freight staged in warehouse on a daily basis. Deliver direct to customer at building and room number stated on package.	10,000 line items per year.	The Contractor shall make deliveries within 1 workday after freight is staged Obtain the customer's signature and current date on

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6.2.29	Continuation Deliver Inbound Freight			the document upon completion of the delivery.
		The Contractor shall provide delivery of inbound overnight/express packages to the customer. Pick up overnight/express packages staged in warehouse for delivery on same day received. Deliver direct to the customer at building and room number stated on package	200 packages per year	The Contractor shall deliver all packages within 1 workday of receipt. Obtain the customer's signature and current date on the work order upon completion of the delivery.
6.2.31	Operate Satellite Warehouses	The Contractor shall provide satellite warehouses as requested by SSC customers. The Contractor shall maintain these areas in the same manner and within the same requirements as the main warehouse with knowledgeable and technically qualified personnel. Areas will be neat, clean, and maintained in a professional, safe manner at all times.	Maintain up to 3 satellite warehouses	Maintain fully supplied warehouses.
		The Contractor shall perform constant surveillance to safeguard the material assure count accuracy		

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6.2.31	Continuation Operate Satellite Warehouses	The Contractor will provide pick-up and delivery of customer material and bench stock items from the main warehouse to the satellite warehouse on a daily basis.	17,000 line items annually	At least 2 pick-ups daily
		The Contractor shall maintain a staging system at each satellite warehouse which assures the customer is aware of awaiting materials and/or status of incoming materials for future projects.	13,000 line items annually	Maintain system daily
		The Contractor shall be responsible for the emergency pick-up of equipment and/or materials from off-site vendors as requested.	150 requests per year	

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6.3.1 DESCRIPTION

This Annex identifies the requirements of equipment management and disposal operations of NASA's personal property at the John C. Stennis Space Center (SSC) including such functions as office furnishings operations including furniture receipt, storage, issue, repair, determination of scrap furniture, field and warehouse assembly and disassembly; redistribution and reutilization operations including receipt, screening, processing precious metals for reclamation purposes, Reutilization on-site, transfers to other federal agencies and other NASA centers and processing of surplus property through GSA sale utilizing the NASA Property Disposal Management System (NPDMS) and interfacing with GSA for excess and surplus property; maintaining equipment accountability of the SSC tagged property utilizing NASA Equipment Management System (NEMS) to include tagging incoming property, performing physical inventories, tracking outgoing and incoming property under repair and maintaining warranty information on equipment and facilities, heritage equipment documentation, tracking personal property used by individuals and interfacing with NASA Financial Management in the reporting of the SSC property held in the general ledger. The Contractor shall establish a database for the furniture pool operation. The data base shall provide data as to the on hand inventory of furniture by type, color and condition and be made available to the NASA Supply and Equipment Management Officer upon request. The Contractor shall be certified in the

use of forklifts, handling of hazardous chemicals and other associated personnel protective equipment and shall maintain current certifications at all times. The Contractor shall be thoroughly familiar with the NASA Procedural Requirements of NPR 4200.1E Equipment Management Manual, NPR 4200.2B Equipment Management Manual for Property Custodians, NPR 4300.1A NASA Personal Property Disposal Procedural Requirements and NPR 4310.1 Identification and Disposal of NASA Artifacts and shall comply with the reporting requirements and measurements standards associated with each requirement.

6.3.1.1 Limitations, Restrictions, or Other Exceptions

The Contractor employees shall ensure that all services protect the integrity of the Government's interest and that accountability of the SSC personal property is accurately reported to the SSC Supply & Equipment Management Officer (SEMO) or designated Representative.

6.3.2 OFFICE FURNISHINGS

The Contractor shall manage the office furnishings operations including furniture receipt, storage, issue, repair, determination of scrap metal furniture, field and warehouse assembly and disassembly. The Contractor shall establish a database for the furniture pool operation. The database shall provide data as to the on-hand inventory of furniture by type, color, and condition and be made available to the NASA Supply and Equipment management Officer upon request Requirements of NPR 4200.1E Equipment Management Manual, NPR 4200.2B

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Equipment Management Manual for Property Custodians, NPR
4300.1A NASA Personal Property Disposal Procedural
Requirements and NPR 4310.1 Identification and Disposal of
NASA Artifacts and shall comply with the reporting
requirements and measurement standards associated with each
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6.3.3	Furniture	The Contractor shall maintain furniture operations (includes acoustical panels).		
6.3.3.1	Furniture Receipts	The Contractor shall receive new furniture in the warehouse, inspect for damage, and store. Log receipt of new furniture/panels into an inventory database.	1,200 pieces per year.	Within 2 workdays after receipt of furniture.
6.3.3.2	Furniture Issues	The Contractor shall identify and prepare furniture for issue; clean, polish, and tag for delivery. Assemble those pieces of furniture needing assembly in warehouse.	1,200 pieces per year.	Comply with schedule date for delivery.
6.3.3.4	Furniture Repair Program	<p>The Contractor shall maintain the minor furniture repair program. Repair includes, but is not limited to, repair of serviceable furniture. For example, cleaning and reupholstering of acoustical panels, replacing casters, pneumatic cylinders, under seat mechanisms; adjusting drawers; covering scratches; filling holes; and repairing and replacing locks.</p> <p>The Contractor shall furnish repair parts as necessary. Repair parts include, but are not limited to, casters, pneumatic cylinders, under-seat mechanisms, locks, refinishing products, wood fillers, screws, and fabric for</p>		

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6.3.3.4	Continuation Furniture Repair Program	re-upholster of acoustical panels. If repairs exceed 66 percent of the replacement cost of the item, the Contractor shall notify the Government and identify the item as scrap.		
		Repairs that cannot be accomplished in the warehouse or in the field including, but not limited to, executive furniture re-upholstery and electrostatic painting, will be accomplished with an issuance of a service order by the Government.		
		The Contractor shall cannibalize parts from non-repairable furniture upon approval of the SEMO or designated Representative.		Within 5 workdays from receipt of the request.
		The Contractor shall make repairs in the field when practical including but not limited to, desks, drawers, handles, locks, chairs, legs, and other minor repairs. SSC Form 704 , Service Work Request, work order will be used by the Government to request field repairs.	20 pieces per year	Repairs of a safety nature shall be completed within 2 work hours upon receipt of request.
		The Contractor shall make minor on the spot repairs in the warehouse as necessary.		Repairs in the field should take no more than 30 minutes to complete.

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6.3.3.5	Furniture Warehousing	Furniture items returned to the warehouses shall be inspected and segregated into groups as reusable, repairable, excess and scrap. As approved by Supply and Equipment Management Officer or authorized representative, the Contractor shall place scrap metal into scrap metal bins provided. Reusable furniture shall be logged into the inventory database.	2,100 pieces per year.	Within 5 workdays of receipt of furniture in warehouse.
		The Contractor shall excess and scrap furniture on a SSC Form 55 , Request for Turn-In or Reissue of Excess Property To/From Redistribution and Utilization, with the appropriate NASA Form 811 , Determination for Classification of Property as Scrap or Salvage, or NASA Form 812 , Determination and Authorization to Abandon or Destroy Surplus Property. The SSC Form 55 must be approved by the Supply and Equipment Management Officer.	As required.	Submit monthly by the 3rd workday of the month for the previous month's activity.
6.3.4	Redistribution and Utilization Operations	This Contractor shall perform the functions necessary to operate and maintain a total mechanized inventory control system, as well as a total storage function for all excess Government property from time of receipt into storage through accomplishments of reutilization or disposal activities. All		

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6.3.4	Continuation Redistribution and Utilization Operations	functions shall be performed in accordance with all applicable Federal Property Management and NASA Regulations including: 41 Code of Federal Regulations (CFR) Chapter 101, Subpart H, NASA Series 4300 NASA Disposal Management.		
6.3.4..1	Limitations, Restrictions, or Other Exceptions	<p>The Contractor employees shall ensure that all services protect the integrity of the Government's interest. The handling of all precious metals shall be restricted according to the following:</p> <ul style="list-style-type: none"> a. Upon receipt of precious metals Contractor shall record the required information from the turn-in document into the logbook. b. All precious metals shall be secured in the designated area. c. The Contractor shall conduct a monthly inventory of all precious metals or precious metal-bearing materials and verify the count with the logbook. 		

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6.3.4.2	Applicable Documents	The Contractor shall comply with all applicable regulations, policies, and procedures including 41 CFR 101; NASA Procedural Requirements Series 4100, 4200, and 4300 and the NASA Property Disposal Management System (NPDMS) Users and Operations Guide.		
6.3.4.3	Hours of Operations -Redistribution	Normal hours of warehouse operations are 08:00 until 11:30 a.m., Monday through Friday.		
6.3.4.4	Reutilization and Disposal	Operate and maintain a total warehousing and documentation function, utilizing the NPDMS for the reutilization and disposal of excess Government property. Processed is defined as actions required from original input to reutilization or final disposal.	4,000 transactions processed in NPDMS annually.	
		Inspect and verify information provided on SSC Form 55 or NASA Form 1602 at the time of receipt. Make a visual record of the item in accordance with NASA procedural requirements. Sign receipt documents, date, and assign storage location.	Incoming receipts of 2,000 line items annually.	Received items shall be processed within 2 days of receipt
		Identify potential exchange/sale items upon receipt. Input into NPDMS accordingly.		

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6.3.4.4	Continuation Reutilization and Disposal	Identify items to be processed for precious metal recovery at the time of receipt. Secure properly.		Within 5 workdays of physical receipt of property.
		Upon receipt, all hazardous material shall be placed only in designated storage areas. Upon receipt of all artifacts/historically significant items shall be placed only in designated secure area.		
		Forward all documentation requiring NASA signature of receipt to SSC Property Disposal Officer or designee.		
		Process all input/output documentation to and from the NPDMS. Documentation includes; turn-in documents, freeze lists, requests for issuance of property, title request letters and screening authorization requests.		Input should be completed with 2 days of final receipt processing.
		Process all requests for reutilization and authorizations for disposal including, "Standard Form SF122" Transfer Order Excess Personal Property, Request for Turn-in SSC Form 55, NASA 811, Determination for Classification of Property as Scrap or Salvage, NASA Form 812 Determination and Authorization to Abandon or Destroy Surplus Property.		

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6.3.4.4	Continuation Reutilization and Disposal	Complete reutilization/disposal activities including issuance of property to requestors (on-site, other NASA Centers, other Federal Agencies, schools and other qualified non-federal recipients of donated property) placing scrap metal and material destruction in appropriate bins.		Within 5 workdays of request
6.3.4.5	GSA Sales	Operate and maintain all functions necessary to successfully complete General Services Administration (GSA) sales.	At least quarterly for Spot Bid Sales, 10 Internet Sales per year	Sale items properly lotted, verified and marked prior to opening of Sale Inspection by bidders.
		GSA Drop Box Bid, Internet Sales or Auction Sales <ul style="list-style-type: none"> a. Lot sale in NPDMS and obtain concurrence from GSA. b. Pull stage, mark and verify lotted items per GSA documentation/ c. Walk-thru inspection with GSA, if applicable d. Assist Bidder Inspection/Registration. e. Obtain on site Security assistance 	1,000 line items	Exchange/Sale items shall be identified for separate lotting.

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6.3.4.5	Continuation GSA Sales	<p>f. Provide special tailgate services to include loading by crane and/or forklifts rated higher than 6,000 lbs.</p> <p>g. Provide tailgate loading service for sold items.</p>		<p>Verify lots against GSA paper work, remove NASA tags and load trucks. Sale items properly lotted, verified and marked prior to opening of Sale Inspection by bidder.</p> <p>Same day as received. No instance of improperly stored material.</p>
		<p>The Contractor shall schedule regular sales with GSA and determine the method of sale which provides the most sales proceeds to the government.</p>		<p>Assure warehouse space is adequate at all times.</p>
		<p>The Contractor will maintain information on each exchange/sale item to assure that NASA FMO will be able to utilize the returned proceeds against new procurements.</p>		<p>Assure no loss of proceeds unless procurements not made within the mandated timeframes.</p>

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6.3.4.5	Continuation GSA Sales	The Contractor will perform 100% inventory of the Redistribution inventory annually. Report results shall include all line items, acquisition cost of items and item number and acquisition cost of line items not located.	At least 1 inventory annually.	Report results to the SSC Property Disposal Officer within 30 days of inventory completion.
6.3.5	Equipment Accountability	The Contractor is required to operate and maintain a total documentation function for the John C. Stennis space Center (SSC) database in the NEMS. Compliance with all applicable Governmental regulations is required – particularly NASA series 4200, NASA Equipment Management.		
6.3.5.1	Limitations, Restrictions, or Other Exceptions	The Contractor employees shall ensure that all services protect the integrity of the Government's interests.		
6.3.5.2	Documentation Function- NEMS	Operate and maintain a total documentation function - NEMS.	10,000 input transactions per year.	See below.
		Input all adds, deletes, changes, and table updates to the NEMS data base.	Nothing additional.	3 workdays.
		Check all transactions processed into the NEMS data- base to verify accuracy; correct all errors prior to beginning the next day's work.	Nothing additional.	Next workday after input.

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6.3.5.2	Continuation Documentation Function-NEMS	Make copies of all adds, deletes, or cost change transactions for capitalized equipment and forward to the SSC Financial Management Division. Resolve all discrepancies, and notify the SSC SEMO or designee for final reconciliation when appropriate.	Nothing additional.	Copies will be made and forwarded monthly; discrepancies will be resolved immediately upon notification by the SSC Financial Management Division.
6.3.5.3	Process NEMS Reports/Documents	Schedule and process NEMS on-line requested reports/documents required by NASA Supply and Equipment Management Officer or Financial Management Office and SSC Property Custodians.	1,800 reports/documents per year. (Historical average time per transaction - 3 minutes)	Day request received.
6.3.5.4	Distribute Reports/Documents	Distribute NEMS on-line reports/documents required by NASA Supply and Equipment Management Officer or Financial Management Office and SSC Property Custodians via SSC mail system.	12,000 reports/documents per year.	Day received from printer.
6.3.5.5	Equipment Control Number Register	Post information from NEMS source document and transmittal form to the Equipment Control Number Register per NASA Series 4200.	3,500 postings per year.	See below.
		Information on all adds, deletes, and cost changes to be posted to logbooks located in NEMS control.	Nothing additional.	2 weeks.

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6.3.5.5	Continuation Equipment Control Number Register	Verify that all NEMS entry reference numbers are accounted for and in numerical sequence from daily input.	Nothing additional.	Next workday after input.
6.3.5.6	Physical Inventory Equipment	Contractor shall perform physical inventories of all NASA/SSC controlled and sensitive equipment in accordance with NASA Series 4200. This function includes advance notification to property users of inventory date, the physical scanning of equipment, creating discrepancy files, suspense files, tracking incident/survey/found on station reports and final close out of inventory process.	100% inventory of controlled and sensitive equipment to be accomplished on approved triennial basis.	Scheduled inventories to be completed and closed out per schedule.
			120 custodial accounts. A minimum of 40 one hundred percent account inventories per year.	Triennial close-out completed and forwarded to NASA HQ on schedule.
			Approximately 10 unscheduled inventories per year.	
6.3.5.7	Tracking of Shipped Equipment	Maintain a tracking system for all equipment in NEMS shipped from NASA SSC for repair, test, relocation, borrow, etc.	500 line items per year.	Documentation Complete.

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6.3.5.7	Continuation Tracking of Shipped Equipment	Prepare a Borrow Out or Repair Out transmittal form for all controlled equipment shipped from NASA SSC on a DD 1149 Shipping Document .	Nothing additional.	
		Match one copy of the DD1149 received from Central Receiving with the Borrow-Out form and enter into NEMS. Monitor returns through Central Receiving and assure equipment is processed as scheduled.		
6.3.5.8	Non-Stock Equipment Receipts	<p>The Contractor shall be responsible for processing equipment received at SSC, assigning and maintaining voucher numbers for the acquisition documents, and physically tagging equipment that meets the tagging criteria with an Equipment Control Number (ECN) tag, or if the tagging criteria is not met, identifying the property or equipment as U.S. Government owned.</p> <p>The Contractor shall prepare a claim folder for the Transportation Officer when concealed damage is discovered during inspection.</p>	6,000 tagging actions per year	Property and equipment shall be processed in accordance with the NASA Series 4200, NASA Equipment Management. Promptly notify the Transportation Officer or designee of concealed damage and prepare claim folder on the same workday discrepancy is discovered.

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6.3.5.8	Continuation Non-Stock Equipment Receipts	The Contractor shall annotate the receiving documentation with the ECN number and the item's serial number of the attached tag for each line item on the document.		Process same day as item is received in Central Receiving. Process receipt information to Equipment Management for input into NEMS.
		If equipment does not meet the criteria for tagging, the Contractor shall affix a NASA Form 1517, Property of U. S. Government decal to the item and annotate "Meatballed" on the receiving document.	Nothing Additional	
		The Contractor shall etch onto items that bar code tags cannot be affixed.		
		If equipment is delivered directly to the customer's building without inspection, the Contractor shall inspect and tag equipment at the delivered location.	Nothing additional	Complete process on the same workday as notified by requestor.
6.3.5.9	Full-time Property Custodian	The Contractor shall provide a full-time property custodian to perform the duties outlined in NASA Series 4200 Equipment Management Users Property Custodian Guide for the control of government property.	Nothing additional.	

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6.3.5.9	Continuation Full-time Property Custodian	Full-time custodians may also be responsible for managing bench stock operations in area of assignment utilizing NSMS.		
		Full-time custodians will be assigned work under a SSC Stennis Work Request.		
6.3.5.10	Property Custodian Training	Provide Training to SSC Approved Custodians and Managers. All new custodians shall be trained within 1 month. All custodians shall receive refresher training as requested.	122 Custodians	All new custodians shall receive training within 1 month of appointment to position.
6.3.6	Semi-annual Reports	The Contractor shall prepare all reports in accordance with NASA HQ and SSC requirements.	See below.	No report will be submitted inaccurately or not in accordance with published timeframes.
6.3.6.1	Semiannual Management Reporting of Property and Supply Operations	The Contractor shall prepare the original data in the LIMS module and submit confirming copies to the SSC SEMO. See DR 6-LS01 for data requirements.	2 reports per year	No later than April 10 th and October 10 th of each year.
6.3.6.2	Property Held by Property Disposal Officer	Prepare and submit monthly report to the SSC Property Disposal Officer and NASA Finance monthly. See DR 6-LS02 for data requirements.	12 reports annually	No later than the 10 th of the month

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6.3.6.3	Annual Report of Exchange/Sale Transactions	Prepare and submit annual report of exchange/sale items to the SSC Property Disposal Officer See DR 6-LS03 for data requirements.	1 report annually	No later than October 10 th
6.3.6.4	Report of Activities Generating Precious Metals	Prepare and submit a report of activities generating precious metals to the Supply and Equipment Management Officer or designee.	1 report per year.	No later than October 10 th
6.3.6.5	Annual Report of Personal Property Provided to Non-Federal Recipients	Prepare and submit original report to the Supply and Equipment Management Officer or designee. See DR 6-LS05 for data requirements.	1 report per year.	No later than October 10 th
6.3.6.6	Performance Measures Report	Prepare and submit original report to the Supply and Equipment Management Officer or designee. See DR 6-LS06 for data requirements.	2 reports per year.	No later than April 10 th & October 10 th
6.3.6.7	Semiannual Report of Personal Property Management Operations	Provide the specific data elements for the semiannual time periods (October - March; April - September) and submit original to the Supply and Equipment Management Officer or designee. See DR 6-LS07 for data requirements	2 reports per year.	No later than April 10 th & October 10 th .

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6.3.7	Testing NASA Equipment Management System (NEMS) & NASA Property Disposal Management System (NPDMS)	Contractor shall perform tests to NEMS and/or NPDMS upon notice of new system upgrades (releases).	3 releases annually. Approximately 10 hours testing per release.	Testing of NEMS release to be completed within 1 week of release being installed.
6.3.8	SSC Equipment Buy Plan	Contractor shall provide a database to initiate and track all approved NASA/SSC Equipment Buys by fund source. Items shall be entered into either the Contractor's procurement system or submitted to NASA procurement based on estimated acquisition cost. Contractor shall track each procurement until receipt and report dollars spent on a monthly basis.	1 plan per year	Provide Monthly status by the 10 th or as requested.

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6.4 Transportation

This Annex describes the Contractor's responsibilities for providing a moving, hauling, delivery, driver services and the operation of the SSC airport dispatch service function for the NASA John C. Stennis Space Center (SSC). The core duty hours for these services to be provided are Monday through Friday, 7:00 a.m. to 4:30 p.m. There will be times when the Contractor shall provide these services during non-core hours, such as, in the afternoons and evenings, weekends, and holidays as requested by the Government. The Government may request that additional driver services be provided to support special SSC functions, official visitors, and other passenger transportation requirements.

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6.4.1	General Transportation Services	The Contractor shall pick up, deliver, load, transport, unload, and/or rearrange between and within SSC the following types of materials; boxes; general supplies and miscellaneous equipment; flags; photographic equipment; laboratory and scientific apparatus; electronic test equipment; mock ups; computers; toner cartridges; data processing equipment; machinery including industrial production equipment, and power tools, and gas cylinders. The Contractor will receive requests for each task from the SSC Transportation Officer or as directed by the Contractor Work Control Office either by phone or in writing. The Contractor shall comply with the requirements of the NASA Series 6000.1 NASA Transportation and General Traffic Management.	500 work orders per year.	The Contractor shall schedule and accomplish each work order as per the due date requested by the customer. If no due date, accomplish within 5 workdays. Comply with the NASA Series 6000.
6.4.2	People Moves - Core Hours	The Contractor shall provide all resources required to provide people moves during the core duty hours. People moves under this function of the contract will include an assortment of furniture, equipment, supplies, etc. Times, dates, and locations of the moves will be provided to the Contractor by the Contractor Work Control Office or by the SSC Transportation Officer. The Contractor shall provide disassembly, packing, loading, transportation, unloading, and re-assembly as required. There are no restrictions on weight or size of items to be moved.	400 people per year.	<p>The Contractor shall accomplish each move as per the scheduled move date.</p> <p>The Contractor shall provide with minimal impact to personnel.</p> <p>Ensure the property being moved and the surrounding areas are protected against damage.</p>

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6.4.3	People Moves - Non-Core Hours	The Contractor shall provide the resources required to move people during non-core hours, in the afternoons and evenings, on weekends, and holidays as requested by the Government.	100 people per year.	
6.4.4	Warehouse Parcel Delivery Service	The Contractor shall provide parcel delivery service of materials in warehouse to customers. Pick up materials for delivery as staged in warehouse daily. Deliver direct to the customer at building and room number stated on the package.	15,000 packages per year.	The Contractor shall make deliveries within 1 workday after supplies are staged in the warehouse. Obtain customer signature and current date on the delivery receipt upon completion of the delivery.
6.4.5	Pick-up and Deliver Furniture	The Contractor shall provide for the site wide pick up and delivery of furniture as staged in warehouse or offices. Pick up furniture staged in warehouses for delivery, or pick up in offices for return to warehouse. Deliver furniture to designated location and rearrange existing furniture as necessary. The Contractor will receive request for each task from the Contractor Work Control Office or the SSC Transportation Officer either by phone or in writing.	1,000 work orders per year.	The Contractor shall schedule and accomplish each delivery work order as per the specified date on the work order. If no date is specified, the Contractor has 5 workdays to complete the requirement from date request received.

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6.4.6	Transport NASA-Tagged Equipment	The Contractor shall provide transportation of NASA-tagged equipment between office and buildings Move equipment from location to location as designated on the work order.	1,000 pieces of equipment per year.	The Contractor shall schedule and transport all equipment within 5 workdays of receipt of work order.
6.4.7	Provide Quick Dispatch Service	During core hours, the Contractor shall provide a radio-equipped quick dispatch service (as an on-call service) for rapid pick up and delivery of non-bulk items and items which cannot be conveniently transported through other means (including work stoppages from the warehouse).	1,500 requests per year.	The Contractor shall provide quick dispatch service within 2 hours of receipt of request from the customer.
6.4.8	Operate Airport Dispatch Service (Park-n-Fly)	<p>Contractor shall operate the SSC Airport Dispatch Service (Park-n-fly) for Authorized Personnel Traveling out of the New Orleans Airport (N.O.).</p> <p>Contractor shall be responsible for establishing and managing contracts with an airport parking service at the airport.</p> <p>Contractor shall maintain a system of assigning available government vehicles for the purpose of travel to and from SSC to N.O. Airport.</p>	Approximately 2,000 dispatches per year.	Respond to requests for service within 30 minutes of receiving requests.

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6.4.8	Continuation Operate Airport Dispatch Service (Park-n-Fly)	<p>Contractor shall operate a fleet of government vehicles assigned to this function. The number of vehicles will be dependent upon an equitable balance between - turn down rate (dispatch vehicle not available) and idle days (the number of days per month a car sits unassigned). Currently a fleet of 24 vehicles meets this requirement. Contractor shall assure these vehicles are in good working order, clean and proper fluids are maintained. Contractor shall shuttle vehicles to and from the SSC and the N.O. Airport to meet demands.</p> <p>This is a reimbursable, pay as you go service. Contractor shall establish dispatch rates to properly offset all costs associated with this service.</p> <p>Contractor shall maintain a database consisting of the following information: Number of dispatches by customers (ex: number supporting Navy, NASA, EPA or other Contractors or resident agencies), number of request turn downs, and a cost of operations (P&L). See DR 6-LS08 for data requirements.</p>		<p>Vehicles to be clean and fueled prior to dispatch.</p> <p>Dispatch rate covers cost of services.</p> <p>Provide the Transportation Officer with dispatch data and P&L by the 10th day of the month for the previous month's business.</p>
6.4.9	Driver Services	The Contractor shall provide driver services, required vehicles, and/or equipment to support the SSC in the movement of personnel.	See below.	See below.

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6.4.9	Continuation Driver Services	<p>The Contractor shall be required to provide driver services support to the SSC Taxi Service, the SSC Visitor's Center Tour Schedules, SSC area airports, hotels, and other locations as required by the customer. This support includes Very Important</p> <p>Person (VIP) support to directorate offices and Public Affairs Office (PAO), Support of "Special Events" at SSC and for large groups visiting the Center.</p>		
6.4.10	Passenger Shuttle Service	<p>Contractor will be provided three mini-vans, one of which will be wheel chair accessible, to transport personnel as required in section above.</p> <p>Contractor shall ensure that vehicles are properly maintained, services and clean. Coordinate with Annex 6.3.</p>	Operate taxi daily, Monday-Friday, 8a.m.–4:30 p.m.	<p>Provide safe, timely, and courteous service.</p> <p>Vehicles are in good working order.</p>

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6.4.11	Government Vehicle Drivers	<p>The Contractor shall provide drivers on an as-needed basis to drive buses, sedans, station wagons, vans, pickup trucks, and other such vehicles when required to support special request requirements of SSC. Times and dates of pick up, number of passengers, and destination will be provided to the Contractor with as much advance notice as possible. The Transportation Office or designee will strive to notify the Contractor 24 hours in advance of the requirement. The Contractor will receive special requests from the SSC Transportation Officer or designee either by phone or in writing.</p> <p>The Contractor shall maintain a database that shall include, but not limited to, the total number of special requests for driver services, number of passengers transported per special request and the total passengers transported.</p>	90 requests per year.	<p>Provide drivers to operate Government buses, sedans, station wagons, vans, pickup trucks, and other such vehicles for special requests.</p> <p>Provide safe, timely, and courteous service.</p> <p>Be at the place of pick up 10 minutes prior to the time requested by the customer.</p> <p>Notify the Transportation Branch on the 3rd workday of each month of the total number of passengers transported for the previous month.</p>

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6.4.12	Personnel Requirements	The Contractor shall provide personnel qualified to perform the requirements of this function of the contract. Personnel hired under this contract function shall have the proper valid State driver's licenses, with proper endorsements, to operate and or drive the required equipment to perform the duties as required in this function. Personnel that will perform the driver. Services portion of this function shall have a Commercial Drivers License with a "P" endorsement.	Contractor determined.	Provide personnel with proper driver licenses to include all required endorsements. Current licenses shall be carried with each driver at all times while performing duties under this contract.
6.4.13	Pickup and Delivery of Shipments	The Contractor shall provide for the transport of shipments from the customers facility to the packing and shipping facility for processing.	300 pickups per year.	Contractor shall provide transport for the pickup of hardware, software, equipment, and materials, from the customer's facility. Contractor shall ensure appropriate protection during handling and transportation.

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6.4.14	General Services Administration GSA Fleet Coordinator	Contractor shall operate and maintain all functions necessary to successfully complete the General Services Administration (GSA) reporting and coordination activities for the GSA Interagency Fleet Management System (IFMS) vehicles at SSC. This includes coordination of monthly mileage reporting, vehicle exchanges, warranty repairs, maintenance, damage reporting, and repair.	322 GSA leased IFMS vehicles 50 accident/warranty recalls to be coordinated per year.	Mileage reporting monthly. IFMS vehicle mileage to be transmitted to GSA by the 10 th of each month.
		The Contractor shall initiate vehicle exchange and damage repair after the Transportation Officer's approval is received.	Approximately 1/4 of fleet is exchanged annually.	
		Contractor shall provide coordination and data relating to usage and costs for operating Government-owned vehicles at SSC. Contractor shall provide data for the SSC Report, cost and vehicle data submittal to OMB and NASA Headquarters. See DR6-LS09 and DR6-LS10. Contractor shall provide justification for the number and types of vehicles required to accomplish contract requirements.	Annually July each year, (Estimate). October 30 each year. Final actual cost. Annually, End of September.	By COB July 31 annually. By COB October 31. Reports to be accurate and timely. Justifications are to be complete.

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6.5 ACQUISITION SERVICES

The Contractor shall provide acquisition services at John C. Stennis Space Center (SSC) in support of NASA and other resident agencies. The Contractor shall procure all supplies and materials required for establishment and replenishment of stores stock and inventory items, as well as direct buys.

6.5.1 General Requirements

The Contractor shall be knowledgeable of Federal Acquisition Regulations (FAR) and be experienced in the acquisition of supplies and services in support of the Government. The Contractor shall adhere to its Government approved purchasing system for John C. Stennis Space Center in accordance with the FAR and the NASA FAR Supplement, performing market surveys in accordance with FAR 7.101 and FAR 6.303.2(a)(8). In accordance with FAR Part 12, the Contractor and its subContractors at all tiers shall incorporate, to the maximum extent practicable, commercial items or non-developmental items as components of items supplied to NASA and its resident agencies.

6.5.1.1 Purchase Requests

The Purchase Request (PR) is used by the requestors to procure through the Contractor warehouse stocked material from supply (such as spares and expendables), as well as materials, services and equipment not available at SSC, including rental, lease or maintenance of equipment, software, software licenses, supplies and equipment. The Contractor is authorized to

procure equipment, supplies, or services to up \$50,000.00 per request. If equipment is listed on SSC's approved annual equipment buy plan or is for inventory stock replenishment, the customer may forward the PR directly to the Contractor without additional approvals from the Government, provided the equipment is as specified and approved on the Equipment Buy Plan. PRs in excess of \$50,000.00 shall be approved by the Contracting Officer on an exception basis.

6.5.1.2 Government Supply Sources

The Contracting Officer upon request will authorize the Contractor to utilize Government supply sources, including General Services Administration (GSA) Federal Supply Schedules and other consolidate contracts as identified by NASA. The Contractor will not be allowed to use Government supply sources for its own personal use. The Contractor will be required to prescreen direct buy requests from within the Supply system and Redistribution prior to procuring from the outside.

6.5.1.3 Direct Reimbursement for Acquisitions

The Contractor will be reimbursed for the actual cost of procured services, supplies, materials, and equipment (without the addition of any burden, handling, or other charges) in accordance with the cost principles and procedures set forth in FAR Part 31. Refer to Section B of the contract for special cost provisions.

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6.5.1.4 Definitions

Completely Documented Requests - All items on form or in the MICS system completed; specifications or salient characteristics emailed or supplied to the Acquisitions offices; justifications for sole or single sourcing attached to the request.

Delinquent Orders - Items or services not received or performed by the due date or completion date.

Direct Buy - Purchase in response to PRs for supplies and services other than replenishment of stock and inventory.

PR - Purchase Request in either the NASA/SSC Access Request System or the Contractor provided Management Information Control System.

Store Stock - Material being held in inventory by the installation which is repetitively procured, stored and used on the basis of receiving demand.

SWR - Stennis Work Request (FORM SSC 704) Electronic Version

Transaction- Single purchase action of material/equipment to a single source (vendor) regardless of the number of line items on an order.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
6.5.2	Acquisition of Materials, Equipment, and Services	<p>The Contractor shall develop and execute documentation to support the procurement of services, supplies, materials, equipment, to which the Government retains title, including:</p> <ul style="list-style-type: none"> - Consumables - Store Stock - Parts and Spares - Equipment Buys - Service, leases, rental agreements, or maintenance agreements - Critical material and equipment to meet short suspense or emergency needs of the Government <p>The different levels of acquisition activity are:</p>	Nothing Additional	The Contractor is not authorized to procure services, equipment, or materials without available funding and completely documented Purchase Requests (PRs). No instances of splitting PRs to fall within a lower dollar level.
		<ul style="list-style-type: none"> - LEVEL I - Purchases less than \$2,500 	14,000 Transactions	Order placed no later than 3 workdays after receipt of completely documented PR
		<ul style="list-style-type: none"> - LEVEL II - Purchases greater than \$2,500, but less than \$25,000 	650 Transactions	Order placed NLT 5 workdays after receipt of completely documented PR

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6.5.2	Continuation Acquisition of Materials, Equipment, and Services	- LEVEL III - Purchases greater than \$25,000, but Less Than \$50,000	120 Transactions	Order placed NLT 10 workdays after receipt of completely documented PR
		- LEVEL IV - Purchases greater than \$50,000, but less than \$100,000	50 Transactions	Order placed NLT 14 workdays after receipt of completely documented PR
		- LEVEL V - Purchases greater than \$100,000	35 Transactions	Order place NLT 30 workdays after receipt of completely documented PR
		NOTE: The workload is reflected in the number of individual transactions of “buys”. A transaction equates to a single purchase action of material/equipment to a single source (vendor) regardless of the number of line items on the order		No instances of insufficient levels of stock or critical spare parts inventory required to accomplish services as a result of their procurement process. Notify customer within one day after receipt of

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
6.5.2	Continuation Acquisition of Materials, Equipment, and Services	The Contractor shall continually monitor, evaluate, and identify acquisition needs, including receiving request for material, equipment, or services identified by the Government and determining if requisition is complete for processing.	Nothing Additional	PR if any problems exist. No instances of acquisition in excess of \$50,000.00 that have not been approved in advance by the Contracting Officer and have no documentation explaining why Contractor is procuring.
		For reimbursable customers, the Contractor shall verify through the NASA/SSC Funds Availability System (FAS) that funds are available for PR. Access to the FAS database will be made available to the Contractor.	Nothing Additional	No instances of acquisitions initiated with unauthorized requestors.
6.5.2	Continuation Acquisition of Materials, Equipment, and Services	The Contractor shall ascertain which qualified sources are capable of satisfying SSC's requirements of all items procured to add to stock, to replenish stock, or for direct buys.	Nothing Additional	

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
		<p>The Contractor shall obtain a minimum of 3 competitive bids for all material and equipment above the FAR specified micro-purchase threshold. For all acquisitions estimated to cost less than the micro-purchase threshold, obtain a “fair and reasonable” price.</p>	<p>Nothing Additional</p>	<p>No instances of vendors who are listed on GSA’s List of Parties Excluded from Federal Acquisitions Program, being awarded acquisitions.</p>
		<p>The Contractor shall procure all materials, equipment, and services, including all follow-up, delivery coordination, and other administrative actions necessary to obtain the requirements.</p>	<p>Nothing Additional</p>	<p>Competitive prices are obtained for all acquisitions.</p>
<p>6.5.2</p>	<p>Continuation Acquisition of Materials, Equipment, and Services</p>	<p>The Contractor shall establish and keep updated a status and tracking system for all acquisitions. The system shall track from receipt of all work requests through close-out of acquisition document. Documentation in the tracking system shall consist of assigned work request number, date of receipt, date of order; or subcontract placed, order delivery date of completion date, actual receipt date; or completion date, actual delivery date to customer, vendor name and address, dollar amount, and assigned buyer.</p>	<p>Nothing Additional</p>	<p>Follow-up of all delinquent orders shall be made within 5 workdays for routine requests and 1 workday for work stoppage requests.</p>
		<p>The tracking system must be accessible to customers. The Contractor shall advise the Contracting Officer in writing of the</p>	<p>Nothing Additional</p>	<p>Input data within one workday after placing order or subcontract and</p>

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
		establishment of the tracking system and how customers can access system.		update status of orders (if applicable) on a daily basis.
		The Contractor shall actively solicit available products containing recovered material that are reasonably priced, available within a reasonable period and meet the requirements in Annex 6, Affirmative Acquisition Program.	Nothing Additional	No more than ½ hour response time to customer inquiries. Establishment NLT 30 days after contract award.
6.5.2	Continuation Acquisition of Materials, Equipment, and Services	The Contractor shall coordinate with customers to confirm requirements for any item with hazardous content, prior to ordering. The Contractor shall verify with the vendor that the material being ordered matches the Material Safety Data Sheet information provided on the PR. Item must be an exact match to the manufacturer and item name.		No incidents of hazardous material purchased unless clearly identified by the Material Safety Data Sheet number on the PR.
6.5.3	Material Returns	The Contractor will create shipping notices for material that needs to be returned to the vendor. Shipping notices will be forwarded to the Shipping Specialist for processing before 12 noon. The Contractor will update the MICS system to indicate material return status, modify the Purchase order with information for tracking and update Accounts Payable personnel.	1,000 notices annually	Shipping notice created within 1 day of request from customer.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
6.5.4	Equipment Returns	The Contractor will ensure a fully documented Form DD1149 accompanies any shipment of SSC Equipment requiring repair, warranty, calibration or replacement including the PO number and return date on the DD1146.	250 items annually	
6.5.5	Customer Service Desk	The Contractor shall provide a Customer Service Desk to assist SSC Customers in status of orders, questions, accounting information, vendor queries, etc.	4,000 customer calls annually	Respond to each call the same day if received before 3:00 p.m. Respond by 9:00a.m. for calls received after 3:00 p.m.
6.5.6	Expediting	The Contractor shall provide expediting services for high priority requests including those that are safety critical, an availability issue or as identified by the requestor.	3,000 line items annually	As needed
6.5.7	Vendor Rating System	The Contractor will provide a vendor rating system that identifies those vendors who do not perform within acceptable guidelines and what improvements need to be made for their retention to serve SSC customers. A Vendor Rating Team will need to be formed and data including late delivery, quality of product, responsiveness, accuracy, etc. will be reviewed and a score given to each vendor. The Contractor shall provide	Quarterly Team Meeting	Hold the meeting by the 10 th of the month following the end of the quarter.

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<u>ITEM</u>	<u>PERFORMANCE REQUIREMENT</u>	<u>RELATED REQUIREMENTS OR INFORMATION</u>	<u>WORKLOAD DATA</u>	<u>MINIMUM STANDARDS</u>
		information to the vendor to correct performance and/or suspend vendors who have demonstrated an inability to perform within published guidelines.		
6.5.8	Establish New Vendors	The Contractor will establish a process by which new vendors are sought to fulfill procurement guidelines based on business size. Records will be maintained of progress in meeting the procurement goals as well as the pertinent data surrounding each vendor's capability to meet affirmative procurement guidelines, business size, etc.	500 new vendors annually	
6.5.9	Supplier Corrective Action Reports	The Contractor shall respond to Supplier Corrective Action Reports as written by the Quality Assurance (QA) office and act as a liaison between QA and the vendor. Stennis Corrective Action Reports (SCARs) are to be resolved within 5 work days from discovery.	300 annually	Resolve within 5 work days.

**Annex 6.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGH T (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGH T (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

Annex 6.0 Logistics

1	Supply Management	25%	PI, UPI, VCC, RR	(a) Maintain accurate and timely supply system to include material receipt, warehousing issue and delivery	50%	Complies with NASA standard fill rate of 90%	2
				(b) Maintain accurate inventory management system (Inventory Adjustment Voucher's) IAV's	25%	Contractor shall ensure integrity of material's inventory in compliance with NASA Series 4100. No more than .5% of inventory adjustments on operation errors	2
			RR	(c) Maintain timely material receipt processing time	25%	Contractor shall comply with NASA standard for receipt processing time of 2 day's	2
2	Equipment Management	25%	PI, UPI, VCC, RR	(a) Maintain accurate, timely equipment management system to include: Equipment Control Re-utilization and Disposal	50%	Contractor shall process equipment transactions within 5 workdays of receipt. Actions to be processed into appropriate NASA property system (NEMS) equipment control (NPDMS) re-utilization and disposal. No more than 20% of transactions may exceed 5 workdays for input	2

**Annex 6.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGH T (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGH T (%)	(7) STANDARD OF PERFORMANCE	(8) MAD

Annex 6.0 Logistics

3	General Transportation Services	25%	PI, UPI, VCC RR	(b)Contractor shall develop and administer procedures to safeguard from loss and/or destruction the IAGP property assigned to the contractor.	25%	Contractor shall not lose and/or damage government property. Loss rate shall be no more that .5% of each account inventoried	1
				(c) Contractor shall stay within dollar limitation for repair and maintenance of IAGP (class exception).	25%	Dollar limitation schedule not exceeded 10% of schedule	2
				(a)Contractor shall pick up, deliver, load, transport, unload, and/or rearrange between and within SSC, government equipment, materials, and supply items.	50%	Contractor shall schedule and accomplish each work order as per due date requested by the customer. If no due date accomplish within 5 workdays.	No more than 20% of deliveries, moves may exceed scheduled due date
				(b)Contractor shall provide safe, courteous, timely taxi, visitor center and passenger shuttle services.	50%	Safe, courteous passenger transportation services shall be performed on date and time requested by customers. Taxi shall respond within 15 minutes of call.	2

**Annex 6.0
PERFORMANCE REQUIREMENTS
SUMMARY**

CONTRACTS REQUIREMENTS			PERFORMANCE REQUIREMENTS				
(1) ITEM NO.	(2) CONTRACTS REQUIREMENT	(3) WEIGH T (%)	(4) SURVEILLANCE METHOD	(5) WORK REQUIREMENT	(6) WEIGH T (%)	(7) STANDARD OF PERFORMANCE	(8) MAD
4	Annex 6.0 Logistics Acquisition Management (Acquire Materials, Supplies, and Services)	25%	PI, UPI, RR	Respond to Material Request (MR)	100%	Order is placed within number of days after receipt of MR: LEVEL I: 2 workdays LEVEL II: 5 workdays LEVEL III: 10 workdays LEVEL IV: 14 workdays LEVEL V: 30 workdays	No more than 10% can exceed standard.

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

ATTACHMENTS J-2

DATA PROCUREMENT DOCUMENT

**NNS07AB21C
CONTRACT / RFP**

ATTACHMENT NUMBER J-2

**FACILITY OPERATING SERVICES AT STENNIS SPACE CENTER
PROJECT / SYSTEM**

DATA PROCUREMENT DOCUMENT

NOTES

Data Procurement Document Forms:

Cover
Introduction, Statement of General Requirements
Data Requirements List
Data Requirement
Data Requirement (Continuation Page)

Codes used on the Data Requirements Form are defined as follows:

Block 5, Type. Type of Data Code

<u>CODE</u>	<u>DESCRIPTION</u>
1	Data requiring written approval by procuring activity prior to implementation into procurement or development.
2	Data submitted to procuring activity for review not later than the time specified in the Data Requirement. Data shall be considered approved unless contractor has been notified of disapproval prior to project implementation.
3	Data submitted to procuring activity for coordination, surveillance, or information.
4	Data retained by respondent to be made available to procuring activity upon request. The respondent shall furnish a list to procuring activity upon request.
5	Data to be retained by respondent and reviewed by NASA on request.

Block 6, Frequency of Submission

<u>CODE</u>	<u>DESCRIPTION</u>	<u>CODE</u>	<u>DESCRIPTION</u>
AD	As Directed	PI	Per Equipment End Item
AN	Annually	PJ	Per Project
AR	As Required	PL	Per Launch
BE	Biennially (every other year)	PS	Per System
BM	Bimonthly (every other month)	PT	Per Test
BW	Biweekly (every other week)	PV	Per Vehicle
DA	Daily	QU	Quarterly
DD	Deferred Delivery	RD	As Released
MO	Monthly	RT	One Time and Revision
OT	One Time	SA	Semiannually (once every six months)
PC	Per Contract	TY	Three Per Year
PD	Per Failure	UR	Upon Request
PE	Per Event	WK	Weekly
PF	Per Facility		

Block 9, As of Date

Entries indicate cutoff date for inputs and document due date. For example, 15/1 indicates an input cutoff date on the 15th and a document due date of the 1st.

Block 14, Interrelationship: relationship to annex.

Block 15, Reference: relationship to other relevant documents other than this contract.

INTRODUCTION

1.0 SCOPE

This Data Procurement Document (DPD), is the basic contract document that shall govern all data required by and for Contract (NNS*****). The Contractor shall furnish all data described by the Data Requirements listed on the Data Requirements List (SSC Form 165 and 166, hereinafter called DRs and DRL), attached hereto and a part of this DPD. Such data shall be prepared, maintained, and delivered to NASA in accordance with the requirements set forth within this DPD.

2.0 DESCRIPTION

This DPD consists of a Statement of General Requirements, DRL, and DRs.

2.1 Statements of General Requirements (SGR), SSC Form 164

The SGR prescribes those general requirements applicable to the preparation, maintenance, and delivery of data that are better defined in aggregate than in the individual data requirements documents.

2.2 Data Requirements List (DRL), SSC Form 165

Throughout the performance of the contract, the DRL at all times provides a complete listing of the data requirements of the contract. The DRL is not presented as an entity, but rather, is segmented into separate categorized listings that precede each section of DRs (see paragraph 2.3).

2.3 Data Requirements (DR), SSC Forms 166, 167

Each data requirement listed on the DRL is given complete definition by the DR. The DR prescribes content, format, maintenance instructions, and submittal requirements.

For the purpose of classification and control, DRs are grouped into the following broad functional management categories:

<u>CATEGORY SYMBOL</u>	<u>DESCRIPTION</u>
CM	Configuration Management
DM	Documentation Management
FA	Facilities
GA	Operations
LS	Logistics/Support
MA	Program Management
MF	Manning and Financial
MT	Mission Oriented Training
PC	Procurement/Contracts
RA	Reliability and Quality Assurance
SA	Safety/Health
SC	Schedules

The symbol representing these categories forms the prefix of the DR identification number. To facilitate the usage and maintenance of the DPD, the DRs have been sectionalized in accordance with these data categories.

Each section contains all DRs within a specific data category. The DRs are filed in numerical sequence and are listed on a DRL page(s) that precedes, and is part of, the section.

3.0 MAINTENANCE

Revisions to this DPD shall be accomplished by contractual direction (e.g., Change Order, Supplemental Agreement). Typographical errors may be corrected by means of Contract Office notification letter.

STATEMENT OF GENERAL REQUIREMENTS

1.0 GENERAL DATA REQUIREMENTS

1.1 Deferred Delivery

NASA reserves the right to reasonably defer the dates of the delivery of any or all data required to be submitted by this DPD. Such right may be exercised at no increase in the contract amount. In the event that NASA defers delivery of a data item, resulting in a cost impact to the total contract cost, the contract amount shall be subject to equitable adjustment in accordance with the contract clause entitled "Changes".

1.2 Excusable Delays

The validity of the data delivered hereunder is directly dependent upon the validity of the technical data made available by the Government. When non-availability, delayed availability or subsequent revision of the pertinent technical data result in delayed delivery of the required data, then such delay shall be deemed to be subject to the Government Property clause of the contract.

In the event contractual submittal dates are not met by the contractor due to the non-availability or delayed availability of Government Furnished Services, or due to any other cause within the control of the Government, then such delay shall be deemed to be subject to the Government Property clause of the contract.

1.3 Cost of Data

Except as otherwise provided in this contract, the cost of data to be furnished in response to this DPD is included in the total cost of this contract and shall be reimbursed in accordance with the Schedule of the Contract.

1.4 Data Not Required by the DPD

Data generated within the normal course of the contracted work, and not a part of the data required by DPD, shall be made available in accordance with the requirements of this contract.

1.5 Referenced Documents

Documents referenced in this DPD are the issue in effect at the time of contract award, unless otherwise specified, and form a part of the DPD to the extent specified herein.

2.0 DOCUMENT PREPARATION STANDARDS

2.1 Contractor's Internal Documents

The contractor's internal documents shall be used to meet the data requirements of this DPD. These documents shall not be rewritten for the sake of meeting the minimum requirements as specified in the applicable DR. In instances where minor differences in content and format

exist between DPD requirements and contractor's document, action will be taken to resolve these differences, and where appropriate, a change in requirements will be effected.

2.2 Document Identification

Documents published by the Contractor and submitted in response to the data requirements of this DPD shall be identified within an organized identification numbering system prescribed by the Contractor. Documents submitted in response to the data requirements of the DPD, that are to be subsequently published by NASA, shall be identified as prescribed by NASA. All document submittals shall be clearly marked with the contract number and applicable DR number except that Drawing and Engineering Change Proposals (ECPs) need not include applicable DR number. Documents that satisfy the requirement of more than one DR shall be marked with all applicable DR numbers. Successive issues or revisions of documents shall be identified in the same manner as the basic issue and shall include appropriate change identification.

2.3 Reference to Other Documents in Data Submittals

References to other documents in documents submitted in response to the data requirements of the DPD are permissible. Referenced documents must be adequate and include such identification elements as title and number. When a document to be referenced would only be applicable to a minor or limited extent, every effort shall be made to include the applicable information in the response document rather than using the reference. All referenced documents shall be made readily available to the cognizant NASA organization upon request.

2.4 Printing Requirements

Printing of formal reports and data in book format shall be in accordance with the following general specifications:

- a) Method of reproduction – offset
- b) Finished size – 8 ½" X 11"
- c) Paper – 20 pound opaque bond
- d) Cover – Litho cover stock
- e) Pages will be printed on both side, blank pages will be avoided when possible
- f) Oversize pages will avoided when possible, but if necessary will be folded to 8 ½ X 11"
- g) Additional color shall be used only upon written approval by the Contracting Officer's Representative.
- h) Binding shall be the most economical method commensurate with the size of the report and its intended use.

2.5 Maintenance of Documents

2.5.1 Revisions to documentation may be accomplished either by individual page revision or a complete reissue of the document with the exception of drawings, which shall be revised in accordance with minimum Configuration Management Requirements.

2.5.2 Individual page revision shall be made as deemed necessary by the Contractor or as directed by the Contracting Officer.

- 2.5.3** The document shall be completely reissued when in the opinion of the Contractor and/or Government the document has been revised to the extent that it is unusable in its present state, or when directed by the Procuring Activity. When complete reissues are made, the entire contents of a document shall be brought up to date.
- 2.5.4** Changes of a minor nature to correct typing errors, misspelled words, etc shall only be made whenever a technical change is made, unless the accuracy of the document is affected.
- 2.5.5** All revised pages shall be identified by placing a revision symbol and data in the upper right-hand corner of the page. Each document shall contain a log or revised pages that will identify the revision status of each page with the revision symbol. This list shall follow the table of contents in each document. The line(s) revised in the margin of the page, and the change authority shall be indicated adjacent to the change.
- 2.5.6** Contractor reports shall not be submitted containing pen and ink markups which correct, add to, or change the text, unless schedule problems exist and approval is obtained in writing from the Contracting Officer's Representative. Such markups, however, shall not exceed 20% of the page content and shall be acceptable provided that the reproduced copies are legible. In addition, hand drawn schematics, block diagrams, data curves and similar charts may be used in original reports, in lieu of formally prepared art work. Acceptability will be determined by the Contracting Officer's Representative performing the quality inspection function.

DATA REQUIREMENTS (DR) INDEX STENNIS SPACE CENTER

ANNEX	DR#	TITLE
1	1-CM01	Plan, Configuration Management
1	1-DM01	Plan, Documentation and Records Management Program
1	1-DM02	Index, Document
1	1-DM03	Request, Data Deviation
1	1-DM04	Index, Records Master List/Files
1	1-GA01	Report, Monthly Activity
1	1-GA02	Customer Guide, Facility Operating Services (FOS)
1	1-GA03	Plan, Emergency Preparedness
1	1-MA01	Report, Equal Employment Opportunity
1	1-MA03	Plan, Conflict of Interest Avoidance
1	1-MA07	Report, Functional Metrics
1	1-MF01	Reports, Contractor Financial Management
1	1-MF02	Report, Work Order Status Report
1	1-MF03	Report, Electronic Weekly Cost Data
1	1-MF04	Report, Contract Monthly Operating Status
1	1-MF05	Report, Occupancy
1	1-PC01	Report, Subcontractor Litigation
1	1-PC02	Report, Liability to Third Person(s)
1	1-PC03	Report, Certificate of Insurance
1	1-PC04	Notification, Advance Subcontract
1	1-PC05	Reports, Subcontract
1	1-PC06	Reports, Davis-Bacon
11	1-PC07	Report, Geographic Economic Impact
1	1-PC08	Metrics, Purchasing and Subcontracting
1	1-RA01	Quality Manual
2	2-GA01	Report, Groundwater Usage
2	2-GA02	Report, Toxic Release Inventory (TRI)
2	2-GA03	Report, Public Health Water Supply Survey
2	2-GA04	Report, Non-hazardous Solid Waste Survey
2	2-GA05	Plan, Environmental Resource Document
2	2-GA06	Report, Annual Water System Survey (Industrial & Potable)
2	2-GA07	Plan, Environmental Integrated Contingency
2	2-GA08	Report, Federal Facilities Compliance and Inspection & Profile
2	2-GA09	Plan, SSC Hazardous Waste and Solid Waste Management
2	2-GA10	Request, Section 7.0 Consultation
2	2-GA11	Plan, Chlorofluorocarbon (CFC) and Halon Compounds
2	2-GA12	Plan, Environmental Operations and Implementation
2	2-GA13	Report, Title V Air Permit State Summary Fee & Emission Inventory Management
2	2-GA14	Report, Title V Operating Permit Requirements
2	2-GA15	Report, Records of Environmental Consideration

ANNEX	DR#	TITLE
2	2-GA16	Reports, Environmental Management System (EMS) & Compliance Audits
2	2-GA17	Report, NASA EMS Functional Review
2	2-GA18	Report, Corrective Action Status on NASA HQs Environmental Functional Review
2	2-GA19	Report, RCRA 3016
2	2-GA20	Report, Off site Treatment, Storage and Disposal (TSD) Facility Audit
2	2-GA21	Report, Landfill and Storm Water Inspection
2	2-GA22	Plan, Pollution Prevention
2	2-GA23	Report, Environmental Facility Inspection Implementation
2	2-GA24	Report, Hazardous Waste Collection and Shipments
2	2-GA25	Report, Quarterly Inspection of Landfill/Rubbish Site
2	2-GA26	Report, PCB Status
2	2-GA27	Report, EPCRA Notification and Submissions
2	2-GA28	Report, Quarterly Surveillance Inspection of Log town and Gainesville
2	2-GA29	Reports , NEPA Documentation
2	2-GA30	Reports, Annual Cultural Resources Activity
2	2-GA31	Report, Hazardous Materials (SARA/Tier II)
2	2-GA32	Report, Hazardous Waste
2	2-GA33	Permits & Waivers
2	2-GA34	Report, CERCLA Oversight and System Operations
2	2-GA35	Report, Solid Waste & Rubbish Landfill Questionnaire
2	2-GA36	Report, SSC Environmental Management System & NASA Environmental Tracking System (NETS)
2	2-GA37	Report, Construction Storm water Inspection & Certification
2	2-GA38	Industrial Hygiene Annual Program Plan
2	2-GA39	Industrial Hygiene Program Activity Report
2	2-GA40	Industrial Hygiene Program Quarterly Report
2	2-GA41	Industrial Hygiene Program Annual Report
2	2-GA42	Health Physics Annual Program Plan
2	2-GA43	Health Physics Program Activity Report
2	2-GA44	Health Physics Program Quarterly Report
2	2-GA45	Health Physics Program Annual Report
2	2-MF01	Report, Occupational Health Program Cost
2	2-MF02	Manual, SSC Medical Services
2	2-MT01	Report, Training Schedule & Personnel Qualifications
2	2-RA01	Report, SSC Safety & Environmental Training, Plans, and Personnel Certification
2	2-RA02	Report, GIDEP Usage
2	2-RA03	Nonconforming Products/Services, and Material Review Board (MRB) Members Lists
2	2-RA04	Plan, Blood borne Pathogens Exposure Control
2	2-SA01	Emergency Response
2	2-SA02	Woodland Fire Fighting Plan
2	2-SA03	Equipment Testing and Maintenance Schedule and Records
2	2-SA04	Report, Quarterly Report of Fire Activities at MSAAP
2	2-SA05	Report, Medical Data

ANNEX	DR#	TITLE
2	2-SA06	Report, Occupational Health International Travel Sv
2	2-SA07	Report, Wellness/Fitness Center Status
2	2-SA08	Report, Federal Employee Assistance Programs Annual
2	2-SA09	Plan, Safety and Health
2	2-SA10	Report, System Safety Database
2	2-SA11	Report, OSHA Annual
2	2-SA12	Safety and Environmental Health Program Self-Assessment and Implementation
2	2-SA13	Accident/Incident Summary, Mishap Notification, Investigation, Reporting Information System, and Corrective Action Report (NF 1627)
2	2-SA14	Report, Confined Space Inventory
2	2-SA15	Plan, SSC Safety and Health Awareness
2	2-SA16	Report, Food Service Sanitation Inspections
3	3-FA01	Report/Plan, Space Utilization
3	3-FA02	List, Real Property Inventory
3	3-FA03	Facilities by Floor Type
4	4-GA01	Profit and Loss Statement
4	4-GA02	Plan, NASA Three Year Comprehensive Printing, Duplicating, Copying, and Publishing
4	4-GA03	Report, Annual Information Reproduction Management
4	4-GA05	Report, Copier Management
4	4-LS01	Report, Direct Accountability Penalty Mail & Meter
4	4-MA01	Status/Tracking Report of Print & Broadcast Media
4	4-MA02	Weekly Activity Report
4	4-MA03	Visitors Center Comment Card Response Card Results
4	4-MA04	Report of the Number and Description of Visitor Guests
4	4-MA05	Offsite Information Form
4	4-MA06	Offsite Report Card
4	4-MA07	Offsite Exhibit Evaluation Form
4	4-MA08	Footprint and Location Map of Offsite Exhibits
4	4-MA11	Report, Multimedia Production and Cost Data
4	4-SC01	Cleaning Schedule
5	5-DM01	Grounds Maintenance & History Report
5	5-FA01	BMAR Database Annual Work Plan & 5 Year Plan
5	5-FA02	List, Preventative Maintenance Document
5	5-FA03	Facility Inspection Plan and Schedule
5	5-FA04	Plan, Preventive Maintenance
5	5-FA05	Plan, Utility Process
5	5-GA01	Report, Fuel Forecast (Annual)
5	5-GA02	Report, Energy Management Control System
5	5-GA03	Report, Fuel Receipt (Monthly)
5	5-GA04	Report, Fuel Utilization
5	5-GA05	Report, UST/AGST Inventory Database
5	5-GA06	Report, HVAC Water Treatment

ANNEX	DR#	TITLE
5	5-GA07	NASA Refrigerant Inventory
5	5-GA08	List Availability Documentation
5	5-GA09	Procedures, Standard Op & Op Manuals
5	5-GA10	Plan, Utilities Operations
5	5-GA11	Plan, Marine Operations
5	5-GA12	Report, Refuse Pickup Schedule
5	5-GA13	Solid Waste Disposal Report
5	5-GA15	Operations Plan for Test Complex
5	5-GA16	Env & Econ Practices on Fed Landscape
5	5-GA17	Integrated Pest Management Plan and Work Schedules
5	5-GA18	Energy Consumption and Cost Report
5	5-GA19	Master Maintenance Schedule Data Input
5	5-GA21	Report, Pesticide Usage
5	5-GA22	Plan, Energy Management
5	5-GA23	Report, Maintenance History
5	5-GA24	Report, Critical System Breakdown
5	5-GA25	Database, System Operation and Maintenance
6	6-LS01	Report, Semiannual Management Reporting of Property and Supply Operations
6	6-LS02	Property Held by Property Disposal Officer
6	6-LS03	Annual Report of Exchange/Sale Transactions
6	6-LS05	Annual Report of Personal Property Provided to Non-Federal Recipients
6	6-LS06	Report, Performance Measures
6	6-LS07	Semi-Annual Report of Personal Property Management Operations (Disposal Management)
6	6-LS08	Park-N-Fly Operations Summary
6	6-LS09	Report, Cost and Vehicle Data
6	6-LS10	Report, Vehicle Validation



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Plan, Configuration Management

3. Operator:

RA00

4. DR Number Page Date Rev.

1-CM01, 1 of 2

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
RT

7. Distribution:

RA00 (1 Copy)
QA00 (1 Copy)
DA00 (1 Copy)

8. Initial Submission:

Initial plan to be submitted no later than 120 days after start of contract.

9. As of Date:

August 28, 20XX

10. Remarks:

1 copy to be submitted to Code RA00, Center Operations and Support Directorate; 1 copy submitted to Code QA00 Safety and Mission Assurance; 1 copy to DA00 (Contracting Officer).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Plan, Configuration Management

12. Standard DRD Number Rev. Page Date

13. Use:

To describe and outline the methods used in assuring Proper configuration identification, control and accounting as related to the SSC facilities, documentation, records And equipment for which the Services for Facility Operations Contractor has responsibility.

14. Interrelationship:

Annex 1.4.2.5
Annex 3.1.1.7

15. Reference:

All Annexes

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement establishes the requirements for the preparation and submittal of a Configuration Management Plan. The Plan shall provide the contractor with operating procedures and controls Required to assure compliance with established SSC configuration management policies.

16.2 **APPLICABLE DOCUMENT:** SOI-8040-0001-FACENG SSC Organization Instruction Construction Configuration Management, SSLP-1410-0001- Document and Data Control, SSLP-1440-001-SSC Records Management Program and Control of Quality Records, SPR 1150.1 John C. Stennis Space Center Establishment Of Charters- Boards/Councils/Committees, SSTD-8070-001-CONFIG-SSC Facility Engineering Documentation Standard, SPG 1280.1 –Customer Service Manual, SOI-8080-0015-Configuration Control of Critical Propulsion Test Systems.

16.3 **CONTENTS:** The plan shall include, as minimum the following information:

- a) General policy statements defining the overall objectives, relationship to the SSC Center Director, and and section responsibilities.
- b) Procedures for formal changes request initiation, information required, routing, and approval requirements.
- c) Procedures and audit systems utilized for baseline control.
- d) Procedures utilized for the control and release of sketch engineering drawings.
- e) Procedures utilized for documentation of change completion and status accounting.
- f) Procedures utilized for the control of equipment identification and records.
- g) Procedures for the control of IT systems used by the FOS contractor.



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**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title:

Plan, Configuration Management

3. Operator:

RA00

4. DR Number Page Date Rev.

1-CM01, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Plan, Configuration Management

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.4 **FORMAT:** The plan shall be prepared in book form on 8 ½"X11" paper with appropriate cover and binding.

16.5 **MAINTENANCE:** Plan shall be reviewed yearly and RA00 advised as to requirement for updating.

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Documentation and Records Management Program	3. Operator: RA40	4. DR Number Page Date Rev. 1-DM01, 1 of 2
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SUBMITTAL REQUIREMENTS

5. Type: 1	6. Frequency of Submission: Reviewed Quarterly and necessary revisions submitted for approval.
7. Distribution: RA20 (3 Copies) DA00 (1 Copy) LA00 (1 Copy)	
9. As of Date:	
8. Initial Submission: 120 days following start of contract.	

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Plan, Documentation and Records Management Program	12. Standard DRD Number Rev. Page Date 1-DM01
13. Use: To define the total program required to establish, Administer, maintain, disposition, and control Documentation and Records Management.	14. Interrelationship: Annex 1.4.2.4 Annex 1.4.1 Annex 4.5.8.6 Annex 1.4.2.4
15. Reference: NPD 1440.6 NPR 144.1.1 NARA General Records Schedules (GRS) 36 CFR, Chapter XII	

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement Description establishes the requirement for the preparation of a Documentation Management Program Plan covering the contractor's policies and objectives for the organization, implementation and control of documentation required for operation and/or support of the Including Multimedia Services, photographic and Central Engineering Files, with descriptions of NASA records maintained, the records retention authority and disposition.

16.2 **APPLICABLE DOCUMENT:** NASA Records Management, NPD 1440.6, NASA Records Retention Schedules (NRRS), NPG 1441.1 NARA General Records Schedules (GRS) 36 CFR, Chapter XII, Subchapter B, Records Management; Annex 1.4, Documentation and Records Management.

16.3 **CONTENTS:** This plan shall provide the identity of all elements of program function including organizational pattern (i.e. relationship to line and staff), implementation policy and procedures, the subcontractor interface, and the reporting and control system for functions outline in the plan. The outlined program shall provide the assurances, the planning, maintenance, and control that documentation requirements of the contract as specified in the Data Procurement Document (DPD) shall be determined and satisfied throughout all phases of contract performances.

The plan shall outline the contractor's proposed controls and processes, as necessary to define the documentation distribution control system. The plan shall define, but not be limited to, the following:



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**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title:

Plan, Documentation and Records Management Program

3. Operator:

RA40

4. DR Number Page Date Rev.

1-DM01, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Plan, Documentation and Records Management Program

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.7 CONTENTS (Continued):

- A) Requirements, including implementation and operational methods.
- B) The plan shall list all acronyms used.
- C) The plan will depict a hierarchy of documents from contracts requirements through implementing and operational documents.
- D) The plan shall describe all document processes used and shall include flow charts.
- E) The plan shall depict the process of document initiation, approval, implementation, and methods of revision.
- F) Reporting and submittal.
- G) Modifications or changes.
- H) The plan will address a system for the management of records and disposition of files.

The type of documents to be placed on automatic distribution, specials, and single outputs shall be clearly defined as an integral part of the control plan. The distribution flow plan shall also be included in the initial presentation of the plan.

16.4 FORMAT: The plan shall be submitted on book form 8 1/2" x 11" paper with appropriate cover. The plan shall outline with the definitive measures Electronic Data Processing, including the type format for input and output printouts. The use of charts, graphs, forms, etc., shall be used as necessary to provide definition and clarity of process.

16.5 MAINTENANCE: The plan shall be reviewed at least quarterly and necessary revisions submitted for approval.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None.



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Index, Document	3. Operator: BA34	4. DR Number Page Date Rev. 1-DM02, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: Monthly
7. Distribution: DA00 (1 Copy) LA00 (1 Copy)	8. Initial Submission: *
9. As of Date:	

10. Remarks:
*Submit updated index 30 days following contract award. 1 copy of basic document and all changes will be submitted to Code BA34, and 1 copy to LAOO due 15th of each month for previous month.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Index, Document	12. Standard DRD Number Rev. Page Date 1-DM02
13. Use: To provide an index, cross reference, and status of all Controlled documents generated as a result of the DPD.	14. Interrelationship: Annex 1.4.2.4
	15. Reference:

16. Preparation Information:

16.1 **SCOPE:** The Contractor shall prepare and submit an index of all controlled documents generated as a result of the DPD. The index shall be sectionalized and include status of all data requirements.

16.2 **APPLICABLE DOCUMENTS:** None

16.3 **CONTENTS:** DPD identified documents. This section shall contain an alpha-numeric listing of document numbers and corresponding document titles. The following minimum information shall be included in this section:

1. Document identification, including number and title.
2. Frequency of document, submission.
3. Document due date, including date submitted and identification of past due document items.
4. Identification of document originator.
5. Identification of document office of primary responsibility.
6. Identification of system or activity using document.

16.4 **FORMAT:** Preparation of the index may be an electronic data processing printout if desired.

16.5 **MAINTENANCE:** The contractor shall maintain the master copy of the index current on a day-to-day basis.

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Request, Data Deviation

3. Operator:

BA34

4. DR Number Page Date Rev.

1-DM03, 1 of 2

SUBMITTAL REQUIREMENTS

5. Type:
1

6. Frequency of Submission:
AR

7. Distribution:
3 Copies

8. Initial Submission:
N/A

9. As of Date:
N/A

10. Remarks:

Submit 1 copy to the individual office noted as OPR for concurrence and the Contracting Officer for approval.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Request, Data Deviation

12. Standard DRD Number Rev. Page Date

13. Use:
To provide an instrument for review of contractor to deviate from established contractual requirements in the DPD. To provide information for updating of Government Approved Documents and/or the Contractor's Specification and Deviation documents (SDD).

14. Interrelationship:
Annex 1.4.2.4

15. Reference:
Contractor's listing of Contractual requirements documents.

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for preparation of data submittal of a delineating proposed deviations to existing DPD.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The data shall include, as a minimum, the following:

- A) To, from, and date information.
- B) Deviation Request Number.
- C) Contract Number.
- D) Contractual Document number against which the deviation is requested.
- E) Applicable equipment affected, if required.
- F) Effectivity, if required.
- G) Supporting Data.
- H) Description and justification of change - in such detail to allow comprehensive evaluation.
- I) Remarks - as necessary.



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**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number	Issue
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2. Title:

Request, Data Deviation

3. Operator:

BA34

4. DR Number Page Date Rev.

1-DM03, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Request, Data Deviation


12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.4 **FORMAT:** The format of the data deviation request shall be as specified in Paragraph 2.4 of the Statement of General Requirements.

16.5 **MAINTENANCE:** N/A

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Index, Records Master List/Files		3. Operator: RA40		4. DR Number Page Date Rev. 1-DM04, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 1		6. Frequency of Submission: AN			
7. Distribution: LA00 (1 Copy)		8. Initial Submission: 120 days following start of the contract.			
9. As of Date: End of the Calendar Year					
10. Remarks:					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Index, Records Master List/Files			12. Standard DRD Number Rev. Page Date 1-DM04		
13. Use: To identify NASA records and establish a files system, administer, maintain, disposition, and control Records generated in the performance of the contract.		14. Interrelationship: 1-DM01 Annex 1.4.2.1 Annex 1.4.2.4		15. Reference:	
16. Preparation Information: 16.1 SCOPE: This Data Requirement Description provides the requirement for the establishment of a files system and the development of a records master list/files index from each division and staff office, including Multimedia Services, photographic and Central Engineering Files (CEF), and shall include the Agency File Scheme (AFS) number, descriptions of NASA records maintained, the records disposition and authority per NPR 1441.1 16.2 APPLICABLE DOCUMENTS: NASA Records Management, NPD 1440.6; NASA Records Retention (NRRS), NPG 1441.1; NARA General Records Schedules (GRS); 36 CFR, Chapter XII, Subchapter B, Records Management; System Level Procedure (SLP) 16; Annex 1.4, Documentation and Records Management. 16.3 CONTENTS: This index shall provide the identity of all NASA records being generated in the performance of the contract and shall include the Agency File Scheme (AFS) number, the descriptions of NASA records maintained, the records disposition and authority per NPR 1441.1. 16.4 FORMAT: The records master list/plans, index shall be submitted in accordance with format in Appendix B of System Level Procedure (SSLP 1440-0001) 16.5 MAINTENANCE: The Index shall be updated annually and submitted for review/approval. 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None.					



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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Monthly Activity

3. Operator:

RA00

4. DR Number Page Date Rev.

1-GA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO

7. Distribution:

QA00 (1 Copy)
RA00 (1 Copy)
DA00 (1 Copy)
VA00 (1 Copy)
EA00 (1 Copy)

8. Initial Submission:

30 days after start of operational performance

9. As of Date:

10. Remarks:

Report to be submitted within 10 days following reporting period.
1 copy each to be submitted to QA00, RA00, DA00 (Contracting Officer), VA00, and EA00.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Monthly Activity

12. Standard DRD Number Rev. Page Date

13. Use:

To provide NASA with visibility of contract performance
And accomplishments compared with planned activities.

14. Interrelationship:

All Annexes.
Annex 1.4.2.4

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement for the preparation and submittal of a monthly activity report.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Activity reporting shall address major accomplishments, events of special significance, difficulties, and progress toward meeting contract requirements. Reports shall be in narrative form, brief, and informal in content. Monthly reports shall include an indication of any current problem which may impede performance and proposed corrective action.

16.4 FORMAT: 8 1/2" x 11" bond paper.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None.



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Customer Guide to Facility Operating Services (FOS)

3. Operator:

DA00

4. DR Number Page Date Rev.

1-GA02, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
See Distribution
List

8. Initial Submission:
60 days after contract award

9. As of Date:

10. Remarks:

Annual updates due September 15th.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Customer Guide to Facility Operating Services (FOS)

12. Standard DRD Number Rev. Page Date

13. Use:
To describe the capabilities and services of the FOS for users who may require facility operating services and to stimulate tenant involvement as paying customers of facility operating services at SSC.

14. Interrelationship:
Schedule Article H-26
Annex 1.2.2
Annex 1.4.2.4

15. Reference:

16. Preparation Information:

The information may be documented on any media that may be widely disseminated and is readily obtainable by current and potential users (e.g., hardcopy, Internet, viewgraphs, etc.). The document shall identify:

1. The steps required by the user to obtain support
2. The full range of capabilities offered by the Contractor, to include:
 - descriptions of services
 - system descriptions
 - locations
 - operating characteristics
 - illustrations
 - inventories
 - operator certifications/requirements
3. Pricing Guide (loaded costs for each type service)
4. Method by which customer feedback is collected and assessed



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Plan, Emergency Preparedness

3. Operator:

RA00

4. DR Number Page Date Rev.

1-GA03, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

Annual
SA updates of key contact list

7. Distribution:

Each Agency/
Organization
(1 Copy)

8. Initial Submission:

Within 30 days after start of contract

9. As of Date:

10. Remarks:

Provide 1 copy to each agency/organization at SSC. Submit Emergency Plan to RA20, Institutional Services, for review and approval. 1 copy and updates to Contracting Officer (Code: DA00)

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Plan, Emergency Preparedness

12. Standard DRD Number Rev. Page Date

13. Use:

To provide information for use during emergencies, including plans of action to be taken to protect life and property and facility recovery after emergencies.

14. Interrelationship:

Annex 5.4.5.2
Annex 1.1.7.1
Annex 5.4.4.2.3.2

15. Reference:

SPG 1040.1D and
current revisions

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the preparation of a plan for the reasonable protection of SSC personnel and facilities, including services, utilities, and personal property that may be damaged during an emergency arising from Natural or unnatural causes.

16.2 APPLICABLE DOCUMENTS: SPG 1040.1D and current revisions.

16.3 CONTENTS: The plan shall contain actions to be taken during all emergencies identified in SPG 1040.1D, including Community Disaster/Recovery Plan, Power Failure Plan, Flood Plan, Spill Plan, Employee Strike Plan, Freeze Plan, Threat of Potable Water Contamination Plan, and related emergencies. Include levels of disaster, evacuation routes, list emergency equipment/supplies, update key contact list every 6 months, identify local medical facilities, radio and TV outlets, and other local and satae key contacts. Provide training, orientation, and exercises of the plans on an annual basis to maintain proficiency.

16.4 FORMAT: The plan shall be in book form, with easy inserts for updates, on 8.5" x 11"

16.5 MAINTENANCE: See block 10, 15, 16.3

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Equal Employment Opportunity

3. Operator:

AA00

4. DR Number Page Date Rev.

1-MA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
QU

Report shall be provided no later than the 7th of each month following the end of the Calendar quarter.

7. Distribution:
2 Copies

8. Initial Submission:

90 days after contract start.

9. As of Date:

10. Remarks:

Original to NASA/SSC/EEO Office with 1 copy to Contracting Officer (BA34)

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Equal Employment Opportunity

12. Standard DRD Number Rev. Page Date

13. Use:

This document will be used by the Government to assess the Contractor's equal employment and affirmative action management of Contract effort.

14. Interrelationship:

All Annexes
Annex 1.4.2.4

15. Reference:

FAR 22.802;
FAR Clause 52.222-26

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description(DRD) establishes the requirement for the preparation and submittal of a quarterly EEO reports.

16.2 APPLICABLE DOCUMENTS: Quarterly Equal Opportunity Statistical Report and Quarterly Equal Opportunity Counseling Report.

16.3 CONTENTS: Format and content of report specified in applicable documents.

16.4 FORMAT: Utilize SSC Forms for quarterly reporting (Note: Contractor may reproduce forms). Also, provide a Quarterly Narrative Report for Equal Opportunity Activities with the following contents.

- A. Training and Career Development
- B. Awards and Recognition Activities
- C. Community Activities
- D. Recruiting Activities
- E. Special Events
- F. Other

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title:

Plan, Conflict of Interest Avoidance

3. Operator:

BA34

4. DR Number Page Date Rev.

1-MA03, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
OT

7. Distribution:
DA00 (4 Copies)
DA00 (Original)
CA00 (1 Copy)

8. Initial Submission:
10 days after contract start

9. As of Date:

10. Remarks:

Original and 4 copies to BA34 (Contracting Officer); 1 copy to CA00 (Chief Counsel)

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Plan, Conflict of Interest Avoidance

12. Standard DRD Number Rev. Page Date

1-MA03

13. Use:

To anticipate all potential organizational conflicts of interest

14. Interrelationship:

Annex 1.4.2.4

15. Reference:

Schedule Article H-7,
Limitation of Future
Contracting
(NFS 1852.209-71)

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement (DR) establishes the requirement for the preparation of a Conflict of Interest Avoidance Plan that identifies any potential conflicts, including conflicts with competing organizations, particularly with regard to conflicts arising out of support to the testing of propulsion hardware and technology, or technology transfer activities

16.2 **APPLICABLE DOCUMENTS:** N/A

16.3 **CONTENTS:** The plan should take into account past, present, and future contracts that would cause offer or to have a conflict of interest in carrying out the terms of this contract. Specifically, the plan shall include:

- The types of conflicts that might occur if the offer or if awarded this contract, including the contract numbers and names of Contracting Officers for any contracts that would be included as part of the plan.
- A description of how potential conflicts would be identified reported and avoided or mitigated.
- The manner in which the Contractor would protect against the unauthorized use or disclosure of proprietary or other restricted data of other companies received in connection with work under this contract.

16.4 **FORMAT:** The plan shall be on 8 ½ x 11 inch bond paper with paper cover.

16.5 **MAINTENANCE:** None

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Functional Metrics	3. Operator: BA34	4. DR Number Page Date Rev. 1-MA07, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type:	6. Frequency of Submission: MO The Contractor shall continuously maintain electronic on-line access to the data required in this data requirement. The access shall be formally reported by the 10 th of each month.
7. Distribution: 2 Copies 1 Electronic Copy	
9. As of Date:	
8. Initial Submission: 90 days after contract award	

10. Remarks:
Submit 2 hard copies and 1 electronic copy to CO/COTR.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Functional Metrics	12. Standard DRD Number Rev. Page Date 1-MA07
13. Use: To establish PWS functional performance document trends. Assures compliance with requirements and provides the Government with to Contractor generated metrics for performance requirements against Performance Requirement Summary (PRS).	14. Interrelationship: All Annexes. Schedule Article H-Annex 1.6
15. Reference:	

16. Preparation Information:

16.1 **SCOPE:** The Contractor shall plan, implement, accomplish, and submit one base to cover all work requirements in Section C of the contract, as further specified in (Annexes); metric requirements in Data requirements; and correlate these metrics. The Contractor may propose and include metrics that are deemed by the Government and meaningful in measuring performance. The Contractor is encourage to be innovative in submitting an efficient and effective functional metrics reporting systems.

16.2 **APPLICABLE DOCUMENTS:** All Annexes (Attachment J-1) and associated PRS.

16.3 **CONTENTS:** The attached metrics are required in addition to the metrics covering all requirements in Section C of the contract, as further specified in Attachment J-1, PWS other metrics on-line electronic data, reports, and submittals that are specifically required in Annexes. The metrics for work performed in all Annexes shall be reported to the 2nd indenture The Contractor shall maintain and provide Government electronic on-line access to the back-up that supports all data requirements and the levels specified above. The available back-up includes, but not limited to, sub-line items within each Annex, customer equipment available to the Government and will permit analysis and trending to various focused levels is that other on-line data be accessible that readily supports all data submitted with this data and that the Government will have full and unlimited access to that data.

16.4 **FORMAT:** The Contractor and the CO/COTR shall jointly agree on the format of data changes in format and content shall be expected from time to time to improve use, application meaningfulness of metrics. electronic format to be on Microsoft Windows based software and are to be reported and maintained in Microsoft Excel.

**Data Requirement 1-MA07
Functional Metrics Report**

Work Control

	Current Month	Contract Year-to-Date
Number of New SWR's Received		
Number of Amendments to SWRs		
Number of Closed SWRs		
Total SWRs		

	Current Month	Contract Year-to-Date
\$ Estimates for New SWRs		
\$ Estimates for SWR Amendments		
Total SWR \$ Estimates		

	Current Month	Contract Year-to-Date
SWRs Completed Within Original \$ Estimates		
SWRs Not Completed Within Original \$ Estimates		

	Current Month	Contract Year-to-Date
SWRs Completed Within Estimated Schedule		
SWRs Not Completed Within Estimated Schedule		

Documentation and Records Management

	Current Month	Contract Year-to-Date
Number Data Requirements Submitted on Time		
Number Data Requirements Not Submitted on Time		
Total Data Requirements Submitted		

Engineering Services

Design – submit a and b every 6 months; c quarterly.

- a. Actual number of designs by construction categories.
- b. Average design turnaround schedules by construction categories
- c. Project Management Plan (PMP) revisions (provide in a 2x3 table)
Number of PMP revisions caused by:
 - a. Schedule change
 - b. Construction cost change

1. Reason for the PMP revision
 - a. Customer scope or schedule changes
 - b. Government PE scope of schedule change
 - c. FOS scope or schedule change

As-Building – submit quarterly.

- a. Actual number of work requests and projects updated per year
- b. Actual number of drawings as-built by drawing categories
- c. Average as-building turnaround schedules by construction categories
- d. Number of remaining backlogged redline drawings
- e. Number of master facility drawings in CAD (vector format, Raster format) and in hardcopy

Installation Accountable Government Property (IAGP)


IAGP Attachment J-10 List 2 (Class Exceptions)

1. Monthly maintenance cost data on all IAGP as follows:

	<u>ECN</u>	<u>Labor</u>	<u>Materials</u>	<u>Total</u>
Maintenance cost:	_____	_____	_____	_____

2. Monthly repair cost data on all IAGP as follow:

	<u>ECN</u>	<u>Labor</u>	<u>Materials</u>	<u>Total</u>
Repair cost:	_____	_____	_____	_____

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Reports, Contractor Financial Management		3. Operator: BA00		4. DR Number Page Date Rev. 1-MF01, 1 of 2	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: *MO-Monthly **QU- Quarterly (Monthly is also due when quarterly is submitted).			
7. Distribution: Original and 5 Copies; NASA Control Deliverable System		8. Initial Submission: Per Block 10 after start of contract.			
9. As of Date: Last Friday of SSC Accounting Month					
10. Remarks: *533M Due on the third Monday following the close of each fiscal month. **533Q Due on the 15 th operating day of the month preceding the quarter being projected. Original – BA00, 1 Copy BA21, 1 Copy BA22, 1 Copy each C.O., COTR, DCMC (ACO); electronic data file to BA21; NASA Contract Deliverable System.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Reports, Contractor Financial Management				12. Standard DRD Number Rev. Page Date	
13. Use: To assure that dollar and labor resources are reported at sufficient detail to allow realistic evaluation of contractor resource utilization performance.		14. Interrelationship: NASA Forms 533M, 533Q, Annex 1.3.5 Annex 1.3.5.1 Annex 1.3.7.1 Annex 1.4.2.4		15. Reference: NPR 9502.D, NFS 1852.242-73	
16. Preparation Information: 16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for the preparation of a report covering accumulated and forecasted dollar expenditures required to perform the Contractual effort. It will be prepared against elements of cost data for each Annex and summarized for a contract total. A separate 533 report is required for the Contract Year and Inception to Date from the initiation of the basic contract. 16.2 APPLICABLE DOCUMENTS: NASA Forms 533M, 533Q, and NPR 9502.D 16.3 CONTENTS: This report shall be prepared in accordance with the NFS 1852.242-73, "NASA Financial Management Reporting." 16.4 FORMAT: See Attached Format 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title:

Reports, Contractor Financial Management

3. Operator:

BA00

4. DR Number Page Date Rev.

1-MF01, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Reports, Contractor Financial Management

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.7 FORMAT:

Hours:

- Prime ST
- Prime OT
- Subcontractor ST
- Subcontractor OT

Full Time Equivalents:

- Prime ST
- Prime OT
- Subcontractor ST
- Subcontractor OT

Labor Dollars:

- Straight Time
- Overtime
- Overtime Premiums
- Total Labor

Pay Related Costs

Subcontractor Costs

Construction

Material

ODC:

- Travel
- Training
- Relocation
- Recruiting
- Services/Leases
- Total ODC

GSA Transportation

G & A

Total Cost

Reimbursements

Provisional Fee

Additional Potential Fee

Fee Earned

Open Commitment Carryover (Outstanding Job Orders)

Total Cost & Fee



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Work Order Status Report

3. Operator:

BA00

4. DR Number Page Date Rev.

1-MF02, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

7. Distribution:

Original and
2 Copies; NASA

Contract
Deliverable
System

9. As of Date:

COB 3rd Monday
After each Fiscal
Month

6. Frequency of Submission:

Monthly

8. Initial Submission:

After start of contract

10. Remarks:

Original to BA00

1 copy to COTR

1 copy SWR Initiator

NASA Contract Deliverable System

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Work Order Status Report

12. Standard DRD Number Rev. Page Date

13. Use:

To monitor monthly status of work orders from 85% to
completion.

14. Interrelationship:

Annex 1.3.5.2

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement for preparation of a monthly report identifying all open work orders which are 85% complete through completion.

16.2 CONTENTS: Data elements work order number, work order estimate, costs incurred, and percentage of completion.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Electronic Weekly Cost Data

3. Operator:

BA22

4. DR Number Page Date Rev.

1-MF03, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
Weekly

7. Distribution:

1 data (flat) file

8. Initial Submission:

After start of contract.

9. As of Date:

COB 2 working
Days following the
End of each week

10. Remarks:

Cost data is due to Computer Operations support contractor for download into Other Accumulated Cost (OAC) NLT COB 2 working days following the end of each week. The flat file layout is file layout is attached as an Annex to this DR.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Electronic Weekly Cost Data

12. Standard DRD Number Rev. Page Date

1-MF03

13. Use:

For the weekly inclusion of cost data into Other Accumulated Cost (OAC)

14. Interrelationship:

Annex 1.3.5.3

15. Reference:

16. Preparation Information:

16.1 SCOPE : This Data Requirement (DR) establishes the requirement and related criteria for providing the Weekly cost data in a flat file format in the format as delineated in the attached Annex.

16.2 CONTENTS AND FORMAT: The data file shall be provided in the format as delineated in the attached Annex to this DR.

16.3 FORMAT: Letter format to the NASA Contract Deliverable System stating date of delivery to Computer Operations support contractor.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, Contract Monthly Operating Status	3. Operator: BA21	4. DR Number Page Date Rev. 1-MF04, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: MO
7. Distribution: 1 Copy 1 Data File	
9. As of Date: Calendar month End	
8. Initial Submission: After start of contract	

10. Remarks:
Report is due by noon on the second Friday following the close of the Stennis Space Center fiscal month.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Contract Monthly Operating Status	12. Standard DRD Number Rev. Page Date 1-MF04
13. Use: Reporting the status of cost and workforce to include variance explanations for total contract, both the prime and all subcontracts, to SSC Management and NASA Headquarters.	14. Interrelationship: Annex 1.3.5.4
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement of the preparation of a monthly workforce report that provides monthly status (dollars and workforce) to include variance explanations against the approved operating budget line items.

16.2 CONTENTS AND FORMAT: The report shall provide cost (dollars) and workforce reported by SSC operating budget programmatic line item via on electronic format.

16.3 MAINTENANCE: None

16.4 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Occupancy	3. Operator: BA22	4. DR Number Page Date Rev. 1-MF05, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type:	6. Frequency of Submission: Annually or 30 days from end of contract.
7. Distribution: BA22 (2 Copies)	
8. Initial Submission: After start of contract	
9. As of Date: November 15 or 30 days from end Of contract	

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Occupancy	12. Standard DRD Number Rev. Page Date 1-MF05
-----------------------------------------------------	---------------------------------------------------------

13. Use: To facilitate the development of the annual occupancy rate.	14. Interrelationship: Annex 1.3.5.5	15. Reference:
-------------------------------------------------------------------------	-----------------------------------------	----------------

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement for preparation of an annual report identifying all costs incurred by the contractor on NASA work orders.

16.2 CONTENTS: Data elements include:
 All costs incurred in fiscal year by budget line item and work order
 Cost breakdown by Labor, Material, ODC, Total
 Subtotal by benefit or within budget line item
 Subtotal by budget line item
 Grand total
 Summary – Total cost to each BLI with Grand Total

Budget Line Item Number	Budget Line Item Name	Stennis Work Request Number and Description	Tot Hrs	Occupancy Report			Sub-Cont	Total
				Labor	Material	ODC		



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Subcontractor Litigation	3. Operator: BA34	4. DR Number Page Date Rev. 1-PC01, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AR
7. Distribution: BA34 (Original) BA34 (1 Copy)	
9. As of Date: *	
8. Initial Submission: N/A	

10. Remarks:
*Report to be made within 15 days after filing of action or suit. Submit original to Chief Counsel (CA00) and 1 copy to Acquisition Management Office (BA34).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Subcontractor Litigation	12. Standard DRD Number Rev. Page Date 1-PC01, 1 of 1
13. Use: To promptly advise the Chief Counsel and Contracting Officer of any actual or possible litigation between contractor and subcontractor.	14. Interrelationship: Annex 1.4.2.4
15. Reference:	

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement Description (DRD) establishes the requirement for the preparation of a report covering any action or suit filed, and prompt notice of any claim made against the Contractor by any subcontractor or vendor which, in the opinion of the Contractor, may result in litigation, related in any way to this contract.


16.2 **APPLICABLE DOCUMENTS:** None.

16.3 **CONTENTS:** Same as Paragraph 16.1 "Scope."

16.4 **FORMAT:** Letter form.

16.5 **MAINTENANCE:** N/A.

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD:** None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Liability to Third Person(s)		3. Operator: BA34		4. DR Number Page Date Rev. 1-PC02, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: *AR			
7. Distribution: BA34 (Original) CA00 (1 Copy)		8. Initial Submission: N/A			
9. As of Date: N/A					
10. Remarks: *Report to be made within 3 days after filing of action or claim. Original to BA34 (Contracting Officer) and one copy to CA00 (Chief Counsel). Immediate oral notification is required whenever settlement negotiations are contemplated or conducted which could result in a liability not covered by insurance.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Liability to Third Person(s)			12. Standard DRD Number Rev. Page Date 1-PC02		
13. Use: To inform the Contracting Officer of any liability by the Contractor to a third person(s) which may or may not be covered by the Contractor's insurance.		14. Interrelationship: Annex 1.4.2.4		15. Reference: FAR 52.228-7	
16. Preparation Information: 16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirement for the preparation of a report covering any suit or action filed, or any claim made against the Contractor by a third person(s) arising from the performance of the contract as required by the "Insurance-Liability to Third Persons" clause of the General Provisions of the contract. This DRD required the contracts to give notice whenever settlement negotiations are contemplated or conducted which could result in a liability not covered by insurance. 16.2 APPLICABLE DOCUMENTS: General Provisions Clause 52.228-7 16.3 CONTENTS: The report will provide detailed information about any suit or action filed, or any claim made, against the Contractor by a third person(s) arising from the performance of the contract. 16.4 FORMAT: Letter form. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Certificate of Insurance

3. Operator:

BA34

4. DR Number Page Date Rev.

1-PC03, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
*RT

7. Distribution:
BA34 (Original)
BA34 (1 Copy)

8. Initial Submission:
15 days after award of contract.

9. As of Date:
*

10. Remarks:

*Initial report to be made 15 days after award of contract. Updated Certificates are required prior to expiration of previous Certificates. Revised certificate required if coverage changes. Original to be submitted to BA34 (Contracting Officer) and one copy to CA00 (Chief Counsel).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Certificate of Insurance

12. Standard DRD Number Rev. Page Date

1-PC03, 1 of 1

13. Use:
Describe the type and amount of insurance coverage maintained by the Contractor during the period of contract.

14. Interrelationship:
1-PC02
Annex 1.4.2.4

15. Reference:
FAR 52.228-7
NASA FAR Supplement
1852.228-75

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for a certificate, as required by the clause of the Contract entitled "Insurance - Liability to Third Persons."

16.2 APPLICABLE DOCUMENTS: Clause of contract entitled "Insurance - Liability to Third Persons."

16.3 FORMAT: Certificate provided by Insurance Company.

16.4 MAINTENANCE: N/A

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Notification, Advance Subcontract

3. Operator:

BA34

4. DR Number Page Date Rev.

1-PC04, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AR

7. Distribution:
BA34 (1 Copy)

8. Initial Submission:
N/A

9. As of Date:
N/A

10. Remarks:

2 Weeks advance notification shall be provided. One copy to be submitted to BA34 (Contracting Officer).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Advance Subcontract Notification

12. Standard DRD Number Rev. Page Date

2-GA01, 1 of 1

13. Use:

To provide the SSC Procurement Office with Advance Notification of proposed subcontracts.

14. Interrelationship:

Annex 1.5.3.1

15. Reference:

FAR 52.244-2

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for the preparation of written, advance notification of any proposed subcontract as defined in the above-references clauses.

16.2 APPLICABLE DOCUMENTS: The "Subcontracts" Clause of the Contract.

16.3 CONTENTS: Same as Paragraph 16.1 "Scope." The Material Request number shall be referenced in the notification.

16.4 FORMAT: Letter Form.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Reports, Subcontract

3. Operator:

BA34

4. DR Number Page Date Rev.

1-PC05, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

- * AN Year End Supplemental Report for Small Disadvantaged Business (SDB)
- * SA Individual Subcontracting Report (ISR) (formerly Standard Form 294),

7. Distribution:

See Item 10*

- * AN Summary Subcontract Report (SSR) (formerly Standard Form 295)
- * MO Small Disadvantaged Business (SDB) Subcontract Status Report
- * AN SDB Participation Report (formerly OF 312)

9. As of Date:

8. Initial Submission:

- * SDB Participation Report – 30th day of month following the close of Gov. Fiscal Year
- * ISR - 30th day of the month following the close of the SA reporting period.
- * SSR - 30th day of the month following the close of the SA reporting period.

10. Remarks:

- * Submit reports using SBA Electronic Subcontract Reporting System (ESRS) (<http://www.esrs.gov>). ISR, SDB Participation Report and SSR are to be submitted using the SBA electronic subcontracting reporting system (ESRS)
- * Monthly SDB Status Report – 1 copy to Small Business Specialist (BA35), and original to Contracting Officer (BA34).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Reports, Subcontract

12. Standard DRD Number Rev. Page Date

1-PC05

13. Use:

ISR; SSR; To provide NASA a basis for evaluation and extent of subcontracts program involving small and disadvantaged business concerns. Appropriations Act 1990 (P.L. 101-144) (P.L. 101-507). SDB Participation Report to provide NASA and Depart. of Commerce with a breakdown of SDB Participation by targeted SIC Major Groups.

14. Interrelationship:

Annex 1.5.4.3

15. Reference:

FAR Part 19.704;
FAR 52.219-25
FAR 52.219-9(d)(10);
NFS 1852.204-70;
NFS 1852.219-76;
NFS 1852.219-75
NASA PIC 05-14

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for the preparation of the following subcontract reports: (1) annual SDB Participation Report; (2) semi-annual ISR subcontracting report for individual contracts; and (3) SSR summary subcontract report.

16.2 APPLICABLE DOCUMENTS: SDB Participation Report, ISR, SSR

16.3 CONTENTS: SDB Participation Report, ISR, SSR - as specified on the system with the following additional instructions: BLOCK 13A and 13B ISR and SSR : Include women-owned small business concerns (WOSB) BLOCK 18 on ISR and SSR : Remarks: Include total dollars awarded for each of the following categories: I Small Business; Small Disadvantaged Business (non-women owned); Small Disadvantaged Business (women-owned); and Small Women Owned Business (non-disadvantaged)

16.4 FORMAT: In accordance with instruction of SDB Participation Report, ISR, SSR.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Reports, Davis-Bacon

3. Operator:

BA34

4. DR Number Page Date Rev.

1-PC06, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
4

6. Frequency of Submission:
QU- Davis-Bacon Payroll
SA- Department of Labor (DOL) Enforcement Report

7. Distribution:
BA34 (1 Copy)

8. Initial Submission:
*QU- 7 days following each quarter from commencement of contract.
* SA –October 1st – march 31st
April 1st – September 30th

9. As of Date:
F/Y 10 days after
Reporting period

10. Remarks:

* 1 copy to be submitted to BA34 (Contracting Officer)

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Reports, Davis-Bacon

12. Standard DRD Number Rev. Page Date

1-PC06

13. Use:

To provide information on Davis-Bacon subcontractors certified payroll and Davis-Bacon violations.

14. Interrelationship:

Annex 1.5.3.3;
Annex 3; Schedule
Articles H-24 & H-25

15. Reference:

Davis-Bacon Act & (40 U.S.C. 276a -276a - 7) Copeland Act (40 USC 276 c) & 29 CFR Part 3 pp3.3. Applicable labor standard provisions of the contract contract.

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for the submittal of the Davis-Bacon subcontractors certified payroll and any instances of Davis-Bacon violations.

16.2 APPLICABLE DOCUMENTS: Davis-Bacon Act (Labor)

16.3 CONTENTS: The Contractor shall, in accordance with the provisions of the Davis-Bacon Act, deliver to NASA the Davis-Bacon subcontractors certified payroll on a quarterly basis and a DOL Semi-Annual Enforcement Report.

16.4 FORMAT: Subcontractors certified payroll in keeping with the provisions of the Davis-Bacon Act. DOL Semi-Annual Enforcement Report format attached hereto.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None

SEMI-ANNUAL LABOR COMPLIANCE REPORT
TO THE DEPARTMENT OF LABOR
PURSUANT TO SECTION 5.7 (b) OF
REGULATION, PART 5

- 1) Period covered:
- 2) Number of prime contracts awarded:
- 3) Total dollar amount of prime contracts awarded: \$
- 4) Number of contractors against whom complaints were received:
- 5) Number of investigations completed:
- 6) Number of contractors found in violation:
- 7) Amount of back wages found due:
 - a) Davis-Bacon Act: (prevailing wage violations) \$
 - b) CWHSSA: (overtime violations) \$
- 8) Amount of back wages paid:
 - a) Davis-Bacon Act: \$
 - b) CWHSSA: \$
- 9) Total number of employees paid wage restitution under the Davis-Bacon and related Acts and/or Contract Work Hours and Safety Standards Act:
- 10) Amount of liquidated damages assessed under CWHSSA:



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Geographic Economic Impact	3. Operator: BA34	4. DR Number Page Date Rev. 1-PC07, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AN
7. Distribution: BA34 (Original) BA34 (1 Copy)	Reporting period shall be October 1 to September 30 for all years with partial reports for Years 1 and 7.
9. As of Date: N/A	8. Initial Submission: 14 days following close of Government Fiscal Year

10. Remarks:
Original report to BA34 (Contracting officer) and 1 copy to NASA/SSC Small Business Specialist (BA30).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Geographic Economic Impact	12. Standard DRD Number Rev. Page Date 1-PC07
13. Use: To determine the economic impact by geographical Distribution.	14. Interrelationship: Annex 1.5.4.1
15. Reference:	

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement Description (DRD) establishes the requirements for the preparation of a report covering all acquisition placed by the Contractor and the related geographic impact of these acquisitions.

16.2 **APPLICABLE DOCUMENTS:** All acquisitions placed by the Contractor.

16.3 **CONTENTS:** Identify FOSS funds disbursements by FY for the following geographic locations:

A. Hancock County, MS	No. of Acquisitions	Total Dollars
B. Harrison County, MS		
C. Pearl River County, MS		
D. All of State of Mississippi		
E. St. Tammany Parish, LA		
F. All of State of Louisiana		
G. List all Other 48 States		
H. Foreign Countries		

16.4 **FORMAT:** At discretion of the Contractor

16.5 **MAINTENANCE:** N/A

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD:** None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Metrics, Purchasing and Subcontracting

3. Operator:

BA34

4. DR Number Page Date Rev.

1-PC08, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
QU- Use of Consolidated Contracts
QU- Acquisition Activity

7. Distribution:
BA34 (Original)
BA34 (1 Copy)

8. Initial Submission:
QU- 7 days following close of each quarter from commencement of contract.

9. As of Date:
N/A

10. Remarks:

Original and 1 copy to be submitted to BA34 (Contracting Officer).

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Metrics, Purchasing and Subcontracting

12. Standard DRD Number Rev. Page Date

1-PC08

13. Use:

To be used by NASA to track the progress of using Consolidated Contracts on a center-wide or government-wide basis. To provide the Government with workload indicators on an annual basis.

14. Interrelationship:
Annex 1.5.4.2

15. Reference:

16. Preparation Information:

16.1 SCOPE: (1) The Contractor will be required to report statistics regarding purchase orders or subcontracts, including modifications, placed against any NASA contracts or other government-wide contracts, for example, General Services Administration (GSA) orders, Science and Engineering Workstation Procurements (SEWP) at Goddard Space Flight Center, etc. (2) The Contractor will be required to report cumulative acquisition activity.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: (1) A listing of all orders, including modification, placed against NASA Center-Wide Contracts or government-wide contracts with associated dollar amounts. Identify specific contractor, contract number, and location. (2) The Contractor shall furnish to the Contracting Officer the following information for each quarter:

- A. Total amount of dollars spent in acquisitions.
- B. Total number of acquisitions.
- C. Total number of line items processed.
- D. Total amount of dollars placed in each Level identified in Annex 1.5
- E. Total number of acquisitions in each Level identified in Annex 1.5.
- F. Total number of line items processed in each Level in Annex 1.5.
- G. Average number of days orders placed for each Level identified in Annex 1.5.

16.4 FORMAT: Format shall be at the discretion of the Contractor.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None

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National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Quality Manual

3. Operator:

RA02

4. DR Number Page Date Rev.

1-RA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:
Once

7. Distribution:

RA02 (1 Copy)

8. Initial Submission:

Due with Offeror's Proposal

9. As of Date:

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Quality Manual

12. Standard DRD Number Rev. Page Date

1-RA01, 1 of 1

13. Use:

Quality Manual is used to define the Offeror's Quality Management System

14. Interrelationship:

Annex 1.1

15. Reference:

16. Preparation Information:

Develop Quality Manual in compliance with ANSI/ISO/ASQC Q9001-2000.

The Quality Manual must define the type, levels, and inter-relationships of the documentation that defines the organization's quality management system. A "tree" diagram showing various types of policies, plans, procedures, and work instructions related to one another may be included. The Quality Manual must be consistent with the organization's documented Quality Policy and objectives.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Groundwater Usage

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
QU
AR (Report all abandoned wells that are capped)

7. Distribution:
RA02 (1 Copy)

8. Initial Submission:
At End of First Quarter

9. As of Date:
COB/Apr 10
Jul 10
Oct 10

10. Remarks:

Submit electronic notification letter along with the required data to the RA02 Environmental Management for submission to MDEQ. DRD will not be considered complete without the SSC Official File Number followed signed transmittal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Groundwater Usage

12. Standard DRD Number Rev. Page Date

2-GA01, 1 of 1

13. Use:

To provide the following report: For local records and submission to the MDEQ Bureau of Land and Water Resources.
Official File Number 8532.6.G.1

14. Interrelationship:
Annex 2.2.4.16

15. Reference:
SPR 8500.2
Clean Water Act (CWA)
Mississippi Water
Criteria

16. Preparation Information:

16.4 SCOPE: This Data Requirement (DR) establishes the requirement to submit a report on the usage of groundwater at Stennis Space Center.

16.5 APPLICABLE DOCUMENT: None

16.6 CONTENTS: Report to the SSC groundwater usage from Potable Well (PW1, PW2, and PW3) and Industrial Well (IW1, IW2, and IW3). The report shall list individually the average daily withdrawal in GPD by month for each of the three (3) months in the preceding quarter. Ensure that the permit limits for each well are met at all times. Provide an annual report of all abandoned wells that are capped.

16.7 FORMAT: Report is submitted on 8½"X11" paper, electronically on the FOSC shared drive accessible NASA personnel.

16.8 MAINTENANCE: N/A

16.9 EXCEPTIONS/ADDITIONS TO THIS STANDARD: Department on regulatory requirements and form revisions.

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National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Toxic Release Inventory (TRI)	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA02, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Jun 15	8. Initial Submission: June 15, 20XX

10. Remarks:
Submit electronic notification letter along with the required data to the RA02 Environmental Management for submission to regulatory agencies. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Toxic Release Inventory (TRI)	12. Standard DRD Number Rev. Page Date 2-GA02, 1 of 1
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13. Use: To provide NASA and the Environmental Protection Agency (EPA) with the chemicals and volumes released from SSC through the various media, air, water, and land. Office File Number 8534.8.F.1	14. Interrelationship: Annex 2.2.4.10	15. Reference: SCWI-8500-004-ENV SPR 8500.2 E.O # 12856, OMB No. 2050.0039 40 CFR 372 for EPA Form 9350-1 Section313 Chemicals Emergency Planning/Community Right-to-Know
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16. Preparation Information:

16.1 **SCOPE:** This Data Requirement (DR) establishes the requirement for the submittal of a report of listed hazardous materials that have been released into the environment.

16.2 **APPLICABLE DOCUMENTS:** EPA Form 9350-1

16.3 **CONTENTS:** This report summarizes the release of various hazardous chemicals (as listed in 40CFR372) from SSC during the preceding calendar year into the environment. The Report must cover information required in 40 CFR 372 and using EPA Form 9350-1. If SSC emissions fall below the reportable levels for the Toxic Release Inventory (TRI), EPA form should not be completed. Instead a report summarizing release totals for the TRI type chemicals should be submitted and the NASA cover letter prepared per instructions in Item 10 should be modified to state "The John C. Stennis Space Center, TRI Facility ID# -39529 STNNS, BUILD, located in Hancock County, MS did not have releases of any materials in the previous year that requires reporting."

16.4 **FORMAT:** Report is submitted on EPA Form 9350-1, data supporting the report stored electronically in a database on the SSC Environmental Server, or report as outlined in 16.3. This information shall also be Placed in the NASA Environmental Tracking System per NASA Headquarters requirements.

16.5 **MAINTENANCE:** N/A

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** Dependent on regulatory requirements and form revisions.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Public Health Water Supply Survey	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA03, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/Fed 1	
8. Initial Submission: February 1, 20XX	

10. Remarks:
Submit electronic notification letter along with the required data to the RA02 Environmental Management for submission to MDEQ. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Public Health Water Supply Survey	12. Standard DRD Number Rev. Page Date
13. Use: To provide Government and Mississippi Department of Health (MSDH) with information pertinent to the SSC Drinking Water System. Official File Number 8532.6.G.1	14. Interrelationship: Annex 2.2.4.17
15. Reference: Safe Drinking Water Act (SDWA) 40 CFR 141.33 Title 49, Chapter 17, Drinking Water Law of 1976	

16. Preparation Information:

16.1 SCOPE This Data Requirement (DR) establishes the requirement for the annual submittal of a Public Water Supply Survey.


16.2 APPLICABLE DOCUMENTS: N/A

16.3 CONTENTS: This reports must be completed by using the format and/or form provided by the Contractor's Certified Drinking Water Supply, MDH and must be signed by the Operator. It should state the Operator's Certificate Number and expiration date. It will also identify the number of connections and population as provided from the Official Population count for the preceding year.

16.4 FORMAT: MSDH required submittal.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: Subject to regulatory requirements revisions.

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Non-hazardous Solid Waste Survey		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA04, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: AN			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: February 15, 20XX			
9. As of Date: COB/ Feb 15					
10. Remarks: Report will be submitted no later than February 15 of each year and will be for the preceding year. Submit an electronic notification to RA02 Environmental Officer. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Non-Hazardous Solid Waste Survey Report				12. Standard DRD Number Rev. Page Date	
13. Use: To provide the Government with a summary of the Non-Hazardous solid waste generated. Office File Number 8533.7.H.1		14. Interrelationship: Annex 2.2.4.14		15. Reference: SCWI-8500-0004 SCWI-8500-0026-ENV Resource Conservation and Recovery Act (RCRA) Mississippi Non-Hazardous Solid Waste Management Plan	
16. Preparation Information: 16.1 SCOPE: This document establishes the requirement for the submittal of a report to summarize the generation and handling of industrial, commercial, and institutional non-hazardous solid waste. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: This report summarizes the generation and handling of industrial, commercial, and institutional non-hazardous solid wastes during the proceeding calendar year. This report format is inclusive of waste reduction goals, how much waste is generated, how much solid waste is diverted from the on-site permitted landfill, quantity of hazardous waste generated, amount of solid and hazardous waste reduced, and the types of materials that are being recycled. 16.4 FORMAT: This report shall on 8½”X11” sheets or forms per requirements of the MDEQ. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: Subject to regulatory requirements revisions.					

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National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Plan, Environmental Resource Document	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA05, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AR
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/Apr 30	8. Initial Submission: April 30, 20XX

10. Remarks:
One (1) copy to be submitted to RA02 Environmental Officer. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Plan, Environmental Resource Document (ERD)	12. Standard DRD Number Rev. Page Date 2-GA05, 1 of 1
13. Use: Provide the Government with a description of the current environmental status as SSC as well as information on the effects of NASA operations on the local environment. Information is also included for consideration for proposed projects or actions. Official File Number 8500.1.D.1	14. Interrelationship: Annex 2.2.4.14
15. Reference: NPR 8580.1 SPR 8500.2 National Environmental Policy Act 42 U.S.C 4321	

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement (DR) establishes for the biennial revisions to the ERD.

16.2 **APPLICABLE DOCUMENTS:** The U.S. COE "*The Environmental Assessment and Management Guide.*"

16.3 **CONTENTS:** This Plan addresses all pertinent information governing environmental media at SSC that would be evaluated in the National Environmental Policy Act process. The media addressed is inclusive of air pollution sources, water resources, domestic wastewater, land resources, wetland and floodplains, aquatic and biotic resources, solid and hazardous waste generation, treatment, storage and disposal, toxic substances, underground and aboveground storage tanks, pressure vessels, insecticides and herbicides, radioactive and non-ionizing radiation materials, historic, archaeological and cultural resources, noise and vibration, and economic impact. The ERD needs to be updated to reflect any changes that have occurred. The Plan is to be in both hard copy and electronic format on the SSC Environmental Home page.

16.4 **FORMAT:** 8½"X11" paper, compact disc and/or electronic on the SSC Shared Drive that is accessible by NASA personnel

16.5 **MAINTENANCE:** N/A

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Annual Water System Survey (Industrial & Potable)	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA06, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ May 15	
8. Initial Submission: May 15, 20XX	

10. Remarks:
Report will be submitted no later than May 31 of each year and will be "as of" COB, of the preceding year. Submit electronic notification letter along with the required data to the RA02 Environmental Management for submission to MDEQ. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Annual Water System Survey (Industrial & Potable)	12. Standard DRD Number Rev. Page Date
13. Use: Provide the MDEQ and the Government with a summary of the quantity of industrial and potable water utilization.	14. Interrelationship: Annex 2.2.4.18
15. Reference: SPR 8500.2 EPA's Clean Water Act (CWA) 40 CFR 100-400, 400-470, Mississippi Water Quality Criteria	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes for the submittal of a report compiling the industrial and potable water usage at SSC for the MDEQ and the Government.


16.2 APPLICABLE DOCUMENTS: None


16.3 CONTENTS: This report summarizes the water usage for the preceding calendar year for six (6) underwater groundwater wells (Industrial & Potable). The Mississippi Department of Environmental Quality permits for these wells are under MSGW01907, MSGW01908, MSGW01909, MSGW01910, MSGW01911, and MSGW01912. The report requires the depth of each well and the amount of groundwater (in million gallons per day) that was used during the previous year.

16.4 FORMAT: Compilation data shall be placed on 8½"X11" sheets or in other format as provided by MDEQ.


16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Plan, Environmental Integrated Contingency		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA07, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AR			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: The plan will be undated as new systems/units are brought online, which may or may not require the revision of the entire document. Next update will take place three (3) years after the issuance of the later document.			
9. As of Date: AR					
10. Remarks: Submit electronic notification letter along with one(1) hard copy to the RA02 Environmental Officer. DRD will not be considered complete without the SSC Official File Number followed and signed transmittal letter for placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Plan, Environmental Integrated Contingency				12. Standard DRD Number Rev. Page Date 2-GA07, 1 of 1	
13. Use: Compliance with national, regional, state, and local Requirements. Official File Number 8534.8.E.1		14. Interrelationship: Annex 2.2.4.22		15. Reference: 29 CFR 1910.120; 29 CFR 1010.38(a); 29 CFR 1910.119; 33 CFR 154 SCWI-8500-0020-ENV; SPR 8500.2 40 CRF 68; 40 CFR 264 Subpart D; 40 CFR 265 Subpart D; 40 CFR 112	
16. Preparation Information: 16.1 SCOPE: This Data Requirement establishes the requirement to maintain and revise the SSC Contingency Plan and to add the required information to address the Clean Air Risk Management Plan (RMP) if deemed necessary. The Spill Prevention Control and Countermeasure Plan must be signed by a Professional Engineer (PE) registered in the State of Mississippi. 16.2 APPLICABLE DOCUMENTS: SCWI-8500-0026-ENV 16.3 CONTENTS: Details emergency contact list, procedures, authorities, locations of bulk storage tanks, underground storage tanks, spill control equipment, and SSC maps including general location, facility, drain lines, and petroleum product storage locations. 16.4 FORMAT: 8½”X11” paper, compact disc, and in electronic form on the FOSC Shared Drive 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Federal Facilities Compliance and Inspection & Profile		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA08, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2	6. Frequency of Submission: SA (Federal Facilities Compliance and Inspection Report) AN (Federal Facilities Compliance Profile)				
7. Distribution: RA02 (1 Copy)	8. Initial Submission:				
9. As of Date: COB/ Feb 10, Aug 10	February 10, 20XX (Federal Facilities Compliance and Inspection Report) February 10, 20XX (Federal Facilities Compliance Profile)				
10. Remarks: Report will be submitted NLT February 10 and August 10 of each year for the Inspection Report and once on February 10 th for the Compliance Profile. Submit electronic notification letter along with the required data to RA02 Environmental Management for submission to U.S. EPA. DRD will not be considered complete without the SSC Office File Number followed with the signed transmittal letter for placement on the FOS Shared Drive NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Reports, Federal Facilities Compliance and Inspection and Profile			12. Standard DRD Number Rev. Page Date 2-GA08, 1 of 1		
13. Use: To provide the Government and EPA with summarized tracking report for multimedia compliance efforts. To provide the following two (2) reports: 1. Federal Facilities Compliance and Inspection Report Official File Number 85517.E.1 2. Federal Facilities Compliance Profile Report Official File Number 85517.E.1		14. Interrelationship: Annex 2.2.4.19		15. Reference: SCWI-8500-0026-ENV U.S. Army Construction Engineering Research Laboratory Protocol for Federal Facilities	
16. Preparation Information: 16.1 SCOPE: The Data Requirement establishes the requirement for the submittal of a report to track the Multimedia compliance status as well as provide time frames for federal or state inspections. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: The Federal Facilities Compliance and Inspection report provides a check list of applicable regulations, compliance status, Notices of Violation (NOVs), CECRLA sites, compliance schedule and media inspection dates. The Federal Facilities Compliance Profile report provides pertinent information about SSC, and compliance statues in the following areas: air, water, wastewater, UST, RCRA, CERCLA, TSCA, pollution prevention, and environmental audits. 16.4 FORMAT: Report will be submitted on 8½”X11” paper or as required by NASA or EPA and electronic form on the FOSC Shared Drive. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					

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 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Plan, SSC Hazardous Material, Hazardous Waste and Solid Waste Management		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA09, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: AR			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: AR			
9. As of Date: AR					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when Plan is completed. DRD will not be considered complete without the SSC Official File Number followed by the signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Plan, SSC Hazardous Material, Hazardous Waste and Solid Waste Management				12. Standard DRD Number Rev. Page Date 2-GA09, 1 of 1	
13. Use: Outlines criteria for the handling of hazardous material and the disposition of environmentally hazardous products and solid waste generated at SSC. Compliance with federal and state waste minimizes requirements . Official File Number 8535.9.C.2		14. Interrelationship: Annex 2.2.4.22		15. Reference: SCWI-8500-0017-ENV SPR 8500.1 SPR 8500.2 Executive Order 12856 Resource Conservation And Recovery Act, 40 CFR 240-271 (RCRA, 3002 A&B)	
16. Preparation Information: 16.1 SCOPE: This Data Requirements establishes the requirements to develop and maintain the Hazardous Materials, Hazardous Waste and Solid Waste Management Plan which specifies SSC hazardous material, hazardous waste and solid waste handling procedure, and waste minimization policies including substitution, reduction, redistribution, and recycling. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: The document should include hazardous material requisition, inventory, substitution reduction and disposition procedures; hazardous material storage and separation requirement; hazardous material usage guidelines; generation and minimization responsibilities; management policies for accumulation points and waste storage; and waste characterization and solid waste operations at SSC. 16.4 16.5 FORMAT: 8½"X11" paper and an electronic version on the FOSC Shared Drive as well as in the NASA/ SSC Technical Documentation System. 16.6 MAINTENANCE: None 16.7 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Request, Section 7.0 Consultation

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA10, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AR (NTE 1 per year)

7. Distribution:
RA02 (1 Copy)

8. Initial Submission:
AR

9. As of Date:
AR

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer that will be forwarded to the regulatory DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with Placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Request, Section 7.0 Consultation

12. Standard DRD Number Rev. Page Date

2-GA10, 1 of 1

13. Use:

To request the U.S. Fish and Wildlife Services (USF&WS) to consult with NASA on threatened and endangered species.
Office File Number 8570.19.H

14. Interrelationship:
Annex 2.2.4.22

15. Reference:

Section 7.0 of the Endangered Species Act of 1973 (16USC 153)
SCWI-8500-0026-ENV

16. Preparation Information:

16.1 SCOPE: To develop the Section 7.0 Consultation letter and attachments needed to meet regulatory requirements.


16.2 APPLICABLE DOCUMENTS: SCWI-8500-0026-ENV

16.3 CONTENTS: Letter requesting consultation, brief description of project, topography map of the project site and other data needed to support consultation request per requirements of the USF&WS.

16.4 FORMAT: 8½"X11" paper and/or on compact disc

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Plan, Chlorofluorocarbon (CFC) and Halon Compounds Reduction and Phase-Out		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA11, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: AN			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: September 30, 20XX			
9. As of Date: COB/ Sep 30					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when Plan is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Plan, Chlorofluorocarbon CFC and Halon Compounds Reduction and Phaseout				12. Standard DRD Number Rev. Page Date 2-GA11, 1 of 1	
13. Use: Provides a method of reporting SSC's status with respect to NASA goals and federal requirements. Official File Number 8531.4.D		14. Interrelationship: Annex 2.2.4.22		15. Reference: SPR 8500.2 SCWI-8500-0004-ENV Code JK response to EPA Clean Air Act 40 CFR 50-80	
16. Preparation Information: 16.1 SCOPE: This Data Requirement establishes the requirement to maintain and revise the Chlorofluorocarbon (CFC) and Halon Compounds Reduction and Phase-Out Plan to reflect changes in NASA/SSC facilities, processes, and activities. 16.2 APPLICABLE DOCUMENT: None 16.3 CONTENTS: Details the current activities utilizing chlorofluorocarbons by location, including cleaning systems, refrigeration, air conditioning units, fire suppression systems, and the associated planned replacements/phase out. 16.4 FORMAT: Report will be submitted on 8½"X11" paper and electronically on the FOSC Shared Drive. Additionally, this document is maintained on the NASA/SSC Technical Documentation System. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None					

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National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Environmental Operations and Implementation	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA12, 1 of 1, 04/11/06
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SUBMITTAL REQUIREMENTS

5. Type: 4	6. Frequency of Submission: AR
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ May 15	8. Initial Submission: May 15, 20XX

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Plan is completed. DRD will not be considered complete without the SSC Official Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Plan, Environmental Operations and Implementation	12. Standard DRD Number Rev. Page Date 2-GA12, 1 of 1
13. Use: To provide the following report: Periodic revision and update of the Environmental Operations Plan, which defines all program elements and implementation responsibilities, which assure environmental regulatory compliance at NASA/SSC. Official File Number: 8500.1.D.1	14. Interrelationship: Annex 2.2.4.22
	15. Reference: NPR 8580.1 SCWI-8500-0026-ENV EO 12088; EO 11514; EO 11991; 15 CFR 1216.1

16. Preparation Information:

16.1 SCOPE: This Data Requirements establishes the requirement for updating the Environmental Operations Implementation Program Plan.


16.2 APPLICABLE DOCUMENTS: SCWI-8500-0026-ENV

16.3 CONTENTS: The updated Environmental Operations Plan will include all relevant changes regarding environmental programs and implementation responsibilities. The Plan addresses general information about SSC, air, environmental impact avoidance, potable water, water pollution control, solid and hazardous water management, CERCLA sites, toxic substance control, EPCRA, pesticides control, environmental noise control, radiation, historical and archaeological resources, flora and fauna protected species, and management of lead containing materials. A matrix of required actions for implementation is included for each media.

16.4 FORMAT: Report will be submitted on 8½"X11" paper and stored electronically in the SSC Technical Documentation System.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Title V Air Permit State Summary Fee & Emission Inventory Management		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA13, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AN AN/Emission Inventory			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: June 20, 20XX			
9. As of Date: COB/ June 20					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when MDEQ Form is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review. Annex 2.2.4.1 Annex 5.4.3.1.2.3					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Title V Air Permit State Summary Fee & Emission Inventory			12. Standard DRD Number Rev. Page Date 2-GA13, 1 of 1		
13. Use: For submission to the State of Mississippi. Official File Number 8531.4.E.6.A		14. Interrelationship: Annex 2.2.4.1 Annex 5.4.3.1.2.3		15. Reference: SCWI-8500-0026-ENV SPR 8500.2 Clean Air Act (CAA); Mississippi Regulation, APC-S-1 through APC-S-6	
16. Preparation Information:					
16.1 SCOPE : This Data Requirement establishes the requirement for documenting and maintaining copies of air emission inventories for SSC.					
16.2 APPLICABLE DOCUMENTS: None.					
16.3 CONTENTS: The data shall include a summary of annual air emissions at SSC accompanied with the associated calculations for each air contaminant. The data shall be compiled in a manner to capture monthly meter reading along with associated calculations for emission sources. The report shall include data as of COB December 31 of the previous year.					
16.4 FORMAT: Report will be submitted on a form provided by the State of Mississippi and 8½"X11" paper for calculations.					
16.5 MAINTENANCE: N/A					
16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Title V Operating Permit Requirements	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA14, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: SA/ Compliance Report AN/ Certification of Compliance MDEQ & EPA
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Jan 15, Jul 15	8. Initial Submission: At End of First Quarter

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer reports are completed. DRD will not be considered complete with the SSC Official File Number followed signed transferal letter with placement on FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Title V Operating Permit Requirement	12. Standard DRD Number Rev. Page Date 2-GA14, 1 of 1
13. Use: For submission to the State of Mississippi and/or EPA Regions IV. Official File Number 8531.4.E.5.A and Official File Number 8531.4.E.6.A (SA & AN Report)	14. Interrelationship: Annex 2.2.4.2
15. Reference: SPR 8500.2 Permit Requirement for Part III of Air Pollution Control Permit#1000- State of Mississippi Regulation APC-S-6	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for preparing semi-annual and annual reports as required by the Title V Air Operating Permit.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The report shall include all monitoring as required by the Title V Air Operating Permit. The Annual Certification shall include: an identification of each term or condition of the permit; compliance status, whether compliance was continuous or intermittent; and method used to determine status and any other facts that are pertinent to the permit. All instances of deviations from permit requirements must be clearly identified. All reports must contain that statement, "Based on the information and belief formed after reasonable inquiry, the statements and information in the following report are true, accurate, and complete." The Responsible Official, SSC Center Director, must sign the report.

16.4 FORMAT: Report will be submitted on 8½"X11" paper or as otherwise specified by NASA.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Records of Environmental Consideration

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA15, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
AR (NTE 36 per year)

7. Distribution:
RA02 (1 Copy)

8. Initial Submission:
N/A

9. As of Date:
AR

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer when reports are complete. DRD will not be considered complete with the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Records of Environmental Consideration

12. Standard DRD Number Rev. Page Date

2-GA15, 1 of 1

13. Use:

NASA Environmental Management records to demonstrate Compliance with NEPA. Official File Number 8580.24.D

14. Interrelationship:
Annex 2.2.4.22

15. Reference:

SCWI-8500-0026-ENV
SPR 8500.2A
NEPA (National Environmental Policy Act) 42 U.S.C. 4371

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement to maintain the Preliminary Environmental Survey (PES) forms submitted on various projects and the Record of Environmental Consideration (REC) for each PES in an electronic format.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The PES and the REC shall be maintained in an electronic format on the FOSC Webpage. This is inclusive of a PES Control Number, a brief description of the project, the findings (or "consideration"), the required action, the date, and a place for signature by the RA02 Environmental Officer. The PES could also result in the development of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), all of which would be developed in accordance with NEPA requirements.

16.4 FORMAT: Report will be maintained in an electronic format on the FOS Shared Drive that is accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Reports, Environmental Management Systems (EMS) & Compliance Audits	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA16, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: SA (NASA and NASA Contractors) AN (Resident Agency Audits exclusive of scoring) 4 th QU of the CY
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Feb 28/ Aug 29	
8. Initial Submission: February 28, 20XX	

10. Remarks:
Following the EMS Audit Plan, all audits are arranged and conducted in February and August, and includes the third party audit for our May registration. Develop Audit Reports and submit to the Audit Manager for proper dissemination to the respective EMS Representative. Compliance letters are also disseminated to appropriate management on an annual and semi-annual basis through the NASA Environmental Officer. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Reports, EMS & Compliance Audits	12. Standard DRD Number Rev. Page Date 2-GA16, 1 of 1
13. Use: NASA records, metrics, and submission to SSC Contractor, general managers, and agency directors. 1. NASA /NASA Contractor EMS Audits: Official File Number 8500.I.E.3.B 2. Annual Compliance Resident Agency Audits: Official File Number 8551.17.D.5	14. Interrelationship: Annex 2.2.4.27 Annex 2.2.4.28
15. Reference: SPR 8500.1 SPR 8500.2 29 CFR 1910.1200 40 CFR 262	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirements for conducting, documenting, and maintaining copies of all the audit reports. Corrective Action Reports (CARs) will be generated for any discrepancies observed during the audits. CARs must be closed out within a specific timeframe per the SSC Audit Manager. The same information must also be maintained for the third party registration audit in May with a follow-on status of outstanding findings.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The data shall include scores for environmental compliance for shops and laboratories with summary sheets and audit comments with appropriate scoring. Resident Agency Audit Reports are scored only by request of the agency. NASA and NASA Contractor EMS audits are semi-annually, which is inclusive of the third party audit for certification. These two (2) audits shall be placed in the Base Environmental Management System where findings, CARs, corrective action plan, and follow-up status report for CARs. Resident Agencies (presently NAVOCEANO, NRL, USGS, EPA, USM, and NDBC) are audited annually during 4th quarter of the CY.

16.4 FORMAT: Report will be submitted on 8½”X11” paper or as otherwise specified by NASA.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD : None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, NASA EMS Functional Review	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA17, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: Every 3 years.
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ TBD	8. Initial Submission: TBD/ Actual Date will be based on when the EFR was conducted; but the submission of the Corrective Action Report to NASA Headquarters will take place 75 days after the receipt of the Final NASA HQs EMS Functional Review Report.

10. Remarks:
The NASA EMS Functional Assessment is based on the U.S. Corp of Engineers Construction Engineering Research Laboratory (CERL) protocol for conducting environmental audits of federal facilities. The report is to submitted to the RA02 Environmental Officer. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, NASA EMS Functional Assessment	12. Standard DRD Number Rev. Page Date 2-GA17, 1 of 1	
13. Use: For submission to NASA Headquarters. Official File Number 8551.17.F	14. Interrelationship: Annex 2.2.4.29	15. Reference: USCOE/CERL Protocol SPR 8500.1 SPR 8500.2 42 U.S.C. 4371 (NEPA) 40 CFR 1500-1517

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for participating in the review process as well as documenting and maintaining copies of the NASA Functional Assessment. Additionally, develop and provide a written correspondence to address any discrepancies in the time frame noted in Section 8 of this DR.


16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The data shall include information requested by NASA Headquarters as well as the completed forms from the COE's protocol. Different media areas are covered per the NASA Headquarters schedule. All areas are reviewed every 3 years.

16.4 FORMAT: Report will be submitted on 8½"X11" paper or as otherwise specified by NASA.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Corrective Action Status on NASA HQs Environmental Functional Review		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA18, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: Every 3 years.			
7. Distribution: RA02 (1 Copy)		8. Initial Submission:			
9. As of Date: COB/ TBD		TBD / Actual Date will be based on when the EFR was conducted, but this Status Report will be due thirty 30 days after the submission of the Corrective Action Report to NASA Headquarters.			
10. Remarks: The Corrective Action Report on EMS Assessment is based on the USCOE's protocol for conducting environmental audits of federal facilities. The report is to be submitted to the RA02 Environmental Officer. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Corrective Action Status on HQs Environmental Assessment				12. Standard DRD Number Rev. Page Date 2-GA18, 1 of 1	
13. Use: For NASA Environmental Office records and submission to NASA Headquarters. Official File Number 8551.17.F		14. Interrelationship: Annex 2.2.4.29		15. Reference: COE's Protocol for the Inspection of Federal Facilities; SPR 8500.1 & SPR 8500.2 42 U.S.C. 4371 (NEPA) 40 CFR 1500-1517 DR#7GA27	
16. Preparation Information:					
16.1 SCOPE: This Data Requirement establishes the requirement for documenting and maintaining copies of auditor comments, suggestions, and corrective action recommended following the NASA Environmental Management System Assessment.					
16.2 APPLICABLE DOCUMENTS: None					
16.3 CONTENTS: The data shall include auditor comments, suggestions, corrective action recommendations, when corrective actions were made, what the corrective actions were, and a schedule for any outstanding corrective actions. Upon completion of any outstanding items, a separate letter must be written to close out the outstanding items.					
16.4 FORMAT: Report will be submitted on 8½"X11" paper and/or in the Base Environmental Management System per NASA directions.					
16.5 MAINTENANCE: N/A					
16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, RCRA 3016

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA19, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
AN

7. Distribution:
RA02 (1 Copy)

8. Initial Submission:
At End of First Quarter

9. As of Date:
COB/ See line #8

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, RCRA 3016

12. Standard DRD Number Rev. Page Date

2-GA19, 1 of 1

13. Use:

To update the EPA inventory of all federal agencies' facilities at which hazardous waste is stored, treated, or disposed of or was disposed of at any time.
Official File Number 8535.9.H.1

14. Interrelationship:
Annex 2.2.4.5

15. Reference:
SCWI-8500-0026-ENV
SPR 8500.2
42 U.S.C. 9601
(CERCLA), Section 120
42 U.S.C. 6901 (RCRA)

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for updating and maintaining copies of the inventory of federal hazardous waste site activities.

16.2 APPLICABLE DOCUMENTS: EPA Form 8710-16 (10/01)

16.3 CONTENTS: The data shall include updates and revision, if any, to the above referenced form.

16.4 FORMAT: Report will be submitted on 8½"X11" paper and stored on the FOSC Shared Drive that is accessible to NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: The database is subject to changes by NASA Headquarters.



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Off-Site Treatment, Storage and Disposal (TSD) Facility Audit	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA20, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy)	8. Initial Submission: AR
9. As of Date: AR	

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Off Site Treatment, Storage and Disposal (TSD) Audit	12. Standard DRD Number Rev. Page Date 2-GA20, 1 of 1
13. Use: To provide NASA with information regarding TSD facility which accept materials from NASA/SSC Official File Number 8535.9.E	14. Interrelationship: Annex 2.2.4.21
	15. Reference: USCOE's Protocol SCWI-8500-0026-ENV SPR 8500.2 40 CFR Part 264

16. Preparation Information:

16.1 SCOPE: The Data Requirement establishes the requirement for documenting and maintaining copies of reports to NASA following audits of TSD facilities. At least two (2) of the pre-approved TSD facilities, Inclusive of the medical waste facility, should be audited annually.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The checklist found in the USCOE's Protocol can be used for this audit process. The report shall include be not limited to the following: a report detailing the site visit, date and time of visit, contact person, description of the disposal process methodology, state and federal inspection report, if violations were noted for what period of time, specifics about the cited violation(s), general appearance of facility, discrepancies noted during visit, if any, and a copy of the TSD facility's audit.

16.4 FORMAT: Report will be submitted on 8½"X11" paper and stored on the FOSC Shared Drive that is accessible to NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Landfill and Storm Water Inspection

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA21, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
RA02 (1 Copy)

9. As of Date:
COB/See line #8

8. Initial Submission:
At End of First Quarter

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Landfill and Storm Water Inspection

12. Standard DRD Number Rev. Page Date

2-GA21, 1 of 1

13. Use:
To be submitted to the Stated of Mississippi per the permit requirements.
Official File Number 8533.7.H.1

14. Interrelationship:
Annex 2.2.4.15

15. Reference:
SPR 8500.2
SCWI-8500-0026 ENV
CWA (Clean Water Act)
MS Storm Water
General NPDES Permit
#MSR 500068

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for conducting the annual stormwater Inspection of the landfill area, documenting the inspections, and maintaining copies of the stormwater Inspection Report.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: The data shall include date and time of inspection, inspectors, date of last rainfall, estimated amount of last rainfall, deficiencies noted, and corrective action if needed.

16.4 FORMAT: Report will be submitted on 8½"X11" paper and electronically maintained on the FOSC Shared Drive accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Pollution Prevention	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA22, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Nov 30	8. Initial Submission: November 30, 20XX

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Plan, Pollution Prevention	12. Standard DRD Number Rev. Page Date 2-GA22, 1 of 1
13. Use: Periodic revision of methods and procedures to prevent And reduce pollution for NASA/SSC and its Contractors. Official File Number 8540.16.D	14. Interrelationship: Annex 2.2.4.22
	15. Reference: SPR 8500.2 SCWI-8500-0004-ENV E.O. 12856, Mississippi Multimedia Pollution Prevention Act, Section 49-31-21 & NPR 8530.1A

16. Preparation Information:

16.1 **SCOPE:** This Data Requirement establishes the requirement for documenting and maintaining copies of Pollution Prevention Plan revisions. The Pollution Prevention Plan is required pursuant to the Federal Pollution Prevention Act of 1990 and Section 49-31-21 of the Mississippi Multimedia Pollution Prevention Act.

16.2 **APPLICABLE DOCUMENTS:** EPA Federal Facility Pollution Prevention Planning Guide, bcc. 1994 (EPA-300-B-94-013).

16.3 **CONTENTS:** The document identifies methods and procedures to prevent or reduce pollution for NASA/SSC and its Contractors for the following areas: Implementation of Pollution Prevention (P2) Initiatives (material acquisition and procurement, water pollution, solid and hazardous waste management, air pollution, and energy); Assessment of P2 Opportunities and attachments that discuss the SSC Recycling program; affirmative procurement, and waste stream analysis. This Plan should be a working document and should be maintained current as new information is obtained.

16.4 **FORMAT:** Report will be submitted on 8½"X11" paper and will be electronically stored on the FOSC Shared Drive accessible by NASA personnel.

16.5 **MAINTENANCE:** N/A

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, Environmental Facility Inspection Implementation	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA23, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: QU (Inspections are weekly, recorded monthly)
7. Distribution: RA02 (1 Copy)	
9. As of Date: Jan 30/ Apr 30/ July 30/ Oct 15	8. Initial Submission: At End of First Quarter

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Environmental Facility Inspections Implementation	12. Standard DRD Number Rev. Page Date 2-GA23, 1 of 1
13. Use: For submission to NASA to be able to demonstrate proper management of hazardous materials/wastes at SSC. Official File Number 8535.9.G.1	14. Interrelationship: Annex 2.2.4.12
15. Reference: SPR 8500.2; SCWI-8500-0026-ENV SCWI-8500-0004-ENV 40 CFR 264	

16. Preparation Information:

16.1 SCOPE : This Data Requirement establishes the requirement for documenting and maintaining copies of weekly inspection reports per SSC Inspection Plan (Exhibit) and provide a quarterly report to NASA.

16.2 APPLICABLE DOCUMENTS: None.

16.3 CONTENTS: The data shall include checklists for hazardous material waste compliance, to include storage management in all site satellite accumulation areas.

16.4 FORMAT: Report will be submitted on 8½”X11” paper and maintained electronically stored on the FOSC Shared Drive.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: Inspection Plan can be adjusted by consent of Environmental Officer.



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Hazardous Waste Collection & Shipments	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA24, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Feb 15	8. Initial Submission: February 15, 20XX

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Hazardous Waste Collections & Shipments	12. Standard DRD Number Rev. Page Date 2-GA24, 1 of 1
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13. Use: To provide NASA with a summary of hazardous wastes collected with proper characterization data available when requested and hazardous waste shipped during the previous 3 month period from the Center. Reports are submitted to Federal and State Agencies. Official File Number 8535.9.H.1	14. Interrelationship: Annex 2.2.4.20	15. Reference: SCWI-8500-0026-ENV; SPR 8500.2; SCWI-8500-0004-ENV 40 CFR 264 and 40 CFR 700-799 Mississippi Department Environmental Quality (MDEQ)
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16. Preparation Information:

16.1 **SCOPE:** The Data Requirement establishes the requirement for documenting and maintaining copies of quarterly reports of hazardous waste collected and shipped off site to TSD facilities. All waste must have waste characterization data/information with a disposition package. Additionally, prepare the annual Hazardous Waste Report per the requirements of the MDEQ.

16.2 **APPLICABLE DOCUMENTS:** None


16.3 **CONTENTS:** The annual report should be composite of all NASA and NASA Contractor hazardous waste disposal activities for the preceding year with a copy of each hazardous waste manifest and respective certificates of incineration, treatment, etc. All certificates of disposal should correspond with the transportation manifests on a one-to-one basis so as to provide a traceable record of all hazardous waste Removed from the site. Waste stream analysis must be included in this report with applicable material safety data sheets for specific chemical characterization. This DR is also applicable to the MDEQ electronic request for NASA generated waste requiring completion of MDEQ's IC and GM Forms that is due by March 1st for the previous year activity.

16.4 **FORMAT:** The information stated in Section 16.3 shall be maintained electronically on the FOSC Shared Drive that is accessible by NASA. Additionally, the MDEQ provides a mechanism for the submission of an Electronic report utilizing their specific software.

16.5 **MAINTENANCE:** N/A

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD:** None

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 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Quarterly Inspection of Landfill/Rubbish Site		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA25, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: QU			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: March 30, 20XX			
9. As of Date: COB/Mar 30, Jun 30, Sept 30, Dec 30					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Quarterly Inspection of Landfill/Rubbish Site				12. Standard DRD Number Rev. Page Date 2-GA25, 1 of 1	
13. Use: These inspection will ensure compliance with applicable Regulations MDEQ. Official File Number 8533.7.H.1		14. Interrelationship: Annex 2.2.4.22		15. Reference: SCWI-8500-0026-ENV; SPR 8500.2 MDEQ Non-Hazardous Waste Management Regulations	
16. Preparation Information: 16.1 SCOPE: This Data Requirements establishes the requirement to perform inspections of the SSC Landfill and Class II Rubbish sites and the submission of that report to NASA. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: Report shall identify any discrepant items, utilizing the guidelines set forth in the MDEQ regulations and provides corrective action or recommendations as applicable. 16.4 FORMAT: The report shall be maintained on the FOSC Shared Drive that is accessible by NASA personnel. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, PCB Status

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA26, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
RA02 (1 Copy)

8. Initial Submission:
June 10, 20XX

9. As of Date:
COB/ Jun 10

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, PCB Status

12. Standard DRD Number Rev. Page Date

2-GA26, 1 of 1

13. Use:

Record keeping. Reports to Federal and State Agencies as required.
Official File Number 8536.11.F

14. Interrelationship:
Annex 2.2.4.4

15. Reference:
SCWI-8500-0026-ENV;
SPR 8500.2;
SCWI -8500-0004-ENV
Toxic Substance Control
Act (TSCA) 40 CFR
700-799

16. Preparation Information:

16.1 SCOPE: The Data Requirement establishes the requirement to prepare and submit a PCB status report. This report will be submitted to the U.S. Environmental Protection Agency on or before July 1 for the previous year activities.

16.2 APPLICABLE DOCUMENTS: N/A

16.3 CONTENTS: The annual report should consists of an inventory of all PCB containing equipment at SSC and its status with concentration levels, PCBs items in storage, and composite of all PCB waste disposal activities, which is inclusive of signed manifests and certificates of disposal for the preceding year.

16.4 FORMAT: Report shall be maintained on the FOSC Shared Drive that is accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD : None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, EPCRA Notification and Submissions

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA27, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
AR

7. Distribution:
RA02 (1 Copy)

8. Initial Submission:
AR

9. As of Date:
AR

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, EPCRA Notification and Submission

12. Standard DRD Number Rev. Page Date

2-GA27, 1 of 1

13. Use:

To provide NASA with information about new products entering SSC that require notifications to MDEQ and the LEPC based on the products toxicity and the storage quantity.

To provide the following reports:

Official File Number: 8534.8.F.1 Section 302 Reports, Section 303 Reports & Section 311 Reports

14. Interrelationship:
Annex 2.2.4.22

15. Reference:

SPR 8500.2;
SCWI-8500-0004-ENV
40 CFR Parts 355 and
370

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement to review all new chemicals entering SSC. Based upon toxicity and quantity to be stored, provide a notification to NASA and Local Emergency Planning Commission (LEPC), Mississippi Emergency Response Commission, and the SSC Fire Department.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: If the quantity is equal to or exceeds the quantity on the SARA Reporting List, notification should consist of the name of the product, the quantity, and number of days a chemical will be stored on site, as well as to provide MSDS' to the LEPC and Local Fire Department.

16.4 FORMAT: Notification should be 8½"X11" paper and/or on the FOSC Shared Drive that is accessible by NASA personnel.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Quarterly Surveillance Inspection of Logtown and Gainesville	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA28, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: QU
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Mar 30/ Jun 30 Sep 30/ Dec 30	8. Initial Submission: March 30, 20XX

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Quarterly Surveillance Inspection of Logtown and Gainesville	12. Standard DRD Number Rev. Page Date 2-GA28, 1 of 1
13. Use: To provide NASA with quarterly inspection reports for the 2 historic areas Logtown and Gainesville. Official File Number 8571.20.D.1	14. Interrelationship: Annex 2.2.4.6
15. Reference: SSC Historic Preservation Plan; SPR 8500.2 EO 13287/ Preserve America	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for conducting and reporting quarterly inspections currently for 2 historical areas.


16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The data shall include observation noted for surface conditions at the historic sites, date, time of inspections, name of inspector, and all other observations should be noted and recommendations for any corrective actions.

16.4 FORMAT: Inspection report and Plan shall be placed on 8½”X11” or on the FOSC Shared Drive that is accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Reports, NEPA Documentation		3. Operator: RA02		4. DR Number Page Date Rev. 2GA29, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AR			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: November 30, 20XX			
9. As of Date: COB/ Nov 30					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Reports, NEPA Documentation			12. Standard DRD Number Rev. Page Date 2-GA29, 1 of 1		
13. Use: Maintain specific documents that are associated with construction efforts such as noted in Item 16.3.		14. Interrelationship: Annex 2.2.4.22		15. Reference: SCWI-8500-0026-ENV; SPR 8500.2 42 U.S.C 4371 (NEPA)	
16. Preparation Information: 16.1 SCOPE: This Data Requirement establishes the requirement for the tracking and maintenance of the all files associated with construction projects and update the wetlands map in the SSC Master Plan. 16.2 APPLICABLE DOCUMENTS: N/A 16.3 CONTENTS: The report should have a copy of the Preliminary Environmental Survey (PES) and the Record of Environmental Consideration (REC) for each project and where applicable the authorizations from the U.S. Army Corp of Engineers under the SSC General Permit or nationwide permit for wetland impacts. 16.4 FORMAT: The PES, REC, and documentation for wetland mitigation for projects shall be maintained on FOS Shared Drive that is accessible for NASA personnel. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Reports, Annual Cultural Resources Activity	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA30, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN/ Calendar Year
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Dec 15	8. Initial Submission: December 15, 20XX

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer and Historic Preservation Officer. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Reports, Annual Cultural Resources Activity	12. Standard DRD Number Rev. Page Date 2-GA30, 1 of 1
13. Use: Annually collect actual photos of the historic locations to depict the state of the facility along with a white paper on any specific maintenance that may have been done. Annual Activity- Official File Number 8571.20.D.3	14. Interrelationship: Annex 2.2.4.7
15. Reference: SPR 8500.2; SCWI-8500-00026-ENV 1989 Programmatic Agreement between NASA, NCSHPO, and ACHP	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for documenting cultural resources activity at SSC by taking photos of the specific locations per Section 12 of the ERD to reflect current conditions. The report should also consist of a summary of any maintenance that may have been done during the year.


16.2 APPLICABLE DOCUMENTS: ERD


16.3 CONTENTS: The data shall include information regarding activities at SSC which had the potential to impact cultural resources during the previous fiscal year.


16.4 FORMAT: Reports will be submitted on 8½"X11" paper and/or maintained on the FOSC Shared Drive that accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Hazardous Materials (SARA/Tier II)		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA31, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AN			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: February 15, 20XX			
9. As of Date: COB/ Feb 15					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Superfund Amendments Reauthorizations (Tier II)			12. Standard DRD Number Rev. Page Date 2-GA31, 1 of 1		
13. Use: To provide the Government and MDEQ with a summary of hazardous chemicals utilized or stored at SSC that exceed 10,000 pounds each. Official File Number 8534.8.F.1 (Tier II Report) Official File Number 8534.8.G (Inventory)		14. Interrelationship: Annex 2.2.4.8 Annex 2.2.4.9		15. Reference: SCWI-8500-0004-ENV; SPR 8500.2; SCWI-8500-0026-ENV Emergency Planning and Community Right-To-Know (EPCRA) 1986 40 CFR 355	
16. Preparation Information: 16.1 SCOPE: The Data Requirement establishes the requirement for the submittal of a Tier II Report for the Emergency Planning for hazardous chemicals at SSC at or above 10,000 pounds. Maintain the SSC Hazardous Chemical Inventory received from all SSC Contractors and Residents Agencies for all chemicals to determine applicability. 16.2 APPLICABLE DOCUMENT: Approved OMB Number 2050-0072. 16.3 CONTENTS: This report summarizes the quantity of each hazardous material stored, location, unit of measure, contact listing, listing of resources, listing of health facilities, schools, evacuation routes, maps of surrounding areas, etc. 16.4 FORMAT: Report submitted on OMB Form Number 2050-0072. Compiled inventories to be submitted on disk and 8½"X11" paper by NASA and its Contractors as well as Resident Agencies. Data will be also maintained on the FOSC Shared Drive that is accessible by NASA personnel. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: Dependent on Regulatory requirements and Form revisions.					

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Hazardous Waste		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA32, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AN			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: February 15, 20XX			
9. As of Date: COB/ Feb 15					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Hazardous Waste				12. Standard DRD Number Rev. Page Date 2-GA32, 1 of 1	
13. Use: Record Keeping. Reports to Federal and State Agencies Official File Number 8535.9.H.1			14. Interrelationship: Annex 2.2.4.13		15. Reference: SCWI-8500-0026-ENV; SPR 8500.2; SCWI-8500-0004-ENV Resources Conservation and Recovery Act (RCRA) Section 3010 Mississippi Department Environmental Quality (MDEQ)
16. Preparation Information: 16.1 SCOPE: The Data Requirement establishes the requirement for preparation of an annual Hazardous Waste Report per the requirements of the MDEQ. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: The annual report should be a composite of all NASA and NASA Contractor hazardous waste disposal activities for the preceding year with a copy of each hazardous waste manifest and respective certificates of incineration, treatment, etc. All certificates of disposal should correspond with the transportation manifests on a one-to-one basis so as to provide a traceable record of all hazardous waste removed from the site. Waste stream analysis must be included in this report with applicable material safety data sheets for specific chemical characterization. This DR is also applicable to the MDEQ electronic request for NASA generated waste requiring completion of MDEQ's IC and GM Forms that is due by March 1 st for the previous year activity. 16.4 FORMAT: The information stated in Section 16.3 shall be maintained electronically on the FOSC Shared Drive that is accessible by NASA. Additionally, the MDEQ provides a mechanism for the submission of an electronic report utilizing their specific software. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None					

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Permits & Waivers		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA33, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AR			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: AR			
9. As of Date: AR					
10. Remarks: Submit electronic notification letter to RA02 Environmental Officet when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Permits & Waivers			12. Standard DRD Number Rev. Page Date 2-GA33, 1 of 1		
13. Use: To obtain and maintain all state permits current and when needed development of required waivers to the Mississippi Department of Environmental Quality or any other regulatory agency.		14. Interrelationship: Annex 2.2.4.23		15. Reference: SPR 8500.2 SCWI-8500-0026-ENV	
16. Preparation Information: 16.1 SCOPE : The Data Requirement establishes the requirement for the submittal of applications or other required documentation to obtain or renew SSC permits and/or development of white paper in explanation for required environmental related waivers to state or federal regulatory agencies. 16.2 APPLICABLE DOCUMENTS : Applicable SSC permit. 16.3 CONTENTS : Develop all permit applications to be equipped with all pertinent regulatory requirements, inclusive of background information, supporting data (laboratory, shop, or operational), appropriate maps and/or graphs and questionnaires. Supporting documentation, recommendations, and length of time for the requested waiver should be inclusive of an introduction for a system, process, or requirement. 16.4 FORMAT : 8½”X11” paper in a designated binder, disk, or any other format requested by NASA. 16.5 MAINTENANCE : N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD : Dependent on regulatory requirements.					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, CERCLA Oversight and System Operations	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA34, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: QU & AN (Data for the prior year)
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Jan 15/ Apr 15/ Jul 15/ Oct 15	8. Initial Submission: At End of First Quarter

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, CERCLA Oversight and System Operations	12. Standard DRD Number Rev. Page Date 2-GA34, 1 of 1
13. Use: To provide a quarterly and annual status report to the NASA Environmental Officer that will be forwarded to the Mississippi Department of Environmental Quality. Quarterly reports will be sent to the U.S. Air Force for Clean Up Area A per Memorandum of Agreement.	14. Interrelationship: Annex 2.2.4.24
15. Reference: SPR 8500.2; SCWI-8500-0026-ENV SSC Long Term Operations & Monitoring Plan; Operational Manuals	

16. Preparation Information:

16.1 SCOPE: The Data Requirement establishes the requirement for the submittal of quarterly reports of the CERCLA operations programs, which is inclusive of the Pump and Treat (P&T) Systems as well as the Inspection reports for the overall program. Systems must be at 95% availability monthly to ensure proper Treatment. Additionally, systems must be operated and maintained in accordance with regulatory Requirements. An annual report shall be done to reflect the status of the program from the prior year the Visualization maps to depict the contaminants of concern.

16.2 APPLICABLE DOCUMENTS: Site-specific Health and Safety Plans for operations and the P&T Systems Operational Manual.

16.3 CONTENTS: The report shall be inclusive of an operational and maintenance checklist for the 4 P&Ts along with an inspection checklist for Area A and Area D per respective Decision Documents. Laboratory analyses will be utilized to verify the systems are operating in accordance with the local, state and federal requirements.

16.4 FORMAT: 8½”X11” paper or on the FOSC Shared Drive that is accessible to NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: Dependent on Regulatory requirements.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, Solid Waste & Rubbish Landfill Questionnaire	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA35, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: An
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/Feb 15	February 15, 20XX

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Solid Waste & Rubbish Landfill Questionnaire	12. Standard DRD Number Rev. Page Date 2-GA35, 1 of 1
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13. Use: To be submitted to the State of Mississippi per the permit requirements using format provided by MDEQ. Official File Number 8533.7.H	14. Interrelationship: Annex 2.2.4.22	15. Reference: To be submitted to the State of Mississippi per the permit requirements using format provided by MDEQ. Resource Conservation and Recovery Act (RCRA) Mississippi Non-Hazardous Solid Waste Management Plan; Permit#0240B0376
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16. Preparation Information:

16.1 SCOPE: This document establishes the requirement for the submittal of a report to summarize the solid waste disposal activities conducted during the previous year for the Class I Landfill and the 4 Class II Rubbish (vegetation) sites.


16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: The report shall include the total amount of waste received during the previous calendar year and should be reported in cubic yards or tons. Supporting information should also be included in the report and is inclusive of maps of all permitted areas, contour maps of the Class I Landfill, strategy for estimating the life of the landfill in cubic yards, acres, and years. Similar information is submitted for the 4 Class II Rubbish sites using the MDEQ format. The contour maps, the estimating of the life of the landfills in acres, cubic yards, and years shall be provided by FSD per DR 2-GA13.

16.4 FORMAT: Report will be submitted on 8½”X11” paper, MDEQ provided form and maintained on the FOSC Shared Drive that is accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, SSC Environmental Management System & NASA Environmental Tracking System (NETS)		3. Operator: RA02		4. DR Number Page Date Rev. 2-GA36, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2		6. Frequency of Submission: AN/ Per NASA HQs Requirements			
7. Distribution: RA02 (1 Copy)		8. Initial Submission: NASA HQs will establish the timeline for the Data Calls associated with the following Environmental modules. This listing is not just limited to the modules listed, which are as follows: Recycling Activities, Non-Hazardous Solid Waste, RCRA Reporting, Affirmative Procurement, CFC/Halon Consumption Report, Pollution Prevention, Spills, Inspections, Non Compliance, Hazardous Waste, Permit Status & Staffing Information, TRI, and others deemed necessary by NASA.			
9. As of Date: AR					
10. Remarks: Upon completion of the electronic input the Environmental Officer will review data/ information and make changes As deemed necessary. DRD will not be considered complete without the SSC Official File Number followed Signed transferal letter with placement on the FOS Shared Drive for NASA review.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, EMS and NETS			12. Standard DRD Number Rev. Page Date 2-GA36, 1 of 1		
13. Use: Record keeping. These reports are required by NASA HQs for compilation of data for various congressional reporting requirements.		14. Interrelationship: Annex 2.2.4.11 Annex 2.2.4.25 Annex 2.2.4.30		15. Reference: SPR 8500.1 NPR 8553.1A NPR 8530.1A Executive Orders per Media	
16. Preparation Information: 16.1 SCOPE: This Data Requirement (DR) establishes the requirement for preparation and submission of electronic or hard copy data for tracking the EMS progress for various environmental media. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: The required reporting shall consist of the reporting elements per NASA HQs Data Call. Usually the required information will be for the preceding year. 16.4 FORMAT: The NETS reports are done electronically. Format is subject to change by NASA. 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Construction Stormwater Inspection & Certification	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA37, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: MO
7. Distribution: RA02 (1 Copy)	
9. As of Date: COB/ Jan 15 through Dec 15	8. Initial Submission: At End of First Quarter

10. Remarks:
Submit electronic notification letter to RA02 Environmental Officer when Report is completed. DRD will not be considered complete without the SSC Official File Number followed signed transferal letter with placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Construction Stormwater Inspection & Certification	12. Standard DRD Number Rev. Page Date 2-GA37, 1 of 1
13. Use: To conduct weekly stormwater inspections but provide monthly report to the NASA Environmental Officer. The monthly reports will be forwarded to the Mississippi Department of Environmental Quality annually.	14. Interrelationship: Annex 2.2.4.31
	15. Reference: SPR 8500.2; SCWI-8500-0026 Clean Water Act, 33 U.S.C 1251 et seq

16. Preparation Information:

16.1 SCOPE: The Data Requirement establishes the requirement for the submittal of monthly reports for the construction stormwater inspections as well as the inspection reports for the overall program after closure of construction locations. Inspections are done to ensure compliance with regulatory requirements as well as with Site Storm Water Pollution Prevention Plans (SWPPP). This DR also covers the requirements to develop Notice of Intent and Notice of Terminations for construction efforts that are performed by NASA or NASA Contractors. This does not apply to construction projects that are contracted through off site firms.

16.2 APPLICABLE DOCUMENTS: Site-specific SWPPPs for construction activities and where applicable for ongoing operations around the Center.

16.3 CONTENTS: The report shall be inclusive of the National Pollutant Discharge & Elimination System per permit number, project name, location, owner, startup date, and the information pertinent to the inspection such as date, time rain fall measurements in inches, noting any deficiencies, and the name of the inspector(s).

16.4 FORMAT: 8½”X11” paper or on the FOSC Shared Drive that is accessible to NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: Dependent on regulatory requirements.

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Industrial Hygiene Annual Program Plan	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA38, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 1	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy) QA00 (1 Copy)	
9. As of Date: Sept 20 for the next fiscal year	
8. Initial Submission: 30 days following start of contract	

10. Remarks:
The exposure assessment program must conform to the guidance of "A Strategy for Assessing and Managing Occupational Exposures" published by the American Industrial Hygiene Association, or other recognized professional Industrial Hygiene protocol determined to be acceptable by NASA SSC.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Industrial Hygiene Annual Program Plan	12. Standard DRD Number Rev. Page Date 2-GA38
13. Use: To provide an annual plan of Industrial Hygiene activities that must be accomplished to meet Annex 2.3.5 requirements.	14. Interrelationship: Annex 2.3.13.1
	15. Reference: NPR 1800.1 NPD 1820.1 OSHA requirements 29 CFR 1910 29CFR 1926 29 CFR 1960

16. Preparation Information:

16.1 SCOPE: An annual plan describing activities to be accomplished to meet Industrial Hygiene (IH) needs of and that establishes of metrics for tracking performance against the plan.

16.2 APPLICABLE DOCUMENT:

16.3 CONTENTS: Written plan identifying annual program needs, goals and objectives for key IH programs, but not limited to, Exposure Assessment, Hazard Communication, Chemical Hygiene, Ergonomics, Ventilation, Indoor Air Quality, Noise & Hearing Conservation, Respiratory Protection, Asbestos, Lead, and Blood-Borne Pathogens. A minimum of two measures of effective performance (including at least one quantitative) must be established for each program. The Exposure Assessment Program section of the plan must include an inventory of Similar Exposure Groups, exposure assessment needs, and exposure assessment schedule. The plan shall include annual routine asbestos surveillance air monitoring in buildings 1000, 1100, 1200, 2101, and 2201.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Environmental Health Activity Report

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA39, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO

7. Distribution:
RA02
QA00

8. Initial Submission:

9. As of Date:
6th day of the
month for the
previous month.

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Environmental Health Activity Report

12. Standard DRD Number Rev. Page Date

2-GA39

13. Use:
To provide a monthly summary of environmental health activities.

14. Interrelationship:
Annex 2.3.13.3

15. Reference:

16. Preparation Information:

16.1 SCOPE: A monthly summary of Industrial Hygiene (IH) activities.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Written summary of tasks completed and tasks in progress by program area.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Industrial Hygiene Program Quarterly Report	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA40, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: QU
7. Distribution: RA02 (1 Copy) QA00 (1 Copy)	
9. As of Date: Jan 7, April 7, July 7, Oct 7 for the previous quarter	
8. Initial Submission:	

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Industrial Hygiene Program Quarterly Report	12. Standard DRD Number Rev. Page Date 2-GA40
13. Use: To provide a quarterly report of progress achieving the goals and objectives of the Industrial Hygiene Annual Program Plan.	14. Interrelationship: Annex 2.3.13.2
15. Reference:	

16. Preparation Information:

16.1 **SCOPE:** Report of progress in achieving the goals and objectives of the Industrial Hygiene Annual Program

16.2 **APPLICABLE DOCUMENT:**

16.3 **CONTENTS:** Written summary of progress towards meeting the goals and objectives of the Industrial Hygiene Annual Program Plan, including a comparison of actual performance against established performance metrics. The Exposure Assessment Program section of this report will include the results and analysis of assessments for the quarter, an evaluation of the effectiveness of exposure controls, including personal protective equipment, and any recommendations for improving health and safety.

16.4 **FORMAT:** Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 **MAINTENANCE:** Per NPR 1441.1

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:** None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Industrial Hygiene Program Annual Report	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA41, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy) QA00 (1 Copy)	
9. As of Date: October 10 for the previous fiscal year	
8. Initial Submission:	

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Industrial Hygiene Program Annual Report	12. Standard DRD Number Rev. Page Date 2-GA41
13. Use: To provide an annual written evaluation of the Center's Industrial Hygiene Program.	14. Interrelationship: Annex 2.3.13.2
15. Reference: NPR 1800.1 OSHA requirements 29 CFR 1910 29 CFR 1926 29 CFR 1960	

16. Preparation Information:

16.1 SCOPE: Annual written evaluation of the Center's Industrial Hygiene program.

16.2 APPLICABLE DOCUMENT:

16.3 CONTENTS: Annual written evaluation of the Center's Industrial Hygiene Program. This will include completion of the NASA Headquarters Industrial Hygiene Program Questionnaire, an evaluation and analysis of the program's compliance with regulatory requirements, identification of strengths and weaknesses, and recommendations for improvement.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Health Physics Annual Program Plan

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA42

SUBMITTAL REQUIREMENTS

5. Type:
1

6. Frequency of Submission:
AN

7. Distribution:

RA02 (1 Copy)
QA00 (1 Copy)

8. Initial Submission:
30 days following start of contract

9. As of Date:

Sept 20

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Health Physics Annual Program Plan

12. Standard DRD Number Rev. Page Date

2-GA42

13. Use:

To provide an annual plan of Health Physics activities that must be accomplished to meet Annex 2.3.6 requirements.

14. Interrelationship:

Annex 2.3.14.1

15. Reference:

Regulations for Control of Radiation in Mississippi
OSHA Requirements
29 CFR 1910
29 CFR 1926

16. Preparation Information:

16.1 SCOPE: Annual plan describing activities to be accomplished to meet Health Physics needs of SSC and establishment of metrics for tracking performance against the plan.

16.2 APPLICABLE DOCUMENT:

16.3 CONTENTS: Written plan identifying annual program needs, goals and objectives for the Health Physics program. A minimum of 2 measures of effective performance will be established (including at least 1 quantitative measure). The plan will include an inventory of all radiation sources at SSC and an audit plan to ensure activities involving the use of radiation sources meet applicable Federal, State, and local regulatory requirements.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Health Physics Program Activity Report

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA43, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO

7. Distribution:

RA02 (1 Copy)
QA00 (1 Copy)

8. Initial Submission:

9. As of Date:

6th day of the
month for the
previous month.

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Health Physics Program Activity Report

12. Standard DRD Number Rev. Page Date

2-GA43

13. Use:

To provide a monthly summary of Health Physics activities.

14. Interrelationship:

Annex 2.3.14.2

15. Reference:

16. Preparation Information:

16.1 SCOPE: A monthly summary of Health Physics activities.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Written summary of Health Physics tasks completed and tasks in progress.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Health Physics Program Quarterly Report

3. Operator:

RA02

4. DR Number Page Date Rev.

2-GA44, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
QU

7. Distribution:

RA02 (1 Copy)
QA00 (1 Copy)

8. Initial Submission:

9. As of Date:

Jan 7, April 7,
July 7, Oct 7
for the
previous quarter

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Health Physics Program Quarterly Report

12. Standard DRD Number Rev. Page Date

2-GA44

13. Use:

To provide a quarterly report of progress achieving the goals and objectives of the Health Physics Program Plan.

14. Interrelationship:

Annex 2.3.14.2

15. Reference:

16. Preparation Information:

16.1 SCOPE: Report of progress in achieving the goals and objectives of the Health Physics Annual Program Plan.

16.2 APPLICABLE DOCUMENT:

16.3 CONTENTS: Written summary of progress towards meeting the goals and objectives of the Health Physics Annual Program Plan, including a comparison of actual performance against established performance metrics. The report will include any additions or deletions to the radiation source inventory and the results of any audit activities for the quarter.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Health Physics Program Annual Report	3. Operator: RA02	4. DR Number Page Date Rev. 2-GA45
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SUBMITTAL REQUIREMENTS

5. Type: 1	6. Frequency of Submission: AN
7. Distribution: RA02 (1 Copy) QA00 (1 Copy)	
9. As of Date: October 15th for the previous fiscal year	8. Initial Submission:

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Health Physics Program Annual Report	12. Standard DRD Number Rev. Page Date 2-GA45
13. Use: To provide an annual written evaluation of the Center's Health Physics Program.	14. Interrelationship: Annex 2.3.14.2
	15. Reference: NPR 1800.1 NPD 1820.1 Regulations for Control of Radiation in Mississippi OSHA requirements 29 CFR 1910 29 CFR 1926

16. Preparation Information:

16.1 SCOPE: Annual written evaluation of the Center's Health Physics program.

16.2 APPLICABLE DOCUMENT:

16.3 CONTENTS: Annual written evaluation of the Center's Health Physics Program. This will include completion of the NASA Headquarters Health Physics Program Questionnaire, an evaluation and analysis of the program's compliance with regulatory requirements, and identification of program strengths, weaknesses, and recommendations for improvement.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Occupational Health Program Cost	3. Operator: RA30	4. DR Number Page Date Rev. 2-MF01, 1 of 4
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AN Report due 15 days following end of FY
7. Distribution: EA20 (1 Copy) RA20 (1 Copy) QA00 (1 Copy)	
9. As of Date: COB/Last Workday of Fiscal Year	8. Initial Submission: October 15 th following start of contract.

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Occupation Health Program Cost	12. Standard DRD Number Rev. Page Date 2-MF01
13. Use: To provide a breakdown of cost expenditures related to The SSC Occupational Medicine and Environmental Health Program.	14. Interrelationship: Annex 2.3.9.2
15. Reference:	

16. Preparation Information:
SCOPE: This Data Requirement (DR establishes the requirements for the preparation and submittal of A report which provides a detail cost analysis of expenditures related to the health programs utilizing enclosed NASA Form.

APPLICABLE DOCUMENTS: NASA Form FY – Occupational Health Program Staffing and Cost Report

CONTENTS: SEE “Scope”

FORMAT: Use NASA Form Attached

MAINTENANCE: None

EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

Instructions for
FY ____ Occupational Health Program Cost Report

Staffing Costs - Civil Service

Please indicate total salary costs for the civil service occupational medicine and environmental health staffs. Do not include fringe benefit costs or other salary burden for the civil service staff.

Staffing Costs – Contractor

Please indicate unburdened salary costs.

Please include cost data for the contractor(s) in direct support of the Center's Occupational Health Office and/or the Environmental Health Office. While it is recognized that many NASA support service contracts may have their own occupational health staffs, this cost request is limited to the Center's central occupational health activity.

All Other Costs – Contractor Only

Please include the total of all other (non-salary) contracts costs such as travel, overhead, fees, purchased services and materials, fringe benefits, training, capital equipment, etc.

Reimbursable Costs – Contract

Reimbursable costs, typical of those incurred from servicing federal tenants on NASA facilities, are no longer included as part of this cost report. All costs reported should reflect those incurred directly by NASA.

Missing Information

Please highlight any area for which cost or staffing data are not available. If for example your organization does not manage workers' compensation benefits and that information is not available prior to your submittal please indicate that the information is missing. If an alternate point of contact should be used for a given area in the future, please so indicate.

Collateral Duty

The attempt to capture work years and costs associated with committees and panels, which was historically requested, has been discontinued.

Environmental Health Program Staffing	Civil Service FTE	Contractor FTE	TOTAL
1. Industrial Hygienists & IH Tech			
2. Health Physicists & HP Tech			
3. Sanitarians			
4. Chemists & Chem Tech			
5. Other Technicians (Specify below)			
6. Environmental Engineers and Specialists			
7.			
8.			
9. Collateral Duty Env Health			
10. Environmental Health Consultants			
11. Environmental Health Educators/Trainers			
12. Administrative - Management			
13. Administrative - Support/Clerical			
14. Consultants			
15. ADP Professional/Technicians			
16. Other Personnel (Specify Below)	XXX	XXX	XXX
17.			
18. TOTAL Environmental Health Personnel (FTE)			

ENVIRONMENTAL HEALTH COSTS	Civil Service	Contractor	Totals
	\$	\$	
Staffing Costs			
All other costs (fringe Benefits, equipment, services, etc.)	XXX		
Total Environmental Health Program Costs			

Occupational Medicine Program Staffing	Civil Service FTE	Contractor FTE	TOTAL
1. Physicians			
2. Physivian Consultants			
3. Nurses			
4. Medical Technologists			
5. Emergency Medical Technicians			
6. Health Educators			
7. Nutritionists			
8. Workers' Comp Specialists			
9. EAP Personnel			
10. Physical Fitness Personnel			
11. Wellness Program Personnel			
12. Administrative - Management			
13. Administrative - Support/Clerical (includes NAVO support)			
14. Consultants - (non Physician)			
15. ADP Professionals/Technicians			
16. Other Personnel (Specify Below)	XXX	XXX	XXX
17.			
18. TOTAL Occupational Medicine Personnel (FTE)			

OCCUPATIONAL MEDICINE COSTS	Civil Service	Contractor	Totals
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	\$	\$	
Staffing Costs			
All other costs (fringe Benefits, equipment, services, etc.)	XXX		
Total Occupational Medicine Program Costs			



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Manual, SSC Medical Services Pricing

3. Operator:

RA30

4. DR Number Page Date Rev.

2-MF02, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
1

6. Frequency of Submission:
November 15th

7. Distribution:

RA30 (2 Copies)
EA20 (1 Copy)

8. Initial Submission:

3rd month following contract commencement

9. As of Date:

End of FY

10. Remarks:

The Pricing Manual will be updated annually. The Contracting Officer shall approve the Pricing Manual prior to formal publication. The pricing information shall include government established loadfactor data.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Manual, SSC Medical Services Pricing

12. Standard DRD Number Rev. Page Date

2-MF02

13. Use:

To provide program offices and resident agencies cost information upon which to project program costs

14. Interrelationship:

Annex 2.3.9.7

15. Reference:

SPLN 1040.003
NPD 1820.1
NPD 1800.2

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirements for the preparation of a Pricing Manual to be updated and published annually. The manual will establish fixed rates for particular services provided. The Contractor shall demonstrate price reasonableness when compared to similar services provided in the local community.


16.2 APPLICABLE DOCUMENTS: None


16.3 CONTENTS: See SCOPE.

16.4 FORMAT: Electronic file compatible with SSC File Suite.

16.5 MAINTENANCE: Annual update

EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Training Schedule and Personnel Qualifications		3. Operator: RA30		4. DR Number Page Date Rev. 2-MT01, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: Once			
7. Distribution: RA30 (1 Copy)		8. Initial Submission: Within 30 days after contract start date			
9. As of Date:					
10. Remarks: Provide RA30 with a schedule of all training, personnel, and site-wide, to be conducted. Personnel qualifications, Personnel assignments, and training schedules provided as changes occur.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Training Schedule and Personnel Qualifications			12. Standard DRD Number Rev. Page Date 2-MT01		
13. Use: To be used in monitoring and historical data.		14. Interrelationship: Annex 2.1.11.8		15. Reference:	
16. Preparation Information: 16.1 SCOPE: This Data Requirement establishes the requirement for preparation of records which are essential to the conduct of the SSC Fire Prevention Program. 16.2 APPLICABLE DOCUMENTS: None. 16.3 CONTENTS: Schedules shall identify training, target audience, date, time, location, instructions. Personnel qualification report shall include names and certification that personnel are qualified in with reference standards. Include an organizational chart of the fire department showing assigned personnel. 16.4 FORMAT: Electronic 16.5 MAINTENANCE: N/A 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, SSC Safety & Environmental Training, Plans, and Personnel Certification		3. Operator: QA00		4. DR Number Page Date Rev. 2-RA01, 1 of 2	
SUBMITTAL REQUIREMENTS					
5. Type: 1, 3		6. Frequency of Submission: AN			
7. Distribution: RA00 (1 Copy) QA00 (1 Copy)		8. Initial Submission: AD			
9. As of Date: COB June 30		Submit personnel certification plan within 60 days of contract start.			
10. Remarks: Submit plan for review to Code QA00 with info copy to Codes RA20, DA00, & DCMC office. Information is updated within 15 days of change. QA00 Safety to be notified of upcoming expirations 60 days prior to expiration that is not already planned for retraining. Submission of one (1) copy to QA00 NASA Safety and one (1) copy to RA02 NASA Environmental Office. Course list includes the following: Forklift Safety; Mobile Crane Operator and Rigging Safety; Overhead crane And Hoist Safety (Bridge Crane, Jib, Monorail, Fixed Hoist); General Rigger Safety; Derrick Safety (Operator, Drum Watch, Rigger/Talker); Personnel Lift Safety (Lift-A-Loft, Aerial Man-lift, Bucket Truck); Personnel Hoist Safety (Spider Staging); Cryogenic Safety; High Pressure Systems Safety; Confined Space Safety; Electrical Safety-Related Work Practices; High Voltage Electrical Safety (Sub-Stations); Lockout/Tag-out (Hazardous Energy Control); O2/LEL/Toxic Meter Operation; Personal Protective Equipment (Head, Foot/Leg, Eye/Face, Hand/Arm, Torso and Marine); New SSC Employee Safety Orientation; Asbestos Maintenance, Levels I & II Respiratory Users, Hearing Conservation, Hazard communication, Heat Stress Awareness, HAZWOPER/HAZMAT, ergonomics, and Versa Hood.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, SSC Safety & Environmental Training & Certification				12. Standard DRD Number Rev. Page Date	
13. Use: Provide a summary report to the government of persons trained in the categories listed in "Remarks" above. Defines the total program required to establish, administer & control agreement of award to contract, has been reported		14. Interrelationship: Annex 2.4.4.1		15. Reference: SPR 8715.1 29 CFR 1910, 60, 26 ASQC Q-9000	
16. Preparation Information: 16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirement for documenting and maintaining records of safety and environmental training performed annually for NASA, resident agencies and SSC Contractors. The contractor shall prepare and submit to the cognizant National Aeronautics and Space Administration Agency a plan implementing the development and maintenance of a training and certification program for these personnel participating in or responsible for controlling special processes having a significant effect upon product quality and /or involving essentially hazardous operation. Certification of personnel for these processes (such as welding, radiography, cryogenics handling, magnetic particle, confined space entry and equipment operations) shall include necessary training followed by suitable test procedure to determine the proficiency of each individual. 16.2 APPLICABLE DOCUMENT: ASQC Q-9001 16.3 CONTENTS: The records shall include, but not be limited to, the following: A. Date and location place the course was presented. B. Name and crew # of individuals attending course. C. Attendees' company affiliation. D. Course title and description. E. Type of course certification, as applicable.					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number	Issue
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2. Title: Report, SSC Safety & Environmental
Training and Certification

3. Operator:
QA00

4. DR Number Page Date Rev.
2-RA01, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:
Report, SSC Safety & Environmental Training and Certification

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.3 CONTENTS: (Continued)

- F. Course evaluation data.
- G. Agency code numbers, as applicable.

16.3.1 The personnel certification plan may include but not be limited to the following items:

- A. Personnel who satisfy certification requirements shall be issued a badge, button or other device as evidence of certification which shall be worn or carried on the person while performing these duties
- B. Certification shall be for a specific period of time with re-certification requiring retesting.
- C. Records shall be maintained indicating individuals and processes in which certified.
- D. The program shall include provisions for monitoring personnel performance and work quality to ensure their continued ability to meet all criteria.

16.4 **FORMAT:** Book Form Report will be submitted on 8 ½" x 11" paper, while report information will be electronically maintained on the SSC Server and S&MA web site the Book Form will satisfy the intent of paragraph 16.3 with appropriate headings.

16.5 **MAINTENANCE:** The contractor will keep the Personnel Certification Plan up-to-date at all times and will submit changes as required. SSC Safety & Environmental Training and Certification information shall be maintained on the SSC Server. This database shall be available for NASA review upon request.

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARDS DR:** Database structure may be changed by the contractor upon approval of the C.O.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, GIDEP Usage

3. Operator:

QA00

4. DR Number Page Date Rev.

2-RA02, 1 of 2

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

AN

7. Distribution:

QA00 (1 Copy)

8. Initial Submission:

9. As of Date:

COB Sept 30

Annually after start of contract.

10. Remarks:

Annual Usage Report is required for participation in GIDEP. It is to be submitted directly to GIDEP Operations Center.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, GIDEP Usage

12. Standard DRD Number Rev. Page Date

13. Use:

To allow for continued participation in the Government Industry Data Exchange Program (GIDEP)
To provide NASA with annual updates regarding GIDEP participation at SSC.

14. Interrelationship:

Annex 2.4.4.2

15. Reference:

NPR 8735.1A
NPD 8730.5

16. Preparation Information:

INTRODUCTION:

The Government-Industry Data Exchange Program (GIDEP) is a cooperative effort to exchange research, development, design, testing, acquisition and logistics information among government and industry participants. GIDEP seeks to reduce or eliminate expenditures of time and money and to improve the total quality and reliability of systems and components during the acquisition and logistics phases of the life cycle.

PROGRAM OBJECTIVES:

- a. Reduce or eliminate expenditure of funds for duplicative testing of identical parts and components used in systems and subsystems.
- b. Improve systems reliability, maintainability and quality.
- c. Eliminate actual or potential problems with nonconforming parts, components, materials, manufacturing processes, testing and items of supply by exchanging failure data.
- d. Provide an on-line network to facilitate rapid communications among scientific and technical personnel working on government programs.
- e. Provide a centralized database for Diminishing Manufacturing Sources and Material Shortages (DMSMS) information and alternate sources of supply.
- f. Provide a centralized database for test information on parts, components, materials, systems and subsystems for reliability, maintainability, safety, human factors engineering and related environmental factors.

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number	Issue
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2. Title:

Report, GIDEP Usage

3. Operator:

QA00

4. DR Number Page Date Rev.

2-RA02, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

- g. Exchange metrology information including calibration procedures and technical manuals for test and measurement equipment. This database includes related National Institute of Standards and Technology (NIST) documents.
 - h. Provide a centralized database for exchange of reliability and maintainability statistical data. This data includes failure rate, failure mode and replacement rate data to assist in the planning, design and testing of parts, components and systems to satisfy through this data area.
- RESPONSIBILITY:**
- a. Serving as the point-of-contact between their organization and the GIDEP Operations Center. The Representative should establish a network of coordinators within the various divisions and departments to ensure that access to data is available according to their needs. The Representative also identifies those groups who are potential sources of data for submission to GIDEP.
 - b. Maintaining control of and safe guarding security passwords to the GIDEP database.
 - c. Submitting applicable data for inclusion in the GIDEP database.
 - d. Publicizing the availability of GIDEP throughout the organization. Accordingly, the GIDEP Representative is responsible for aggressively promoting and publicizing the availability of GIDEP data, as appropriate. Promotional materials such as posters, slides, films, and support for internal briefings are available upon request from the GIDEP Operations Center.
 - e. Collecting utilization data and submitting the GIDEP Annual Utilization Report. Representatives are urged to submit utilization data as frequently as documents are used, but at least yearly.
 - f. Ensuring data required in the contractual Contractor's Data Requirements List (CDRL) are submitted to GIDEP in a timely manner.
 - g. Informing your upper management of benefits resulting from participation in GIDEP.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Non-Conforming Products/Services, Material Review Board (MRB) Members Lists	3. Operator: QA00	4. DR Number Page Date Rev. 2-RA03, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 1	6. Frequency of Submission: AD MO
7. Distribution: QA00 (1 Copy) RA20 (1 Copy) DA00 (1 Copy) DCMC (1 Copy)	
9. As of Date: N/A	8. Initial Submission: 30 days after award of contract

10. Remarks:

New lists to be submitted three days after membership change or every 30 days.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:	12. Standard DRD Number Rev. Page Date 2-RA03
13. Use: To provide a list of qualified personnel responsible for reviewing parts, and material non-conformances. To provide a list of non-conforming products and services to determined status	14. Interrelationship: Annex 2.4.4.3 Annex 2.4.4.5
15. Reference:	

16. Preparation Information:

16.1 SCOPE: The contractor shall prepare and submit a list of non-conforming products, services, MBR Member List, and report.

16.2 APPLICABLE DOCUMENTS: ASQC Q9001/Element 13, Control of Non-conforming Products.

16.3 CONTENTS: The Board/Lists may consist/contain of:

- A. A contractor representative whose primary responsibility is engineering.
- B. A contractor representative whose primary responsibility is product quality.
- C. A designated government quality representative (DCMC).
- D. An open or closed status of each documented non-conformance.

The technical competence, knowledge of product quality and functional understanding of the selected individuals shall encompass the requirements prescribed in ASQC Q9001, Contractor Quality Management System for the John C. Stennis Space Center.

16.4 FORMAT: The list shall be submitted on a single sheet of 8 1/2" x 11" paper.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None.

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Bloodborne Pathogens Exposure Control	3. Operator: RA30	4. DR Number Page Date Rev. 2-RA04, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: Once. Updates as required.
7. Distribution: RA30 (1 Copy)	
9. As of Date:	8. Initial Submission: Within 30 days following start of contract

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Bloodborne Pathogens Exposure Control Plan	12. Standard DRD Number Rev. Page Date	
13. Use: Compliance with 29CFR 1910.1030, The Bloodborne Pathogens Control Act	14. Interrelationship: Annex 2.3.9.3	15. Reference: SPR 8715.1

16. Preparation Information:

16.1 SCOPE: The Contractor shall update the Bloodborne Pathogens Control Plan sufficient to comply with the requirements identified in 29CFR 1910.1030.


16.2 APPLICABLE DOCUMENT: 29CFR 1910.1030


16.3 CONTENTS: See SCOPE


16.4 FORMAT: Electronic version in Microsoft Word, or latest SSC Office Suite.

16.5 MAINTENANCE: Data to be updated in accordance with 29CFR 1910.1030.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Response, Emergency		3. Operator: RA30		4. DR Number Page Date Rev. 2-SA01, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: Within 48 hours of each incident			
7. Distribution: RA30 (3 Copies)		8. Initial Submission: N/A			
9. As of Date: N/A		10. Remarks: Provide RA30 and QA00 with a report of all fire alarms, ambulance runs in a response. RA00 Environmental Office a report of all HAZ-MAT incidents.			
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Response, Emergency				12. Standard DRD Number Rev. Page Date	
13. Use: To be used in monitoring fire response activity data associated with fire alarm incidences and historical.		14. Interrelationship: 2.1.11.6 2.1.11.7		15. Reference: NFPA Standard 1202, 1024, 472 150	
16. Preparation Information: 16.1 SCOPE: This Data Requirement establishes the requirement for preparation of records which are essential to the conduct of the SSC Fire Prevention Program. 16.2 APPLICABLE DOCUMENT: None 16.3 CONTENTS: Each alarm should be documented and the cause should be investigated. A minimum of the following information will be included: report number, date, type of incident, location, how alarm received, person reporting, time of alarm, time of response, time returned to station, office in charge, apparatus responding, equipment used, description of incident, findings documented. 16.4 FORMAT: Electronic 16.5 MAINTENANCE: Records Retention Program Requirements. 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None					

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Woodlands Fire Fighting Plan		3. Operator: RA30		4. DR Number Page Date Rev. 2-SA02, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 1	6. Frequency of Submission: Once. Revisions as required.				
7. Distribution: RA30 (3 Copies)	8. Initial Submission: Within 30 days of contract start date				
9. As of Date: N/A					
10. Remarks: Update as required by changing fire conditions in the woods.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Woodland Fire Fighting Plan			12. Standard DRD Number Rev. Page Date		
13. Use: To provide NASA with a plan of actions in responding to woodland fires and information regarding fire activities.		14. Interrelationship: Annex 2.1.11.10		15. Reference:	
16. Preparation Information: 16.1 SCOPE: Contractor shall develop a plan to respond to woodland fires within the fee area and on NASA owned lands with the Buffer Zone. Develop a program in the prevention of wildfires by planning and participating in prescribed fire operations based on demand services. The Fire Chief may act as a "fire boss" having responsibilities under controlled burn accomplished by SSC fire department. Each plan will be submitted for approval by NASA's Natural Resource Manager prior to each burn. 16.2 APPLICABLE DOCUMENTS: None 16.3 CONTENTS: Identify resources to use in fighting woodland fire and include response activities in the incident reports. Define/describe the command system to be used in response activities. Identify steps To be taken in the prevention and/or mitigation of woodland fires (i.e., annual assessments of woodland fire hazards). Recommendations for improvements will be made to NASA. Describe how training will be accomplished to maintain proficiency of appropriate personnel. 16.4 FORMAT: Typewritten or computer generated on 8.5 X 11" bond paper. 16.5 MAINTENANCE: Plan updated as woodland fire hazards dictate and fire responses and reports as they occur. 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Equipment Testing and Maintenance Schedule and Records		3. Operator: RA30		4. DR Number Page Date Rev. 2-SA03, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 4		6. Frequency of Submission: AR			
7. Distribution: N/A		8. Initial Submission: Within 30 days after contract start date			
9. As of Date:					
10. Remarks: Maintain up to date records and make available for inspection upon request by RA30. Provide RA30 with a schedule of all equipment to be tested. Updates and notifications should be made within 24 hours of changes in schedules.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Equipment Testing and Maintenance Schedule and Records				12. Standard DRD Number Rev. Page Date	
13. Use: To provide for records of equipment testing, inspections, and maintenance.		14. Interrelationship: Annex 2.1.11.4		15. Reference: NFPA Standard 1002, 191, 1961, 1931, 1201 1971, 13, 1231, 10, 12, 1 NASA STD 8719.11	
16. Preparation Information: 16.1 SCOPE: This Data Requirement establishes the requirement for preparation of records which are essential to the conduct of the SSC Fire Prevention Program. APPLICABLE DOCUMENTS: None 16.2 CONTENTS: All maintenance and testing records should include name of equipment, location, date and test results. Each schedule should identify the equipment of system to be tested, the location, date, and time of each test. 16.3 FORMAT: Electronic 16.4 MAINTENANCE: N/A 16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Quarterly Report of Fire Activities at MSAAP

3. Operator:

RA30

4. DR Number Page Date Rev.

2-SA04, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
Report to be submitted within 5 business days following the end of the FY quarter.

7. Distribution:
RA30 (2 Copies)

8. Initial Submission:
N/A

9. As of Date:

10. Remarks:

1 copy of the Quarterly Report will be submitted to Mississippi Army Ammunition Plant Commander, with
1 copy to RA30

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Quarterly Report of Fire Activities

12. Standard DRD Number Rev. Page Date

13. Use:
To provide NASA with information regarding fire activities
At the Mississippi Army Ammunition Plant.

14. Interrelationship:
Annex 2.1.11.9

15. Reference:
Space Act Agreement
April 18, 1997

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement to report all fire department activities performed at the Mississippi Army Ammunition Plant (MSAAP).

16.2 APPLICABLE DOCUMENTS: Fire Protection Support Agreement dated February 8, 1985.

16.3 CONTENTS: As a minimum the report will summarize activities by category and reflect location and date of activity. Categories will include inspections, fire responses, test and maintenance, training, other activities, and comments/recommendations.

16.4 FORMAT: Electronic

16.5 MAINTENANCE: To be maintained through the life of the Contract.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Medical Data	3. Operator: RA30	4. DR Number Page Date Rev. 2-SA05, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: 15 th day of the month following end of FY quarter
7. Distribution: 1 Copy *Gov Request	QU AR*
9. As of Date: Last day of month	8. Initial Submission: 15th day following the of the end of the FY quarter following the start of the contract

10. Remarks:
Submit one (1) copy to RA30.
Data shall be collected on a monthly basis and submitted quarterly.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Medical Data	12. Standard DRD Number Rev. Page Date
13. Use: To provide records of the medical transactions for a particular site. Data shall not include patient identifiers which may be excluded under the Privacy Act.	14. Interrelationship: Annex 2.3.9.1
	15. Reference: Emergency Plan SPLN 1040-0003 NPD 1820.1

16. Preparation Information:

16.1 SCOPE: This data DR establishes the requirements for the preparation and maintenance of records which document the medical activities of the Occupational Health Services and industrial service functions at the SSC.

16.2 APPLICABLE DOCUMENTS: NPD 1820.1.

16.3 CONTENTS: The records shall include, but not be limited to, data pertinent to the following areas:


- A. Treatment of accidents and job-related illnesses through the use of the OHS clinic and First Aid areas.
- B. Examinations and procedures performed by clinic staff.
- C. Implementation and operation of a preventive medicine and immunization program.
- D. Employee health education through the use of posters, films, electronic media, pamphlets, & articles.
- E. Participation in SSC Emergency Plan, SPLN 1040.003.
- F. Development and maintenance of occupational injury/illness program.
- G. Line item listing of all medical transactions by department, organization, & agency with subtotal and total cost. Data shall reflect visit categories. and EAP program visits and program summary.
- H. Accounting charge number.

16.4 FORMAT: Electronic File compatible with SSC Microsoft Office Suite on CD.

16.5 MAINTENANCE: NASA Records Retention Schedule NPR 1441.1B

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Occupational Health International Travel Sv		3. Operator: RA30		4. DR Number Page Date Rev. 2-SA06, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 3		6. Frequency of Submission: AN – October 15 th			
7. Distribution: RA30 One (1) copy		8. Initial Submission: 45 days following the start of the contract			
9. As of Date: COB/Last work day of Fiscal year					
10. Remarks:					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Occupational Health International Travel Services Report			12. Standard DRD Number Rev. Page Date 2-SA06		
13. Use: To provide breakdown of medical services to personnel performing international travel. Data requirement is prescribed by NPR 1810.1.		14. Interrelationship: Annex 2.3.9.4		15. Reference: NHS/OM-1845.2 (Yellow Book) NPR 1810.1	
16. Preparation Information: 16.1 SCOPE: This DR establishes the requirements for the preparation of an Agency report to NHS. 16.2 APPLICABLE DOCUMENTS: NHS/OM-1845(Yellow Book). 16.3 CONTENTS: Number of cholera and yellow fever vaccines administered by clinic staff in FY; Number of medical travel kits issued in the FY; Number of international travel medical exams performed for civil servants and contractor employees in FY; Number of international travel medical exams performed in FY utilizing DoD Form 1843 or 1622; Number of Dept of State medical clearances (Form 823) received from the Dept of State during FY; Provide a medical kit contents list and instructions for use. 16.4 FORMAT: Electronic file compatible with SSC Office Suite. 16.5 MAINTENANCE: Two (2) years after report submittal 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Wellness and Fitness Center Status	3. Operator: RA30	4. DR Number Page Date Rev. 2-SA07, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: MO – 15 th day of month
7. Distribution: RA30 One (1) copy	
9. As of Date: End of each month	8. Initial Submission: 15 th day of month following start of contract

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Wellness and Fitness Center Status Report	12. Standard DRD Number Rev. Page Date 2-SA07, 1 of 1
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13. Use: To monitor Wellness and Fitness Center activities and progress.	14. Interrelationship: Annex 2.3.9.6	15. Reference:
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16. Preparation Information:

16.1 SCOPE: The Contractor shall prepare a monthly summary report of Wellness/Fitness Center activities detailing program participation, organizations, programs, and profits and loss.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: The report shall be of sufficient detail that will allow assessment of the effectiveness of the program. As a minimum, the report shall provide membership demographics, percentage of use by demographics, programs and participation by demographics, an overall assessment of the program with substantiating data. Included in the later section of the report should be data such as new initiatives, success of programs offered measured by number of participants meeting their individual goals, etc. The report should include a listing of exercise equipment and number of days in down-time for repair. The report shall include an operating profit and loss statement to include utility and maintenance costs.

16.4 FORMAT: Electronic file compatible with SSC Office Suite.

16.5 MAINTENANCE: Data to be updated monthly

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Federal Employee Assistance Programs Annual

3. Operator:

RA30

4. DR Number Page Date Rev.

2-SA08, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

3

6. Frequency of Submission:

AN – 15th day of each month

7. Distribution:

Three (3) copies

8. Initial Submission:

45 days following start of contract

9. As of Date:

COB/Last work
day of fiscal
year

10. Remarks:

1. Original to Director Occupational Health, NASA Headquarters, Washington D.C.
2. One (1) copy - NASA SSC Code QAOO
3. One (1) copy - NASA SSC Code RA30

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Federal Employee Assistance Programs

12. Standard DRD Number Rev. Page Date

13. Use:

OPM required report from NASA installations having
an Employee Assistance Program

14. Interrelationship:

Annex 2.3.9.5

15. Reference:

16. Preparation Information:

16.1 SCOPE: Required information on OPM Form 1210 (Rev 8/87).


16.2 APPLICABLE DOCUMENTS: Federal Programs Reporting, OPM Form 1210 (Rev 8/87).

16.3 CONTENTS: All portions of two (2) page OPM Form 1210 to be filled in from data compiled from
annual services provided by the Employee Assistance Program

16.4 FORMAT: Submit data on OPM Form 1210 (Rev 8/87).

16.5 MAINTENANCE: To be maintained in file for three (3) years.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Plan, Safety and Health		3. Operator: QA00		4. DR Number Page Date Rev. 2-SA09 1 of 6	
SUBMITTAL REQUIREMENTS					
5. Type: 1		6. Frequency of Submission: *RT			
7. Distribution: 1 Copy (QA00) 1 Copy (RA00) 1 Copy (DA00)		8. Initial Submission: One submission only (with the proposal) and annual revisions.			
9. As of Date: COB Sept 30					
10. Remarks: *Update approved plan when 10% of any page requires changing or sooner if the nature of the change warrants special consideration. Distribution of approved changes: one copy to QA00 Safety Office; one copy to RA00; and one copy to DA00 (Contracting Officer).					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Plan, Safety and Health			12. Standard DRD Number Rev. Page Date		
13. Use: To describe a safety and health plan for the protection of personnel, equipment, and facilities.		14. Interrelationship:		15. Reference: NPR 8715.3 SPR 8715.1	
16. Preparation Information: 16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirements for the preparation of a plan addressing safety controls to be applied by the contractor for the protection of life and health of employees and other persons, and for the prevention of damage to property, materials, supplies, and equipment. The instructions on safety and health plan content below include specific reports and data to be submitted to the Government and should represent contractual commitments by the contractor to provide this information. 16.2 APPLICABLE DOCUMENTS: None. 16.3 CONTENT: A. The plan shall be based upon the following standards to the extent that they are applicable to the contractor's operations. <ol style="list-style-type: none"> 1. OSHA 29 CFR 1910/1926 or equivalent. 2. CFR Part 49 3. U.S. Environmental Protection Agency 40 CFR 61, Subpart M. 4. National Fire Protection Association, National Fire and Electrical Codes 5. American National Standards Institute (ANSI, Safety Series) 6. SSC Safety and Health Procedures and Guidelines SPG 8715.1 7. NASA Safety Manual 8. American Society of Mechanical Engineers, Boiler and Unfired Pressure Vessel Code 9. Accident Prevention Manual for Industrial Operations (NSC) 10. National Fire Protection Association Handbook for Fire Protection 11. National Building Code 					



National Aeronautics and
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DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number	Issue
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2. Title:

Plan, Safety and Health

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA09 2 of 6

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Plan, Safety and Health

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.3 CONTENT: (Cont)

- 12. Southern Building Code
- 13. Industrial Ventilation Guide
- 14. Illumination Engineering Society Handbook
- 15. Heating, Ventilation Guide
- 16. Factory Mutual Engineering Division Requirement

B. The contractor's Safety and Health Plan shall include the following content.

1.0 Management Leadership and Employee Participation

1.1 Policy. Provide the contractor's safety policy statement with the plan.

1.2 Goals and Objectives. Describe specific goals and objectives to be met throughout contract performance.

1.3 Management Leadership. Describe management's strategy for implementing its commitment to safety and health through visible management activities and initiatives including a commitment to exercise management prerogatives to ensure work place safety and health. Describe processes that will be used to make management safety and health leadership visible in all contract and subcontract activities and products. Include a statement from the program manager or designated safety official indicating that the plan will be implemented as approved and that the program manager will take personal responsibility for its implementation.

1.4 Employee Involvement. Describe strategy to promote and implement employee (including non-supervisory) involvement in safety and health program development, implementation and decision making.

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, other contractors and resident agencies or other special responsibilities and support).

1.6 Provision of Authority. Describe how the SSC Safety and Health Program requirements are integrated into the Plan and identify consistency of the Plan with applicable NASA requirements and contractual direction as well as applicable Federal, state, and local regulations and how this will be maintained throughout the life of the contract.

1.7 Accountability. Describe strategy for ensuring that key personnel, supervisors, and employees will be held accountable for implementing their tasks in a safe and healthful 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. The program evaluation may consist of either (1) participation in a Performance Evaluation Profile (PEP) survey at the request of the Government or (2) a written report documents the following: the contractor shall state responsibility and procedures to determine the significance,



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DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Safety and Health	3. Operator: QA00	4. DR Number Page Date Rev. 2-SA01 3 of 6
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DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title: Plan, Safety and Health	12. Standard DRD Number Rev. Page Date
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16. Preparation Information:
1.8 (cont)

intrinsic worth, and criticality of the contractor's hazardous operations in a manner that proper risk management techniques can be applied and notable safety risk documented.

1.9 Safety Program Documentation. Describe approach to augmenting and integrating safety and health documentation with the SSC Safety and Health program documentation in order to provide the Government with the necessary visibility and insight. This includes the identification, acquisition, and processing of safety and health data; development of procedures; record keeping; statistical analyses including metrics; and the furnishing of data and reports to the Government. The contractor will identify what records it will make to the Government. 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, fire protection, emergency services, environmental protection, or emergency preparedness.

1.10 Government Access to Safety and Health Documentation. The contractor shall recognize in it's plan that it will be expected to make all safety and health documentation (including relevant personnel records) available for inspection or audit at the Government's request.

1.11 Procurement. Identify procedures used to assure that procurements are reviewed for safety considerations, MSDS requirements, and that specifications contain appropriate safety criteria and instructions. Set forth authority and responsibility to assure that safety tasks are clearly stated in subcontracts.

1.12 Fire Protection Program. The contractor will describe how NASA fire protection requirements as well as NFPA requirements will be incorporated into the fire prevention program. Describe fire prevention awareness activities and methods to implement corrective action upon identification of potential fire hazards. The description shall also contain details of how alarm response time and personnel complement requirements will be met.

2.0 Workplace Analysis. Describe how hazards shall be systematically identified through a combination of surveys, analyses, and inspections of the workplaces, 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 audits and inspections; reports of spills and inadvertent releases to the environment. Records of workplace hazards and inspection shall be indexed by area/workplace evaluated and shall be readily available to NASA QAO0 for audit and evaluation purposes. All hazards identified, whether by engineering assessments, inspections, hazards analyses, or employee reports shall be mitigated or the residual hazards accepted by a formal system. All hazards and operations which are immediately dangerous to life or health shall be reported immediately to NASA QA00.

2.1 System Safety - The Plan shall address the contractor's method of conducting a system safety program. The program is the application of engineering and management principles, criteria, and techniques to optimize safety and reduce risks within the constraints of operational effectiveness, time, an cost throughout all phases of the system life cycle.



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DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Safety and Health	3. Operator: QA00	4. DR Number Page Date Rev. 2-SA09 4 of 6
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DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title: Plan, Safety and Health	12. Standard DRD Number Rev. Page Date
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16. Preparation Information:

2.2 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 which are performed 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.

2.3 Inspections. Describe 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 and regularly scheduled inspections for safety, health, hygiene and fire and explosion hazards.

2.4 Employee Reports of Hazards. Identify 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.

3.0 Accident and Record Analysis.

3.1 Mishap Investigation – Identify methods to assure the reporting and investigation of mishaps including corrective actions implemented to prevent recurrence: 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 use of NASA Form 1627, “Mishap Report:” (or equivalent), including notification of NASA QA00.

3.2 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. Discuss how trend data will be used to educate the workforce on safety and health performance and provide motivation for injury reduction and workplace improvement. In support of site-wide trend analysis to be performed by the Government, the contractor will discuss methods of providing data as follows:

a. Accident/Incident Summary Report. The contractor shall prepare and deliver Accident/Incident Summary Reports. Report all new and open mishaps, including vehicle accidents, incidents, injuries, fires, and close calls along with current status. Negative reports are also required. Report frequency is monthly. The report is to be delivered to the SSC NASA Safety Office.

b. Log of Occupational Injuries and Illnesses. The Contractor shall deliver to the Government a copy of its annual summary of occupational injuries and illnesses (OSHA 200 or equivalent) as described in Title 29, Code of Federal Regulations, Subpart 1904.5. 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.)



National Aeronautics and
Space Administration
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**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title:

Plan, Safety and Health

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA09 5of 6

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Plan, Safety and Health

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

4.0 Hazard Prevention and Control. Identified hazards must be eliminated or controlled. It is required that hazards including discrepancies and corrective actions be collected in a information management system (Hazard Abatement Tracking System (HATS)) for risk management purposes. Describe your approach to implementing this requirement. Implementation of controls and corrective actions will be tracked and verification of completion available for NASA S&MA review.

5.0 Occupational Health. The contractor will describe surveillance programs to evaluate personnel health (medical) and workplace conditions to identify specific health issues and prevent degradation of personnel health as a result of occupational exposures. Describe how SSC medical dispensary facilities will be used to facilitate contractor and NASA occupational health programs. Describe the professional qualifications of medical personnel who will administer on-site occupation health activities and any off-site or corporate professionals retained to administer occupational health and workers compensation programs.

6.0 Emergency Response. Discuss approach to emergency preparedness and contingency planning which addresses fire, explosion, inclement weather, environmental releases, and how the SSC Emergency Preparedness Plan is incorporated. Discuss compliance with 29 CFR 1910.120 (HAZWOPER) and implementation of an Incident Command System. Discuss methods to be used for notification of emergencies. Discuss establishment of pre-planning strategies through procedures, training, drills, etc. Discuss methods to verify emergency readiness.

7.0 Safety and Health Training. 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 including protective and/or emergency countermeasures. Discussion should also address approval, changes, and control of training materials. Discuss how personnel certification programs requiring medical/health review (such as respiratory protection, asbestos abatement) are processed. Certifications should include documentation that training requirements and physical conditions have been satisfied. All training materials and training records will be provided for NASA review on request.

16.4 FORMAT: The Plan shall be submitted on 8 1/2" x 11" paper and on 3.5" disk (or latest electronic technology).

1. Cover page – to include as a minimum the signature of Contractor's program manager and designated safety official (if different); upon contract award, the Plan shall be submitted for approval by Chief, S&MA Office; and the NASA Contracting Officer. Other signatures may be required at the discretion of the Government.
2. Table of Contents. The organization of the contractor's Safety and Health Plan should parallel the content of this data requirement as detailed in content section.
3. Body of plan – as required. Contractor's format is acceptable but should be traceable to this data requirement.



National Aeronautics and
Space Administration
John C. Stennis Space Center

**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title:

Plan, Safety and Health

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA09 6 of 6

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Plan, Safety and Health

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

4. When preparing its Safety and Health Plan, the offeror/contractor is expected to review all content items and tailor its plan accordingly. The Plan will clearly identify those resources to be provided by the contractor and 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.

16.5 MAINTENANCE: The plan shall be maintained in a current condition by page revision or complete reissue, as contractually determined, to reflect the latest program changes and hardware configuration.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, System Safety Database

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA10, 1 of 3

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
AN Report
QU updates to database

7. Distribution:
QA00 (1 Copy)

8. Initial Submission:

9. As of Date:
May 15

Quarterly after contract start date.

10. Remarks:

The Systems Safety database shall be updated quarterly on the SSC NASA S&MA Server. A hard copy report shall be submitted by the due date to the QA00 Safety Office. DRD will not be considered complete without a SSC Official File Number and copy ready to be filed in SSC Official Safety Files. Examples of system safety analyses includes Operations Hazard Analysis and Fault Tree Analysis.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, System Safety Database

12. Standard DRD Number Rev. Page Date

13. Use:
To provide a status of planned and completed updates to system safety hazard analyses.

14. Interrelationship:
Annex 2.5.4.4

15. Reference:
SPR 8715.1
General facilities safety and accident prevention plan FARS - Equipment, supplies, and facilities acquisition

16. Preparation Information:

16.1 SCOPE: This document is to provide a database of various analyses to determine risk and hazards in the conceptual phase, life cycle, and disposal phase of facilities, equipment and systems whether existing or planned and to provide an organized approach to early identification and resolution of hazards to reduce the safety risk to the lowest possible level. The report shall contain system safety number(s), status of planned and completed analyses, anticipated or actual completion dates, and the date the system safety database was updated on the SSC S&MA Website.

16.2 APPLICABLE DOCUMENTS: None.



National Aeronautics and
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DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number Issue

2. Title:

Report, System Safety Database

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA10 2 of 3

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Report, System Safety Database

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.3 CONTENTS: System Safety Reports shall contain the following:

- a. System Description. This will consist of summary descriptions of the physical and functional characteristics of the system and its components. Reference to more detailed system and component descriptions, including specifications and detailed review documentation shall be supplied when such documentation is available. The capabilities, limitations and interdependence of these components shall be expressed in terms relevant to safety. The system and components shall be addressed in relation to its mission and its operational environment. System block diagrams or functional flow diagrams may be used to clarify system descriptions.
- b. Data. This will consist of summaries of data used to determine the safety aspects of design features.
- c. Hazard Analysis Results. This will consist of a summary or a total listing of the results of hazard analysis. Contents and formats may vary according to the individual requirements for hazard analysis results:
 - 1. A summary of the results
 - 2. A listing of identified hazards, in narrative or matrix format, to include the following information:
 - (a) System/Subsystem/Unit. Enter the particular part of the system that this analysis is concerned with: For example, if this item(s) applies to a radar system modulator, enter "modulator". If there are several modulators in the system, be sure to clearly specify which one the analysis pertains to.
 - (b) Component(s) Failure Mode(s). All component failure modes which can result in a hazard. Failure modes generally answer the question of "how" it fails.
 - (c) Subsystem Failure Mode(s). The subsystem failure mode descriptions for the SHA are similar to the component descriptions provided in the SSHA. However, emphasis is now placed on failures affecting interfacing subsystem operations.
 - (d) System Component/Phase. The particular phase/component that the analysis is concerned with. This could be a system, subsystem, component, operating/maintenance procedure or environmental condition.
 - (e) System Event(s) Phase. The configuration or phase of the mission the system is in when the hazard is encountered, for example, during maintenance, during flight, during preflight, full-power applied, etc., or it could be encountered in all system events.
 - (f) System Operation Description. A description of what is normally expected to occur as the result of operating the component/subsystem or performing the operating/maintenance action.
 - (g) Hazard Description
 - 1. A brief description of the hazard, for example, "Radiation leakage from radar set waveguide".
 - 2. A complete description of the potential/actual hazards inherent in the item being analyzed, or resulting from normal actions or equipment failure.

SSC-167 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR) Continuation Sheet

Data Procurement Document

1. Number Issue

2. Title:

Report, System Safety Database

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA10 3 of 3

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.3 CONTENTS: System Safety Reports shall contain the following:

(h) Hazard Identification/Indication. A description of operator/crew indications which include all means of identifying the hazard to operation/maintenance personnel.

(i) Effect on System. The detrimental effects which could be inflicted on the system or personnel, resulting from this hazard. Possible upstream and downstream effects shall also be described.

(j) Risk Assessment. A risk assessment for each hazard (classification of severity and probability of occurrence).

(k) Recommended Action. The recommended action required to eliminate or control the hazard. Sufficient technical detail is required in order to permit the design engineers and the customer to adequately develop and assess design criteria resulting from the analysis and to include alternative designs and life cycle cost impact appropriate.

(l) Effect of Recommended Action. The effect of the recommended action on the assigned risk assessment. If the recommended action will result in cost/schedule/performance penalties to the extent that the contractor requires government approval prior to incorporation, then these considerations will be addressed.

(m) Remarks. Any information relating to the hazard not covered in other blocks, for example, applicable documents, previous failure data on similar systems, or administrative directions.

(n) Status. The status of actions to implement the recommended, or other, hazard controls.

(o) Caution and Warning Notes. A complete list of warnings, cautions, and procedures required in operating and maintenance manuals and for training courses.

16.4 FORMAT: Report will be submitted on 8 ½" x 11" paper and stored electronically in a database on the SSC S&MA server.

16.5 MAINTENANCE: The system Safety Database shall also be updated and available to the SSC community S&MA Web Page.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:
Report, OSHA Annual

3. Operator:
QA00

4. DR Number Page Date Rev.
2-SA11

Section 1.01 SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
QA00 (1 Copy)
RA00 (1 Copy)
RA20 (1 Copy)

8. Initial Submission:

9. As of Date:
COB April 1

January of each year.

10. Remarks:

As requested by NASA Headquarters through the NASA Safety Office. Submission of one (1) copy each to QA00 Safety Office, one (1) copy each to RA00 Environmental Officer, and one (1) copy to RA30. DRD will not be considered complete without the following: 1) SSC Official File Number and copy ready to be filed in SSC Official Safety and Mission Assurance.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:
Report, OSHA Annual

12. Standard DRD Number Rev. Page Date

13. Use:
To provide NASA Headquarters with the information needed to prepare the Annual Occupational Safety and Health Report.
Official File Number 1470.5

14. Interrelationship:
Annex 2.5.4

15. Reference:
NPD 1800.2
OSHA

16. Preparation Information:

16.1 SCOPE: The scope of this Data Requirement is defined by NASA Headquarters each year in their request for center reports.

16.2 APPLICABLE DOCUMENT: None.

16.3 CONTENTS: This report summarizes Safety, Environmental Health and Occupational medicine activities accomplishments and goals pertinent to OSHA regulations and serves as a vehicle for offering comments and recommendations for consideration by OSHA.

16.4 FORMAT: The format/guidelines for reporting are provided by NASA Headquarters each year.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Safety and Environmental Health Program Self-Assessment and Implementation	3. Operator: QA00	4. DR Number Page Date Rev. 2-SA12, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 1	6. Frequency of Submission: AN
7. Distribution: QA00 (1 Copy)	
9. As of Date: COB Sept 30	
8. Initial Submission: Annually after contract start date.	

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Safety and Environmental Health Program Self-Assessment and Implementation	12. Standard DRD Number Rev. Page Date
13. Use: Self evaluation of Contractor's Safety and Environmental Health program performance.	14. Interrelationship: Annex 2.5.4.5 Annex 2.5.4.8
15. Reference: NPR8715.3	

16. Preparation Information:

16.1 SCOPE: This DR establishes the requirement to submit a report on the internal assessment of the Contractor's safety and health program effectiveness during the previous reporting period and an Implementation plan including corrective actions (with estimated complementation dates) to be completed In the future.


16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Report areas of strength and weakness in Contractor safety program performance and report status of goals or objectives previously established. The data shall include corrective actions recommended, a description of corrective actions completed, date corrective action completed, and a schedule for any outstanding corrective actions. Closure documentation must accompany all closed corrective actions and be included in the report.

16.4 FORMAT: 8.5"X11" paper and on 3.5"disk (or latest electronic technology).

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Accidental/Incident Summary, Mishap Notification, Investigation, Reporting Information System, and Corrective Action Report (NF 1627)		3. Operator: QA00		4. DR Number Page Date Rev. 2-SA13, 1of 2	
SUBMITTAL REQUIREMENTS					
5. Type: 1,3		6. Frequency of Submission: AR MO			
7. Distribution: CO (1 Copy) QA00 (1 Copy) *RA20 (1 Copy) DA00 (1 Copy)		8. Initial Submission: AR- Within 24 hours of Mishap – for any Type A, B, or C Mishap.			
9. As of Date: AR		Monthly report of prior month's activity.			
10. Remarks: Use NASA Mishap Report NF 1627 *One copy to the NASA Property Officer if equipment is involved. (RA20) DR will not be considered complete until statistics are inputted into the NASA Incident Reporting Information System (IRS)					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Accident/Incident Summary, Mishap Notification, Investigation, Reporting Information System and Corrective Action Report (NF1627)				12. Standard DRD Number Rev. Page Date	
13. Use: Report summary of contractor mishaps(Type A,B,C) close calls and mission failures to prevent recurrence to manage potential liabilities to Government statistics Monthly summary of safety data to be used to evaluate contractor safety program performance		14. Interrelationship: Accident Reporting Trend Trend Analysis & Corrective Action Annex 2.5.4.7		15. Reference: NPR 8621.1 SPR 8715	
16. Preparation Information: SCOPE: This Form (NF 1627) and reporting requirement replaces all previous reporting forms, dates, and establishes data requirements. Reports provides a monthly summary of the contractor safety program Accomplishments. This DR establishes the requirements for collecting and reporting mishaps statistics, Utilizing the computer-based NASA IRIS program. APPLICABLE DOCUMENTS: NASA Form 1627, NPD 8621.1G, NASA "Mishap Reporting and Investigating Policy." SPG 8715.1, NPR 8715.3 CONTENTS: NF 1627 is a 3 part form requiring initial submission of first part within 24 hours of a Mishap (Type A, B, C) incidents and close calls with the potential of being mishaps which are Type A or B bodily Injury and/or property damage, or Type C property damage. Part 2 is due within 10 working days after initial Report whether or not correction action can be resolved. Should the contractor choose to convene a formal Investigation requiring more than 10 working days to perform its investigation, the contractor will immediately Notify the NASA Safety Office and request an extension of the 10-day requirement. The data shall include statistical data, such as frequency or incidence rates, severity rates, number of hours Worked, number of employees, number of mishaps, number of days lost work, dollar totals for government Property losses incurred by the contractor. Other data (such as statistical analysis) may be generated and Presented as required to support further analyses (such as trends).					



National Aeronautics and
Space Administration
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**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title: Accidental/Incident Summary, Mishap Notification,
Investigation, Reporting Information System, and Corrective
Action Report (NF 1627)

3. Operator:
QA00

4. DR Number Page Date Rev.
2-SA13, 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

The DR establishes the requirements for the preparation and submittal of a report which provides a statistical summary of fatalities, man-hours worked, number of lost-time injuries or illnesses, lost-time frequency rate, number of mishaps and close calls, and average number of employees by month. All accidents, for example, vehicle accidents, injuries, and fires shall be reported in summary format.

16.4 MAINTENANCE: Forms for mishaps will be retained for 10 years. IRIS input shall be an integrated product across the contract (including Medical Clinic). IRIS automatically calculates year-end statistics from input.

16.5 FORMAT: Report will be submitted on (Form 1627) NASA Mishap Report (latest revision). All attachments will be submitted on 8 1/2" x 11' paper or as otherwise specified by NASA. Format for input is provided by IRIS software.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Confined Space Inventory

3. Operator:

QA00

4. DR Number Page Date Rev.

2-SA14, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

3

6. Frequency of Submission:

AN

7. Distribution:

QA00 (1 Copy)

8. Initial Submission:

60 days of contract start date and update as required.

9. As of Date:

11. Standard DRD Title:

Report, Confined Space Inventory

12. Standard DRD Number Rev. Page Date

13. Use:

To maintain a current inventory of permit-required confined spaces at SSC.

14. Interrelationship:

2-SA04
Annex 2.5.4.6

15. Reference:

SPR 8715.1
29 CFR 1910.146

16. Preparation Information:

16.1 SCOPE: This Data Requirement Description (DRD) establishes the requirement for submittal of an annual report which includes an inventory of all permit-required confined spaces at SSC.

16.2 APPLICABLE DOCUMENT: None.

16.3 CONTENTS: A request form letter to all SSC organizations responsible for permit-required confined spaces should be submitted annually for updates. The submittal shall include an annual inventory by SSC organizations of all SSC permit-required confined spaces, hazard assessment and requirement for entry..

16.4 FORMAT: Report will be submitted on 8 ½" x 11" paper. The SSC confined space Inventory shall also be updated, as needed, in a database on the SSC Server (S&MA Web Page).

16.5 MAINTENANCE: The inventory shall be maintained in a current condition by incorporation of updates provided by SSC organizations responsible for certain SSC facilities (permit-required confined spaces).

EXCEPTIONS/ ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Plan, SSC Safety and Health Awareness	3. Operator: QA00	4. DR Number Page Date Rev. 2-SA15 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 1	6. Frequency of Submission: AN
7. Distribution: QA00 (1 Copy) RA00 (1 Copy)	
9. As of Date: COB Oct. 30	8. Initial Submission: Within 60 days after contract start.

10. Remarks:
Submission of one (1) copy each to QA00 Safety Officer and RA02 Environmental Officer.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Plan, SSC Safety and Health Awareness	12. Standard DRD Number Rev. Page Date
13. Use: To describe a safety and health awareness plan for SSC.	14. Interrelationship: Annex 2.5.4.9
15. Reference: SPR 8715.1 NPR 8715.1	

16. Preparation Information:
16.1 SCOPE: This DRD establishes the requirement for an Annual SSC Safety and Health Awareness Plan.

16.2 APPLICABLE DOCUMENTS:

16.3 CONTENTS: Develop and provide for NASA review a written plan on how the contractor plans to implement to implement a SSC site-wide safety and health awareness program. Implement safety and health awareness activities and campaigns, detailed in the plan. This plan should be aimed at motivating SSC employees, including resident agencies and support contractors, to strive for a mishap-free and healthy work environment. Specific products include posters, announcements, newsletters, videos, and other awareness/motivation items. Products will be technically correct, grammatically correct, and free of spelling errors. Specific events include NASA Safety and Health Observance Day, SSC Safety and Health Council Meetings and Hurricane Season Preparedness.

The SSC Safety and Health newsletter will be published quarterly with hardcopy distribution and S&MA Website information maintenance performed for each. SSC Safety and Health Council meeting (quarterly) information will be managed via electronic media (e.g., website maintenance, member notification). Slogan boards and signage poster boards will be changed out at the beginning of each month.

16.4 FORMAT: Report will be submitted on 8 ½" x 11" paper and on CD, or format as provided by NASA.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Food Service Sanitation Inspection Report

3. Operator:

RA30

4. DR Number Page Date Rev.

2-SA16, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
QU

7. Distribution:
RA20 (1 Copy)
RA02 (1 Copy)

8. Initial Submission:

9. As of Date:
Jan 7, April 7,
July 7, Oct 7
for the previous
quarter

10. Remarks:

Monthly inspections shall be performed for food service facilities in buildings 1100, 2201, 1002, Food Truck, and the Cypress House. Reports on Building 1002, Food Service Facility, to be sent to NAVOCEANO Safety with copies to RA30 and RA02.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Food Service Sanitation Inspection Report

12. Standard DRD Number Rev. Page Date

2-SA20

13. Use:
To document status of food service sanitaiton in NASA facilities

14. Interrelationship:
Annex 2.3.13.4

15. Reference:
NPR 1800.1
Mississippi State Board
of Health, Food Service
Sanitation

16. Preparation Information:

16.1 SCOPE: Reporting results of monthly food service sanitation inspections.


16.2 APPLICABLE DOCUMENT:

16.3 CONTENTS: Written summary of food service sanitation inspection results, deficiencies, and related comments. Deficiencies corrected should be noted in the next quarterly report. Any deficiencies imminent danger to life or health must be corrected or the facility shall be closed immediately.

16.4 FORMAT: Microsoft Word document file format submitted by electronic mail and published to SSC server.

16.5 MAINTENANCE: Per NPR 1441.1

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report/Plan, Space Utilization		3. Operator: RA30		4. DR Number Page Date Rev. 3-FA01, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: FA		6. Frequency of Submission: 1. Copy of individual building plan schematic to be sent to RA30 and Odin contractor upon update.			
7. Distribution: RA30 (1 Copy) Distribution List Provided by NASA FUO (1 Copy)		2. Annual Copy of Buildings Plan Manual to distribution list provided by the NASA Facilities Utilization Officer (FUO).			
9. As of Date: 1. PE 2. AN		8. Initial Submission: 120 days after receipt of DR PE - 14 days after completion of any project AN – May 1, Distribution List provided by the NASA FUO			
10. Remarks: The NASA Facilities Utilization Officer (FUO) requires an update to the Buildings Plan Manual to be provided 14 days after completion of any project resulting in new construction or affecting allocation or reconfiguration of space in any building, facility or structure. The timely update of square footage is required for Cost Allocation changes to occupants of space at SSC.					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title:			12. Standard DRD Number Rev. Page Date		
13. Use: To provide the NASA Facilities Utilization Officer with up to date buildings plans for allocation of space.		14. Interrelationship: Annex 3.1.1.8 Annex 3.1.1.12		15. Reference: NPR 8800.15 NPR 8820.2	
16. Preparation Information: 16.1 Scope: This Data Requirement (DR) establishes the requirement for a 1/8" floor plan of every building, facility or structure at SSC. 16.2 Applicable Documents: NPR 8800.15 and NPR 8820.2 - Inventory of existing space. 16.3 Contents: The floor plan will contain net square footage per room type (identified in NPR 8800.15), type of space per room (definition provide by NASA FUO), gross square footage per building, wall type and occupying room. 16.4 Format: Building Plan Manual to be provided on 8-1/2" x 11" paper, punched for 3 ring binder. NASA FUO To be provided with 11" x 17". 16.5 Maintenance: Update of the floor plan shall occur within 14 days of completion of projects resulting in new Construction and changes affecting space allocation or reconfiguration of space are completed. There will be a yearly submission of the Buildings Plan Manual to individuals on distribution list provided by the NASA FUO. 16.6 Exceptions/Addition to this Standard DR: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

List, Real Property Inventory

3. Operator:

RA30

4. DR Number Page Date Rev.

3-FA02, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
FA

6. Frequency of Submission:
Results of Building Inventory to be submitted 5 days after inventory has been conducted.

7. Distribution:
RA30 (1 Copy)

8. Initial Submission:
September 1

9. As of Date:
Every building to
be inventoried
every 3 years.

10. Remarks:

Real Property Inventory to consist of all collateral equipment with a value of over \$5,000.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Real Property Inventory

12. Standard DRD Number Rev. Page Date

13. Use:
To provide NASA Real Property Accountable Officer with
an inventory listing of all collateral equipment valued over
\$5,000

14. Interrelationship:
Annex 3.1.1.12

15. Reference:
NPR 8800.15

16. Preparation Information:

16.1 Scope: This Data Requirement (DR) establishes the requirement for an inventory listing of all collateral equipment with a purchase value of over \$5,000.

16.2 Applicable Documents: NPR 8800.15, NASA Form 1046 and SSC Form **728**.

16.3 Contents: Provide an inventory listing of all collateral equipment per building, structure, or facility containing manufacturer plate data, manufacturer, serial number, acquisition cost, and location.

16.4 Format: Excel spreadsheet.

16.5 Maintenance: Inventory to be conducted on each building, facility and structure every three years. Inventory of all new construction to be conducted and reported within 30 days of turnover of construction project to the Government.

16.6 Exceptions/Additions to this Standard DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Facilities by Floor Type

3. Operator:

RA30

4. DR Number Page Date Rev.

3-FA03

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

Submit on a quarterly basis

7. Distribution:

RA30 (2 Copies)

8. Initial Submission:

9. As of Date:

Initial submission shall be within 15 days following the end of the quarter.
September 30 is the end of the first quarter to be reported.

10. Remarks:

Provide 2 copies to RA30, Institutional Division, each quarter. Information may be provided electronically. Any changes to format or content shall be submitted to RA30 for approval.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Facilities by Floor Type

12. Standard DRD Number Rev. Page Date

13. Use:

Information used in compiling workload data and monitoring requirements for Custodial Services

14. Interrelationship:

Annex 3.1.1.12

15. Reference:

None

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the compilation, categorization, identification of all floor space at SSC and the submittal of information in spreadsheet format.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Comprehensive listing of all SSC Buildings, including the addition, deletion, or increase in square footage of existing buildings. All changes in square footage, both addition or deletion, shall be highlighted and quantified. See attachment, sample report, detailing both format and information to be included in the document.

16.4 FORMAT: See attachment sample report.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Profit and Loss Statement

3. Operator:

RA30

4. DR Number Page Date Rev.

4-GA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO

7. Distribution:
RA30 (1 Copy)

8. Initial Submission:
Within 5 days following the end of each month

9. As of Date:

10. Remarks:

Provide COTR with a copy of the P&L for each month

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Profit and Loss Statement

12. Standard DRD Number Rev. Page Date

4-GA01

13. Use:

To be used in the monitoring of cafeteria operations.

14. Interrelationship:

Annex 4.2.3

15. Reference:

16. Preparation Information:

16.1 This data requirement establishes the requirement for preparation of records which are essential to the operation of SSC Food Services.


16.2 Applicable Documents: None

16.3 Contents: Each report should consist of a Food Services operating statement (Sales Loss Cost of Goods and Labor) for current month and an annual cumulative value. The report should also contain data to reflect information such as customer count, catering data, food truck, etc.

16.4 Format: Letter Form 8 1/2 x 11 bond paper

16.5 Maintenance: N/A

16.6 Exceptions/Additions to this DRD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Plan, NASA Three Year Comprehensive		3. Operator:		4. DR Number Page Date Rev.	
Printing, Duplicating, Copying and Publishing Management		RA30		4-GA02, 1 of 1	
SUBMITTAL REQUIREMENTS					
5. Type: 2	6. Frequency of Submission: AN December 20 th				
7. Distribution: RA30 (1 Copy)	8. Initial Submission: 30 days following end of fiscal year				
9. As of Date: End of FY					
10. Remarks: Forms may change from year to year and will be supplied by Government					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Same			12. Standard DRD Number Rev. Page Date Same		
13. Use: Provide data for agency report to Congressional Committee on Printing		14. Interrelationship: Annex 4.5.10.1		15. Reference: NPD 1490.1G	
16. Preparation Information:					
16.1 SCOPE: This DR establishes the requirements for the preparation of a three-year printing production plan.					
16.2 APPLICABLE DOCUMENTS: NPD 1490.1G Copier Management Report					
16.3 CONTENTS: Actual printing production data for current FY and three year projection.					
16.4 FORMAT: NASA FORMS (Provided electronically by NASA Headquarters)					
16.5 MAINTENANCE: The forms and information will be reviewed and updated annually.					
16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Annual Information Reproduction Management	3. Operator: RA30	4. DR Number Page Date Rev. 4-GA03, 1 of 1
-----------------------------------------------------------------	----------------------	-----------------------------------------------

SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN December 20 th
7. Distribution: RA30 (1 Copy)	
9. As of Date: End of FY	
8. Initial Submission: 30 days following end of fiscal year	

10. Remarks:
Forms may change from year to year and will be supplied by Government.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Annual Information Reproduction Management	12. Standard DRD Number Rev. Page Date
13. Use: Provide data for agency report to the Joint Committee on Printing	14. Interrelationship: Annex 4.5.10.2
15. Reference: NPD 1490.1G	

16. Preparation Information:

16.1 **SCOPE:** This DR establishes the requirements for the preparation of a statistical report published by the Agency. The data reflects the type of SSC printing equipment and printing production units/costs for the fiscal year.

16.2 **APPLICABLE DOCUMENTS:** NPD 1490.1G

16.3 **CONTENTS:** Listing of printing equipment and production units

16.4 **FORMAT:** Complete JCP Form 1, Printing Plant Report; JCP Form 2, Commercial Printing Report; JCP Form 5, Annual Plant Inventory; JCP Form 7, Excess Equipment Disposal Report; Mission Statement; Cover letter.

16.5 **MAINTENANCE:** The forms and information will be reviewed and updated annually.

16.6 **EXCEPTIONS/ADDITIONS TO THIS STANDARD DR:** None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Copier Management

3. Operator:

RA30

4. DR Number Page Date Rev.

4-GA05, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO UR
5th day each month

7. Distribution:
RA30 (1 Copy)

8. Initial Submission:
5th day of contract award

9. As of Date:
End of month

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Copier Management

12. Standard DRD Number Rev. Page Date

4-GA05, 1 of 1

13. Use:

Data required to manage the day-to-day copier operations and pay vendor invoices.

14. Interrelationship:
Annex 4.5.10.4

15. Reference:
NPD 1490.1G

16. Preparation Information:

16.1 SCOPE: This DR establishes the collection of copier information to manage the NASA Stennis cost per copy program in accordance with the Agency agreement.

16.2 APPLICABLE DOCUMENTS: NASA Cost Per Copy Agreement

16.3 CONTENTS: Model; Serial Number; Volume Band; Building Number; Room Number; Organization; contact name; telephone; charge code; crew number; accessories; meter reading (monthly); calculation; usage analysis.

16.4 FORMAT: Microsoft Word document – coordinate data format with COTR.

16.5 MAINTENANCE: As required

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, Direct Accountability Penalty Mail and Meter	3. Operator: RA30	4. DR Number Page Date Rev. 4-LS01, 1 of 1
-------------------------------------------------------------------	----------------------	-----------------------------------------------

SUBMITTAL REQUIREMENTS

5. Type: 4	6. Frequency of Submission: Monthly – 10 th day of each month
7. Distribution: RA30 (1 Copy)	
9. As of Date: End of month	
8. Initial Submission: 10 th day of month following the start of contract	

10. Remarks:
The report shall be provided as an attachment in Microsoft Excel electronic format.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Direct Accountability Penalty Mail and Meter	12. Standard DRD Number Rev. Page Date 4-LS01
---------------------------------------------------------------------------------	--------------------------------------------------

13. Use: To provide NASA with billing information and mail distribution statistics. Data will be used for audit control, data accuracy, certification of information, and performance measurement. Data is utilized by NASA Finance in the Official Mail Accounting System.	14. Interrelationship: Annex 4.3.3.13	15. Reference:
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16. Preparation Information:

16.1 SCOPE: Provide Contractor certified financial information and mail volume and distribution data.

16.2 CONTENTS: Center name; meter number; reporting month; date; identify as Government or Contractor report; mail category; mail volume (pieces); total postage; last meter reset date; amount in dollars: 1st Class, Priority, Third/Fourth, Special Fourth, Registered, Certified, International Mail; printed PMS envelopes; penalty mail stamps; permit imprint (Contractor); Business Reply Mail; INTELPOSTT/ International Mail Postage; Grand Total. - Ascending Meter Reading (Date) (Reading) (Dollar Amount) (Supervisor Certification); Descending Meter Reading (Date) (Reading) (Dollar Amount) (Supervisor Certification); Date, meter number and dollar amount of meter refurbishment during month including receipts.

16.3 FORMAT: Microsoft Excel electronic and printed.

16.4 MAINTENANCE: Quarterly Review

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Status/Tracking Report of Print & Broadcast Media
Coverage

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:

WK
AR

7. Distribution:

One (1) copy

8. Initial Submission:

9. As of Date:

As of COB
Thursday

Monthly by 3 p.m. on the 5th of each month for the previous month's coverage
(Mod No. 105), except on government holidays, beginning with the start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Status/Tracking Report of Print & Broadcast Media Coverage

12. Standard DRD Number Rev. Page Date

4.6-MA01, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.7.7

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for the weekly submittal to PAO of a Status/Tracking Report of Print & Broadcast Media Coverage and Publications.

16.2 APPLICABLE DOCUMENTS: See sample Status/Tracking Report of Print & Broadcast Coverage and Publications.

16.3 CONTENT: This report shall contain a minimum information illustrated on the sample Status /Tracking Report of Print & Broadcast Coverage and Publications that can be found in Appendix 1 of the SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Weekly Activity Report

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA02, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:

WK

7. Distribution:

AR

One (1) copy

8. Initial Submission:

9. As of Date:

As of COB
Thursday

One (1) per week by 10:00 a.m. on Friday, except on government holidays, beginning with start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Weekly Activity Report

12. Standard DRD Number Rev. Page Date

4.6-MA02, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.8.4
Annex 4.6.11.5

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for the weekly submittal to PAO of a Weekly Activity Report, describing the Contractor's activities.

16.2 APPLICABLE DOCUMENTS: See sample Weekly Activity Report

16.3 CONTENT: This report shall contain as a minimum information illustrated on the sample Weekly Activity Report that can be found in the Appendix 1 of the SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Visitors Center Comment Card Response Card Results	3. Operator: PA00	4. DR Number Page Date Rev. 4-MA03, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: WK AR
7. Distribution: One (1) copy	
9. As of Date: As of COB Thursday	8. Initial Submission: One (1) per week by 10:00 a.m. on Friday, except on government holidays, beginning with start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Visitors Center Comment Card Response Results	12. Standard DRD Number Rev. Page Date 4-MA03, 1 of 1
13. Use: Provide to PAO	14. Interrelationship: Annex 4.6.8.3
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for the weekly submittal to PAO via the Weekly Activity Report, Visitors Center Comment Card Response results.

16.2 APPLICABLE DOCUMENTS: See sample Weekly Activity Report

16.3 CONTENT: This report shall contain as a minimum the information illustrated on the sample Weekly Activity Report and Visitors Center Comment Cards that can be found in Appendix 1 of the SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report of the Number and Description of Visitor Guests

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA04, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:

WK

7. Distribution:

AR

One (1) copy

8. Initial Submission:

9. As of Date:

One (1) per week by 10:00 a.m. on Friday, except on government holidays, beginning with start of the contract.

As of COB
Thursday

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report of Number and Description of Visitor Guests

12. Standard DRD Number Rev. Page Date

4.6-MA04, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.8.4

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for the weekly submittal to PAO via the Weekly Activity Report, Report of the Number and Description of Visitor Guests.

16.2 APPLICABLE DOCUMENTS: See sample Weekly Activity Report hat includes information regarding the number and description of the daily guests to the Visitors Center.

16.3 CONTENT: This report shall contain a minimum information illustrated on the sample of the Weekly Activity Report that can be found in Appendix 1 of the SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Offsite Information Form

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA05, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:

PE
AR

7. Distribution:

One (1) copy

8. Initial Submission:

9. As of Date:
As of last work day
Two (2) weeks
prior to event.

One (1) per event two (2) weeks prior to the actual event, except on government holidays, on the start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Offsite Information Form

12. Standard DRD Number Rev. Page Date

4-MA05, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.9.1

15. Reference:

SSC Public Affairs
Operations Manual

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for submittal to PAO, two (2) weeks before each event, an Offsite Information Form.

16.2 APPLICABLE DOCUMENTS: See sample Offsite Information Form that includes information regarding the event, materials needed, and staff personnel.

16.3 CONTENT: This report shall containing the minimum information illustrated on the sample of the Offsite Information Form that can be found in Appendix 1 of the SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Offsite Report Card

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA06, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:

PE
AR

7. Distribution:

One (1) copy

8. Initial Submission:

9. As of Date:

As of date of
Event

One (1) per event two (2) weeks prior to the actual event, except on government holidays, on the start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Offsite Report Card

12. Standard DRD Number Rev. Page Date

4-MA06, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.9.1

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for submittal to PAO, two (2) weeks before each event, an Offsite Report Card.

16.2 APPLICABLE DOCUMENTS: See sample Offsite Report Card includes information regarding the event, materials needed, and staff personnel.

16.3 CONTENT: This report shall contain the minimum information illustrated on the sample of the Offsite Report Card that can be found in Appendix 1 of the SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Offsite Exhibit Evaluation Form

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA07, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:

PE AR

7. Distribution:

One (1) copy

8. Initial Submission:

9. As of Date:

As of date of
each event

Within 72 hours following each offsite exhibit, except on government holidays, beginning the the start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Offsite Exhibit Evaluation Form

12. Standard DRD Number Rev. Page Date

4-MA07, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.9.1

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for submittal of an Offsite Evaluation Form to the offsite event organizer following each offsite exhibit.

16.2 APPLICABLE DOCUMENTS: See sample Offsite Evaluation Form.

16.3 CONTENT: This report shall contain the minimum information illustrated on the sample of the Offsite Evaluation Form that can be found in Appendix 1 of SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Footprint and Location Map of Offsite Exhibits

3. Operator:

PA00

4. DR Number Page Date Rev.

4-MA08, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:

PE
AR

7. Distribution:

One (1) copy

8. Initial Submission:

9. As of Date:
As of last work
day, two (2)
weeks prior to
event.

Two (2) weeks prior to the event, except on government holidays, beginning with the start of the contract.

10. Remarks:

Use form illustrated in Public Affairs Operations Manual (PAOM) to submit in electronic form.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Footprint and Location Map of Offsite Exhibits

12. Standard DRD Number Rev. Page Date

4.6-MA08, 1 of 1

13. Use:

Provide to PAO

14. Interrelationship:

Annex 4.6.9.1

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the need for submittal of a Footprint and Location Map of all offsite events two (2) weeks prior to each offsite exhibit.

16.2 APPLICABLE DOCUMENTS: See sample Footprint and Location Map.

16.3 CONTENT: This document shall contain the minimum information illustrated on the sample of the Footprint and Location Map that can be found in Appendix 1 of SSC Public Affairs Operations Manual (PAOM).

16.3 FORMAT: Microsoft Word.

16.4 MAINTENANCE: None

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Multimedia Production and Cost Data

3. Operator:

RA30

4. DR Number Page Date Rev.

4-MA11, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:

AN

7. Distribution:

AR

RA30
One (1) copy

October 15

8. Initial Submission:

9. As of Date:

End of the first quarter following start of the contract

COB of each
Month

10. Remarks:

Data shall be collected on monthly basis

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Multimedia Production and Cost Data

12. Standard DRD Number Rev. Page Date

4-MA11, 1 of 1

13. Use:

Statistical data required for the management of the Contract and unit and loaded cost projections. Data will be Provided to resident agencies upon the request.

14. Interrelationship:

Annex 4.5.2.3
Annex 4.5.10.3

15. Reference:

16. Preparation Information:

16.1 SCOPE: This DR establishes the contract production and cost information for government contract management.

16.2 APPLICABLE DOCUMENTS: Non

16.3 CONTENT: Number of work orders by Job Category Type (I-V), crew, benefactor, cost, base and demand, customer agency, and production code. Type I = 0.0-1.0 hours; Type II = 1.0-2.0 hours; Type III = 2.1-6.1 hours; Type IV = 6.1-16.0 hours; Type V = 16.1 or greater hours.

16.3 FORMAT: Available in Microsoft Excel electronic format and printed form.

16.4 MAINTENANCE: The information will be reviewed annually.

16.5 EXCEPTIONS/ADDITIONS TO THIS STANDARD DR: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Cleaning Schedules

3. Operator:

RA30

4. DR Number Page Date Rev.

4-SC01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

Once

7. Distribution:

RA30 (1 Copy)

8. Initial Submission:

48 hours prior to contract start date

9. As of Date:

End of month

10. Remarks:

1 copy to COTR Code RA30.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Cleaning Schedule

12. Standard DRD Number Rev. Page Date

4-SC01

13. Use:

Historical data and inspection planning.

14. Interrelationship:

Annex 4.4.3.11

15. Reference:

16. Preparation Information:

- a) Provide a schedule that identifies cleaning services to be performed, including performance requirements number.
- b) Identify where (building number), when (date), and the time of day (a.m. or p.m.) service be performed.
- c) Changes to the schedule shall be provided within 24 hours.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Grounds Maintenance History Report

3. Operator:

RA20

4. DR Number Page Date Rev.

5-DM01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

As Required

7. Distribution:

RA10 (1 copy)

8. Initial Submission:

Submit Grounds Maintenance Report to RA10 by January 31 for the period from contract commencement through December 31.

9. As of Date:

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Grounds Maintenance History Report

12. Standard DRD Number Rev. Page Date

5-DM01

13. Use:

Quantify work content for future contracts.

14. Interrelationship:

Annex 5.8.5.4

15. Reference:

16. Preparation Information:

16.1 SCOPE: Maintenance History

16.2 APPLICABLE DOCUMENT:

16.3 CONTENT: Description, location, date and quantity (SF, LF, EA, etc-as appropriate) for the following: Emergency clean-up (5.8.5.3.2), Special Events (5.8.5.3.4), Landscaped areas (5.8.5.4.7), erosion control (5.8.5.4.6), grass planting and sodding (5.8.5.4.9), pest infestation treatments (5.8.6.2.2.2), carcass disposal (5.8.7.5).

- a. Spares identification and control.
- b. Specification control.
- c. Technical documentation control

16.4 FORMAT: The plan shall be prepared in book form on 8 ½" x 11" paper with appropriate cover and binding.

16.5 MAINTENANCE: Plan shall be reviewed quarterly and RA00 advised as to requirement for updating.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: BMAR database, Annual Work Plan and
5Year Plan - Test Complex

3. Operator:
RA20

4. DR Number Page Date Rev.
5-FA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:
Annually prior to March 1 of each year

7. Distribution:
RA10 (1 copy)

8. Initial Submission:
Prior to March 1, 20XX

9. As of Date:

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:
BMAR database, Annual Work Plan and Five Year Plan - Test Complex

12. Standard DRD Number Rev. Page Date

13. Use:
Provides data to NASA on the existing condition of
Test Complex facilities, structures, utilities and associated
equipment. Provides backlog of maintenance and repair
costs required by Headquarters.

14. Interrelationship:
Annex 5.7.5.1

15. Reference:

Annual and five year plans allow NASA to project budget
needs and establish the coming years main priorities.

16. Preparation Information:

BMAR database shall be in an electronic spreadsheet format consistent with SSC site standards. The submittal shall contain all the fields shown in Exhibit 7.

The annual and five year plans shall be in the same format as the BMAR database. The annual plan shall be in rank order - the first project having the highest priority, etc. The five year plan is the BMAR database sorted by fiscal year required and in rank order.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: List, Preventive Maintenance Document	3. Operator: RA20	4. DR Number Page Date Rev. 5-FA02, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: MO
7. Distribution: DA00 (1 copy) RA10 (2 copies)	
9. As of Date: 28, 30, 31/10	
8. Initial Submission: Submit on the 10 th after full month from contract start	

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: List, Preventative Maintenance Document	12. Standard DRD Number Rev. Page Date 5-FA02
13. Use: To document Preventive Maintenance.	14. Interrelationship: Annex 5.2.2.5.1 Annex 5.2.2.5.2 Annex 5.2.2.5.3
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the development and submittal of PM documentation related to Utilities equipment & systems defined in contract.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Submittals shall include: 1. A listing of Maintenance Task Sheets (MTS) performed and the date accomplished. The list shall be sorted by the line items listed in Annex 5.2 under line item 5.2.2.2 "Accomplish Utility PM" in contract.

2. A listing of MTS deferred, sorted as in 1, above, including the scheduled date, rescheduled date, and cause for nonperformance. MTS that cannot be accomplished within the initial or subsequent scheduled windows shall be coded in accordance with Table 5.2-1.

3. A listing of MTS that will not be accomplished. Sort as in 1. Above. Code in accordance with Table 5.2-1. Code "CC" requires that corrective measures to prevent reoccurrence, be given.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheet shall provide Title and Date.

16.5 MAINTENANCE: None

16.6 EXCEPTION/ADDITION TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Facility Inspection Plan and Schedule

3. Operator:

RA20

4. DR Number Page Date Rev.

5-FA03, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

7. Distribution:

RA00
(2 copies of the
Inspection Plan
1 copy of each
schedule)

Schedule - annually and 5 days prior to a change in the schedule

8. Initial Submission:

Within 60 days of contract award

9. As of Date:

10. Remarks:

Submit 3 copies to RA00 which includes 2 copies of the Inspection Plan and 1 copy of each schedule.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Facility Inspection Plan and Schedule

12. Standard DRD Number Rev. Page Date

13. Use:

The Inspection Plan provides assurance that inspections are comprehensive and standardized.

The schedule provides assurance that all structures, facilities, utilities and associated hardware, attachments, and equipment will be inspected and in a timely manner.

14. Interrelationship:

Annex 5.7.4
Annex 5.7.3.2

15. Reference:

None

16. Preparation Information:

The plan shall be the contractors format. It shall contain specific inspection criteria, in the form of checklists, for all structures, facilities, utilities and associated hardware, attachments and equipment. Each inspection checklist shall have a unique number (e.g., the inspection checklist for built-up roofs, roads, interior finishes).

The schedule shall be the contractors format and include at a minimum the following information:
Facility ID (per real property records), common nomenclature, location, inspection checklist number, inspection date.



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Plan, Preventive Maintenance	3. Operator: RA20	4. DR Number Page Date Rev. 5-FA04 , 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: As Required
7. Distribution: RA10 (4 copies)	
9. As of Date: September 15	
8. Initial Submission: Initial Submission within 90 days of contract start date	

10. Remarks:
Plan requires CO concurrence. Plan shall cover Fiscal Year Period, October 1-September 30.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Plan, Preventative Maintenance	12. Standard DRD Number Rev. Page Date 5-FA04
13. Use: Forecast operations for the following year.	14. Interrelationship: Annex 5.2.1.6 Annex 5.2.2.1.1 Annex 5.2.2.2.6
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for development and submittal of an annual Maintenance Plan.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Subject report shall provide the following:

- a. Detail instructions on how the contractor plans to perform all required PM tasks (to meet both MTS and Availability Requirements)
- b. Detailed plans in regard to methods which will be used by technicians in order to complete maintenance and operations in a safe, timely and quality manner. Any maintenance instructions or procedures required for completion of work shall be included as part of the original plan. Note: Simple Tasks may not require additional instructions/procedures.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheet shall provide Title, Date and Fiscal Year of Plan. Documents and sections shall be indexed.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Plan, Utility Process

3. Operator:

RA20

4. DR Number Page Date Rev.

5-FA05, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
PE

7. Distribution:
RA10 (4 copies)

8. Initial Submission:
Submit for RA10 concurrence within 5 working days prior to performance of process.

9. As of Date:

N/A

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Plan, Utility Process

12. Standard DRD Number Rev. Page Date

5-FA05

13. Use:

Document Utility Processes

14. Interrelationship:

Annex 5.4.1.3

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the development and submittal of Utility Process Plans (UPP) for one-time operations on utilities.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Subject submittals shall provide step-by-step instructions that establish responsibility and control system configuration changes. Instruction shall include procedures which minimize risk and provide for contingency and point of contact as applicable to the procedure being performed.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheets shall provide Title and Date.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
	Rev 2

2. Title:

Report, Fuel Forecast (Annual)

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA01, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
Annual

7. Distribution:
RA20 (3 copies)

8. Initial Submission:
*

9. As of Date:
*

10. Remarks:

*Report will be submitted by COB 8/30 for the ordering period of April 1 through the following March 31 and Duplicated as of February 28. Deliver three copies to RA20 Transportation Officer.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Fuel Forecast (Annual)

12. Standard DRD Number Rev. Page Date

5-GA01

13. Use:

To provide necessary inputs enabling coordination with the Defense Fuel Supply Center

14. Interrelationship:
Annex 5.4.3.4.2.1

15. Reference:
Monthly Utilization and Receipt Report

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the preparation of an annual forecast of fuel for SSC consumption.

16.2 APPLICABLE DOCUMENTS: DCA Form 558

16.3 CONTENTS: This forecast report shall reflect anticipated consumption of fuels for a one-year period. The report shall be in monthly increments. Reporting periods shall be from April 1 through March 31 of the following year, with an updated forecast submitted in February picking up the next 12-month period.

16.4 FORMAT: NASA Form 558

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
	Rev 2

2. Title: Report, Energy Management Control System (EMCS) Status	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA02, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: As Required.
7. Distribution: RA10 (1 copy) RA30 (1 copy)	
9. As of Date: 28, 30, 31/10	
8. Initial Submission: September 10, 20XX	

10. Remarks:
Contractor to submit monthly report showing number of pertinent alarms and system failures in the utilities, Facilities and equipment.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, EMCS Status	12. Standard DRD Number Rev. Page Date
13. Use: To provide NASA with utility, facility and equipment status	14. Interrelationship: Annex 5.4.3.4.2.2
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement provides information on the status of the Energy Management Control System and of SSC Utilities, Facilities and Equipment.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: The report shall show the following:

- A. Type and number of significant central station hardware failures
- B. Number of significant alarms recognized by the EMCS, how many were nuisance, how many were corrected by the EMCS operator, and how many necessitated the dispatch of a technician.
- C. Number of EMCS instrumentation and HVAC trouble calls to the EMCS, how many were corrected by the EMCS operator, and how many necessitated the dispatch of a technician.
- D. EMCS Host generated Failed Points Listing.
- E. Listing of all open Work Orders (for EMCS repairs) and all work orders closed out during the reporting period. Data shall include building location, priority, status, date received and work description.
- F. Listing of all significant activities involving chillers and boilers. Shall include recurring equipment resets (more than 2 resets within 7 days, or more than 4 resets within 30 days), failed equipment, equipment repairs, scheduled outages, or other significant equipment concerns.

16.4 FORMAT: 8 x 10 sheets

MAINTENANCE: N/A

EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue
Rev 2

2. Title:

Report, Fuel Receipt (Monthly)

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA03 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO

7. Distribution:
RA20 (1 copy)

8. Initial Submission:
September 5, 20XX

9. As of Date:
28, 30 31/5

10. Remarks:

Report shall cover the first through the last day of the month. Deliver one copy to RA20 Transportation Officer, by the fifth work day of the following month.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Fuel Receipt (Monthly)

12. Standard DRD Number Rev. Page Date

13. Use:
To provide a complete summary of all fuels received each month.

14. Interrelationship:
Annex 5.4.3.4.2.3

15. Reference:
Receiving reports and monthly vendor billings (DD 250's where applicable) Annual Forecast

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the product - gasoline, diesel, fuel, propane, or other fuels - actually received.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Report will reflect the product shipper's numbers, date received, exact quantity, SSC Order No., vendor delivery vehicle number and other appropriate remarks.

16.4 FORMAT:

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



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DATA REQUIREMENT (DR)

Data Procurement

1. Number	Issue
	Rev 2

2. Title: Report, Fuel Utilization	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA04, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: MO
7. Distribution: RA10 (1 copy) RA20 (1 copy)	
9. As of Date: 28, 30, 31/5	8. Initial Submission: September 5, 20XX

10. Remarks:
This report must be submitted NLT the fifth work day of the month for the preceding month. Deliver original

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Fuel Utilization	12. Standard DRD Number Rev. Page Date 5-GA04	
13. Use: To provide basic usage data of all fuels for NASA/SSC	14. Interrelationship: Annex 5.4.3.4.2.4	15. Reference: Annual Forecast of Fuels

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the preparation of a fuel utilization report on a monthly basis.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Subject report shall begin with the opening inventory as of the first day of the month for each product - gasoline, diesel fuel, and propane. (Other fuels may be added) The report shall show the closing for each product. The report shall break out transactions by individual vehicle identification, by vehicle class, by customer, by building delivery location as applicable to the method of fuel consumption.

16.4 FORMAT: 8 ½" x 11" paper.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, UST/AGST Inventory Database

3. Operator:

RA02

4. DR Number Page Date Rev.

5-GA05, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

2

6. Frequency of Submission:

AN

7. Distribution:

RA02 (1 copy)

8. Initial Submission:

January 15, 20XX

9. As of Date:

COB/ Jan 15

10. Remarks:

Submit electronic notification letter to RA02 Environmental Officer when report is completed. DRD will not be considered complete without the SSC Official File Number followed the placement on the FOS Shared Drive for NASA review.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

UST/AGST Inventory Database Report

12. Standard DRD Number Rev. Page Date

5-GA05

13. Use:

Maintain a database of all underground and aboveground storage tanks that shall be forwarded to the Government and MDEQ. Official File Number 8538.15.F.2, AFT, UST, Tank System & Maintenance Record, 8538.15F, AST, UST Inventory.

14. Interrelationship:

Annex 5.4.3.6

15. Reference:

SPR 8500.2
MDEQ UST Regulations
Resource Conservation
And Recovery Act
(RCRA), 1984,
40 CFR 280

16. Preparation Information:

16.1 SCOPE: This Data Requirement (Dr0 establishes the requirement for submittal of a report for any changes to SSC's underground storage tank systems or its aboveground storage tank systems. Additionally, all alarm notification should be referenced along with corrective actions taken or maintenance activities taken to a normal status, integrity test results, and other means of UST monitoring.

16.2 APPLICABLE DOCUMENT: N/A

16.3 CONTENTS: This report summarizes the location of tanks, number of tanks present, product stored, capacity, construction material, piping material, location of construction drawings and specifications, year installed, presence of monitoring wells and status. Any changes in the number of status of UST/AGST at SSC should be updated within 60 days of change. All alarm notifications should be addressed, the corrective action taken or maintenance efforts taken to restore to normal operations, monitoring activities, and integrity test results.

16.4 FORMAT: 8 ½" x 11" paper and stored electronically in a database on the FOSC Shared Drive that is accessible by NASA personnel.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement

1. Number	Issue
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2. Title: Report, HVAC Water Treatment	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA06 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: QU
7. Distribution: RA10 (1 copy)	
9. As of Date: 10/15	
8. Initial Submission: January 10, following award of contract.	

10. Remarks:
Initial report shall cover October 1 through December 31. Subsequent reports shall be provided on the 10th of the month following each quarter.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, HVAC Water Treatment	12. Standard DRD Number Rev. Page Date 5-GA06	
13. Use: To provide summary of water treatment of HVAC systems.	14. Interrelationship: Annex 5.4.4.2.2.5	15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement provides complete reporting on HVAC Water Treatment.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Report chemical concentrations and sampling results from all condenser water, chilled water and heating water systems. Shall include chemical concentrations of corrosion inhibitors, biocides, algaecides, etc. Shall include monthly average corrosion rates for all condenser water systems. Shall also include all recommendations and conclusions for discrepancies.

16.4 FORMAT: 8 ½" x 11" Paper.

16.5 MAINTENANCE: Keep records 12 months.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: N/A



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

NASA Refrigerant Inventory

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA07, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
RA10 (1 copy)
RA00 (1 copy)

8. Initial Submission:
October 30 following award of contract.

9. As of Date:
Oct. 30

10. Remarks:

Initial submittal shall include inventory taken at start of contract. Following initial submittal, annual submittals shall be due on October 10.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

NASA Refrigerant Inventory

12. Standard DRD Number Rev. Page Date

13. Use:
To provide a report on the inventory of NASA owned refrigerants. Will be used to audit compliance with requirements established for refrigerant use.

14. Interrelationship:
Annex 5.4.4.2.2.6

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement provides for reporting the inventory of NASA owned refrigerants.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Report shall include refrigerant quantities at start and end of Fiscal Year. Quantities shall be presented by refrigerant type, storage bottle number and storage location (bldg. and room no.).

16.4 FORMAT: 8 ½" x 11" Paper.

16.5 MAINTENANCE: Keep records 36onths.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: N/A



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

List, Availability Documentation

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA08, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
MO

7. Distribution:

DA00 (1 copy)
RA10 (2 copies)

8. Initial Submission:

Submit on the 10th after full month from contract start

9. As of Date:

28, 30, 31/10

10. Remarks:

Annex 5.5 defines Availability Requirements
Table 5.5-4 lists the Availability Units for which availability must be reported.
Table 5.5-5 gives the allowable occurrences of unavailability.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

List, Availability Documentation

12. Standard DRD Number Rev. Page Date

5-GA08

13. Use:

To document loss for availability for utility system

14. Interrelationship:

Annex 5.5.2

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the development and submittal of Availability Documentation related to Utilities Equipment & Systems defined in contract.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Submittals shall include: A listing of malfunction and unavailability occurrences for each Availability Unit given in Table 5.5-1. This will be a running total of Utility malfunction and unavailability per Availability Unit during the contractor year. It shall include pertinent data such as date and time Units are unavailable, individuals who were contacted, and details concerning the reason and duration of the unavailability. The listing shall highlight and distinguish units that have exceeded the allowable occurrences established in Table 5.5-3, and shall present a plan to reduce future Availability Losses for the systems/equipment which have unacceptable Availability Losses.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheets provide Title and Date.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Procedures, Standard Operating Procedures
and Operation Manuals

3. Operator:
RA20

4. DR Number Page Date Rev.
5-GA09, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
As Required

7. Distribution:
RA10 (4 copies)

8. Initial Submission:
Submit for RA10 concurrence within 90 days of contract start date.

9. As of Date:
N/A

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:
Procedures, Standard Operating Procedures and Operation Manuals

12. Standard DRD Number Rev. Page Date
5-GA09

13. Use:
Document Operating Procedures

14. Interrelationship:
Annex 5..4.1.3
5.4.3.1.3.1, 5.4.3.2.3.1
5.4.3.3.3.1
5.4.3.4.3.1, 5.4.3.4.3.2
5.4.3.5.3.3, 5.4.4.2.3.1

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the development and submittal of Stand Operating Procedures (SOP) and Operation Manuals.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: Submittals shall include:

- a. Any instructions required to operate utility systems for activities which commonly occur, including detailed step-by-step instructions.
- b. Any necessary instructions/manuals required to provide operator instructions for day-to-day and reoccurring operational utility activities.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheets shall provide Title, Date and Revision of each SOP or Operation Manual.

16.5 MAINTENANCE: Submit revisions to Operation Manuals within 30 days of operational modification. Any new SOP shall be submitted a minimum of 3 work days prior to the execution of the procedure.

16.6 EXCEPTIONS/ADDITION TO THIS STANDARD DRD: None



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Plan, Utilities Operations	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA10, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission:
7. Distribution: RA10 (4 Copies)	
9. As of Date: September 15	
8. Initial Submission: Initial Submission within 60 days of contract start date	

10. Remarks:
Plan requires CO concurrence. Plan shall cover Fiscal Year Period, October 1-September 30.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:	12. Standard DRD Number Rev. Page Date
13. Use: Forecast operations for the following year	14. Interrelationship: Annex 5.4.1.5 Annex 5.4.2.4.1
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for development and submittal of an annual Operational Plan.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Subject report shall provide the following:

- a. Detailed instructions on how the contractor plans to perform all required Operations (to meet Annex 5.5 and Availability Requirements)
- b. Detailed plans in regard to methods which will be used by technicians in order to complete maintenance and operations in a safe, timely and quality manner. Any instructions or procedures required for completion of work shall be included as part of the original plan.
- c. Details addressing specific procedures, training, etc. which will be used to ensure that personnel requirements are continuously met. The plan shall address issues such as start-up/transition, attrition, contingency plans, etc.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheet shall provide Title, Date and Fiscal Year of Plan. Documents and sections shall be indexed.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Marine Operations Plan	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA11, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 3	6. Frequency of Submission: AN
7. Distribution: RA10 (4 Copies)	
9. As of Date: September 15	
8. Initial Submission: Initial Submission within 60 days of contract start date	

10. Remarks:
Plan requires RA10 concurrence. Plan shall cover Fiscal Year Period, October 1-September 30.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Marine Operations Plan	12. Standard DRD Number Rev. Page Date 5-GA11
13. Use: Forecast operations for the following year	14. Interrelationship: Annex 5.4.5.1
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for development and submittal of a Marine Operational Plan.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Subject report shall provide the following:

- a. Detail instructions on how the contractor plans to perform all required Operations (to meet Annex 5.5 and Availability Requirements)
- b. Detailed plans in regard to methods which will be used by technicians in order to complete maintenance and operations in a safe, timely and quality manner. Any instructions or procedures required for completion of work shall be included as part of the original plan.
- c. Details addressing specific procedures, training, etc. which will be used to ensure that personnel requirements are continuously met. The plan shall address issues such as start-up/transition, attrition, contingency plans, etc.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheet shall provide Title, Date and Fiscal Year of Plan. Documents and sections shall be indexed.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Refuse Pickup Schedule

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA12, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
2

6. Frequency of Submission:
MO

7. Distribution:
RA10 (1 Copy)
RA00 (1 Copy)

8. Initial Submission:
January 31, 20XX

9. As of Date:
COB/Jan 31 thru
Dec 31

10. Remarks:

One copy to be submitted to RA10 Technical Operations Office and one copy to the RA00 Environmental Officer. The DRD will not be considered without the following: 1) Cover letter of transmittal to the NASA Environmental Officer. 2) SSC Official File Number and copy ready to be filed in SSC Official Environmental Files.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Refuse Pickup Schedule

12. Standard DRD Number Rev. Page Date

13. Use:
Provide the Government with a copy of the initial Refuse Schedule and submit a monthly update of the schedule. If there is not change from a prior month that should be noted in a cover letter to the Government.

Official File Number 8800.12.B

14. Interrelationship:
Annex 5.4.6.1.1

15. Reference:
SCWI-8500-0004
Environmental Resource Document
Resource Conservation and Recovery Act (RCRA)
Mississippi Non-Hazardous Solid Waste Management Plan

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement for the submission and monthly updates of the refuse pickup schedule.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: This report should include the location of the pickups by building number and name, day of the scheduled pickup and the state the size of the refuse container.

16.4 FORMAT: 8 ½" x 11" paper or as otherwise specified by NASA.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
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John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, Solid Waste Disposal	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA13 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: MO AN (Contour maps & other pertinent information listed in Section 16.1)
7. Distribution: RA10 (1 Copy) RA02 (1 Copy)	
9. As of Date: COB/Jan 31 thru Dec 21	8. Initial Submission: January 31, 20XX December 15, 20XX (Contour Maps and other information for the rubbish & Class I Landfill).

10. Remarks:
One copy to be submitted to RA10 Technical Operations Office and one copy to the RA02 Environmental Officer. The DRD will not be considered without the following: 1) Cover letter of transmittal to the NASA Environmental Officer. 2) SSC Official File Number and copy ready to be filed in SSC Official Environmental Files.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Solid Waste Disposal	12. Standard DRD Number Rev. Page Date 5-GA13	
13. Use: Provide the Government with a monthly report of the quantities of waste handled at the SSC Class A Landfill. This report should also include the quantity of waste disposed of at the Rubbish site.	14. Interrelationship: Annex 5.4.6.2.3	15. Reference: SCWI-8500-0004 Environmental Resource Document Resource Conservation and Recovery Act (RCRA) Mississippi Non-Hazardous Solid Waste Management Plan

16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement for the submission and monthly report of the solid waste placed in the Class A Landfill and the permitted Rubbish site. This DR also establishes the requirement to compare current year data/maps to the previous year and calculate the quantity of waste placed in the landfill. The remaining capacity in terms of acres, cubic yards and years of remaining life should be provided based on the current map. This information should be as close to the end of the calendar year as possible.

16.2 APPLICABLE DOCUMENT: None

16.3 CONTENTS: This report will reflect the weekly activities at the Class A Landfill and the permitted Rubbish site. The report should state the quantity (in tons) of waste handled at the Specific Landfill Cell and the rubbish site. At the end of each week, a total quantity should be shown on the report and an average tonnage per week should be identified on the monthly report. Copies of the operator's signed log sheets and any other pertinent disposal paperwork must be submitted with the monthly report. The information for the contour map, current quantity of waste disposed, remaining life of the both landfills as specified in 16.1 is an annual requirement.

16.4 FORMAT: 8 ½" x 11" paper or as otherwise specified by NASA.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Operations Plan for Test Complex

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA15 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
As Required

7. Distribution:
RA10 (4 copies)

8. Initial Submission:
Initial Submission within 60 days of contract start date

9. As of Date:
September 15

10. Remarks:

Plan requires RA10 concurrence. Plan shall cover Fiscal Year Period, October 1-September 30.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Operations Plan for Test Complex

12. Standard DRD Number Rev. Page Date

5-GA15

13. Use:

Forecast operations for the following year

14. Interrelationship:

Annex 5.6.1.6

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for development and submittal of an annual Operational Plan.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Subject report shall provide the following:

- a. Detail instructions on how the contractor plans to perform all required Operations (to meet Annex 5.5 and Availability Requirements)
- b. Detailed plans in regard to methods which will be used by technicians in order to complete maintenance and operations in a safe, timely and quality manner. Any instructions or procedures required for completion of work shall be included as part of the original plan.
- c. Details addressing specific procedures, training, etc. which will be used to ensure that personnel requirements are continuously met. The plan shall address issues such as start-up/transition, attrition, contingency plans, etc.

16.4 FORMAT: 8 ½" x 11" Bond Paper. Cover sheet shall provide Title, Date and Fiscal Year of Plan. Documents and sections shall be indexed.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None

SSC-166 (10/96) (Ms Word 6.0) C.G. (10/96) pc



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Env & Econ Practices on Fed Landscape

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA16 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:
As required

7. Distribution:

RA10 (1 copy of
plan)

8. Initial Submission:

15 days prior to contract commencement submit the Grounds Maintenance Plan, and the first monthly work plan.

9. As of Date:

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Env & Econ Practices on Fed Landscapes

12. Standard DRD Number Rev. Page Date

5-GA16

13. Use:

The Grounds Maintenance Plan, work plan and monthly work plans will be used to monitor contractor progress and quality of work.

14. Interrelationship:

Annex 5.8.4.1

15. Reference:

Exec Memo
4/26/94 "Enviro and
Economically Beneficial
Practices on Fed.
Landscape

16. Preparation Information:

16.1 Maintenance Plan

16.1.a Format: Contractor determined.

16.1.b Content: The contractor shall provide a Maintenance Plan that discusses methods and procedures used in the performance of this contract. The plan shall also address item 5.8 of the specification.

16.2 Work Plan and Updated Monthly Work Plan

16.2.a Format: Computerized schedule compatible with Microsoft Project

16.2.b Content: The work plan shall itemize all required work in item 5.8 by month. The monthly work plan shall provide an updated, detailed schedule of grounds maintenance work and an updated list of the previous months work showing: scheduled work accomplished, scheduled work not accomplished, rescheduled work, and non-scheduled work accomplished.

16.3 Maintenance: Revisions are required within 30 days of receipt of applicable contract modifications. Revisions to the Grounds Maintenance Plan are required if methods and procedures are changed.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Integrated Pest Mgt Plan and Work Schedules

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA17 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

As Required

7. Distribution:

1 copy of each
plan or schedule
to RA10

8. Initial Submission:

15 Days prior to contract commencement submit the Integrated Pest Management Plan, annual inspection schedule (from contract commencement through December 31 of current year) and the first monthly treatment schedule.

9. As of Date:

10. Remarks:

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

12. Standard DRD Number Rev. Page Date

13. Use:

The Integrated Pest Management Plan, inspection schedule and monthly treatment schedule will be used to monitor contract performance.

14. Interrelationship:

Annex 5.8.4.2

15. Reference:

16. Preparation Information:

16.1 Integrated Pest Management Plan

16.1.a Format: Contractor determined

16.1.b Content: The contractor shall provide an Integrated Pest Management Plan that discusses methods and procedures used in the performance of this contract. The plan shall address items 5.8.4.2 and 5.8.6 of the specification.

16.2 Annual Inspection and Monthly Treatment Schedules

16.2.a Format: Computerized schedules compatible with Microsoft Project

16.2.b Content: The annual inspection schedule shall itemize all inspections by month. The monthly treatment schedule shall provide a detailed schedule of known treatment work, and an updated list of the previous months work showing: scheduled work accomplished, scheduled work not accomplished, rescheduled work, and non-scheduled work accomplished.

16.3 Maintenance: Revisions are required within 30 days of receipt of applicable contract modifications. Revisions to the Grounds Maintenance Plan are required if methods and procedures are changed.



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Energy Consumption and Cost Reports

3. Operator:

RA02

4. DR Number Page Date Rev.

5-GA18, 1 of 2

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
Monthly, Quarterly, Annually, as required - See Block 16 for more information.

7. Distribution:
Original

8. Initial Submission:
Due as described in Block 16.

9. As of Date:

10. Remarks:

Submit reports in electronic format to NASA Energy Program Manager, NASA Energy Resources Coordinator and NASA Finance as required.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Energy Consumption and Cost Reports

12. Standard DRD Number Rev. Page Date

13. Use:
Provide necessary information for management of energy resources and for reporting metrics to NASA HQ via the NASA Environmental Tracking System (NETS).

14. Interrelationship:
Annex 5.4.10.2
Annex 5.4.5.4.5

15. Reference:
NETS

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for preparation of energy consumption and cost reports. These reports shall be prepared and submitted at frequencies described below in Paragraph 16.3, and include consumption and cost data on electricity, natural gas, diesel fuel, and propane/butane consumed by individual users. Sources of data to be utilized in these reports include energy meters and estimates of consumption based upon assigned floor space.

16.2 APPLICABLE DOCUMENTS: None.

16.3 CONTENTS:

Monthly Reports:

1. SSC Total Electric Meter Reading (information required to certify Electric invoice, due on the 15th of each month).
2. SSC Monthly Electric Invoice Disbursement by Agency (Due 3 days after certification of Electric invoice).
3. SSC Total Natural Gas Meter Reading (information required to certify Natural Gas invoice, due on the 25th of each month).
4. SSC Monthly Natural Gas Invoice Disbursement by Agency (Due 3 Days after certification of Natural Gas Invoice).

Quarterly Reports:

1. Utilities and Transportation Consumption and Cost Report via NASA Environmental Tracking System (NETS) (Due each calendar quarter as required by NETS.)

Annual Reports:

1. Annual NASA Utilities Consumption Back to Base Year FY 1985. (Due 30 days after the end of the fiscal year).



National Aeronautics and
Space Administration
John C. Stennis Space Center

**DATA REQUIREMENT (DR)
Continuation Sheet**

Data Procurement Document

1. Number Issue

2. Title:

Energy Consumption and Cost Report

3. Operator:

RA02

4. DR Number Page Date Rev.

5-GA18 2 of 2

DATA REQUIREMENT DESCRIPTION - CONTINUATION

11. Standard DRD Title:

Energy Consumption and Cost Report

12. Standard DRD Number Rev. Page Date

16. Preparation Information:

16.3 CONTENTS: (Cont'd)

- 2. Breakout and Graph of Utilities for NASA/SSC. (Due 30 days after the end of the fiscal year.)
- 3. Annual Report via NASA Environmental Tracking System (NETS). (Due each fiscal year as required by NETS).

4. Reports due "As Requested":

- a. Electric History Report by Building
- b. Gas History Report by Building
- c. Consolidated Electric Energy Report
- d. Consolidated Gas Energy Report
- e. Comparison of Utilities Report
- f. Energy Consumption and Cost Comparison Report – NASA Programs, NASA ROS, NASA PMS, NASA Contractors, Resident Agencies, and MSAAP
- g. Other reports as required by the SSC Energy Program Manager

16.4 FORMAT: Itemized columnar entries on 8 1/2" x 11" paper. Note - use existing report formats.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Master Maintenance Schedule Data Input

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA19, 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
Prior to 7:00am each work day.

7. Distribution:
Master Scheduling
Office

8. Initial Submission:
Prior to 7:00 a.m. each work day

9. As of Date:
N/A

10. Remarks:

Inputs are usually made in handwritten or database format at a 7:00 a.m. scheduling meeting. Inputs can be made on the previous day but changes may have to be made at the scheduling meeting due to testing schedule changes. Inputs are to include anticipated work for PM, CM, Maintenance Projects, Grounds Care, and other maintenance and construction activities. Weekly inputs with daily updates are preferred.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Master Maintenance Schedule Data Input

12. Standard DRD Number Rev. Page Date

13. Use:
This information will be used to determine what work is to be accomplished each day in the various test complexes and to level load work content. This information will also be used to assure effective access control such that testing will not be adversely affected by maintenance and construction work.

14. Interrelationship:
Annex 5.6.1.8

15. Reference:

16. Preparation Information:

16.1 SCOPE:

16.2 APPLICABLE DOCUMENTS:

16.3 CONTENTS: All maintenance and construction activities scheduled for actual work in any test complex Including subcontract work, COF, and Vendor Access.

16.4 FORMAT:

16.5 MAINTENANCE: Revisions each day are acceptable for access restrictions, NASA directed reprioritization That affects labor availability, Program Office reprioritization, and Operational reprioritization.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD:



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Report, Pesticide Usage	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA21 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: AN
7. Distribution: RA02 (1 copy)	
9. As of Date: COB/Jan 31	8. Initial Submission: January 31, 20XX

10. Remarks:
1 copy to be submitted to RA02 Environmental Officer. The DRD will not be considered complete without the following: 1) Cover letter of transmittal to the NASA Environmental Officer. 2) SSC Official File Number and copy ready to be filed in SSC Official Environmental Files.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Report, Pesticide Usage	12. Standard DRD Number Rev. Page Date
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13. Use: Provide the Government with a copy of the Material Safety Data Sheet (MSDS) of new pesticides to be utilized utilized at the facility at least 15 days prior to its use at SSC. Provide the government with an annual report of all pesticides utilized during the previous year at SSC.	14. Interrelationship: Annex 5.8.4.3	15. Reference: Mississippi's Pesticide Application Law of 1975 and Mississippi Code 1972, Sections 69-19-1 and 69-23-109. Rule 1, 2, 3 Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Public Law (PL) 92-516
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16. Preparation Information:

16.1 SCOPE: This Data Requirement (DR) establishes the requirement for the annual submission of the Pesticide Usage Report.

16.2 APPLICABLE: None

16.3 CONTENTS: This report should include the name of the pesticide used, concentration applied, form of application, dilution rate used, active ingredients, EPA registration #, target pest, purpose of application, quantity of active ingredient per area, method of application, equipment, # of applications, # of sites or buildings, description of areas, month and year of application, State of application, areas to avoid, areas to be treated with caution, use of certified personnel for treatment, are other pesticides used in the same location or area, is the area monitored during and after treatment and is the treatment coordinated with state, local or federal agencies.

16.4 FORMAT: 8 ½" x 11" paper utilizing the attached Federal Working Group on Pest Management form.

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Plan, Energy Management

3. Operator:

RA02

4. DR Number Page Date Rev.

5-GA22 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
RA10 (4copies)

8. Initial Submission:
Initial submission within 60 days of contract start date.

9. As of Date:
September 15

10. Remarks:
Plan requires CO concurrence.
Plan shall cover fiscal year period October 1 - September 30

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Plan, Energy Management

12. Standard DRD Number Rev. Page Date

13. Use:
Manage energy use to meet goals and regulations

14. Interrelationship:
Annex 5.4.10.1

15. Reference:
Energy Policy Act of
2005; Executive Orders
12759 & 13101,13123,
13149, and 13221.
10 CFR 435 & 436

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for development and submittal of an Energy Management Plan.

16.2 APPLICABLE DOCUMENTS: None

15.3 CONTENTS:

a. Detailed plans on how the Contractor will meet the goals established by the Energy Policy Act of 2005 (EPACT 2005), as amended and Executive Orders 12759, 13101, 13123, 13149, and 13221.

b. Detailed instructions on how the Contractor will implement the "SSC Utilities Energy Consumption and Cost Allocation Procedures"

c. Description of how the Contractor will achieve energy management for all Statement of Work requirements.

16.4 FORMAT: 8 ½" x 11" bond paper. Cover sheet shall provide title, date and fiscal year.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Maintenance History

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA23 1 of 1

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:

7. Distribution:
RA10 (1 Copy)

8. Initial Submission:
October 15

9. As of Date:
October 15

10. Remarks:

The Contractor shall provide this report by October 15 each year for the previous fiscal year. The data in report shall be updated monthly and be available for NASA review as requested.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Maintenance History

12. Standard DRD Number Rev. Page Date

13. Use:
Forecasting Maintenance

14. Interrelationship:
Annex 5.4.7.11

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for development and submittal of maintenance history data.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Tables 5.4-2 and 5.4-3 provide the format and give the minimum content required. The data shall contain information on all trouble calls and maintenance work orders.

16.4 FORMAT: The format is given in tables 5.4-2 and 5.4-3.

16.5 MAINTENANCE: None

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Report, Critical System Breakdown

3. Operator:

RA20

4. DR Number Page Date Rev.

5-GA24

1 of 1

SUBMITTAL REQUIREMENTS

5. Type:

3

6. Frequency of Submission:

PD

7. Distribution:

RA10 (1 copy)

QA00 (1 copy)

VA00 (1copy)

8. Initial Submission:

Within 2 working hours of each occurrence by an electronic means to RA10 Technical Manager.

9. As of Date:

10. Remarks:

Submit one copy of each report to RA10 and one copy to QA00. Submit one copy to VA00 only on test failures of 13.8 k.V. systems.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Critical System Breakdown

12. Standard DRD Number Rev. Page Date

13. Use:

To provide report failures to:

- a. Utility Systems
- b. Collateral Equipment with a value of \$500 or more
- c. Test Related Failures

14. Interrelationship:

Annex 5.3.3.8

15. Reference:

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the submittal of Critical System Breakdown reports.

16.2 APPLICABLE DOCUMENT: Critical System/Equipment Breakdown Report

16.3 CONTENTS:

- a. Identification of failed part; on component.
- b. System in which used, and circuit(s) affected.
- c. Local time and date of incident.
- d. Brief description of incident, and duration of outage.
- e. Corrective action taken to restore system affected.
- f. Symptom of failure.
- g. Cause of failure.
- h. Impact on operations of affected facilities.

16.4 FORMAT: Reports shall be submitted on 8 ½" x 11" paper (Breakdown Report Form)

16.5 MAINTENANCE: N/A

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Database, System Operation and Maintenance	3. Operator: RA20	4. DR Number Page Date Rev. 5-GA25, 1 of 1
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SUBMITTAL REQUIREMENTS

5. Type: 2	6. Frequency of Submission: Monthly
7. Distribution: RA20 (2 copies) RA40 (1 copy) VA60 (1 copy)	
9. As of Date:	8. Initial Submission: December 1, 20XX

10. Remarks:
The electronic, Microsoft Excel version shall be submitted to the office of David Walters, RA40 on a monthly basis For his inclusion on the Stennis Intranet. Note: Data shall exclude all records for B-1000. Submit 2 copies to RA20: 1 copy to Chief and 1 copy to the Test Complex Monitor Submit 1 copy to VA60, Lead Personnel.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: System Operation and Maintenance Responsibility Database (SOMRD)	12. Standard DRD Number Rev. Page Date 5-GA25
13. Use: To define the maintenance and operational responsibilities Between functional organizations at Stennis Space Center.	14. Interrelationship: Annex 5.1.2
15. Reference:	

16. Preparation Information:

16.1 SCOPE: This Data Requirement establishes the requirement for the development and submittal of the System Operation and Maintenance Responsibility Database.

16.2. APPLICABLE DOCUMENT: None

16.3. CONTENT: Submittals shall include a listing of all equipment in the MAXIMO database, excluding any and all records for B-1000, along with the assigned responsibilities for NASA oversight, System Management, Operations, Preventative Maintenance, Corrective Maintenance, and Troubleshooting for each. Listing shall reference any and all applicable Interface Control Drawings.

16.4 FORMAT: Reports shall be submitted on a spreadsheet from Microsoft Excel.

16.5 MAINTENANCE: As needed.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD DRD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Report, Semiannual Management Reporting of
Property and Supply Operations

3. Operator:
RA30

4. DR Number Page Date Rev.
6-LS01

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
Semi - Annual

7. Distribution:
RA30 (3 Copies)

8. Initial Submission:
10/10/20XX for period covering 10/1/20XX through 9/30/20XX

9. As of Date:
3/31 and 9/30

10. Remarks:
Reports are due April 10 and October 10 annually.
1 original and 1 copy to be delivered to Supply and Equipment Management Officer.
1 copy to be retained by Contractor.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:
Report, Semiannual Management Of Property and Supply Operations

12. Standard DRD Number Rev. Page Date
6-LS01

13. Use:
To provide information to NASA management on SSC
Supply and Equipment Operations.

14. Interrelationship:
Annex 6.2.9
Annex 6.3.6.1

15. Reference:
Latest revision of
NASA Series 4200
NASA Series 4300
NASA Series 4100

16. Preparation Information:

16.1 SCOPE: This report sets forth the requirements for submitting a semiannual management report supply and equipment operations. Data to be entered into the NASA Logistics Information Management System (LIMS).

16.2 APPLICABLE DOCUMENT: NASA Form 1324 NSMS System Generated other reporting requirements can be obtained in NASA Series 4100.

16.3 CONTENTS: The report shall contain information about NASA/SSC Supply and Equipment Management Operations and shall be prepared in accordance with the instructions provided in Series 4100.

16.4 FORMAT: LIMS

16.5 MAINTENANCE: To be maintained in file for 3 years.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Property Held by Property Disposal Officer

3. Operator:

RA30

4. DR Number Page Date Rev.

6-LS02

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:
Annual

7. Distribution:

RA20 (2 Copies)

8. Initial Submission:

Submission of 2 reports due 10/5/200XX showing the activity for the periods covering 10/01/20XX through 09/30/20XX.

9. As of Date:

Submitted by the 5th of each month for the previous months activity

10. Remarks:

1 Report to Property Disposal Officer
1 Report to Commercial Accounting and Financial Services Office

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Property Held by Property Disposal Officer Report

12. Standard DRD Number Rev. Page Date

6-LS02

13. Use:

To provide NASA Management with data on the excess/surplus property at the site. Also provides financial information on the value of equipment in the 1800 account.

14. Interrelationship:

Annex 6.3.6.2

15. Reference:

Latest revision of NASA Series 4300

16. Preparation Information:

16.1 SCOPE: Required information for reporting the Center's value of idle property being held pending reutilization or disposal.

16.2 APPLICABLE DOCUMENTS: NPDMS Report 009

16.3 CONTENTS: Lists items and value of idle equipment or materials being held by Disposal Operations pending reutilization or disposal.

16.4 FORMAT: NPDMS System Generated

16.5 MAINTENANCE: To be maintained in file for 3 years.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Annual Report of Exchange/Sale Transactions

3. Operator:

RA30

4. DR Number Page Date Rev.

6-LS03

SUBMITTAL REQUIREMENTS

5. Type:

7. Distribution:
RA30 (3 Copies)

9. As of Date:
9/30 each FY

6. Frequency of Submission:
Annual

8. Initial Submission:
Report due 10/10/06 for period covering 10/1/05 through 9/30/06

10. Remarks:

Reports due not later than October 10 of every year.
Original to be submitted to Supply and Equipment Management Officer.
1 Copy to Disposal Officer.
1 Copy to be retained by Contractor.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Annual Report of Exchange/Sale Transactions

12. Standard DRD Number Rev. Page Date

6-LS03

13. Use:

To provide information to NASA management on SSC disposal operations and to comply with Federal Property Management Regulations, 41 CFR, subchapter H, Part 101-46.305 and the NPR 4300.1.

14. Interrelationship:

Annex 6.3.6.3

15. Reference:

Latest revision of
NASA Series 4300
CFR 41

16. Preparation Information:

16.1 SCOPE : This report provides information pertaining to the sales or exchanges (trade-ins) of equipment which the Agency retains value or funds for future procurements.

16.2 APPLICABLE DOCUMENTS: None.

16.3 CONTENTS: Report provides informations as to the items sold or exchanged, value of purchase and related sales data.

16.4 FORMAT: Data-System generated in NPDMS

16.5 MAINTENANCE: To be maintained in file for 3 years.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Annual Report of Personal Property Provided To Non-Federal Recipients	3. Operator: RA30	4. DR Number Page Date Rev. 6-LS05
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SUBMITTAL REQUIREMENTS

5. Type:	6. Frequency of Submission: Annual
7. Distribution: RA30 (Original) RA30 (2 Copies)	
9. As of Date: COB 9/30	8. Initial Submission: 10/10/06 for the period covering 10/1/05 to 9/30/06

10. Remarks:
Submit original to Supply and Equipment Management Officer
Submit 1 copy to Property Disposal Officer
Contractor to retain 1 year

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Annual Report of Personal Property Provided to Non-Federal	12. Standard DRD Number Rev. Page Date 6-LS05
13. Use: To identify and report loaned and donated personal property provided to non-federal organizations. This data is required by NASA Management for reporting to GSA.	14. Interrelationship: Annex 6.3.6.5
15. Reference: Latest revision of NASA Series 4300	

16. Preparation Information:

16.1 SCOPE: Report provides a listing of Government property both donated or provided as a loan to other than federal recipients.

16.2 APPLICABLE DOCUMENTS: NPDMS REPORT 190

16.3 CONTENTS: Provides listing of non-federal individuals whom received federal property during the year. at Provides name, type of property, and acquisition value.

16.4 FORMAT: NPDMS generated

16.5 MAINTENANCE: To be maintained in file for 3 years

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title:

Performance Measures Report

3. Operator:

RA30

4. DR Number Page Date Rev.

6-LS06

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:

Semi-annual

7. Distribution:

RA30 (Original)
RA30 (2 Copies)

8. Initial Submission:

10/10/06 for the period covering 4/1/06 through 9/30/06

9. As of Date:

COB 3/31
COB 9/30
each FY

10. Remarks:

Submit original and 1 copy to Supply and Equipment Management Officer
Contractor retain 1 copy
Reports due April 10 and October 10 each FY.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Performance Measures Report

12. Standard DRD Number Rev. Page Date

6-LS06

13. Use:

For use by NASA and management personnel to determine overall status and performance in all areas of Logistics (Reutilization and Disposal Management).

14. Interrelationship:

Annex 6.3.6.6

15. Reference:

Latest revision of
NASA Series 4300

16. Preparation Information:

16.1 SCOPE: Report provides SSC and NASA HQ management with an overview of reutilization and property disposal activities for the period requested. And the performance of the Center against NASA Standards.

16.2 APPLICABLE DOCUMENTS: Performance Measures Reporting - Chapter Reporting - Series 4300

16.3 CONTENTS: Data relating to lost property, property reutilize, donated sold. Refer to 4300

16.4 FORMAT: LIMS

16.5 MAINTENANCE: To be maintained in file for 3 years.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD : None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number Issue

2. Title: Semi-annual Report of Personnel Property
Management Operations (Disposal Management)

3. Operator:
RA30

4. DR Number Page Date Rev.
6-LS07

SUBMITTAL REQUIREMENTS

5. Type:

6. Frequency of Submission:
Semi-annual

7. Distribution:
RA30 (Original)
RA30 (2 Copies)

8. Initial Submission:
10/10/06 for the period covering 4/1/06 to 9/30/06

9. As of Date:
COB 3/30
COB 9/30
each FY

10. Remarks:
Submit original and 1 copy to Supply and Equipment Management Officer,
Contractor retain 1 copy

Reports due April 10 and October 10 each FY

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:
Performance Measures Report

12. Standard DRD Number Rev. Page Date
6-LS07

13. Use:
For use by NASA and management personnel to identify and report utilization and disposal of excess and surplus personnel property. Report is utilized by NASA Headquarters in completing report requirements to Congress and GSA.

14. Interrelationship:
Annex 6.3.6.7

15. Reference:
Latest revision of
NASA Series 4300

16. Preparation Information:

16.1 SCOPE: Report provides information on specific disposal activities at the center which are forward to NASA HQ for GSA and Congressional reporting requirements.

16.2 APPLICABLE DOCUMENTS: NPDMS Report 010, NPDMS Report 023 and NPDMS Report 160

16.3 CONTENTS: Reutilization and disposal of NASA SSC equipment, sales info, donations, list of items being held for disposal. Refer to Series 4300 for total requirements.

16.4 FORMAT: NPDMS System generated

16.5 MAINTENANCE: To be maintained in file for 3 years.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
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2. Title: Park-n-Fly Operations Summary	3. Operator: RA30	4. DR Number Page Date Rev. 6-LS08
--------------------------------------------	----------------------	---------------------------------------

SUBMITTAL REQUIREMENTS

5. Type:	6. Frequency of Submission: Monthly
7. Distribution: RA30 (Original) RA30 (2 Copies)	
9. As of Date: By the 10 th of each month reflecting previous month's Activity	
8. Initial Submission: 10/10/06 for the period covering 9/1/06 thru 9/30/06	

10. Remarks:
Submit original and 1 copy to Transportation Officer
Contractor retain 1 copy

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title: Park-n-Fly Operations Summary	12. Standard DRD Number Rev. Page Date 6-LS08
13. Use: For use by NASA and management personnel to monitor airport dispatch activity.	14. Interrelationship: Annex: 6.4.8
15. Reference:	

16. Preparation Information:

16.1 SCOPE: The Park-n-Fly operation provides government vehicles and parking space at the New Orleans Airport, this report is utilized to review cost of this operation and performance.


16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: This report is a Profit & Loss Statement and should reflect the cost of operations number of vehicles, number of dispatches, number of idle days for vehicles dispatches by organization (ex: NASA, NAVY, EPA etc.) number of turn-downs.

16.4 FORMAT: Contractor to submit suggested format.

16.5 MAINTENANCE: To be maintained in file for 3 years

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None

 National Aeronautics and Space Administration John C. Stennis Space Center		DATA REQUIREMENT (DR)		Data Procurement Document 1. Number Issue	
2. Title: Report, Cost and Vehicle Data		3. Operator: RA30		4. DR Number Page Date Rev. 6-LS09	
SUBMITTAL REQUIREMENTS					
5. Type:		6. Frequency of Submission: Annual			
7. Distribution: RA30 (Original) RA30 (1 Copy)		8. Initial Submission: 2 reports required annually.			
9. As of Date: By COB July 31 By COB Oct 31 each FY		Maintenance and fuel costs of NASA owned vehicles and bus lease costs 1 report due 7/31/20XX 1 report due 10/31/20XX covering the period of 10/01/20XX through 9/30/20XX. Covering the number of vehicles held on-hand by size and type			
10. Remarks: Submit original and 1 copy to RA20 Transportation Officer. Notice: Distribution may be in an electronic format, which will be provided by the Transportation Officer. Report required 7/31 of each year is actual expenditures for vehicles transportation through 6/30 of that FY for NASA Budgeting Purposes. The report of 10/30 is actual expenditures for the FY required by OMB					
DATA REQUIREMENT DESCRIPTION (DRD)					
11. Standard DRD Title: Report, Cost and Vehicle Data			12. Standard DRD Number Rev. Page Date 6-LS09		
13. Use: To provide a review of the cost and vehicle data pertaining to Government-owned vehicles.		14. Interrelationship: Annex 6.4.14		15. Reference: Latest Revision of NASA Series 7400	
16. Preparation Information: 16.1 SCOPE: This report provides actual cost of operations for motor vehicles at SSC. July report provides information to NASA HQ for future budgeting. Oct report provides actual cost data for Congress. 16.2 APPLICABLE DOCUMENTS: Standard Form SF-82 16.3 CONTENTS: Report contains data as to the number of government vehicles operating at SSC and the cost of operations. 16.4 FORMAT: Standard Form SF-82. Electronic version of this form will be provided by Transportation Officer when received from NASA HQ. 16.5 MAINTENANCE: To be maintained in file for 3 years. 16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: Any exceptions or additions to this standard will be transmitted from NASA HQ to the SSC Transportation Officer and provided to the contractor upon receipt.					



National Aeronautics and
Space Administration
John C. Stennis Space Center

DATA REQUIREMENT (DR)

Data Procurement Document

1. Number	Issue
-----------	-------

2. Title:

Report, Vehicle Validation

3. Operator:

RA30

4. DR Number Page Date Rev.

6-LS10

SUBMITTAL REQUIREMENTS

5. Type:
3

6. Frequency of Submission:
AN

7. Distribution:
RA30 (Original)

8. Initial Submission:
6/30/20XX

9. As of Date:
9/30

10. Remarks:

Submit original to RA20 Transportation Officer.
"Form 971 Justification/Re-justification full-time vehicle assignment" shall be utilized for each vehicle.

DATA REQUIREMENT DESCRIPTION (DRD)

11. Standard DRD Title:

Report, Vehicle Validation

12. Standard DRD Number Rev. Page Date

6-LS10

13. Use:

To ensure that the contractor reviews the use of Government provided vehicles on a regular basis and re-justifies the number and type of vehicles required.

14. Interrelationship:
Annex 6.4.14

15. Reference:

16. Preparation Information:

16.1 SCOPE: This report provides a justification for the number of vehicles and types of vehicles required to perform the contract.

16.2 APPLICABLE DOCUMENTS: None

16.3 CONTENTS: Each vehicle will be justified on the basis of miles driven, types made, number of people transported or other such justification as may be required.

16.4 FORMAT: Contractor discretion

16.5 MAINTENANCE: Update annually; keep on file 1 year.

16.6 EXCEPTIONS/ADDITIONS TO THIS STANDARD: None

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

ATTACHMENT J-3

**FACILITY OPERATING SERVICES
COST AND PERFORMANCE INCENTIVE FEE PLAN**

ATTACHMENT J-3

FACILITY OPERATING SERVICES

JOHN C. STENNIS SPACE CENTER

COST AND PERFORMANCE INCENTIVE FEE PLAN

I. INTRODUCTION

This Incentive Fee Plan reflects the arrangements between the Government and the Contractor regarding incentive fees available under the contract. It explains the applicability and operation of incentive fee clauses contained elsewhere in the contract. This plan addresses only the performance and cost incentive fees. The award term incentive plan is addressed in attachment J-13. The contract does not contain any fixed fees or potential award fee.

II. BACKGROUND

This contract is a performance-based Cost-Plus-Incentive-Fee (CPIF), Award Term contract for Facility Operating Services in support of NASA and other resident agencies at John C. Stennis Space Center. Under the contract there are cost and performance incentive fee arrangements.

An incentive fee arrangement will be applied for cost, based on actual cost as compared to target cost. Any overruns or underruns related to Government-Directed Material/Equipment purchases will be excluded from the computation in determining the cost incentive fee. An incentive fee arrangement will be applied for performance, based on the performance requirements stated in the Performance Requirement Summary (PRS) identified in each Annex of Section J, Attachment J-1.

This plan reflects an effective and balanced incentive structure with meaningful value statements within each Annex, and reflects the Government's subjective determination of the relative importance of the cost and performance elements. The allocation of the total incentive fee pool between cost and performance is: 30% (Cost) and 70% (Performance). The total fee reduction for cost and performance is limited to 100 percent of the cost and performance incentive fee pool. Performance and cost will be earned annually for the basic and subsequent potential award term years. The Government reserves the right to unilaterally change the frequency of the evaluation periods.

III. PERFORMANCE MEASUREMENT

Performance within each Annex will be measured and computed by cognizant NASA technical personnel who will be identified by the Contracting Officer at the start of the contract. There will be quarterly performance measurements. There will not be quarterly cost assessments, since this will not present an accurate analysis of final actual costs versus target costs. However, based on the quarterly computations of performance incentive fee, the Contractor will accrue cost and performance fees accordingly. The designated NASA technical personnel will provide the COTR with the performance incentive fee computations for each Annex whereupon the COTR will compile the results for all Annexes into a weighted percentage of performance incentive fee earned. The COTR will submit the results to the Contracting Officer for final review.

Within two (2) weeks following the end of each contract year, the Contractor shall furnish the Contracting Officer a summary of actual costs versus target costs, segregating unallowable actual costs. The Defense Contract Audit Agency (DCAA) will assist the Contracting Officer in auditing the annual reported actual costs. Upon receipt of the percentage of performance fee earned from the COTR, the Contracting Officer, after audit verification, will determine the cost incentive fee earned. Within two (2) weeks of receipt of the Contractor's final cost summary and audit verification, the Contracting Officer will issue a contract modification setting forth the incentive fee earned for the contract year, as well as any increases/decreases in contract value due to overruns or underruns. Payment of incentive fee shall be made in accordance with Schedule Articles B.8 (Payment of Fees), and G-2, (Submission of Vouchers for Payment).

If the Contractor and Government fail to agree on the determination of final allowable cost and the adjusted cost incentive fee, the Contracting Officer may unilaterally determine the final cost incentive fee, which determination may be subject to the Disputes clause.

IV. COST INCENTIVE FEE

The Federal Acquisition Regulation (FAR) Clause 52.216-10, target Cost Incentive Fee, (Schedule Article B.4) applies only to the cost incentive fee pool; it does not apply to the performance incentive fee pool. However, there is a direct correlation between measured performance, based on the performance requirements stated in the PRS, and the sharing of cost underruns. The terms defined in the target Cost Incentive Fee clause have the meanings set forth below.

The Government and the Contractor agree that:

- A. For cost underruns, the share ratio will be computed based on the weighted sum of percentages of performance incentives earned for all annexes. This is the direct correlation between technical performance and cost performance. The graduated share formulas apply:

<u>Percentage of Performance Incentive Fee Earned</u>	<u>Share Ratio</u>
≤50	100/0
>50 - 60	99/1
>60 - 65	95/5
>65 - 70	90/10
>70 - 75	85/15
>75 - 80	80/20
>80 - 85	75/25
>85 - 90	70/30
>90 - 95	65/35
>95 - 100	60/40

If the Contractor earns a performance incentive percentage of 50% or less, there will be zero share in the underrun.

- B. For cost overruns, the share formula will be 80% Government and 20% Contractor. There will be no correlation to the performance incentive and cost incentive for cost overruns.

V. PERFORMANCE INCENTIVE FEE

The incentive fee shall be apportioned among all annexes according to the weights specified in Schedule Article B.5, Performance Incentive Fee. The Contractor's performance will be measured by surveillance methods as described in the applicable PRS within each Annex. The purpose of the PRS is described in Schedule Article B.6. The performance measurements will be calculated on a quarterly basis. Some measurements cannot be done quarterly but will be done annually. The quarterly computations will be summed for the entire contract year. A percentage of performance incentive fee earned will be determined by the number of deficiencies observed or calculated during the surveillance period as compared to the Maximum Allowable Deficiencies (MADs). When the method of surveillance includes reliance on Contractor-generated databases or reports, the databases or reports will be checked for accuracy. In those cases where the databases or reports are determined to be inaccurate, the percentage of performance incentive fee earned for the work requirement will be reduced in accordance with the number of errors detected. The percentage of performance incentive fee earned for each work requirement will be totaled to determine the percentage of performance incentive fee earned for the Annex. The total contract percentage of performance incentive fee earned for all Annexes will then be determined by multiplying the percentage of performance incentive fee earned for each Annex by the weight for each Annex. The resultant percentage of performance incentive fee earned will then be totaled for the contract. The performance incentive target fee pool will be multiplied by the final total contract percentage of performance incentive fee earned in order to determine the final earned performance incentive fee. Exhibit 1 to this Attachment provides a sample for calculating cost and performance incentive fees for illustrative purposes.

USE FOR EXAMPLE ONLY

EXHIBIT 1

ATTACHMENT J-3

SAMPLE COST/PERFORMANCE INCENTIVE FEE CALCULATION FACILITY
OPERATING SERVICES (FOS) CONTRACT

The following is the method for calculating the earned cost and performance incentive fee. Three annexes are used as examples in this calculation. One of the annexes' (engineering) contract requirements and associated work requirements are given for illustrative purposes. Summary information is provided for the remaining engineering contract requirements and for the other two annexes in total. The final calculation for the incentive fee appears at the end of the example. The example assumes a potential \$700,000 performance incentive fee and \$300,000 target cost incentive fee for the annual period. Cost incentive fee will be calculated annually. A Cost and Performance Incentive Fee Plan will be incorporated into the contract.

Definitions:

Observed Deficiencies (OD): Number of "failed" inspections during the surveillance period. This may be expressed as a finite number or as a rate.

Maximum Allowable Deficiencies (MAD): The performance deficiencies upon which contract performance becomes unsatisfactory. This may be expressed as a finite number or as a rate.

Percent MAD (%MAD): The measure comparing the OD to the MAD: $\%MAD = OD / MAD$

Earned Performance Incentive Fee (PIF): The weighted sum of % of performance incentives earned for all annexes. $PIF = Target\ Performance\ Incentive\ Fee \times (100\% - \% MAD)$

Earned Cost Incentive Fee (CIF): The allowable cost incentive fee considering the contract cost outcomes. $CIF = Target\ Cost\ Incentive\ Fee\ plus\ contractor's\ share\ of\ underrun\ or\ minus\ 20\% \ of\ overrun.$

Graduated Share Formulas for Cost Underruns: The agreed-to Government/Contractor share ratios for cost underruns.

STEPS IN CALCULATION:

1. Assume the total Target Fee is \$1.0 million. Based on the allocation of 30% for Cost and 70% for Performance the Target Cost Incentive Fee equals \$300,000 and the Target Performance Incentive Fee equals \$700,000.
2. Assume the FOS Contract has only 3 annexes with relative weights (i.e., importance) as follows:

<u>Annex</u>	<u>Weight</u>
Engineering Services (Annex 3)	20%
Institutional Services (Annex 4)	25%
Facilities Maintenance and Operations (Annex 5)	55%

3. Assume Engineering Services Annex 3 contract requirements and their weights:

<u>Contract Requirement</u>	<u>Weight</u>
• Engineering Services (Designs, Studies, Project Management Plans)	20%
• Construction Management Services	20%
• Engineering Support Services (Drafting, Digging Permits, Space Utilization)	20%
• CADD Systems Support	20%
• Central Engineering File	20%

4. Assume the following Performance Requirements Summary for the Engineering Services from Annex 3 and the ODs during the surveillance period:

<u>Work Requirements</u>	<u>MAD</u>	<u>Weight</u>	<u>OD</u>
Timely Submission	3%	30%	2%
Quality	3%	40%	3%
Documentation	3%	30%	5%

5. Calculate the Weighted % MAD for Engineering Services contract requirement:

$$\text{Weighted \% MAD} = \frac{(2\% \times 30\%)}{3\%} + \frac{(3\% \times 40\%)}{3\%} + \frac{(5\% \times 30\%)}{3\%}$$

$$= 110\%$$

6. Follow same steps for all contract requirements in Annex 3.

7. Assume the following % MADs for all of the work requirements in Annex 3 and calculate the overall Annex 3 % MAD:

<u>Work Requirement</u>	<u>Annex Weight</u>	<u>% MAD</u>
Engineering Services	20%	110%
Construction Management Services	20%	10%
Engineering Support Services	20%	15%
CADD Systems Support	20%	20%
Central Engineering File	20%	15%

Annex 3 %MAD = Weighted Sum of the Contract Requirement
% MAD

$$= (20\%) (110\%) + (20\%) (10\%) + (20\%) (15\%) + (20\%) (20\%) + (20\%) (15\%)$$

$$= 34\%$$

8. Assume the following % MAD for all three annexes.

<u>Annex</u>	<u>Weight</u>	<u>%MAD</u>
Annex 3	20%	34%
Annex 4	25%	102%
Annex 5	55%	2%

9. FOS Total % MAD = Weighted Sum of the Annex “%MADs”

$$= (20\%) (34\%) + (25\%) (102) + (55\%) (2\%)$$

$$= 33.4\%$$

10. Earned Performance Incentive Fee (PIF) equals \$700,000 (Target Performance Incentive) x (100% - 33.4%) = \$700,000 x 66.6% = \$466,200

11. Assume Contractor cost underrun of \$100,000.

12. Contractor’s share of cost underrun, based on the graduated share ratio would be as follows:

$$\$100,000 \times 10\% = \$10,000$$

Note: 66.6% Performance results in a 10% contractor share of underrun.

13. Earned Cost Incentive Fee equals

Target Cost Incentive Fee plus contractor's share of cost underrun as follows:
 $\$300,000 + \$10,000 = \$ 310, 000$

14. Total Fee earned:

Performance Incentive Fee	\$466,200
Cost Incentive Fee	<u>310,000</u>
Total Fee Earned	\$776,200

AGREEMENT

BETWEEN

**MISSISSIPPI SPACE SERVICES
ABACUS TECHNOLOGY CORPORATION
INDYNE, INC.
MADISON SERVICES, INC.
OCCU-HEALTH, INC.**

Stennis Space Center/Facility Operating Services

**John C. Stennis Space Center
Stennis Space Center, MS 39529-6000**

AND

**INTERNATIONAL ASSOCIATION OF
MACHINISTS AND AEROSPACE WORKERS
Local No. 2249
AFL-CIO**

9 JUNE 2005 THROUGH 8 JUNE 2009

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PREAMBLE

This agreement entered into by and between Mississippi Space Services Stennis Space Center/Facility Operating Services Project, and its subcontractors (Abacus Technology Corporation, InDyne, Inc., Madison Services, Inc., and Occu-Health, Inc.) their successors and assigns (hereinafter called "Company") and the International Association of Machinists and Aerospace Workers, AFL-CIO, and its Local Lodge 2249, (hereinafter called "Union") evidences the desires of the parties hereto to promote and maintain harmonious relations between the Company, and the Union and Employees represented by the Union, by setting forth herein the terms of agreement relating to rates of pay, hours of work and conditions of employment.

**ARTICLE I
INTRODUCTION**

Section 1. Application.

This Agreement applies to the employees of the Company assigned to Stennis Space Center/Facility Operating Services at Stennis Space Center, Mississippi.

Section 2. Purpose.

The purpose of this contract is to set forth the agreement reached June 23, 2005, between the Company and the Union, who are signatory hereto, as to the rates of pay, hours of work, and other conditions of employment to be observed by the parties, except as it may be amended hereafter by written agreement of the parties.

Section 3. Duration.

This contract shall become effective **9 June 2005** except for those provisions herein which specify a different effective date and shall continue through **8 June 2009** and yearly thereafter unless notice is given in writing of a desire to change, modify or terminate this contract by either party to the other party sixty (60) days or more prior to the expiration of this contract, or any anniversary date thereof.

In the event notice is given, negotiations shall commence within thirty (30) days after said notice and shall continue until an agreement is reached, or until ten (10) days advance notice is given by either party to the other to terminate the contract. Until then the terms and provisions of this contract shall remain in full force and effect. In the event no such notice is given, this contract shall be automatically renewed and extended for additional periods of time of one year thereafter, unless one party gives to the other party sixty (60) days prior written notice before the end of any yearly period of a desire to change, modify or terminate this Agreement.

Section 4. Savings Clause.

In the event that any Federal or State Legislation, governmental regulation or court decisions cause invalidation of any Article or Section of this Agreement, all other Articles and Sections not so invalidated shall remain in full force and effect.

Section 5. No Strikes or Lockouts.

During the life of this Agreement, no work stoppages, strikes, or slowdown shall be called or sanctioned by the Union, and no lockouts shall be made by the Company. Any employee actively

involved in a work stoppage, strike, or slowdown in violation of this provision shall be subject to disciplinary action, including discharge. The Union shall take prompt and reasonable steps to stop such violation.

Section 6. Gender Neutral.

It is understood that wherever in the Agreement employees or jobs are referred to in the male gender it shall be recognized as referring to both male and female employees.

Section 7. Waiver.

The Company and the Union, for the life of this Agreement, each voluntarily and unqualifiedly waives the right, and each agrees that the other shall not be obligated, to bargain collectively with respect to any subject not specifically referred to or covered in this Agreement.

This agreement and the applicable benefit agreements are the sole and controlling source of employees' rights and benefits. The entitlement of employees to rights, benefits, privileges shall be governed solely by those agreements without regard or reference to any past practices of the parties as they may have existed before the effective date of this agreement.

Section 8. Mutual.

Exceptions, local or side agreements or modifications of this Agreement may not be made except by mutual agreement in writing between the MSS Manager of Human Resources, the Union International Representative, President of Local 2249 and the affected Committeepersons.

**ARTICLE II
MANAGEMENT RIGHTS & GOVERNMENT RESPONSIBILITY**

Section 1. Management Rights.

Except to the extent expressly abridged by a specific provision of this Agreement, the Company reserves and retains, solely and exclusively, all of its rights to manage the business, as such rights existed prior to the execution of this Agreement. All matters not specifically and expressly covered or treated by the language of this Agreement may be administered for its duration by the Company in accordance with such policy or procedure as the Company may determine from time to time.

Section 2. Government Responsibility.

The Union recognizes that the Company is a contractor to the Federal Government at NASA, Stennis Space Center, Mississippi and that the Company is required at all times to fully meet its obligations as a Contractor. The Union further recognizes that from time to time the Government may impose legal and/or lawful demands or obligations upon the Company and that the Company and its employees must meet such demands, obligations or comply with such rules or regulations as may be promulgated or imposed by the Government.

It is further understood that if a security clearance is required in order to perform work in job classifications covered by the Collective Bargaining Unit, that such security clearance shall be a condition of continued employment with the Company. Such employees shall be subject to investigation for security clearance under regulations prescribed by NASA or any other authorized and appropriate agency of the United States Government. A denial or withdrawal of

such clearance by such government agency shall be just cause for discharge. However, if the affected employee is qualified and cleared to work in a different position under this collective bargaining agreement, (s)he shall be offered that position provided (s)he has the necessary seniority.

ARTICLE III RECOGNITION, REPRESENTATION, ACCESS & SECURITY

Section 1. Recognition and Exclusive Representation.

The Company recognizes the Union as the sole and exclusive Collective Bargaining agency for the purpose of Collective Bargaining with respect to rates of pay, hours of work, and other conditions of employment pursuant to Sections 9(a) of the National Labor Relations Act and the certifications of representation in:

- (a) Case No. 15-RC-4714 of the 16th day of September, 1971, and, Case No. 15-RC-4713 of the 23rd day of September, 1971 for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act; and,
- (b) Case No. 15-RC-6461 of the 23rd day of July, 1979 for all office clerical employees, including property administrators, planner/schedulers and estimators employed by the Company at the Stennis Space Center; excluding all other employees, including industrial relations employees, administrative secretaries, confidential employees, technical writers, licensed and/or professional engineers, field engineers, associate engineers, architects, physicians, head nurses, nurses, guards, watchmen, foremen and supervisors as defined in the Act.
- (c) Case No. 15-RC-7805 dated 20 December 1993 for all compositors, reproduction operators, photographers, video technicians, photo technicians, illustrators and technical information specialists employed by the employer at the Stennis Space Center; excluding all other employees; guards, watchmen and supervisors.
- (d) Case No. 15-RC-7897 dated 2 March 1995 for Utility Service Control technicians employed by the Company at the Stennis Space Center, excluding all professional employees, guards and supervisors as defined by the Act.
- (e) Case No. 15-RC-3217 dated 7 March 1966 for janitors, matrons and refuse employees employed by the Company at the Stennis Space Center, excluding professional, technical, office clerical employees, guards and supervisors.
- (f) **Case No. 15-RC-4714 and Case No. 15-RC-4713 dated 5 September 2001 for Visitors Relations Specialist I and Visitors Relations Specialist II employees employed by the Company at the Stennis Space Center, for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the**

Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act.

- (g) Case No. 15-RC-4714 and Case No. 15-RC-4713 dated 4 January 2003 for Tugboat Pilot employees employed by the Company at the Stennis Space Center, for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act.
- (h) Case No. 15-RC-4714 and Case No. 15-RC-4713 dated 21 May 2002 for Remediation Waste System Operator employees employed by the Company at the Stennis Space Center, for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act.

The Company and Union agree and understand that classification names have changed and recognition has been extended to other classifications since the issuance of the above-described certifications. The Company recognizes the Union as employees' sole and exclusive representative for the purposes of collective bargaining of the classifications listed in Exhibit A.

Section 2. Union Representation.

The Company will recognize and deal, where appropriate, with all accredited members of the Union Committee, Stewards, and other Union Representatives in all matters relating to grievance, interpretations of the agreement, or in any other matters which affect, or may affect, the relationship between the Company and the Union. The Company agrees to holding a quarterly labor management meeting to facilitate open communication between the Company and Union. **These meetings will be scheduled annually during the months of March, June, September and December.**

A written list of the Union committeepersons and Union Stewards will be furnished to the Company after their designation and the Union will notify the Company of any changes. The Union Committeepersons will consist of the following:

- Facilities Systems Department – 2 Committeepersons
- Test Complex Support Department – 2 Committeeperson
- Institutional Services- 1 Committeeperson
- Office/Clerical – 1 Committeeperson
- Graphics/VRS/Clinic – 1 Committeeperson
- At-Large – Union President
- Roads and Grounds – 1 Committeeperson
- Custodial – 1 Committeeperson
- Vice President – 1 Committeeperson
- Union Secretary/Treasurer – 1 Committeeperson**
- Recording Secretary – 1 Committeeperson

The Company shall pay employees covered by this Agreement and representing the Union at their straight time rate for the time spent during the employee's normally scheduled work period in negotiating a Collective Bargaining Agreement, processing grievances, arbitration hearings and attending Company Union meetings.

It is agreed that the employees representing the Union in the negotiating of a Collective Bargaining Agreement with the Company shall consist of the Union committeepersons as previously defined.

Hours spent in preparing and for negotiating a Collective Bargaining Agreement will be agreed upon by the Union and the Company.

Union committeepersons, **stewards and officers of the Union will be granted unpaid leave(s) to attend official union meetings and/or training. However, the Company reserves the right to withhold approval where it is determined that such leave(s) would unreasonably impact operations.**

Section 3. Union Access to Company Premises.

Accredited representatives of the Union shall be permitted to enter on the premises of the Company at all reasonable times to the extent that government regulations permit. Upon being admitted, the Union representatives shall inform the Manager, Human Resources, or his/her designated representative, and the subcontractor Site Manager/designee, if any, of the area or areas they wish to visit and then proceed to the area they wish to visit and contact the supervisor then present in the area. It is understood that if it becomes necessary for the Union representatives to engage in any substantial discussion with an employee during his/her working time, then the Union representatives will secure permission for such discussion from the employee's supervisor.

The collection of dues and assessments and campaigning for Union office will be restricted to non-working hours, but in no event shall any Union representative engage in organizing or campaigning for political office on Company premises.

Section 4. Union Security.

For the convenience of the Union and employees who are members of the Union, the Company agrees to deduct regular **weekly** Union dues from the wages of each employee who authorizes such deduction as provided for herein.

An employee who desires the Union dues to be deducted from his/her wages shall submit a fully executed authorization form to the Company, as approved by the parties, signed by said employee from whose wages deductions are to be made as provided for therein.

Deductions shall be made for the regular **weekly** Union dues of each employee in the bargaining unit for whom the above authorization has been received **effective** the first full pay period **after** an employee's authorization is received. Deductions shall continue **weekly** in like manner thereafter.

Deductions shall be remitted monthly to the designated Financial Officer of the Union not later than fifteen (15) days after the last **weekly** deductions have been made each calendar month. The

Company shall furnish the designated Financial Officer of the Union with a monthly record of those for whom deductions have been made.

An employee's authorization for dues deduction shall automatically be voided upon his or her transfer outside the bargaining unit.

An employee changing the company for whom (s)he is working shall submit a new authorization card.

Temporary employees are **exempt** from this section. On call employees shall have minimum dues deducted and remitted to the Union in accordance with this article.

Section 5. Permanent Union Office.

The Company will support, with its customer, the provision of a union office with adequate office space for all union committee members to meet. Any and all signage shall be consistent with NASA regulations and specifications. The office will have a computer and phone connection.

**ARTICLE IV
EQUAL OPPORTUNITY**

Section 1. Equal Opportunity.

The Company and the Union mutually agree to cooperate in establishing and/or maintaining, at the project covered by this Agreement, Equal Employment Opportunity, Affirmative Action Programs, the Americans with Disabilities Act (ADA) and Family and Medical Leave Act (FMLA) consistent with all Government statutory obligations applicable to employees and applicants for employment and thereby to provide, consistent with corporate policy, equal treatment with respect to rates of pay, benefits and other terms and conditions of employment and employment opportunity regardless of race, color, religion, sex, national origin, age, disability, or membership or non-membership in any labor organization. The Company shall also give due consideration to qualified Veterans.

When the Company needs additional employees, the Union will be given equal opportunity with all other sources to provide suitable applicants. The Company, however, shall not be required to hire those referred by the Union or any other sources.

**ARTICLE V
GRIEVANCE & ARBITRATION PROCEDURE**

Section 1. Grievance Procedure.

It is mutually agreed that the prompt adjustment of grievances is desirable in the interest of sound relations between the Union, the employee, and the Company.

For the purpose of this Agreement the term grievance means any differences arising between the Company and the Union or an employee involving the interpretation or application of the terms of this Agreement.

Whenever an employee covered by this Agreement has instituted a grievance as described below or wishes to institute a grievance, the Union Steward and/or the Union committee person responsible for that employee's work area shall be permitted to leave his/her work area to adjust the matter. An employee may inform the Union that (s)he does not desire Union representation which request shall be honored; however, such a request shall not deprive the Union of the right to be present and participate at all stages of the grievance procedures. The Union Representative must secure permission from his/her Supervisor prior to his/her departure during working hours which permission shall be granted unless the Union Representative's departure at that time would create an extremely critical situation. If the Union representative must enter a work area other than his/her own in fulfillment of his/her duties, (s)he shall notify the Supervisor in that area of his/her presence and purpose. The Supervisor shall allow the Union Representative to discuss the matters with the affected employee unless discussion at that time would create an extremely critical situation. Upon the request of an employee or the Union Representative, the Supervisor shall permit the Union Representative and the affected employee to discuss matters relating to a complaint or grievance in private. Time spent in investigating and adjusting grievances by Union Representatives and employees during working hours shall be limited to a reasonable period of time which the parties hereto would not normally expect to exceed 30 minutes to an hour per investigation.

- Step 1. (Oral) A grievance shall be raised by the aggrieved employee with Union Representation which would normally be the employee's area steward/committeeperson, presenting the facts and issues in connection with the grievance to the aggrieved employee's Supervisor. The initial raising of a grievance must be done within five (5) working days of the occurrence of the facts that give rise to the grievance, or else it shall be considered waived. Employees raising a grievance shall cite the Article of the Collective Bargaining Agreement that has been violated. The Supervisor shall have three working days in which to advise the employee, and the Union Representative of his/her decision in connection with the grievance raised. Should this fail to settle the grievance, then:
- Step 2. The grievance shall be reduced to writing by the Union Representative and the aggrieved employee and be presented to the MSS Department Manager, or his/her designated representative, and the subcontractor Site Manager/designee, if any, within three (3) working days by the Union Representative and the aggrieved employee, or else it shall be considered waived. Grievances or disputes affecting the employees in a Unit as a whole may be initiated by the Union by presenting it in writing to the MSS Department Manager, or his/her authorized representative, and the subcontractor Site Manager/designee, if any, within seven (7) working days of the occurrence of the facts giving rise to the grievance or else it shall be considered waived. The MSS Department Manager, or his/her designated representative, and the subcontractor Site Manager/designee, if any, shall answer in writing within three (3) working days. Should this fail to settle the grievance then:
- Step 3. The grievance shall be presented to the MSS Manager, Human Resources or his/her designated representative within five (5) working days of the answer of the MSS Department Manager or his/her designated representative and the subcontractor Site Manager/designee, if any, or else the grievance shall be considered waived. A conference shall then be **expeditiously arranged and held within fifteen (15) working days, which period may be extended by mutual agreement**, between the MSS Manager, Human

Resources, the subcontractor Site Manager/designee, if any, and a maximum of three (3) **on-site** representatives, **not including the Business Representative**, of the Union **and the aggrieved employee**. The MSS Manager, Human Resources shall have five (5) working days in which to answer the grievance in writing. In the event that this conference fails to settle the grievance amicably, the Union may refer the matter to arbitration.

Section 2. Company Grievances.

The Company shall have the right to file grievances alleging violations by the Union of the Collective Bargaining Agreement. Such grievances shall be filed by the MSS Manager, Human Resources with the Local Union President and shall be resolved in accordance with Step 3 above – i.e., the Local Business Representative shall have five (5) working days in which to answer the grievance in writing.

Section 3. Arbitration Procedure.

Any grievance not adjusted in the normal manner or any dispute between the Company and the Union involving the interpretation or application of this agreement shall be referred to arbitration as herein provided.

The Company and Union will make every attempt to mutually agree upon an arbitrator to hear any case before submitting to the Federal Mediation and Conciliation Service.

In the event the parties are unable to agree on an arbitrator, then either or both parties may request the Federal Mediation and Conciliation Service to submit a panel of five (5) names to the parties. If the parties agree and select an arbitrator, the arbitrator's name will be sent to the Federal Mediation and Conciliation Service. In the event the parties cannot agree on an arbitrator, the choice shall be made by the alternate strike method. The person whose name is not struck shall be named as arbitrator. The determination of who goes first shall be made by tossing a coin. After a case on which the arbitrator is empowered to rule hereunder has been referred to said arbitrator, it may not be withdrawn by either party except by mutual consent.

The arbitrator shall have no power to alter, change, or modify the terms of the Agreement.

The arbitrator shall render a decision, signed by the arbitrator, and copies of the award shall be delivered or mailed to each of the parties.

There shall be no appeal from the arbitrator's decision, which shall be final and binding on the Union and its members, the employee or employees involved covered by this Agreement, and the Company.

Regardless of the outcome of any matter submitted to arbitration, the costs thereof shall be borne by the Company and the Union, share and share alike. Such costs shall be limited to the arbitrator's fee and expenses. The costs of any additional services required by either party shall be borne by the party requesting these additional services. The cost of requests for arbitration panels shall be alternated by the Union and the Company.

Any grievance not presented, processed to adjustment or scheduled for arbitration as provided in this article within six (6) months of the date of the alleged contract violation shall be waived. The time limitations set forth in this article may be extended by mutual agreement of the parties.

**ARTICLE VI
EMPLOYEE BENEFITS**

Section 1. Holidays.

Employees covered by this Agreement shall receive eight (8) hours of pay at their regular hourly rate for the following holidays:

New Year's Day	Martin Luther King Birthday	Presidents Day
Memorial Day	Independence Day	Labor Day
Columbus Day	Veteran's Day	Thanksgiving Day
		Christmas Day

A floating day to be requested by the employee and approved by management.

Any day designated by the United States Government as a holiday, day of mourning, or other day on which Federal employees are not required to report for work under presidential proclamation.

To be eligible for holiday pay, an employee must be in pay status on the **scheduled** working day preceding and following the holiday.

Any holiday which falls on a Sunday shall be celebrated on the following **scheduled day of work**. Any holiday which falls on a Saturday shall be celebrated on the preceding **scheduled day of work**.

If a holiday falls within an employee's vacation period, such holiday shall not be considered as part of the vacation period and the Company shall give an additional day off.

Any employee called in and reporting to work on any of the above holidays, or days on which they are observed, shall perform the work for which (s)he was called in, work related thereto, and any other emergency work which arises and shall be paid one and one-half his/her regular straight time rate of pay for actual hours worked in addition to eight (8) hours holiday pay and will be guaranteed four hours work or pay in lieu thereof.

Regular Part-time employees are paid pro rata holiday pay if they are normally scheduled to work on the day of the holiday. However, the Regular Part-time employee must work the **scheduled** day before and the **scheduled** day after the holiday to be entitled to the pro rata holiday pay.

Section 2. Vacations.

Paid vacation shall accrue on a proportionate hourly basis per week sufficient to produce the following vacation availabilities per year:

- a. First 6 months (0-6) of continuous service – 0.0 hours. On employee's six-month anniversary date, one week of vacation will be credited to the employee.

- b. Two weeks for employees with one (1) year of continuous service;
- c. Three weeks for employees with five (5) years of continuous service. On employee's fifth year of continuous service, one week of vacation will be credited to the employee.
- d. Four weeks for employees with eight (8) or more years of continuous service. On the employee's eighth year of continuous service, one week of vacation will be credited to the employee.

Continuous service accumulated with prior SSC/FOS contractors will be counted in determining the amount of vacation for which an employee is eligible. In all other cases, service for vacation purposes will date from the employee's date of hire by the Company.

Scheduling of vacation will be management's responsibility and shall take into consideration the workload commitments of the organization. Vacation time must have been accrued prior to taking of any vacation.

Unscheduled vacation may be granted by management for all or part of a day for reasons of illness, emergency or other unanticipated reasons deemed valid by management.

Terminated employees shall be paid accrued vacation.

Pay for vacation shall be based on the hours scheduled for a normal work week of 40 hours at the straight hourly rate of the employee, except that pay for employees in the Fire Department shall be based on the amount earned in a normal scheduled work week.

If an employee dies while on the payroll of the Company, vacation pay, as provided, shall be paid to his/her beneficiary as designated on the IAM Insurance Payroll Deduction Form maintained in the employee's personnel file.

Employees shall be provided each pay period an accounting of their vacation accrual on their pay stub or other appropriate document.

The vacation status of an employee will be converted to sick leave if (s)he is hospitalized and such is verified by documentation.

A bargaining unit employee (donor) may transfer vacation hours to another bargaining unit employee (donee) where the medical condition of the donee, or the medical condition of an immediate family member of the donee, requires the donee to be absent from work and will result in substantial loss of income to the donee because of unavailability of paid leave. In order to become entitled to transfer under this section, the donor and donee employees must qualify under company policy and follow applicable procedures.

Section 3. Sick Leave.

Each employee will accrue 1.54 hours of sick leave time per week to a maximum of 80 hours per year thereby providing for ten (10) days of sick leave time per year -- except 24-hour shift

Fire Department employees will accrue 1.924 hours of sick leave time per week to a maximum of 100 hours per year thereby providing for five (5) days of sick leave per year. Employees may accrue unlimited sick leave.

Sick leave is leave occasioned by the employee's personal illness or injury or the personal illness or injury of an immediate family member whose relationship is defined in The Family and Medical Leave Act (FMLA).

Employees shall not be eligible for accrued sick leave until completing six (6) months of continuous employment, at which time the employee will be credited with 40 hours of sick leave (50 hours for 24-hour shift Fire Department employees). Sick leave time must have been accrued prior to the absence for which it is used -- except in the case of hospitalization of the employee or the employee's immediate family member whose relationship is defined in The Family and Medical Leave Act (FMLA), which the employee shall be eligible for after 60 calendar days.

After three days, the Company may require that absences be supported by a doctor's statement to be considered sick leave; however, if the employee is involved in any attendance disciplinary action, the Company may request a statement on the first day of absence.

The Company may discharge any employee who misuses this provision for sick leave.

Sick leave which would be covered by the FMLA shall be counted toward the twelve (12) weeks of annual FMLA leave.

Compensation for lost time as provided above shall be paid on regular paydays following the absences. The pay for each day of sick leave shall be equal to the amount earned by the employee in a normal scheduled work day.

No payments will be made to any employee for unused sick leave time except that:

- a. Employees who either are laid off and not offered an opportunity to return to work within one year or apply for, but do not receive, employment with a successor contractor to the Company at SSC, will be paid at their straight time rate for the sick leave time accrued, but unused, up to a maximum of sixty (60) days when the employee was laid off by the Company or when the successor contractor took over from the Company. However, employees covered by the former Office/Clerical Agreement who have 400 hours or more of sick leave as of the signing of the **9 June 2000 through 8 June 2005 Agreement** will, in the above described circumstances, be paid at their straight time rate for all sick leave time accrued but unused.
- b. All employees may request, during the first week of June, to be paid for unused sick leave accrued during the current Agreement year, provided they carry over 24 hours of that year's accrual. Sick leave will be paid at the employee's regular rate at the time the leave was accrued. **A maximum annual buyback is limited to 56 hours, 40 hours for 24-hour shift**

Fire Department employees. Example: An employee accrued 80 hours of leave during the year and used 24 hours. This employee is eligible to sell back 32 hours of leave.

- c. **Employees who are employed by the Company on a regular full-time or regular part-time basis as of the signing of this Agreement** who retire at the age of 62 years of age or older and provided they have at least one year of service with the Company, regardless of their eligibility for IAM National Pension Plan retirement benefits, **or who retire at 55 years of age with 20 years of service or at any age with 30 years of service** will be paid for unused sick leave time when the employee leaves the Company.
- d. **Should any employees who are employed by the Company on a regular full-time or regular part-time basis as of the signing of this Agreement** who passed the age of 62 while in the employment of the Company, their unused sick leave time will be paid to their beneficiary as designated on the IAM Insurance Payroll Deduction Form maintained in the employee's personnel file.

Section 4. Personal Leave.

Each employee will accrue .46 hours of personal leave time per week to a maximum of 24 hours per year thereby providing for three (3) days of personal leave time per year -- except 24-hour shift Fire Department employees will accrue 1.153 hours of personal leave time per week to a maximum of 60 hours per year thereby providing for three (3) days of personal leave per year.

Documentation or a reason for the personal leave is not required, but the employee must obtain prior approval from their Department Manager, or Subcontractor Site Manager if any. However, in cases of an emergency when prior approval is not received, the Department Manager, or Subcontractor Site Manager if any, may require documentation for the personal leave request. Use of personal leave will not negatively impact the employee's attendance percentage.

Employees shall not be eligible for accrued personal leave until completing six (6) months of continuous employment, at which time the employee will be credited with 12 hours of personal leave (30 hours for 24-hour shift Fire Department employees). Personal leave time must have been accrued prior to the absence for which it is used -- except in the case of hospitalization of the employee or the employee's immediate family member whose relationship is defined in The Family and Medical Leave Act (FMLA), which the employee shall be eligible for after 60 calendar days.

Employees may carry over five (5) days of personal leave per year -- 40 hours per year (100 hours for 24-hour shift Fire Department employees). However, at the time of the annual sick leave buyback, employees who have not used at least 24 hours of personal leave (60 hours for 24-hour shift Fire Department employees) will be paid up to 24 hours of personal leave (60 hours for 24-hour shift Fire Department employees) accrued during the current Agreement year to prevent carry over of more than five (5) days personal leave per year. Personal leave will be paid at the employee's regular rate at the time the leave was accrued.

As of the signing of this Agreement, employees who have sufficient sick leave accruals may request, which request will be granted by the Company, to transfer up to five days (40 hours – 100 hours for 24-hour shift Fire Department employees) of their sick leave accruals to their personal leave accruals.

Section 5. On-the-Job Injury.

When an employee is injured on the job, the Company will pay his/her regular salary to be excused from work for time spent for doctors' appointments during regular working hours up to a maximum of four (4) hours **per visit**. Employees will provide proof substantiating doctors' visits.

Section 6. Leave of Absence.

Any employee, upon application in writing, may be granted a leave of absence without pay at the discretion of the Company. A leave of absence without pay shall be granted for a period not to exceed one (1) year because of personal illness, disability or undue hardship. Documentation substantiating the need for leave of absence may be required by the Company. Seniority shall not accrue for a leave of absence in excess of one calendar month except for leave of absence for personal illness, disability or undue hardship.

At the termination of the leave of absence if for personal illness, disability or undue hardship the employee will upon application be returned to his/her former position providing that the position is available and the employee is able to perform the job. In the event the former position has since been abolished or the employee is unable to perform the job, the employee will be assigned to an equivalent position for which (s)he is qualified in accordance with the seniority provisions of this Agreement. In all cases, the employee will receive the prevailing rate of pay for the job to which (s)he is assigned.

Employees accepting full time positions as Union Representatives shall be given an automatic leave of absence without pay for their term of office, or any renewal thereof, without loss of seniority rights and with the privilege of returning to their former position. In the event their former position has since been abolished, and there is no equivalent position vacant, they shall be allowed, if necessary, to bump into an equivalent position at the prevailing rate of pay for that job.

Employees taking a medical leave of absence will not be required to first use accrued vacation.

Section 7. Jury, Witness and Military Pay.

Jury and subpoenaed witness duty shall be considered a paid absence outside of that which is provided elsewhere in this agreement. The employee who serves on a jury or as a witness shall be paid their normal straight time wage rate to a maximum of forty (40) hours per week except Fire Department which will be sixty (60) hours. Any difference in pay due to military leave will be paid for up to 80 hours per calendar year. Fire Department personnel will be paid up to 120 hours per calendar year if on day/night schedule. This payment is not applicable to weekend or monthly inactive drill dates.

Section 8. Pension Plan.

For the duration of this Agreement, the Company agrees to make hourly contributions in the amounts listed below to the IAM National Pension Fund of the International Association of

Machinists and Aerospace Workers for each employee covered by this collective bargaining agreement on the basis of eight (8) hours a day up to a maximum of forty (40) hours per week for each hour the employee is receiving his/her regular rate of pay.

- \$1.95 – effective June 9, 2005
- 2.10 – effective June 9, 2006
- 2.20 – effective June 9, 2007
- 2.30 – effective June 9, 2008

Payments to the program are due by the twentieth day of the month following the month in which they were accrued.

Section 9. Health and Welfare Benefits.

Effective August 1, 2005, and through the duration of this Agreement, the Company will make available medical, dental and vision insurance for each covered employee. Covered employee means an employee who is regularly scheduled to work a minimum of 30 hours per work week. Employees who currently work at least 20 hours but less than 30 hours per week and are in receipt of Health and Welfare benefits upon the signing of the **June 9, 2000, through June 8, 2005, Agreement** will continue to receive such benefits. Such "20+" coverage shall not continue if the employee changes to either a regular full-time or less than 20-hour status. If the employee returns to a schedule of at least 20 hours but less than 30 hours per week, the "20+" coverage shall not be reinstated unless the return is a result of a layoff and the employee bumps back into the schedule. If husband and wife are both employed by the Company during the same period of time, only one of them may carry the designated coverages.

These plans will provide for tiered coverage for election by the eligible employee (employee only, employee plus child(ren), employee plus spouse, and family for medical and dental coverage; and employee only, employee plus one and family for vision).

The employee will pay 20% of the total MSS premium cost for medical coverage elected by the employee.

Effective August 1, 2005, through July 31, 2006, employee monthly contributions will be 20% of the total monthly premium not to exceed:

Employee Only	\$ 75.95
Employee + Child(ren)	\$121.90
Employee +Spouse	\$171.48
Family	\$223.70

The Company will pay 50% of the total premium cost for dental coverage elected by the employee.

The employee will pay 100% of the total premium cost for vision insurance.

120 calendar days prior to the renewal date of medical or dental insurance, a labor-management Insurance Evaluation Committee will be constituted to evaluate the need to modify the current plan or change providers comprised of three members appointed by the Union President, three members appointed by management, the Union President and the MSS Human Resources Manager. The Union President shall chair this committee. The Insurance Evaluation Committee will be responsible for reviewing insurance experience data and premium cost, soliciting, evaluating and analyzing quotes from insurance carriers and recommending whether a change in provider is warranted or a modification in benefits is best for employees. All decisions and recommendations of the Insurance Evaluation Committee shall be decided by majority vote. In the event of a deadlock, the matter shall be submitted to expedited arbitration through the American Arbitration Association under its Employment Disputes Resolution Rules for a final and binding decision.

For an employee on a leave of absence without pay for personal illness, disability or undue hardship, the Company will continue to pay the Company portion of the medical insurance premium for a period up to six (6) months. Employees who do not participate in the plan will not receive monetary payments. If the leave of absence without pay is for personal illness or disability, the Company will then continue to pay the total medical insurance premium for one (1) month for every forty (40) hours of sick leave accrued, but not utilized, at the on-set of the illness. However, for the duration of the leave of absence without pay for personal illness or disability, the maximum payments by the Company shall not exceed 12 months of Company contributions.

The Company agrees to maintain life/accidental death insurance in the amount of \$25,000, with \$50,000 for accidental death, for the duration of this Agreement.

Section 10. Funeral Leave.

In the event of a death in the **current** immediate family – parents (**including step-parents**), grandchild, sister, brother (**including half-sister and half-brother**), spouse, child (**including stepchild**), mother or father-in-law, brother or sister-in-law, son or daughter-in-law and grandparents, and grandparents-in-law -- any employee covered by this Agreement will be granted three (3) days of leave to attend the funeral with pay equal to the amount earned by the employee in a normally scheduled work day, but in no event shall the payment for funeral leave cause the employee to receive wages in excess of the amount earned in a normally scheduled work week. The Company will consider requests for additional funeral leave where attendance at the funeral will involve exceptional amounts of travel.

Section 11. 401(k) Plan.

The Company agrees to make payroll deductions for a 401(k) plan that is independently sponsored by the Union provided the following qualifications are met:

1. The Plan Trustee will hold the Company harmless for any administration action and/or deduction. The Plan Trustee will furnish the Company with a document stating that the plan is IRS approved for 401(k) deductions to be made prior to any applicable taxes being withheld.

2. The Union agrees to hold the Company harmless from any administrative or legal action that may result from this agreement to deduct **weekly** contributions for an independent 401(k) plan.

Section 12. Part-time, On-call & Temporary Employees.

A. Definitions

For the purpose of this Agreement, the following definitions will apply:

- Regular Part-time employee – An employee who is regularly scheduled to work at least twenty (20) but less than forty (40) hours per work week.
- On-call employee – An employee who is not regularly scheduled to work, but who is called in to work as needed on either a part-time or full-time basis.
- Temporary employee – An employee who is hired to work either full-time or part-time for a finite period of time not to exceed 30 days unless extended for an additional 30 days upon mutual written agreement of the parties.

B. Benefits

- Regular Part-time employees are entitled to the following benefits: pro rated holiday pay, pro rated vacation and sick leave accruals, pro rated funeral and jury leave, pension contributions for each hour the employee is receiving his/her regular rate of pay, and for employees with 30 or more hours per week health insurance.
- **On-call employees will not accrue any benefits except on-call employees working 601 or more hours in a calendar year will receive pension contributions for hours worked in that calendar year where (s)he received his/her regular rate of pay. However, when an on-call employee receives a bid award to a regular part-time or regular full-time position, the date of the bid award is the eligibility date for the commencement of benefits and leave accruals.**
- Temporary employees will not accrue any benefits except holiday pay in accordance with Section 1 of this Article.

C. On-call Callout List

Each business unit or department utilizing on-call employees shall maintain an on-call callout list for the purpose of equalizing callouts of on-call employees. The on-call callout list shall rank the on-call employees by least amount of callouts and the first employee on the list shall be offered the first callout, providing (s)he has the qualifications to perform the job for which the callout is required, and so on down the list. Employees refusing the callout shall be charged for the callout as if actually worked. On-call employees may be removed from the callout list for

documented performance issues about which the employee has been counseled.
Article XI, Section 1, paragraphs l, m and n shall not apply to on-call employees.

Section 13. Critical Illness/Injury of Children.

An employee absence, regardless of pay status, necessitated by the critical illness or injury of the employee's child of any age shall not be held against the employee in the employer's attendance program.

**ARTICLE VII
DISCHARGE & DISCIPLINE**

Section 1. Just Cause.

No employee shall be discharged, suspended, demoted, or otherwise disciplined without just cause. Any employee who has been discharged shall be granted an interview with his/her Union Steward or Committeeperson, before (s)he is required to leave the premises. The employee may inform his/her union steward or committeeperson that (s)he does not desire union representation, which request shall be honored.

Section 2. Representation.

In all cases of discharge, demotion or written discipline, the employee involved and the Union representative shall be notified in writing of the action taken and the reason therefore at a meeting among all involved. In addition, the Company shall provide a copy of the written notification to the Union's Recording Secretary.

Section 3. Disputes.

Should there be any dispute between the Company and the Union concerning the existence of just cause for discharge, demotion or discipline, such dispute shall be adjusted in accordance with the Grievance and Arbitration provisions of this Agreement.

When an employee is suspended from work without pay, that absence will not negatively impact the employee's attendance percentage.

Section 4. Letters of Discipline.

Letters of discipline (warning or suspension) will not be used in arbitration or any formal disciplinary action, nor will they prevent promotions, after a period of two (2) years from the date of issuance. No oral warnings that are six months or older will be used in any formal disciplinary procedures.

Section 5. Removal from Work.

Employees involved in violent or hostile circumstances may be removed from Stennis Space Center and sent home pending result of investigation.

**ARTICLE VIII
SAFETY & SANITATION**

Section 1. Regulation.

The Company will comply with all applicable Federal and State safety and health laws to the extent it is permitted to do so by the provisions of its contract with the National Aeronautics and Space Administration.

Section 2. Equipment.

The Company will furnish uniforms and safety glasses for employees when such are required for the efficient and safe performance of the employees' duties.

For employees in the Fire Department, the company will furnish safety hats, working gloves, jackets, boots, bunker coats, bunker pants, fire helmets and any other equipment which the Company requires its firemen to use in the performance of their duties. (The quantity and quality of the foregoing items will be up to accepted standards in the industry). Sanitary facilities, dormitory facilities, including beds, pillows, linens, and lockers shall be provided by the Company. Kitchen facilities and cooking utensils will be provided by the company and each shift will be permitted cooking privileges.

Section 3. Inoculations.

Employees working in areas having unsanitary conditions will be furnished inoculations as good medical practices dictate.

Section 4. Buddy System.

The Buddy System will be required when employees are working in environments as follows:

- a. Inside vessels, lift stations, areas of leaking gas, high voltage (50 volts when energized, or above), high pressure gas (3500 lbs. or higher), chemical cleaning or cryogenic testing, or to work with hoist equipment, necessitating the presence or assistance of another individual under the existing safety regulations, there shall always be two or more employees assigned thereto; however, the "buddy system" will be utilized to comply with any regulatory or safety provisions as required.
- b. When work involves extensive troubleshooting and/or work on top of elevators there will always be two qualified technicians assigned. Elevator work will require the "buddy system" for all work under or over the elevator or for proof testing. (See latest revision of SSC/FOSS Project Article 11-20-008 "Buddy System".)

Section 5. Hazard Premium Pay.

Employees covered by this Agreement shall be paid thirty cents (\$.30) per hour extra for work tasks identified by Hazard Assessments and work performed:

- a. requiring personnel basket (spider), safety harness, or lifeline
- b. cryogenic testing

- c. in test cell or testing on systems with pressures in excess of 3,500 lbs.
- d. chemical cleaning (clean line)
- e. with red leaded paint
- f. with beryllium while wearing Personnel Protective Equipment (PPE)
- g. on commercial x-ray work involving the handling of radioactive cobalt or other radioactive substances
- h. requiring compliance with asbestos maintenance work requirements, i.e., wearing required PPE, completing an Asbestos Maintenance Work Approval Form (Form SSC-740)
- i. by the Fire Department only when performing standby work and requiring use of a safety harness. Staging or positioning of the standby crew will be determined by the customer and the senior fire officer.
- j. In areas of leaking gas
- k. On energized circuits greater than 50 volts

Premium pay will be allowed only for workers actually performing the hazardous work.

Excluded from this provision are the following:

Routine tasks using forklifts, stackers or other material handling machines; Lab/X-Ray Technicians and warehouse personnel scanning parcel packages.

Section 6. Safety & Training.

A committeeperson, or his/her designee, may participate in monthly safety meetings and training sessions. The committeeperson may report any condition (s)he believes to be unsafe to the Safety Department for investigation and response. It is also understood that all employees should participate to the maximum extent possible in safety programs and report any unsafe condition which they believe exists for investigation.

The Company and the Union are deeply committed to support safety in the workplace for all workers and will, therefore, partner to achieve and maintain the OSHA Voluntary Protection Program.

A joint Management Labor Safety Committee will be formed consisting of three management representatives and three labor representatives. The labor representatives will be appointed by the Union President. Either party to the VPP partnership may elect to opt out of the partnership for good cause by providing a ninety (90) day written notice to the other party

stating the basis for its withdrawal. During the 90-day notice period, the parties will endeavor in good faith to provide for the continuation of the VPP.

Section 7. Safety Shoes.

The Company will issue safety shoes to employees who are required to wear them in accordance with OSHA, ANSI, and MSS Safety Standards.

The Company will pay for quality safety shoes when required in accordance with the above. The Company will pay up to \$90 for a quality safety shoe, or up to \$150 for employees required to wear EH (Electrical Hazard) safety shoes. The shoe allowance will increase as follows:

Effective June 9, 2006	Up to \$94
Effective June 9, 2007	Up to \$98
Effective June 9, 2008	Up to \$105

Employees who are designated to wear safety shoes must wear them each day of work. If for any reason they do not have them in their possession on a workday, they will be required to wear safety protective shoe caps consistent with OSHA standards.

Shoes will normally be replaced by the Company every 12 months from the date of issue to the employee. Employees who damage shoes through neglect or lose possession of them will be required to purchase new ones at their expense through payroll deduction within a period of ten days after loss. Employees must contact the Safety Department to initiate the replacement. Prior to obtaining the new shoes, safety protective shoe caps consistent with OSHA standards must be worn as a temporary measure.

**ARTICLE IX
ASSIGNMENT OF WORK**

Section 1. Work Assignments.

Company supervision will make all work assignments.

When an employee is assigned to perform work in a higher paying job classification and performs such work for more than **one (1) hour**, or more than four hours, during any one working day, (s)he shall receive the higher rate of pay for four hours or the entire day, respectively, provided, however, that the employee is assigned and is actually performing the primary duties of the higher paying position. When an employee is temporarily assigned to a lower classification, (s)he shall receive his/her regular rate of pay. Where practical, assignments to lower classifications will be rotated. Employees temporarily assigned to a higher classification at least three (3) working days immediately prior to an absence will receive sick, holiday and vacation pay rate of the higher classification.

When work schedules are posted for the Fire Department, no change may be made without both the Company and the Union agreeing.

The primary duties and responsibilities of a Lead shall be the leading and directing of employees as assigned. However, Leads will not make job assignments.

Exempt/non-represented employees will not be called to work to perform those functions presently certified under the Collective Bargaining Agreement. Notwithstanding the above, an exempt/non-represented employee may be required to inspect and determine the nature of a problem. If it is determined to be other than incidental and a non-emergency situation, an attempt will be made to contact and call in to work appropriate employees covered by the Collective Bargaining Agreement.

The exempt/non-represented employee assigned to the tugboat operations as the Captain shall perform all functions related to the tugboat operations presently certified under the Collective Bargaining Agreement. In addition, represented employees assigned to the tugboat operations may be assigned to perform the functions of the Captain related to the tugboat operations, which are not certified under the Collective Bargaining Agreement.

Any employee scheduled to drive a bus who is precluded from doing so due to mechanical failure shall be placed on the next schedule in the same capacity and will be afforded an additional assignment.

In two shift operations, personnel will be allowed to select the shift of their choice by seniority. However, the Company reserves the right to assign individuals to a given shift in order to assure proper balance of experienced personnel.

Whenever practicable, but excluding subcontracting decisions made by the Company when placing subcontracts with minority, small or disadvantaged businesses, the Company will, when work covered by the collective bargaining agreement is identified for subcontracting, discuss subcontracting plans with the Union. When requested by the Company, the Union may submit a proposal and the Company will review the Union proposal, without commitment on the Company's part, prior to the selection of a subcontractor.

Section 2. Cross Training.

1. With the approval of the Union and the employee, an employee may be assigned to a higher classification, under supervision, for the purpose of gaining experience at his/her regular rate of pay.
2. To enhance employee skills and opportunity for advancement, employees will be cross-trained in other skills. While cross training, the employee will receive his/her regular rate of pay.
3. Employees who do not desire cross training shall decline in writing and will not be considered for the next opening in that position.
4. A cross training program and procedure will be established by the Company, which will meet and consult with a designated union cross-training committee not to exceed three (3) members. The cross training program will be established to encourage senior employees to

identify job classifications for which they hold minimum qualifications and to which they wish to progress.

5. **Quarterly meetings of the cross training committee will be held to review and implement cross training procedures. These meetings will be held immediately following the quarterly labor management meeting as set forth in Article III, Section 2.**
6. **The Company and the Union shall use their best efforts to agree upon a cross training program no later than December 31, 2005.**

ARTICLE X WAGES & CLASSIFICATIONS

Section 1. Wage Rates.

The applicable wage rates and effective dates for the respective classifications are shown in the attached Exhibit A.

Section 2. Pay Practices.

Payment of wages shall be weekly and, at the option of each employee's payroll employer, shall be made by electronic funds transfer with electronic advice (notification) of deposit, or direct distribution of paycheck to the employee. For those employers not electing EFT as provided above, current pay practices regarding check distribution will remain in effect for the duration of this Agreement.

Section 3. Shopleader/Leads.

1. A Shopleader will be a working employee who will, at the direction of his/**her** supervisor, assist the supervisor in the performance of his/**her** duties and/or act as a working Shopleader. (S)He must be able to provide initiative and competent leadership. (S)He will be responsible for the continuity of work and quality and quantity of work produced by his/**her** assigned group. (S)He must be able to properly prepare and process all forms required in conjunction with the group and work assigned.
2. Seniority shall not be controlling in regard to promotion to Shopleader. Selection of individual employees for promotion to Shopleader shall be based upon qualifications, merit and capability; however, seniority will be a factor to be considered by the company.
3. A Shopleader who is selected from a lower classification will continue to accrue his/**her** seniority, in that lower classification. In the event of a layoff, the most junior employee in the job classification affected will be laid off. For example, a certified welder selected to be a Shopleader of the weld shop would continue to accrue his/**her** seniority in the certified welder classification. However, if a layoff for certified welders occurs, the most junior employee in that classification would be selected for layoff, and not the Shopleader.

4. Shopleaders can bump back to any job that they have previously worked, in accordance with seniority provisions of this Agreement, provided they give the Company a two (2) week notice in writing.
5. Premium pay for a Lead is \$.40 per hour over the highest rate being paid in the job classification over which (s)he is assigned.

Lead I is \$.60 per hour over the Lead rate over which (s)he is assigned. If there is no Lead, (s)he is paid \$.60 per hour over the highest rate being paid in the job classification over which (s)he is assigned.

Shopleader is \$1.00 per hour over the Lead I rate over which (s)he is assigned. If there is no Lead I, (s)he is paid \$1.00 per hour over the Lead rate over which (s)he is assigned. If there is no Lead and Lead I, (s)he is paid \$1.00 per hour over the highest rate being paid in the job classification over which (s)he is assigned.

6. The classification rate of pay of the EMCS/HVAC Systems Specialist and Electrician/Electrical Control Specialist will be considered in determining Lead, Lead I and Shopleader rates of pay.
7. The Company may establish a Lead I position in certain shops to assist Shopleaders as operations dictate. In such instances, the Lead I will not perform all the duties of Shopleader in any one work-day schedule. It is understood that every shop will not require this position, and the intent is to provide Shopleaders in large shops with qualified assistants.

Section 4. Apprenticeship Program.

The Company and the Union agree to the Apprenticeship Program which is included as Exhibit B to this Agreement.

**ARTICLE XI
HOURS OF WORK & OVERTIME**

Section 1. Applicability.

All Employees except Fire Department and EMCS Personnel:

- a. A work day is defined as a 24-hour consecutive period commencing at 0001 and ending at midnight.
- b. A work week is defined as a 7-day consecutive period commencing at 0001 Saturday and ending at 2400 (midnight) Friday.
- c. The normal work week schedule will be Monday through Friday 40 hours per week with a regular workweek defined as 40 hours per week Saturday through Friday. The normal work week and shift schedules for departments, shops or other organizational units shall be decided as required by operational requirements determined by management. But nothing herein shall prohibit management from establishing the normal work week as required by

operational requirements. Where operating requirements permit, the Company will provide affected employees two working days notice of a change.

- d. Employees whose normal work shift begins between the hours of 12:00 noon and 3:30 a.m. will be considered on a night shift. Such employees will receive a shift pay differential of \$.75 per hour, in addition to their regular earnings for all work performed on such shifts. **Effective June 9, 2007, shift differential will increase to \$1.00 per hour.**

- e. One and one-half the regular straight time rate will be paid for hours worked in excess of eight (8) hours in a day, except for employees who are subject to reduced daily schedules due to inclement weather and make up time within the same work week, Regular Part-time employees and On-call employees. One and one-half the regular straight time rate will be paid for hours worked in excess of forty (40) hours in a regular work week and on a holiday.

One and one-half (1.5) times the straight-time rate of pay, plus applicable differentials, shall be paid for all time worked on an employee's sixth (6th) consecutive day worked.

Two (2) times the straight-time rate of pay, plus applicable differentials, shall be paid for all time worked on an employee's seventh (7th) consecutive day worked.

- f. For the purpose of determining whether or not an employee is entitled to overtime pay for having worked more than eight (8) hours in a day and forty (40) hours in a week, all hours in a pay status except sick and **personal** leave time shall be counted.

For the purpose of determining whether or not an employee has worked a sixth (6th) or seventh (7th) consecutive day, all hours in a pay status up to and including four (4) hours of sick and **personal** leave shall be counted.

- g. Premium pay of \$1.00 per hour on Saturday and \$1.50 per hour on Sunday shall be paid in addition to any applicable overtime rate.

- h. Two (2) times the straight time rate will be paid for hours worked in excess of twelve (12) hours in a day or in a continuous required work period. If an employee is called back to work during the day of his/**her** normal work period, the hours worked thereafter shall be added to the hours worked during his/**her** normal work period for the basis of determining overtime payment. When under this computation, an employee goes into a double the straight time rate pay status, (s)he shall remain in a double the straight time rate pay status until released by the company. For the purpose of computing overtime pay, a shift cutting across two calendar days shall be treated as worked on the day on which the shift begins. If, on the second calendar day, the employee is released by the Company and reports to work for his/**her** regular shift, the first eight (8) hours will be paid at straight time. When it becomes necessary for employees covered by this Agreement to work overtime, they shall not be laid off during regular working hours to equalize the time except where the employee has worked for twenty-four (24) hours or more in a two (2) day period. (S)He may be sent home for rest without pay at the company's discretion to report back at his/**her** next regularly scheduled work period provided the employee has had a minimum of eight (8)

hours off for rest. When an employee has worked twenty-four (24) or more hours in a two (2) day period and has not had a minimum of eight (8) hours off for rest between the second and third day, all hours worked on the third day will be paid at two (2) times the straight time rate.

- i. Employees are required to work overtime when assigned. The Company will inventory and attempt to equalize the opportunity for overtime within each classification by crew, by department, by bargaining unit. Records of overtime worked by employees shall be made available each week to Union representatives. Employees from one job classification will not be called upon to work overtime in another classification unless all employees within such other classification request relief from overtime work. Employees who request relief from overtime will be charged the equivalent pay hours of overtime worked. Temporary employees will not be scheduled for any overtime work until the regular employees in that job classification have been offered the overtime.

Among office/clerical employees, overtime shall be the responsibility of the employee normally assigned to work. When necessary, anyone familiar enough with the work can be called upon to help out. When possible, large, pre-planned overtime jobs should be shared within the classification.

- j. When two or more types of premium compensation are applicable to the same hours of work, only one, the higher, shall be paid. In no case shall premium compensation be pyramided.
- k. For the purpose of computing the overtime pay for holidays, a shift cutting across two calendar days shall be treated as worked on the day on which the shift begins.
- l. In the event the employee reports for work at the start of his/**her** scheduled shift, (**s**)he shall receive at least four (4) hours of work or pay in lieu thereof unless (**s**)he was previously notified not to report.
- m. In the event the employee is called back to work after (**s**)he has completed his/**her** scheduled hours and after leaving the site for the day, (**s**)he shall be guaranteed at least four (4) hours of work at the designated overtime rate. For the purpose of computing overtime pay, a shift cutting across two calendar days shall be treated as worked on the day on which the shift begins. If, on the second calendar day, the employee is released by the Company and reports to work for his/**her** regular shift, the first eight (8) hours will be paid at straight time. In the event the employee is called in to report to work less than four (4) hours before his/**her** scheduled hours, (**s**)he shall be guaranteed at least four (4) hours pay at the designated overtime rate. These four (4) hours are guaranteed to be paid in addition to and not inclusive of the regularly scheduled work hours.
- n. In the event the employee is called to work on an unscheduled workday (Saturday or Sunday) (**s**)he shall be guaranteed at least four (4) hours of work at an overtime rate of 1.5 times for Saturday and 2 times for Sunday. Premium pay provisions related to Saturday and

Sunday will not be applicable to callout pay. The day worked on a call out will be used for computation of the sixth and seventh day worked status.

- o. Employees who began work on an overtime assignment on their sixth (6th) consecutive day worked will be paid at the overtime rate (i.e., 1.5 times the regular straight time rate) for all continuous hours worked up to twelve (12), even though the period of continuous service continues into a seventh (7th) consecutive day worked.
- p. Employees who began work on an overtime assignment on their seventh (7th) consecutive day worked will be paid at the overtime rate (i.e., 2 times the straight time rate) for all continuous hours worked even though the period of continuous service continues into another day.
- q. Further to the above, if an employee normally works the day shift (s)he will not be paid shift differential for overtime hours; however, if any employee normally works the evening shift (s)he will be paid the appropriate shift differential compounded for overtime purposes.
- r. **Any regular part-time employee who is called in to work shall receive a minimum of four (4) hours call-in pay.**

Section 2. Shift Worker (Rotating).

- a. A rotating shift worker is defined as an employee who normally works a rotating shift Providing seven (7) day a week coverage.
- b. The following paragraphs of Section 1 above also apply to the rotating shift workers:
a, b, c, d, g, h, i, j, k, l, m, **o, p, q, and r.**
- c. Shift workers will be paid 1 and one-half times the straight time rate for hours worked in excess of 8 hours in a day, 40 hours in a week, on the 6th consecutive day of work and on holidays.
- d. Shift workers will be paid at two times the straight time rate for hours worked in excess of 12 in any one day or continuous required work period, and on the 7th consecutive day.
- e. For the purpose of determining whether or not an employee is entitled to overtime pay for working on the 6th and 7th consecutive days of work, all hours in a pay status, up to and including four (4) hours of sick and paid leave, shall be counted.
- f. If an unexpected absence among the shift workers is to be filled by the use of overtime, then the **employee** working the preceding shift will be offered the opportunity to work over four (4) hours into the next shift.

In addition, attempts will be made by the supervisor to reach the **employee** reporting for the succeeding shift as early as possible, and (s)he will be offered the opportunity to report four (4) hours early.

Section 3. Off-site Assignments.

Employees shall receive straight time rates for all hours spent traveling, but not working, not to exceed 8 hours in a calendar day.

Employees who are assigned work while away from the Stennis Space Center will be paid in accordance with the provisions of this Agreement for such hours worked.

Prior to any off-site assignment, the Company and the Union shall meet and confer regarding any special payment provisions for the assignment.

Section 4. Fire Department Employees Only.

1. Work Week

The work week for each employee in the Fire Department covered by this Agreement shall consist of three (3) staggered twenty-four (24) consecutive hours of duty. The compensation for the Fire Department employees during the twenty-four (24) hour period shall be as follows:

- a. The first eight hours starting at 0730 hours, normal work will be performed at straight time rate.
- b. The second eight hours starting at 1530 will be at time and one-half. The only work to be performed during this eight (8) hour period will be ambulance stand-by assignments and responding to alarms and emergencies.
- c. No compensation for the third eight (8) hours starting at 2330 hours. However, an employee shall receive a minimum of one hour of pay at time and one-half the base hourly rate in each instance the employee is called upon to answer alarms during the third period.
- d. Employees who do not get five (5) hours of uninterrupted rest during the combined second and third shift periods due to answering alarms or emergencies will be paid at time and one-half the base rate for the entire eight (8) hour third period.
- e. Any work in addition to regularly scheduled work shall be compensated at time and one-half the base pay. This does not apply to part time employees.
- f. Saturdays are regular work days. An additional \$1.00 per hour will be paid for the first eight (8) hours worked on Saturdays.
- g. Sundays and listed contractual holidays are days on which no work will be scheduled. However, apparatus inspections are required 7 days per week.

2. Consecutive Shifts & Temporary Relief

No firefighter shall be required to work a second consecutive twenty-four (24) hour shift unless (s)he agrees to do so. Under no circumstances will firefighters be allowed to work

more than three consecutive 24-hour days. Temporary relief for employees in the Fire Department will be provided by:

- a. Full-time employees
- b. Use of On-call personnel in accordance with their seniority
- c. **Replacement personnel will be paid for the full 24-hour shift provided they work at least 16 hours. If they do not work at least 16 hours, the first eight (8) will be paid at straight time and the remaining hours will be paid at one and a half (1.5) times the straight time rate.**

A firefighter not wishing to work a second consecutive 24-hour shift will remain on duty for a reasonable period of time to allow for the securing of a temporary relief **firefighter**. The relief **firefighter** will be paid for the full 24-hour shift.

3. Fire Department Shift Exchange

This section sets forth the procedures to be adhered to by all personnel of the SSC Fire Department interest in exchanging a shift with another employee of the Fire Department.

- a. Procedure
 - (1) Requests must be submitted one week in advance of the exchange.
 - (2) Shift exchange will be completed in the same pay period.
 - (3) All exchanges will be made within the same classification.
 - (4) The shift exchange will not result in additional cost to operations.
 - (5) The exchange will not impact the capabilities of the Fire Department.
 - (6) The resulting exchange will not require either person to work more than three consecutive 24-hour shifts.
 - (7) The 40-hour Firefighter classification is exempt from the Shift Exchange Policy.
 - (8) If requestor is going to take vacation in conjunction with the shift exchange, this shall be documented at the time the request is made.
 - (9) When a firefighter is asked to work an extra shift at the request of the Company, the firefighter may request to swap the extra shift later in the **pay period**. The request for exchange must be made at the time of the Company's request. When a firefighter is asked to perform a higher classification, upgrades will be authorized.
- b. Approval/Review
 - (1) The Fire Chief will approve/disapprove all requests for shift exchange and the decision of the Fire Chief will be final.
 - (2) If it is determined that this privilege is being abused, the person found abusing the privilege will lose all rights to exchange shifts.
 - (3) The shift exchange policy is not for long-term changes to the work schedule.

4. All firefighters are required to successfully pass a task-oriented fitness test on an annual basis. Newly hired personnel will be required to pass the fitness test prior to a job offer being tendered. The facility of the Wellness Center and a fitness program will be made available to fire department personnel at no cost to the firefighter.
5. Employees in the firefighter classification who are in a full-time pay status, and EMT certified, and are required for standby emergency medical duty (approximately 6 employees will normally be required) will be compensated one hundred **fifty** dollars (**\$150**) per month for such certified emergency medical duty. Employees who are certified will be selected by seniority. Employees will have to be re-certified as required to maintain the EMT status. Employees will be assigned to shifts to provide proper coverage by seniority.
6. Firefighters shall be paid an additional **\$5.00** per hour when conducting CPR training.

Section 5. Energy Management Control Service Personnel Only.

- a. A work day is defined as a 24-hour consecutive period commencing at 0001 hours and ending at 2400 (midnight). However, such hours may be changed at the discretion of the Company provided they give affected employees a 48-hour notice.
- b. A work week is defined as a 7-day consecutive period commencing at 0001, Saturday and ends at 2400 (midnight) on Friday. However, such work week schedule may be changed by the Company to meet the customers' operational requirements provided they give the affected employees a 48-hour notice.
- c. EMCS personnel assigned to work a rotating shift will normally be scheduled to work twelve (12) hours per shift. The Company desires to maintain the current shift schedule but reserves the right to change. If such a change is made, the new schedule will allow two (2) consecutive weekends off for rotating shift personnel. When a change is made, the Company will give the affected employees a 2-week notice of such a change.
- d. EMCS personnel will be paid one and one-half (1-1/2) times the straight time rate for hours worked in excess of forty (40) hours in a week and on holidays. For hours worked in excess of sixty (60) hours in a work week they will be paid two (2) times the straight time rate. For the purpose of computing overtime pay for EMCS Operators/Trainees, a shift cutting across two work weeks shall, where the employee is in an overtime status, be treated as worked in the work week which the shift begins. For the purpose of computing overtime pay for the Shopleader, a shift cutting across two work weeks, regardless of whether the Shopleader is in an overtime status, shall be treated as worked in the work week which the shift begins. If an employee should work in excess of twelve (12) continuous hours, they shall be paid time and one half (1-1/2) for all hours exceeding twelve (12) hours in a continuous period.
- e. For the purpose of determining whether or not an employee is entitled to overtime pay for having worked more than forty (40) hours in a work week, sixty (60) hours in a work week

and twelve (12) hours in a continuous period, all hours in a pay status except sick and paid leave shall be counted.

- f. The regular shift allowance for all hours worked between 1800 hours and 0600 hours shall be \$.75 per hour. Day shift personnel working an overtime assignment after 1800 hours shall not be eligible for the shift allowance. **Effective June 9, 2007, shift differential will increase to \$1.00 per hour.**
- g. EMCS personnel shall have their vacation requests honored on a first come basis. If there is a conflict, seniority will govern.
- h. Vacation days or weeks will be in hourly entitlements. A 1-day vacation utilizes twelve (12) hours of vacation entitlement for rotating shift workers.
- i. The Company will pay an hourly pension contribution not to exceed forty (40) hours per week for each EMCS personnel who is in a pay status. Pension contributions will be made for forty (40) hours per week when an employee is in a pay status for less than forty (40) hours per week due to the rotating shift schedule of the EMCS Shop.
- j. EMCS personnel who are in their initial training period will not be eligible for overtime until they are qualified, as determined by management. However, this initial period of training should be no longer than six (6) months.
- k. The EMCS overtime list will be one list which includes the following classifications:
 - Shopleader
 - EMCS Operator
 - EMCS Operator Trainee

Shift schedules permitting, the Company will attempt to equalize overtime where practical.

- l. Jury and subpoenaed witness duty shall be paid at the normal straight time of 12 hours per day to a maximum of 40 hours per week.
- m. EMCS Operator duties:
 - (1) Analyze, trouble-shoot and repair all system software problems.
 - (2) When assigned, EMCS personnel will adjust, repair and replace all EMCS hardware devices with the EMCS/HVAC Specialist.
 - (3) EMCS Operators can handle trouble desk calls.
 - (4) Shopleader duties interchange with management responsibilities and that work when performed is not to be classified exclusively as union work.
 - (5) Equipment belongs to the Company and may be used by any qualified person; however, no performance of any EMCS Operator's normal duties will be done, except in cases of emergency.

ARTICLE XII GENERAL

Section 1. Bulletin Boards.

Space on existing bulletin boards will be made available for the sole use of the Union as follows:

- Notices of Union recreational and social affairs.
- Notices of Union elections.
- Notices of Union appointments and results of Union elections.
- Notices of Union meetings.
- Other notices concerning bona fide Union activity such as Cooperatives, Credit Unions, and unemployment compensation information.

Section 2. Emergency Work Stoppages.

Emergency work stoppages not under the Company's control such as weather disasters, riots, and other national disasters, wherein employees are directed not to report to work are considered a normal work day, and personnel shall be allowed their regular salary. A maximum of fourteen (14) days will be paid within a calendar year. However, each employee who is called in by the Company to perform emergency duties during their regular hours of work shall be paid one and one-half times his/her regular straight time rate of pay for actual hours worked in addition to their regular rate of pay. No charges to vacation or other leave will be made by the Company for such emergency work stoppages.

Appropriate announcements made at the SSC or over local radio and/or television stations will be considered as notification not to report to work. Only those employees selected for emergency work shall be entitled for overtime compensation.

It is understood that under such conditions some confusion may exist in the selection of employees who agree to perform emergency work. The selection of employees will be on a voluntary basis and may not necessarily follow the normal provisions of overtime assignments, however, whenever practical every effort will be made to follow the normal provisions of overtime assignments.

When the site is closed, EMCS personnel who perform emergency duties during their regular hours of work shall be paid one and one-half times their regular straight time rate of pay for actual hours worked in addition to their regular rate of pay.

Section 3. Maintenance of Privileges.

Any and all privileges enjoyed by the employees will not be denied to them because of the signing of this Agreement, unless the parties, through collective bargaining mutually agree to change or specifically waive any of these privileges.

Privileges as used herein means advantages or special benefits (i.e., lunches, parties, banking privileges) heretofore granted to employees and subject to reasonable rules and regulations promulgated by the Company or the customer. Privileges does not refer to wages, hours and working conditions negotiated by the parties and made a part of this Agreement.

Section 4. Tool and Work Area Clean Up Period.

Adequate time will be allowed before the end of the shift to clean up work areas, put away tools used during the shift as directed by the Company, and for time-keeping recording.

Section 5. Flexible Work Schedule.

A Flexible Work Schedule will be administered in accordance with a mutually agreed upon policy. Both parties agree to review this policy semi-annually. Changes will be made only by mutual agreement of the parties.

Section 6. 4 Day/10 Hour Workweek.

1. One and one-half the regular straight time rate will be paid for hours worked in excess of forty (40) hours in a work week and on the fifth (5th) consecutive day worked. Two (2) times the straight-time rate of pay shall be paid for hours worked on the sixth (6th) or seventh (7th) consecutive days worked. For the purpose of determining whether or not an employee has worked a fifth (5th), sixth (6th) or seventh (7th) consecutive day, all hours in a pay status, including up to five (5) hours sick and **personal** leave, shall be counted.
2. Employees who are laid off for lack of work will receive 80 working hours notice or 80 working hours pay, at straight time rate, in lieu of notice.
3. Employees who resign their employment with the Company must provide 80 working hours notice.
4. Vacation and sick leave accrual rates will not change. However, absences for vacation, sick or paid leave, or military, jury duty and funeral leave would be charged at the 10 hour per day rate when taken on work days.
5. The Company will make the appropriate contributions per hour to the IAM Pension Plan up to a maximum of 40 hours per week for each hour the employee is receiving his/her regular rate of pay.
6. On weeks with a regularly scheduled holiday, **management of each unit will provide coverage for the remaining regular workdays in that week. Providing work schedules permit, employees may be allowed to flex during holiday weeks provided management determines it is feasible. Management may require the entire unit to revert to an 8-hour/5-day workweek.** On weeks preceding and succeeding a holiday week, the unit will work a 4 day/10 hour workweek period.
7. The normal work week schedule will be Monday through Friday 40 hours per week with a regular workweek defined as 40 hours per week Saturday through Friday. The normal work week and shift schedules for departments, shops or other organizational units shall be decided as required by operational requirements determined by management. But nothing herein shall prohibit management from establishing the normal work week as required by operational requirements. Where operating requirements permit, the Company will provide affected employees two working days notice of a change.

Section 7. Job Descriptions.

Job descriptions, including revised and amended job descriptions, shall be provided to the Union. These job descriptions will be stamped company proprietary and shall be treated as such by the Union. The Union shall not copy these job descriptions and shall retain custody and control of them in a secure manner.

The Company reserves the right to revise, change or amend job descriptions from time-to-time to correspond to duties and qualifications of the position.

Section 8. Use of Forklift Trucks.

Heavy equipment operators will be assigned to lift items weighing up to 8,000 pounds or greater. All other personnel will normally be restricted to movement of 6,000 pounds or less, but in no event more than 8,000 pounds.

If an employee has a need for a forklift truck to perform his/her regular duties at a location other than inside the 2204/2205 industrial complex, the employee may drive it to that location. However, no materials will be transported on the forklift to the job location except by storekeeper personnel and the property administrator, since heavy equipment operators will normally perform this function in accordance with the weight limitation referred to above.

All employees who are operators of forklifts must be certified in accordance with the MSS Certification Plan.

**ARTICLE XIII
SENIORITY - JOB VACANCIES & LAYOFFS**

Section 1. Seniority/Breaks in Seniority.

1. Seniority for employees covered by this Agreement after its execution shall be determined for purposes of promotion, layoff, and callback, according to the Mississippi Space Services SSC Seniority List in effect at the time. A copy of the current Mississippi Space Services SSC Seniority List will be provided to each employee covered by the Collective Bargaining Agreement. The seniority list will be posted on the Union bulletin board for a period of thirty (30) days upon publication of this Agreement during which period any employee covered by this Agreement shall advise his/her Union Representative of any alleged inaccuracy and it shall be the duty of the Union to advise the Company if any change is required in the seniority list. Once an employee agrees that his/her seniority is correct by affixing his/her initials by his/her seniority date, it shall not be changed in any subsequent review. Individuals becoming employees covered by this Agreement after finalization of the attached seniority list shall be added to the list in the appropriate classification according to the time that each became an employee covered by the Agreement. Effective 5 January 1979 the relative seniority of new employees hired on the same date shall be determined by the last four (4) digits of the employee's Social Security Number. The employee with the lowest last four (4) digits shall be deemed the senior.

The seniority date for a temporary employee will always be the date they become a regular employee.

2. Seniority for the employees covered by this Agreement for purposes of promotion, layoff, and callback shall accrue for time actually worked with the Company, time on vacation, holiday, sick or funeral leave, or as specified for leave of absence under the terms of this Agreement. Seniority will be lost whenever the employee covered by this Agreement:
 - a. Voluntarily terminates his/her employment, is discharged, or fails to apply to return to work at the termination of an authorized leave of absence.
 - b. Is absent from work because of personal illness or accident and fails to keep his/her manager notified monthly stating the probable date of his/her return to work.
 - c. Is laid off for a period of more than two (2) years.
 - d. Is notified within two years from date of layoff that (s)he may return but fails to respond within **five (5) working days** and arrange a mutually satisfactory date for re-employment.
 - e. Is absent for three (3) consecutive work days without properly notifying the Company.
3. The seniority list will be revised periodically and provided to the Union representative once a year for a period of forty-five (45) days, during which period of time it shall be the obligation of each employee and the Union to notify the Company in writing of any errors on said list. The list shall be available for inspection by any employee or Union Representative at reasonable times. It is the Union's duty to resolve any dispute between employees covered by this Agreement as to their respective seniority and to advise the company of the resolution thereof. Failure to notify the MSS Manager, Human Resources, or his/her designee, of any errors within the above-mentioned 45-day period shall foreclose any changes to the dates shown on the list.
4. For purposes of this Agreement, there will be three seniority dates: Union Seniority, Classification Seniority and Site Service Seniority.

Union Seniority-represents the total amount of time (adjusted if required) employees have been in a job now covered under the Collective Bargaining Agreement. Union seniority will be used for bidding and bumping purposes only.

Classification Seniority-is the time accrued under each classification in which an employee has worked. Classification seniority will be used to determine the most junior employee in an affected classification in a layoff.

Site Service Seniority-is the length of continuous time an employee has worked at the Government facility performing the kind of work performed by Mississippi Space Services and its predecessors.

Site Service Seniority shall apply for purposes of vacation eligibility. However, for those employees with an adjusted company service date greater than their Site Service, the adjusted company service date shall apply for purposes of vacation eligibility. The seniority described above is that seniority indicated for each employee in the current SSC seniority list.

5. **Layoff date is the date on which an employee was laid off from the Company. The layoff date shall be maintained on the seniority list for the length of callback rights.**

Section 2. Job Vacancies.

1. Notices of job openings in the bargaining unit covered herein will be posted on the Union bulletin board for a period of **five (5)** working days during which time the job shall not be permanently filled. All employees covered by this agreement regardless of employer will be eligible to bid on openings. **Employees on leave may bid by phone or by proxy for any openings posted during their leave time.**
2. Employees desiring transfer to the new job will submit their bid in writing and signed to the MSS Manager Human Resources, who shall provide a copy to the union representative. The Company will provide a designated bid form. If an employee is bidding from one SSC/FOS contractor to another, a completed job application must be submitted with the bid.
3.
 - a. Seniority, qualifications, merit and capabilities shall be the determining factors in filling job vacancies.
 - b. In the event of a posted job opening, the bidding employee with the most union seniority in the most directly related skill classification who has the qualifications, merit and capabilities shall be awarded the position. Where qualifications, merit and capabilities are substantially equal, union seniority shall be the determining factor. In the warehouse and clerical job classifications, seniority within those job classifications, not union seniority, shall be the measurement.
 - c. If there are no qualified bidders in accordance with Section 3B above, then the bidding employee with the most union seniority who has the superior qualifications, merit and capabilities shall be awarded the position. Where qualifications, merit and capabilities are substantially equal, union seniority shall be the determining factor.
4. If the Company determines within a period of thirty (30) working days that an employee selected to fill a job vacancy is not performing the job satisfactorily, the employee will be returned to his/her previous job without loss of seniority. If the employee's previous job has been abolished and there is no other job available for which the employee is qualified and eligible, then the employee shall be put on layoff.
5. When there is no qualified bidder for a posted job opening, the Company may fill the job with a qualified individual available from any source.

6. Employees who bid on a position vacated by an incumbent being placed on a Medical Leave of Absence (MLOA) will be placed into the position on a permanent basis unless the incumbent employee returns from the MLOA. Bid Bulletins will indicate positions vacated by employees placed on a MLOA. Employees displaced by another employee returning from a MLOA may exercise their seniority to bump into another job in accordance with other provisions of this article.
7. When a lateral vacancy occurs within a job classification which is normally filled by reassignment of employees within the classification, employees desiring to make a lateral transfer within their classification shall inform their supervisor and MSS Manager, Human Resources, or subcontractor Site Manager/designee.
8. Newly hired employees from sources external to the SSC/FOS contract will be considered as probationary employees for sixty (60) working days and shall be subject to discipline including discharge at the complete discretion of the Company.
9. Temporary employees will not accrue seniority. If the temporary employee is required beyond the initial thirty (30) days or the date of the agreed upon extension period, whichever is later, the job will be posted for bid.
10. The Company will notify the Union of any new hires, including temporary employees, regular part-time employees and on-call employees.
11. A weekly union/insurance orientation session for newly hired employees will be held on Monday after the employees complete their paperwork in the Human Resources Department and prior to their reporting to work. The Human Resources Office will advise the Union on Friday of each week whether there will be any new employees hired on the following Monday. The Union will be responsible for obtaining the meeting place and furnishing the appropriate completed medical/dental insurance forms to the Human Resources Office by Wednesday of the employee's first week.
12. If on any given date when there are multiple openings in a posted job classification, classification seniority for those awarded such positions will be established as follows:
 - a. A regular employee who bids into that classification on that date will be placed first in seniority order.
 - b. A regular part-time employee placed in that classification on that date will be placed second in seniority order.
 - c. Temporary employees placed into that classification on that date will be placed third in seniority order.
 - d. Newly hired employees into that classification on that date will be placed fourth in seniority order.

13. When filling vacancies, on-call employees will be considered prior to considering sources external to the SSC/FOS contract.

Section 3. Layoffs and Recalls.

1. A layoff is a termination of employment of indefinite length. Any permanent employee who is laid off for lack of work will receive ten (10) working days notice or ten (10) working days pay in lieu of notice.
2. In the event of a layoff, the employee with the least classification seniority in the job classification affected shall be laid off.
3. An employee subject to layoff may exercise his/her union seniority, or in the case of craftsmen listed in Exhibit C his/her classification seniority, to bump into any classification provided (s)he has previously held that job classification or performed like work in a now defunct classification, and provided (s)he has the union seniority, or in the case of craftsmen listed in Exhibit C the classification seniority, and qualifications and capabilities to perform in that classification.
4. Employees on layoff from a classification (onsite/offsite) will be recalled within two years if an opening exists in the classification from which they were laid off. This recall will be done without posting the job and will be processed according to the individual's seniority within the job classification. Notification of offsite recalls will be made by certified mail to the employee at his/her last known address and a failure of said employee to respond within **five (5) working days** of the time of mailing that (s)he will report to work, will constitute a waiver of his/her rights in regard to that recall, and to all future recalls unless (s)he explains his/her failure to respond and report for work to the satisfaction of the Company. If a temporary vacancy occurs, the employee can accept or decline the recall, and it will not interfere with the employee's recall rights.
5. If an employee who has been in a bargaining unit position for a period of one year is transferred to another position within **the Company** so as to be excluded from the coverage of this Agreement, such employee shall retain his/her seniority in the position from which (s)he was transferred. In the event of an unfilled bargaining unit vacancy in his/her previous position and for which (s)he is selected, his/her seniority shall be credited and (s)he shall resume his/her seniority as of the date (s)he is selected.
6. Employees who resign their employment with the Company must provide ten (10) working days notice.

Section 4. Recall of Regular Employees to Temporary Positions.

When Personnel Requisitions are received for temporary positions (positions that do not exceed 60 days), employees who have been laid off from regular positions are contacted prior to filling the requisition with outside candidates. The recall letter sent to the employee should specifically state that it is temporary – not to exceed 60 days – and their recall rights will be maintained if they decline because it is a temporary position. Temporary employees may be extended beyond 30 days

only upon mutual agreement between the Union and the Company. When the temporary assignment ends, the employee is terminated without a 10 day layoff letter issued. Benefits are extended to employees in this category.

The two year recall right for regular employees on layoff who accept recall to temporary positions (positions that do not exceed 60 days) will begin all over again at the end of the temporary assignment. **Seniority will not be accrued while on temporary recall.**

**ARTICLE XIV
HIGH PERFORMANCE WORK ORGANIZATION**

The Company and the Union agree to establish and maintain a High Performance Work Organization in accordance with Exhibit E.

In WITNESS WHEREOF, this instrument is executed as of this 23rd day of June 2005.

MISSISSIPPI SPACE SERVICES

INTERNATIONAL ASSOCIATION
OF MACHINISTS & AEROSPACE
WORKERS, LOCAL 2249

W. Kirt Bush
W. Kirt Bush
MSS Project Manager

A. B. Wallace
A. B. Wallace, Business Rep.

Diane Wyle
Diane Wyle, Manager
MSS Human Resources

Bryan Burleson
Bryan Burleson, President

James Holt
James Holt, Manager
MSS Facilities Systems

Michael Carr
Michael Carr, Vice President

Todd Mannion
Todd Mannion, Manager
MSS Engineering Project Management

Brenda Reynolds
Brenda Reynolds, Recording Secretary

Marla Carpenter
Marla Carpenter, Site Manager
Abacus Technology Corporation

Rhonda Adcox
Rhonda Adcox, Secretary/Treasurer

Deborah Jackson
Deborah Jackson, Site Manager
InDyne, Inc.

Clarence Harris
Clarence Harris, Committeeperson

Joe Chandler
Joe Chandler, Site Manager
Madison Services, Inc.

Jeremiah Hill
Jeremiah Hill, Committeeperson

Pat McCullough
Pat McCullough, President
Occu-Health, Inc.

Marsha King
Marsha King, Committeeperson

Debra Ladner
Debra Ladner, Committeeperson

Cynthia Maurigi
Cynthia Maurigi, Committeeperson

In WITNESS WHEREOF, this instrument is executed as of this 23rd day of June 2005.

MISSISSIPPI SPACE SERVICES

INTERNATIONAL ASSOCIATION
OF MACHINISTS & AEROSPACE
WORKERS, LOCAL 2249

W. Kirt Bush
MSS Project Manager

A. B. Wallace, Business Rep.

Diane Wyle, Manager
MSS Human Resources

Bryan Burleson, President

James Holt, Manager
MSS Facilities Systems

Michael Carr, Vice President

Todd Mannion, Manager
MSS Engineering Project Management

Brenda Reynolds, Recording Secretary

Marla Carpenter, Site Manager
Abacus Technology Corporation

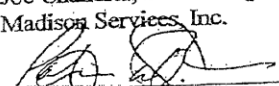
Rhonda Adcox, Secretary/Treasurer

Deborah Jackson, Site Manager
InDyne, Inc.

Clarence Harris, Committeeperson

Joe Chandler, Site Manager
Madison Services, Inc.

Jeremiah Hill, Committeeperson


Pat McCullough, President
Occu-Health, Inc.

Marshá King, Committeeperson

Debra Ladner, Committeeperson

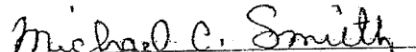
Cynthia Maurigi, Committeeperson



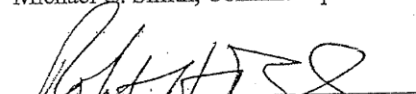
Douglass Mayberry, Committeeperson



Damon Saul, Committeeperson



Michael C. Smith, Committeeperson



Robert Taylor, Committeeperson

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
Accounting Clerk	13.73	14.14	14.63	15.36
Accounting Clerk, Senior	14.85	15.30	15.84	16.63
Air Conditioning Technician	19.04	19.61	20.30	21.32
Air Conditioning Technician, Certified	19.63	20.22	20.93	21.98
Bus Driver	15.03	15.48	16.02	16.82
Buyer	17.54	18.07	18.70	19.64
Buyer, Jr.	15.12	15.57	16.11	16.92
Carpenter	19.04	19.61	20.30	21.32
Chauffeur	14.45	14.88	15.40	16.17
Chief Storekeeper	17.54	18.07	18.70	19.64
Commodity Specialist/Cataloger	17.54	18.07	18.70	19.64
Component Technician	19.04	19.61	20.30	21.32
Compositor	15.42	15.88	16.44	17.26
Computer Operator	14.63	15.07	15.60	16.38
Configuration Control Clerk	13.15	13.54	14.01	14.71
Configuration Control Clerk, Jr.	12.35	12.72	13.17	13.83
Configuration Coordinator I	17.00	17.51	18.12	19.03
Configuration Coordinator II	15.14	15.59	16.14	16.95
Configuration Coordinator III	14.86	15.31	15.85	16.64
Cook	11.94	12.30	12.73	13.37
Crew Chief	14.13	14.55	15.06	15.81
Documentation Coordinator	19.17	19.75	20.44	21.46
Documentation Specialist	16.00	16.48	17.06	17.91
Driver/Operator	13.79	14.20	14.70	15.44
Elec./Elec. Controls Specialist	20.24	20.85	21.58	22.66
Elec./Elec. Controls Specialist, Certified	20.83	21.45	22.20	23.31
Electrician	19.04	19.61	20.30	21.32
Electrician, Certified	19.63	20.22	20.93	21.98
EMCS Operator (25+ months)	21.93	22.59	23.38	24.55
EMCS Operator (25+ months), Certified	22.52	23.20	24.01	25.21
EMCS Trainee (0-24 months)	20.56	21.18	21.92	23.02
EMCS Trainee (0-24 months), Certified	21.14	21.77	22.53	23.66
EMCS/HVAC Systems Specialist	20.24	20.85	21.58	22.66
EMCS/HVAC Systems Specialist, Certified	20.83	21.45	22.20	23.31
EMCS Specialist Senior, Certified	21.08	21.97	23.00	24.41
Environmental Health Technician	16.63	17.13	17.73	18.62
Environmental Technician	10.55	10.87	11.25	11.81
Environmental Specialist	10.77	11.09	11.48	12.05
Equipment Operator, Jr.	16.53	17.03	17.63	18.51
Equipment Operator, Heavy	19.50	20.09	20.79	21.83

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
Equipment Operator, Heavy, Certified	20.06	20.66	21.38	22.45
Facility Warranty Administrator	16.56	17.06	17.66	18.54
Firefighter	13.54	13.95	14.44	15.16
Fire Inspector	14.57	15.01	15.54	16.32
Food Service Helper	11.15	11.48	11.88	12.47
Food Truck Operator/Sales	11.86	12.22	12.65	13.28
General Clerk	12.35	12.72	13.17	13.83
General Helper	13.94	14.36	14.86	15.60
Graphics Coordinator	19.17	19.75	20.44	21.46
Grounds Technician	16.47	16.96	17.55	18.43
Illustrator	20.36	20.97	21.70	22.79
Illustrator, Senior	23.11	23.80	24.63	25.86
Lab/X-Ray Technician	17.89	18.43	19.08	20.03
Librarian Technician	12.13	12.49	12.93	13.58
Lineman	19.48	20.06	20.76	21.80
Lineman, Certified	20.05	20.65	21.37	22.44
Machinist	19.04	19.61	20.30	21.32
Mail Clerk	11.58	11.93	12.35	12.97
Marine Maintenance Technician	19.35	19.93	20.63	21.66
Material Accounting Specialist	16.69	17.19	17.79	18.68
Mechanic Automotive	19.04	19.61	20.30	21.32
Mechanical Technician	19.04	19.61	20.30	21.32
Mechanical Technician, Certified	19.63	20.22	20.93	21.98
Medical Records Specialist	13.40	13.80	14.28	14.99
Medical Records Specialist, Senior	19.17	19.75	20.44	21.46
Multimedia Graphics Artist	20.36	20.97	21.70	22.79
NAVO Liaison	19.17	19.75	20.44	21.46
Painter	18.09	18.63	19.28	20.24
Payroll Specialist	16.70	17.20	17.80	18.69
Photo Technician	20.57	21.19	21.93	23.03
Photographer	18.31	18.86	19.52	20.50
Pipefitter/Plumber	19.04	19.61	20.30	21.32
Pipefitter/Plumber, Certified	19.63	20.22	20.93	21.98
Planner Scheduler	19.17	19.75	20.44	21.46
PM Mechanic/Pesticide Tech.	17.63	18.16	18.80	19.74
Property Administrator	16.68	17.18	17.78	18.67
Property Administrator, Senior	17.54	18.07	18.70	19.64
PT&I Specialist/Electrician	20.24	20.85	21.58	22.66
PT&I Specialist/Electrician, Certified	20.83	21.45	22.20	23.31
PT&I Specialist/HVAC	20.24	20.85	21.58	22.66

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
PT&I Specialist/HVAC, Certified	20.83	21.45	22.20	23.31
PT&I Technician/Electrician	19.04	19.61	20.30	21.32
1 st Quarter	19.32	19.90	20.60	21.63
2 nd Quarter	19.63	20.22	20.93	21.98
3 rd Quarter	19.94	20.54	21.26	22.32
4 th Quarter	20.24	20.85	21.58	22.66
PT&I Technician/Electrician, Certified	19.63	20.22	20.93	21.98
1 st Quarter	19.91	20.51	21.23	22.29
2 nd Quarter	20.22	20.83	21.56	22.64
3 rd Quarter	20.52	21.14	21.88	22.97
4 th Quarter	20.83	21.45	22.20	23.31
PT&I Technician/HVAC	19.04	19.61	20.30	21.32
1 st Quarter	19.32	19.90	20.60	21.63
2 nd Quarter	19.63	20.22	20.93	21.98
3 rd Quarter	19.94	20.54	21.26	22.32
4 th Quarter	20.24	20.85	21.58	22.66
PT&I Technician/HVAC, Certified	19.63	20.22	20.93	21.98
1 st Quarter	19.91	20.51	21.23	22.29
2 nd Quarter	20.22	20.83	21.56	22.64
3 rd Quarter	20.52	21.14	21.88	22.97
4 th Quarter	20.83	21.45	22.20	23.31
Quality Assurance Technician	18.09	18.63	19.28	20.24
Quality Assurance Technician, Certified	18.67	19.23	19.90	20.90
Radiation Safety Officer	19.70	20.29	21.00	22.05
Rad./X-Ray Quality Technician	18.09	18.63	19.28	20.24
Rad./X-Ray Quality Technician, Certified	18.67	19.23	19.90	20.90
Real Property Specialist	19.09	19.66	20.35	21.37
Receiving/Shipping Clerk	13.59	14.00	14.49	15.21
Records Clerk	12.35	12.72	13.17	13.83
Registered Nurse I	16.96	17.47	18.08	18.98
Registered Nurse II	18.30	18.85	19.51	20.49
Registered Nurse III	19.83	20.42	21.13	22.19
Registered Nurse IV	21.65	22.30	23.08	24.23
Registered Nurse V	23.78	24.49	25.35	26.62
Remediation Waste System Operator	19.63	20.22	20.93	21.98
Reports Coordinator	14.76	15.20	15.73	16.52
Reproduction Operator	18.48	19.03	19.70	20.69
Reproduction Operator, Senior	21.09	21.72	22.48	23.60
Shipping Specialist	17.28	17.80	18.42	19.34
Small Engine Mechanic	17.95	18.49	19.14	20.10
Small Mower Operator	14.20	14.63	15.14	15.90

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
SpecsIntact Clerk	14.76	15.20	15.73	16.52
Stock Specialist	15.12	15.57	16.11	16.92
Storekeeper	14.35	14.78	15.30	16.07
Supply Clerk	15.12	15.57	16.11	16.92
Technical Publications Specialist	16.63	17.13	17.73	18.62
Tractor Operator	16.47	16.96	17.55	18.43
Truck Driver, Medium	14.28	14.71	15.22	15.98
Truck Driver, Heavy	16.96	17.47	18.08	18.98
Truck Driver, Refuse	15.93	16.41	16.98	17.83
Tugboat Deckhand	14.97	15.42	15.96	16.76
Tugboat Pilot	20.90	21.53	22.28	23.39
VEM Maintenance Mechanic	19.50	20.09	20.79	21.83
Visitor Relations Specialist I	10.40	10.71	11.08	11.63
Visitor Relations Specialist II	11.78	12.13	12.55	13.18
Visitor Relations Specialist III	13.19	13.59	14.07	14.77
Warehouseman	13.28	13.68	14.16	14.87
Warranty Administrator	15.12	15.57	16.11	16.92
Welder, Certified	19.63	20.22	20.93	21.98

EXHIBIT B

APPRENTICESHIP PROGRAM

1. The Apprenticeship Program shall be governed by the rules and regulations established by the Joint Apprenticeship Committee (JAC). The JAC shall consist of four members – specifically two (2) Union Committeepersons and two (2) members of Company management. The MSS Manager, Human Resources, or his/**her** designee, will act in an advisory capacity.
2. The MSS Manager, Human Resources, or his/**her** designee's, duties shall include:
 - A. Coordinate the JAC Program
 - B. Maintain adequate records showing progress of each apprentice.
 - C. Review related work experience progress with supervision to assure the apprentice is obtaining the necessary on-the-job training.
 - D. Recommend additions, revisions, or modifications to the existing program to the JAC.
3. The JAC Committee's duties shall include:
 - A. Identification and prioritization of apprenticeable occupations.
 - B. Development of apprentice specific program requirements, assessment of duration of apprenticeship, classroom requirements, training materials, involvement of offsite institutions, (i.e., community colleges) and development of evaluation criteria and progression and advancement.
 - C. Determine the appropriate number and qualifications of apprentices.
 - D. Recommend to MSS Manager, Human Resources, or his/**her** designee, award of credit for prior training and experience, based on recommendations and requests (with supporting documentation) submitted to the JAC.
 - E. Recommend to the Company, after periodically reviewing the job training, attendance and performance of each apprentice, their continuance in, progression or termination from the program.
 - F. Assure that skills training phases of the program are carried out by each apprentice to provide diversified experience for each apprentice and to preserve the integrity of the program.
 - G. Assure each supervisor maintains required training records.
 - H. Receive suggestions or questions concerning the program that have been raised by the apprentice for program improvement.
 - I. Recommend additions, revisions or modifications to the existing program.

EXHIBIT B

4. The supervisor of the apprentice shall be responsible to:
 - A. Develop task evaluation criteria to be used in objective determination of apprentice's qualification to progress to the next successive apprentice rate. Criteria will be established for each successive apprentice rate, and be used to make recommendations to the JAC.
 - B. Recommend to JAC for continuance, progression, or termination of apprentice based on the apprentice's observed progress.
 - C. Orient apprentice on safety, shop responsibilities and procedures prior to work assignments.

5. The apprentice has the following obligations and responsibilities to:
 - A. Perform and complete, diligently and faithfully, skills training and/or assignments and such other pertinent tasks as are assigned by the Company.
 - B. Respect and protect Company property and equipment and abide by Company rules and regulations.
 - C. Maintain such records as may be required by the classification and task at hand.
 - D. Develop and practice safe working habits, and conduct himself/**herself** in such a manner as to assure his/**her** own safety and that of his/**her** fellow workers.
 - E. Maintain a good attendance record. Absences will be documented and records submitted to the JAC to be used as a factor in determining continuance, progression, or termination from the program.

6. Selection of apprentices will be made by the JAC based on a grading system of interviews administered by the Committee. Credit shall be considered for grading candidates pursuing an apprentice being offered for the program, such as attending trade school, correspondence courses, or prior experience. Credit for prior training and experience may be granted in increments as determined by the JAC. The interview records will remain on file with the application. Bid posting will be in accordance with seniority provisions of the Agreement. Apprentices granted credit shall receive the appropriate apprentice rate and shall progress from that point according to the schedule determined by the JAC.

Selection of required apprentices must meet the following qualifications:

 - A. Possess a high school diploma, or it equivalent.
 - B. Passage of a company fitness for duty physical.
 - C. Any other established Company employment requirements.

7. The apprentice shall work with and directly under the direction of a qualified mentor or journeyman for the duration of the program except as agreed to by the JAC.

EXHIBIT B

8. Progress in the program is as follows:
 - A. Apprentices shall be granted increases in their basic rate following a progression criteria determined by the JAC, using the following rate structure as a guideline:
 - Start 1000 hours – 70% of Craftsperson Rate
 - 1000 hours – 75% of Craftsperson Rate
 - 2000 hours – 80% of Craftsperson Rate
 - 3000 hours – 85% of Craftsperson Rate
 - 4000 hours – 90% of Craftsperson Rate
 - 5000 hours – 95% of Craftsperson Rate
 - 6000 hours – 100% of Craftsperson Rate

Wage rates and progression will be determined by the JAC based upon the skills development required, critically of the position, industry progression standards, academic requirements, and other related factors as established by the JAC.
 - B. Apprentices whose total performance is not satisfactory at the time they are scheduled to receive an increase but who are recommended for retention in the Program by the Company, shall receive no increase. The Company will recommend review of the apprentice's performance by the JAC three (3) months following the date they were originally scheduled to receive an increase to determine if the apprentice should receive the increase, be removed from the Program, or be placed on probation for an additional three (3) months. If after the second 3-month probation period the apprentice's performance is still not satisfactory, (s)he will be terminated from the program.
9. Apprentice will not be given "super seniority" over journey craftspersons, unless the apprentice has entered the program prior to the journeyman craftsperson entering his/her classification.
10. To ensure program integrity the Apprenticeship program will be initiated in the crafts area first and after a period designated by the JAC it will be opened up to other skill classifications on a schedule to be determined by the JAC.

EXHIBIT C

CRAFTS CLASSIFICATION SENIORITY

Air Conditioning Technician; Electrician; Carpenter; Pipefitter/Plumber; Lineman; Component Technician; Machinist; Certified Welder; Electrician/Electrical Control Specialist; EMCS/HVAC Control Specialist; Mechanical Technician; Painter; PT&I Technician/Electrician; PT&I Specialist/Electrician; PT&I Technician/HVAC and PT&I Specialist/HVAC. Employees in these classifications who transfer into another job classification will have their seniority in their prior job classification frozen on the date of their transfer.

For purposes of layoff or recall, the following classifications shall be considered one classification:

- Pipefitter/Plumber and Mechanical Technician
Pipefitter/Plumber Certified and Mechanical Technician Certified
- Electrician, Electrician/Electrical Control Specialist, PT&I Technician/Electrician and PT&I Specialist/Electrician
Electrician Certified, Electrician/Electrical Control Specialist Certified, PT&I Technician/Electrician Certified and PT&I Specialist/Electrician Certified
- Air Conditioning Technician, EMCS/HVAC Systems Specialist, PT&I Technician/HVAC and PT&I Specialist/HVAC
Air Conditioning Technician Certified, EMCS/HVAC Systems Specialist Certified, PT&I Technician/HVAC Certified and PT&I Specialist/HVAC Certified

EXHIBIT D

**AGREEMENT BETWEEN
IAMAW LOCAL 2249
AND
MISSISSIPPI SPACE SERVICES STENNIS SPACE CENTER/FACILITY OPERATING
SERVICES PROJECT
AND ITS SUBCONTRACTORS (ABACUS TECHNOLOGY CORPORATION, INDYNE,
INC., MADISON SERVICES, INC., AND OCCU-HEALTH INC.)
THEIR SUCCESSORS AND ASSIGNS (HEREINAFTER CALLED "COMPANY")**

This agreement acknowledges that the Company has agreed to allow the IAMAW and its Local 2249, to offer the Custom Choices Worksite Benefits program of supplemental insurance benefits to their employees in the bargaining unit through their designated agent, Employee Benefit Systems, Inc. (EBS). Employees will be given an opportunity to spend up to fifteen minutes with an EBS Counselor at the worksite during normal working hours, once per year, not to exceed 15 minutes absence from work per employee. EBS shall schedule the employee meetings in consultation with Company managers to minimize operational disruption. Further, the Company will honor payroll deduction requests and make payments to the underwriting insurance companies for supplemental life, cancer, long-term and short term disability and critical illness insurance.

All policyholder service will be provided by the underwriter and Employee Benefit Systems, Inc. It is recognized that the Company is not endorsing this program and that participants will pay 100% of the cost through payroll deduction.

EXHIBIT E

The formation of a responsible MSS SSC FOS Project High Performance Work Organization Partnership is essential in our current Service Contract Arena for long-term success. Our HPWO Partnership will create a relationship where all employees are empowered to be successful, are involved in the decision-making process, and mutually share in the benefits of partnering. By creating an atmosphere of mutual trust and respect, through education and training, through open communications, commitment, and to the greatest extent possible, decision making by consensus, we will achieve our goals of continual improvements in safety, quality, customer satisfaction, cost competitiveness, and employment security through innovation and partnering between Mississippi Space Services and its Subcontractors (Company) and the Union.

Agreement to Partner

We, the International Association of Machinists and Aerospace Workers Local Lodge 2249, and the Mississippi Space Services and its Subcontractors (Company) have committed to a HPWO partnership that will accomplish goals that mutually benefit the Company, the Union, all employees, the SSC as our customer, and the community in which we live.

Both the Union and the Company recognize that success and growth will be based largely on the efforts of all employees and those efforts are best achieved through a professional and positive Union-Management relationship.

We agree to develop, through shared decision-making, work processes and practices that will focus on providing services that meet or exceed the needs of our customers. The approach will enable continuous improvement by maximizing the contribution of skills, knowledge, and sharing information. Through this ongoing partnering commitment, people will seek out, learn, and apply competence in our daily work environment.

Cooperative activities or projects undertaken as a result of this commitment shall be in conformity with the provisions of the Collective Bargaining Agreement, which is our contract. The partnership agreement will be enabling language, which will allow leaders of labor and management to expose the entire workforce to their commitment to establish and promote positive, and extensive workplace change. This agreement will highlight the mutual goals and benefits of the partnership and the commitment to establish a new era of labor relations through shared decision making. Working as one, we will participate in understanding our customers' perceptions and definitions of value. The knowledge gained will be integrated with design and development efforts, thereby creating high value in all new products and services that we offer.

The Company and the union recognize that total team effort is required through the HPWO Implementation and development process. As we strive toward service contract excellence, we agree to trust, respect, and help each other throughout all phases of the partnership, and its commitment to positive workplace change. With this partnership agreement we intend to increase operation efficiency, expand the workforces, better educate and train our employees, increase Company profitability, provide the basis for enhancement of wages and benefits, and secure employment for all who participate.

94-2302 MS,PASCAGOULA

WAGE DETERMINATION NO: 94-2302 REV (22) AREA: MS,PASCAGOULA

HEALTH AND WELFARE LEVEL - TOTAL BENEFIT **OTHER WELFARE LEVEL WD:94-2301

REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor | WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Handwritten signature and date 6/1/86

William W.Gross Division of
Director Wage Determinations

Wage Determination No.: 1994-2302
Revision No.: 22
Date Of Revision: 05/24/2006

State: Mississippi

Area: Mississippi Counties of George, Hancock, Harrison, Jackson, Pearl River, Stone

Fringe Benefits Required Follow the Occupational Listing

Table with 2 columns: OCCUPATION CODE - TITLE and MINIMUM WAGE RATE. Lists various job titles like Accounting Clerk, Court Reporter, etc. with their corresponding wage rates.

01531 - Travel Clerk I	10.01
01532 - Travel Clerk II	10.62
01533 - Travel Clerk III	11.14
01611 - Word Processor I	10.99
01612 - Word Processor II	12.35
01613 - Word Processor III	13.79
03000 - Automatic Data Processing Occupations	
03010 - Computer Data Librarian	11.12
03041 - Computer Operator I	12.15
03042 - Computer Operator II	14.91
03043 - Computer Operator III	17.40
03044 - Computer Operator IV	18.51
03045 - Computer Operator V	20.44
03071 - Computer Programmer I (1)	17.82
03072 - Computer Programmer II (1)	22.02
03073 - Computer Programmer III (1)	26.47
03074 - Computer Programmer IV (1)	27.62
03101 - Computer Systems Analyst I (1)	25.01
03102 - Computer Systems Analyst II (1)	27.41
03103 - Computer Systems Analyst III (1)	27.62
03160 - Peripheral Equipment Operator	12.15
05000 - Automotive Service Occupations	
05005 - Automotive Body Repairer, Fiberglass	18.95
05010 - Automotive Glass Installer	13.96
05040 - Automotive Worker	13.96
05070 - Electrician, Automotive	14.52
05100 - Mobile Equipment Servicer	12.79
05130 - Motor Equipment Metal Mechanic	15.09
05160 - Motor Equipment Metal Worker	13.96
05190 - Motor Vehicle Mechanic	16.10
05220 - Motor Vehicle Mechanic Helper	12.26
05250 - Motor Vehicle Upholstery Worker	13.38
05280 - Motor Vehicle Wrecker	13.96
05310 - Painter, Automotive	14.52
05340 - Radiator Repair Specialist	13.96
05370 - Tire Repairer	12.36
05400 - Transmission Repair Specialist	15.09
07000 - Food Preparation and Service Occupations	
(not set) - Food Service Worker	8.41
07010 - Baker	11.09
07041 - Cook I	10.17
07042 - Cook II	11.09
07070 - Dishwasher	8.41
07130 - Meat Cutter	11.42
07250 - Waiter/Waitress	8.83
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	15.00
09040 - Furniture Handler	11.53
09070 - Furniture Refinisher	14.52
09100 - Furniture Refinisher Helper	12.26
09110 - Furniture Repairer, Minor	13.38
09130 - Upholsterer	14.52
11030 - General Services and Support Occupations	
11030 - Cleaner, Vehicles	8.41
11060 - Elevator Operator	8.41
11090 - Gardener	10.41
11121 - House Keeping Aid I	8.41
11122 - House Keeping Aid II	8.86
11150 - Janitor	8.86
11210 - Laborer, Grounds Maintenance	9.04
11240 - Maid or Houseman	7.94
11270 - Pest Controller	12.79
11300 - Refuse Collector	11.13
11330 - Tractor Operator	10.52
11360 - Window Cleaner	8.83
12000 - Health Occupations	
12020 - Dental Assistant	11.15
12040 - Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	13.21

12071 - Licensed Practical Nurse I	11.84
12072 - Licensed Practical Nurse II	13.30
12073 - Licensed Practical Nurse III	14.87
12100 - Medical Assistant	10.38
12130 - Medical Laboratory Technician	13.84
12160 - Medical Record Clerk	11.36
12190 - Medical Record Technician	12.93
12221 - Nursing Assistant I	8.72
12222 - Nursing Assistant II	8.93
12223 - Nursing Assistant III	10.81
12224 - Nursing Assistant IV	12.15
12250 - Pharmacy Technician	11.63
12280 - Phlebotomist	12.98
12311 - Registered Nurse I	17.87
12312 - Registered Nurse II	21.85
12313 - Registered Nurse II, Specialist	21.85
12314 - Registered Nurse III	23.17
12315 - Registered Nurse III, Anesthetist	26.45
12316 - Registered Nurse IV	31.70
13000 - Information and Arts Occupations	
13002 - Audiovisual Librarian	19.32
13011 - Exhibits Specialist I	16.53
13012 - Exhibits Specialist II	20.10
13013 - Exhibits Specialist III	25.61
13041 - Illustrator I	16.46
13042 - Illustrator II	20.10
13043 - Illustrator III	25.61
13047 - Librarian	19.72
13050 - Library Technician	11.00
13071 - Photographer I	11.36
13072 - Photographer II	13.07
13073 - Photographer III	15.89
13074 - Photographer IV	20.24
13075 - Photographer V	22.31
15000 - Laundry, Dry Cleaning, Pressing and Related Occupations	
15010 - Assembler	7.71
15030 - Counter Attendant	7.71
15040 - Dry Cleaner	8.92
15070 - Finisher, Flatwork, Machine	7.71
15090 - Presser, Hand	7.71
15100 - Presser, Machine, Drycleaning	7.71
15130 - Presser, Machine, Shirts	7.71
15160 - Presser, Machine, Wearing Apparel, Laundry	7.71
15190 - Sewing Machine Operator	9.46
15220 - Tailor	10.01
15250 - Washer, Machine	8.05
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Toolroom)	15.97
19040 - Tool and Die Maker	18.39
21000 - Material Handling and Packing Occupations	
21010 - Fuel Distribution System Operator	14.45
21020 - Material Coordinator	13.69
21030 - Material Expediter	13.69
21040 - Material Handling Laborer	10.11
21050 - Order Filler	10.73
21071 - Forklift Operator	12.18
21080 - Production Line Worker (Food Processing)	12.42
21100 - Shipping/Receiving Clerk	11.34
21130 - Shipping Packer	11.95
21140 - Store Worker I	12.20
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	14.22
21210 - Tools and Parts Attendant	12.58
21400 - Warehouse Specialist	12.58
23000 - Mechanics and Maintenance and Repair Occupations	
23010 - Aircraft Mechanic	19.03
23040 - Aircraft Mechanic Helper	15.46
23050 - Aircraft Quality Control Inspector	19.69
23060 - Aircraft Servicer	16.87

23070 - Aircraft Worker	17.61
23100 - Appliance Mechanic	14.52
23120 - Bicycle Repairer	12.36
23125 - Cable Splicer	20.17
23130 - Carpenter, Maintenance	14.52
23140 - Carpet Layer	14.15
23160 - Electrician, Maintenance	18.11
23181 - Electronics Technician, Maintenance I	16.52
23182 - Electronics Technician, Maintenance II	17.43
23183 - Electronics Technician, Maintenance III	18.94
23260 - Fabric Worker	15.02
23290 - Fire Alarm System Mechanic	16.68
23310 - Fire Extinguisher Repairer	14.44
23340 - Fuel Distribution System Mechanic	17.01
23370 - General Maintenance Worker	13.96
23400 - Heating, Refrigeration and Air Conditioning Mechanic	15.84
23430 - Heavy Equipment Mechanic	16.79
23440 - Heavy Equipment Operator	15.09
23460 - Instrument Mechanic	17.35
23470 - Laborer	10.21
23500 - Locksmith	16.05
23530 - Machinery Maintenance Mechanic	16.89
23550 - Machinist, Maintenance	16.68
23580 - Maintenance Trades Helper	13.84
23640 - Millwright	18.02
23700 - Office Appliance Repairer	16.13
23740 - Painter, Aircraft	16.13
23760 - Painter, Maintenance	14.52
23790 - Pipefitter, Maintenance	17.59
23800 - Plumber, Maintenance	16.57
23820 - Pneudraulic Systems Mechanic	16.68
23850 - Rigger	16.61
23870 - Scale Mechanic	15.57
23890 - Sheet-Metal Worker, Maintenance	16.61
23910 - Small Engine Mechanic	13.96
23930 - Telecommunication Mechanic I	17.89
23931 - Telecommunication Mechanic II	20.65
23950 - Telephone Lineman	17.93
23960 - Welder, Combination, Maintenance	16.82
23965 - Well Driller	16.68
23970 - Woodcraft Worker	16.68
23980 - Woodworker	14.16
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	7.52
24580 - Child Care Center Clerk	9.95
24600 - Chore Aid	7.94
24630 - Homemaker	11.08
25000 - Plant and System Operation Occupations	
25010 - Boiler Tender	18.70
25040 - Sewage Plant Operator	14.66
25070 - Stationary Engineer	18.70
25190 - Ventilation Equipment Tender	13.84
25210 - Water Treatment Plant Operator	14.52
27000 - Protective Service Occupations	
(not set) - Police Officer	14.75
27004 - Alarm Monitor	12.35
27006 - Corrections Officer	11.87
27010 - Court Security Officer	13.23
27040 - Detention Officer	12.79
27070 - Firefighter	14.48
27101 - Guard I	9.05
27102 - Guard II	13.94
28000 - Stevedoring/Longshoremen Occupations	
28010 - Blocker and Bracer	16.99
28020 - Hatch Tender	15.88
28030 - Line Handler	15.88
28040 - Stevedore I	16.28
28050 - Stevedore II	17.65

29000 - Technical Occupations	
21150 - Graphic Artist	19.07
29010 - Air Traffic Control Specialist, Center (2)	31.49
29011 - Air Traffic Control Specialist, Station (2)	21.71
29012 - Air Traffic Control Specialist, Terminal (2)	23.92
29023 - Archeological Technician I	15.11
29024 - Archeological Technician II	16.94
29025 - Archeological Technician III	20.94
29030 - Cartographic Technician	24.35
29035 - Computer Based Training (CBT) Specialist/ Instructor	25.01
29040 - Civil Engineering Technician	14.65
29061 - Drafter I	14.64
29062 - Drafter II	15.72
29063 - Drafter III	19.12
29064 - Drafter IV	24.35
29081 - Engineering Technician I	13.93
29082 - Engineering Technician II	16.16
29083 - Engineering Technician III	18.58
29084 - Engineering Technician IV	22.62
29085 - Engineering Technician V	28.80
29086 - Engineering Technician VI	31.74
29090 - Environmental Technician	22.04
29100 - Flight Simulator/Instructor (Pilot)	27.41
29160 - Instructor	20.92
29210 - Laboratory Technician	18.70
29240 - Mathematical Technician	20.28
29361 - Paralegal/Legal Assistant I	15.09
29362 - Paralegal/Legal Assistant II	18.49
29363 - Paralegal/Legal Assistant III	22.64
29364 - Paralegal/Legal Assistant IV	27.37
29390 - Photooptics Technician	20.04
29480 - Technical Writer	25.79
29491 - Unexploded Ordnance (UXO) Technician I	20.02
29492 - Unexploded Ordnance (UXO) Technician II	24.22
29493 - Unexploded Ordnance (UXO) Technician III	29.03
29494 - Unexploded (UXO) Safety Escort	20.02
29495 - Unexploded (UXO) Sweep Personnel	20.02
29620 - Weather Observer, Senior (3)	19.04
29621 - Weather Observer, Combined Upper Air and Surface Programs (3)	17.17
29622 - Weather Observer, Upper Air (3)	17.17
31000 - Transportation/ Mobile Equipment Operation Occupations	
31030 - Bus Driver	12.64
31260 - Parking and Lot Attendant	7.06
31290 - Shuttle Bus Driver	10.99
31300 - Taxi Driver	9.49
31361 - Truckdriver, Light Truck	10.99
31362 - Truckdriver, Medium Truck	15.01
31363 - Truckdriver, Heavy Truck	14.38
31364 - Truckdriver, Tractor-Trailer	14.38
99000 - Miscellaneous Occupations	
99020 - Animal Caretaker	9.26
99030 - Cashier	7.31
99041 - Carnival Equipment Operator	9.75
99042 - Carnival Equipment Repairer	11.17
99043 - Carnival Worker	8.41
99050 - Desk Clerk	8.40
99095 - Embalmer	20.02
99300 - Lifeguard	10.52
99310 - Mortician	20.02
99350 - Park Attendant (Aide)	13.21
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	9.24
99500 - Recreation Specialist	14.74
99510 - Recycling Worker	12.96
99610 - Sales Clerk	9.48
99620 - School Crossing Guard (Crosswalk Attendant)	11.72
99630 - Sport Official	10.52
99658 - Survey Party Chief (Chief of Party)	13.44
99659 - Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	12.21

99660 - Surveying Aide	8.90
99690 - Swimming Pool Operator	12.21
99720 - Vending Machine Attendant	12.35
99730 - Vending Machine Repairer	14.04
99740 - Vending Machine Repairer Helper	12.35

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: Life, accident, and health insurance plans, sick leave, pension plans, civic and personal leave, severance pay, and savings and thrift plans. Minimum employer contributions costing an average of \$3.01 per hour computed on the basis of all hours worked by service employees employed on the contract.

VACATION: 1 week paid vacation after 1 year of service with a contractor or successor; 2 weeks after 2 years; 3 weeks after 5 years; and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractor in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.
- 3) WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials

are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Under the policy and guidance contained in All Agency Memorandum No. 159, the Wage and Hour Division does not recognize, for section 4(c) purposes, prospective wage rates and fringe benefit provisions that are effective only upon such contingencies as "approval of Wage and Hour, issuance of a wage determination, incorporation of the wage determination in the contract, adjusting the contract price, etc." (The relevant CBA section) in the collective bargaining agreement between (the parties) contains contingency language that Wage and Hour does not recognize as reflecting "arm's length negotiation" under section 4(c) of the Act and 29 C.F.R. 5.11(a) of the regulations. This wage determination therefore reflects the actual CBA wage rates and fringe benefits paid under the predecessor contract.

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE (Standard Form 1444 (SF 1444))

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C) (vi))

When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed (occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

AGREEMENT

BETWEEN

**MISSISSIPPI SPACE SERVICES
ABACUS TECHNOLOGY CORPORATION
INDYNE, INC.
MADISON SERVICES, INC.
OCCU-HEALTH, INC.**

Stennis Space Center/Facility Operating Services

**John C. Stennis Space Center
Stennis Space Center, MS 39529-6000**

AND

**INTERNATIONAL ASSOCIATION OF
MACHINISTS AND AEROSPACE WORKERS
Local No. 2249
AFL-CIO**

9 JUNE 2005 THROUGH 8 JUNE 2009

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PREAMBLE

This agreement entered into by and between Mississippi Space Services Stennis Space Center/Facility Operating Services Project, and its subcontractors (Abacus Technology Corporation, InDyne, Inc., Madison Services, Inc., and Occu-Health, Inc.) their successors and assigns (hereinafter called "Company") and the International Association of Machinists and Aerospace Workers, AFL-CIO, and its Local Lodge 2249, (hereinafter called "Union") evidences the desires of the parties hereto to promote and maintain harmonious relations between the Company, and the Union and Employees represented by the Union, by setting forth herein the terms of agreement relating to rates of pay, hours of work and conditions of employment.

ARTICLE I INTRODUCTION

Section 1. Application.

This Agreement applies to the employees of the Company assigned to Stennis Space Center/Facility Operating Services at Stennis Space Center, Mississippi.

Section 2. Purpose.

The purpose of this contract is to set forth the agreement reached June 23, 2005, between the Company and the Union, who are signatory hereto, as to the rates of pay, hours of work, and other conditions of employment to be observed by the parties, except as it may be amended hereafter by written agreement of the parties.

Section 3. Duration.

This contract shall become effective **9 June 2005** except for those provisions herein which specify a different effective date and shall continue through **8 June 2009** and yearly thereafter unless notice is given in writing of a desire to change, modify or terminate this contract by either party to the other party sixty (60) days or more prior to the expiration of this contract, or any anniversary date thereof.

In the event notice is given, negotiations shall commence within thirty (30) days after said notice and shall continue until an agreement is reached, or until ten (10) days advance notice is given by either party to the other to terminate the contract. Until then the terms and provisions of this contract shall remain in full force and effect. In the event no such notice is given, this contract shall be automatically renewed and extended for additional periods of time of one year thereafter, unless one party gives to the other party sixty (60) days prior written notice before the end of any yearly period of a desire to change, modify or terminate this Agreement.

Section 4. Savings Clause.

In the event that any Federal or State Legislation, governmental regulation or court decisions cause invalidation of any Article or Section of this Agreement, all other Articles and Sections not so invalidated shall remain in full force and effect.

Section 5. No Strikes or Lockouts.

During the life of this Agreement, no work stoppages, strikes, or slowdown shall be called or sanctioned by the Union, and no lockouts shall be made by the Company. Any employee actively

involved in a work stoppage, strike, or slowdown in violation of this provision shall be subject to disciplinary action, including discharge. The Union shall take prompt and reasonable steps to stop such violation.

Section 6. Gender Neutral.

It is understood that wherever in the Agreement employees or jobs are referred to in the male gender it shall be recognized as referring to both male and female employees.

Section 7. Waiver.

The Company and the Union, for the life of this Agreement, each voluntarily and unqualifiedly waives the right, and each agrees that the other shall not be obligated, to bargain collectively with respect to any subject not specifically referred to or covered in this Agreement.

This agreement and the applicable benefit agreements are the sole and controlling source of employees' rights and benefits. The entitlement of employees to rights, benefits, privileges shall be governed solely by those agreements without regard or reference to any past practices of the parties as they may have existed before the effective date of this agreement.

Section 8. Mutual.

Exceptions, local or side agreements or modifications of this Agreement may not be made except by mutual agreement in writing between the MSS Manager of Human Resources, the Union International Representative, President of Local 2249 and the affected Committeepersons.

**ARTICLE II
MANAGEMENT RIGHTS & GOVERNMENT RESPONSIBILITY**

Section 1. Management Rights.

Except to the extent expressly abridged by a specific provision of this Agreement, the Company reserves and retains, solely and exclusively, all of its rights to manage the business, as such rights existed prior to the execution of this Agreement. All matters not specifically and expressly covered or treated by the language of this Agreement may be administered for its duration by the Company in accordance with such policy or procedure as the Company may determine from time to time.

Section 2. Government Responsibility.

The Union recognizes that the Company is a contractor to the Federal Government at NASA, Stennis Space Center, Mississippi and that the Company is required at all times to fully meet its obligations as a Contractor. The Union further recognizes that from time to time the Government may impose legal and/or lawful demands or obligations upon the Company and that the Company and its employees must meet such demands, obligations or comply with such rules or regulations as may be promulgated or imposed by the Government.

It is further understood that if a security clearance is required in order to perform work in job classifications covered by the Collective Bargaining Unit, that such security clearance shall be a condition of continued employment with the Company. Such employees shall be subject to investigation for security clearance under regulations prescribed by NASA or any other authorized and appropriate agency of the United States Government. A denial or withdrawal of

such clearance by such government agency shall be just cause for discharge. However, if the affected employee is qualified and cleared to work in a different position under this collective bargaining agreement, (s)he shall be offered that position provided (s)he has the necessary seniority.

ARTICLE III

RECOGNITION, REPRESENTATION, ACCESS & SECURITY

Section 1. Recognition and Exclusive Representation.

The Company recognizes the Union as the sole and exclusive Collective Bargaining agency for the purpose of Collective Bargaining with respect to rates of pay, hours of work, and other conditions of employment pursuant to Sections 9(a) of the National Labor Relations Act and the certifications of representation in:

- (a) Case No. 15-RC-4714 of the 16th day of September, 1971, and, Case No. 15-RC-4713 of the 23rd day of September, 1971 for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act; and,
- (b) Case No. 15-RC-6461 of the 23rd day of July, 1979 for all office clerical employees, including property administrators, planner/schedulers and estimators employed by the Company at the Stennis Space Center; excluding all other employees, including industrial relations employees, administrative secretaries, confidential employees, technical writers, licensed and/or professional engineers, field engineers, associate engineers, architects, physicians, head nurses, nurses, guards, watchmen, foremen and supervisors as defined in the Act.
- (c) Case No. 15-RC-7805 dated 20 December 1993 for all composers, reproduction operators, photographers, video technicians, photo technicians, illustrators and technical information specialists employed by the employer at the Stennis Space Center; excluding all other employees; guards, watchmen and supervisors.
- (d) Case No. 15-RC-7897 dated 2 March 1995 for Utility Service Control technicians employed by the Company at the Stennis Space Center, excluding all professional employees, guards and supervisors as defined by the Act.
- (e) Case No. 15-RC-3217 dated 7 March 1966 for janitors, matrons and refuse employees employed by the Company at the Stennis Space Center, excluding professional, technical, office clerical employees, guards and supervisors.
- (f) Case No. 15-RC-4714 and Case No. 15-RC-4713 dated 5 September 2001 for Visitors Relations Specialist I and Visitors Relations Specialist II employees employed by the Company at the Stennis Space Center, for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the

Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act.

- (g) Case No. 15-RC-4714 and Case No. 15-RC-4713 dated 4 January 2003 for Tugboat Pilot employees employed by the Company at the Stennis Space Center, for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act.
- (h) Case No. 15-RC-4714 and Case No. 15-RC-4713 dated 21 May 2002 for Remediation Waste System Operator employees employed by the Company at the Stennis Space Center, for cafeteria, fire department, operations, transportation, maintenance, warehouse, inventory and purchasing employees of the Company at the Stennis Space Center, excluding watchmen, guards, professional employees and supervisors as defined in the Act.

The Company and Union agree and understand that classification names have changed and recognition has been extended to other classifications since the issuance of the above-described certifications. The Company recognizes the Union as employees' sole and exclusive representative for the purposes of collective bargaining of the classifications listed in Exhibit A.

Section 2. Union Representation.

The Company will recognize and deal, where appropriate, with all accredited members of the Union Committee, Stewards, and other Union Representatives in all matters relating to grievance, interpretations of the agreement, or in any other matters which affect, or may affect, the relationship between the Company and the Union. The Company agrees to holding a quarterly labor management meeting to facilitate open communication between the Company and Union. **These meetings will be scheduled annually during the months of March, June, September and December.**

A written list of the Union committeepersons and Union Stewards will be furnished to the Company after their designation and the Union will notify the Company of any changes. The Union Committeepersons will consist of the following:

- Facilities Systems Department – 2 Committeepersons
- Test Complex Support Department – 2 Committeeperson
- Institutional Services- 1 Committeeperson
- Office/Clerical – 1 Committeeperson
- Graphics/VRS/Clinic – 1 Committeeperson
- At-Large -- Union President
- Roads and Grounds – 1 Committeeperson
- Custodial – 1 Committeeperson
- Vice President – 1 Committeeperson
- Union Secretary/Treasurer – 1 Committeeperson**
- Recording Secretary – 1 Committeeperson

The Company shall pay employees covered by this Agreement and representing the Union at their straight time rate for the time spent during the employee's normally scheduled work period in negotiating a Collective Bargaining Agreement, processing grievances, arbitration hearings and attending Company Union meetings.

It is agreed that the employees representing the Union in the negotiating of a Collective Bargaining Agreement with the Company shall consist of the Union committeepersons as previously defined.

Hours spent in preparing and for negotiating a Collective Bargaining Agreement will be agreed upon by the Union and the Company.

Union committeepersons, **stewards and officers of the Union will be granted unpaid leave(s) to attend official union meetings and/or training. However, the Company reserves the right to withhold approval where it is determined that such leave(s) would unreasonably impact operations.**

Section 3. Union Access to Company Premises.

Accredited representatives of the Union shall be permitted to enter on the premises of the Company at all reasonable times to the extent that government regulations permit. Upon being admitted, the Union representatives shall inform the Manager, Human Resources, or his/her designated representative, and the subcontractor Site Manager/designee, if any, of the area or areas they wish to visit and then proceed to the area they wish to visit and contact the supervisor then present in the area. It is understood that if it becomes necessary for the Union representatives to engage in any substantial discussion with an employee during his/her working time, then the Union representatives will secure permission for such discussion from the employee's supervisor.

The collection of dues and assessments and campaigning for Union office will be restricted to non-working hours, but in no event shall any Union representative engage in organizing or campaigning for political office on Company premises.

Section 4. Union Security.

For the convenience of the Union and employees who are members of the Union, the Company agrees to deduct regular **weekly** Union dues from the wages of each employee who authorizes such deduction as provided for herein.

An employee who desires the Union dues to be deducted from his/her wages shall submit a fully executed authorization form to the Company, as approved by the parties, signed by said employee from whose wages deductions are to be made as provided for therein.

Deductions shall be made for the regular **weekly** Union dues of each employee in the bargaining unit for whom the above authorization has been received **effective** the first full pay period **after** an employee's authorization is received. Deductions shall continue **weekly** in like manner thereafter.

Deductions shall be remitted monthly to the designated Financial Officer of the Union not later than fifteen (15) days after the last **weekly** deductions have been made each calendar month. The

Company shall furnish the designated Financial Officer of the Union with a monthly record of those for whom deductions have been made.

An employee's authorization for dues deduction shall automatically be voided upon his or her transfer outside the bargaining unit.

An employee changing the company for whom (s)he is working shall submit a new authorization card.

Temporary employees are **exempt** from this section. On call employees shall have minimum dues deducted and remitted to the Union in accordance with this article.

Section 5. Permanent Union Office.

The Company will support, with its customer, the provision of a union office with adequate office space for all union committee members to meet. Any and all signage shall be consistent with NASA regulations and specifications. The office will have a computer and phone connection.

**ARTICLE IV
EQUAL OPPORTUNITY**

Section 1. Equal Opportunity.

The Company and the Union mutually agree to cooperate in establishing and/or maintaining, at the project covered by this Agreement, Equal Employment Opportunity, Affirmative Action Programs, the Americans with Disabilities Act (ADA) and Family and Medical Leave Act (FMLA) consistent with all Government statutory obligations applicable to employees and applicants for employment and thereby to provide, consistent with corporate policy, equal treatment with respect to rates of pay, benefits and other terms and conditions of employment and employment opportunity regardless of race, color, religion, sex, national origin, age, disability, or membership or non-membership in any labor organization. The Company shall also give due consideration to qualified Veterans.

When the Company needs additional employees, the Union will be given equal opportunity with all other sources to provide suitable applicants. The Company, however, shall not be required to hire those referred by the Union or any other sources.

**ARTICLE V
GRIEVANCE & ARBITRATION PROCEDURE**

Section 1. Grievance Procedure.

It is mutually agreed that the prompt adjustment of grievances is desirable in the interest of sound relations between the Union, the employee, and the Company.

For the purpose of this Agreement the term grievance means any differences arising between the Company and the Union or an employee involving the interpretation or application of the terms of this Agreement.

Whenever an employee covered by this Agreement has instituted a grievance as described below or wishes to institute a grievance, the Union Steward and/or the Union committee person responsible for that employee's work area shall be permitted to leave his/her work area to adjust the matter. An employee may inform the Union that (s)he does not desire Union representation which request shall be honored; however, such a request shall not deprive the Union of the right to be present and participate at all stages of the grievance procedures. The Union Representative must secure permission from his/her Supervisor prior to his/her departure during working hours which permission shall be granted unless the Union Representative's departure at that time would create an extremely critical situation. If the Union representative must enter a work area other than his/her own in fulfillment of his/her duties, (s)he shall notify the Supervisor in that area of his/her presence and purpose. The Supervisor shall allow the Union Representative to discuss the matters with the affected employee unless discussion at that time would create an extremely critical situation. Upon the request of an employee or the Union Representative, the Supervisor shall permit the Union Representative and the affected employee to discuss matters relating to a complaint or grievance in private. Time spent in investigating and adjusting grievances by Union Representatives and employees during working hours shall be limited to a reasonable period of time which the parties hereto would not normally expect to exceed 30 minutes to an hour per investigation.

Step 1. (Oral) A grievance shall be raised by the aggrieved employee with Union Representation which would normally be the employee's area steward/committeeperson, presenting the facts and issues in connection with the grievance to the aggrieved employee's Supervisor. The initial raising of a grievance must be done within five (5) working days of the occurrence of the facts that give rise to the grievance, or else it shall be considered waived. Employees raising a grievance shall cite the Article of the Collective Bargaining Agreement that has been violated. The Supervisor shall have three working days in which to advise the employee, and the Union Representative of his/her decision in connection with the grievance raised. Should this fail to settle the grievance, then:

Step 2. The grievance shall be reduced to writing by the Union Representative and the aggrieved employee and be presented to the MSS Department Manager, or his/her designated representative, and the subcontractor Site Manager/designee, if any, within three (3) working days by the Union Representative and the aggrieved employee, or else it shall be considered waived. Grievances or disputes affecting the employees in a Unit as a whole may be initiated by the Union by presenting it in writing to the MSS Department Manager, or his/her authorized representative, and the subcontractor Site Manager/designee, if any, within seven (7) working days of the occurrence of the facts giving rise to the grievance or else it shall be considered waived. The MSS Department Manager, or his/her designated representative, and the subcontractor Site Manager/designee, if any, shall answer in writing within three (3) working days. Should this fail to settle the grievance then:

Step 3. The grievance shall be presented to the MSS Manager, Human Resources or his/her designated representative within five (5) working days of the answer of the MSS Department Manager or his/her designated representative and the subcontractor Site Manager/designee, if any, or else the grievance shall be considered waived. A conference shall then be **expeditiously arranged and held within fifteen (15) working days, which period may be extended by mutual agreement**, between the MSS Manager, Human

Resources, the subcontractor Site Manager/designee, if any, and a maximum of three (3) on-site representatives, **not including the Business Representative**, of the Union **and the aggrieved employee**. The MSS Manager, Human Resources shall have five (5) working days in which to answer the grievance in writing. In the event that this conference fails to settle the grievance amicably, the Union may refer the matter to arbitration.

Section 2. Company Grievances.

The Company shall have the right to file grievances alleging violations by the Union of the Collective Bargaining Agreement. Such grievances shall be filed by the MSS Manager, Human Resources with the Local Union President and shall be resolved in accordance with Step 3 above – i.e., the Local Business Representative shall have five (5) working days in which to answer the grievance in writing.

Section 3. Arbitration Procedure.

Any grievance not adjusted in the normal manner or any dispute between the Company and the Union involving the interpretation or application of this agreement shall be referred to arbitration as herein provided.

The Company and Union will make every attempt to mutually agree upon an arbitrator to hear any case before submitting to the Federal Mediation and Conciliation Service.

In the event the parties are unable to agree on an arbitrator, then either or both parties may request the Federal Mediation and Conciliation Service to submit a panel of five (5) names to the parties. If the parties agree and select an arbitrator, the arbitrator's name will be sent to the Federal Mediation and Conciliation Service. In the event the parties cannot agree on an arbitrator, the choice shall be made by the alternate strike method. The person whose name is not struck shall be named as arbitrator. The determination of who goes first shall be made by tossing a coin. After a case on which the arbitrator is empowered to rule hereunder has been referred to said arbitrator, it may not be withdrawn by either party except by mutual consent.

The arbitrator shall have no power to alter, change, or modify the terms of the Agreement.

The arbitrator shall render a decision, signed by the arbitrator, and copies of the award shall be delivered or mailed to each of the parties.

There shall be no appeal from the arbitrator's decision, which shall be final and binding on the Union and its members, the employee or employees involved covered by this Agreement, and the Company.

Regardless of the outcome of any matter submitted to arbitration, the costs thereof shall be borne by the Company and the Union, share and share alike. Such costs shall be limited to the arbitrator's fee and expenses. The costs of any additional services required by either party shall be borne by the party requesting these additional services. The cost of requests for arbitration panels shall be alternated by the Union and the Company.

Any grievance not presented, processed to adjustment or scheduled for arbitration as provided in this article within six (6) months of the date of the alleged contract violation shall be waived. The time limitations set forth in this article may be extended by mutual agreement of the parties.

ARTICLE VI EMPLOYEE BENEFITS

Section 1. Holidays.

Employees covered by this Agreement shall receive eight (8) hours of pay at their regular hourly rate for the following holidays:

New Year's Day	Martin Luther King Birthday	Presidents Day
Memorial Day	Independence Day	Labor Day
Columbus Day	Veteran's Day	Thanksgiving Day
		Christmas Day

A floating day to be **requested by the employee and approved by management.**

Any day designated by the United States Government as a holiday, day of mourning, or other day on which Federal employees are not required to report for work under presidential proclamation.

To be eligible for holiday pay, an employee must be in pay status on the **scheduled** working day preceding and following the holiday.

Any holiday which falls on a Sunday shall be celebrated on the following **scheduled day of work**. Any holiday which falls on a Saturday shall be celebrated on the preceding **scheduled day of work**.

If a holiday falls within an employee's vacation period, such holiday shall not be considered as part of the vacation period and the Company shall give an additional day off.

Any employee called in and reporting to work on any of the above holidays, or days on which they are observed, shall perform the work for which (s)he was called in, work related thereto, and any other emergency work which arises and shall be paid one and one-half his/her regular straight time rate of pay for actual hours worked in addition to eight (8) hours holiday pay and will be guaranteed four hours work or pay in lieu thereof.

Regular Part-time employees are paid pro rata holiday pay if they are normally scheduled to work on the day of the holiday. However, the Regular Part-time employee must work the **scheduled** day before and the **scheduled** day after the holiday to be entitled to the pro rata holiday pay.

Section 2. Vacations.

Paid vacation shall accrue on a proportionate hourly basis per week sufficient to produce the following vacation availabilities per year:

- a. First 6 months (0-6) of continuous service – 0.0 hours. On employee's six-month anniversary date, one week of vacation will be credited to the employee.

- b. Two weeks for employees with one (1) year of continuous service;
- c. Three weeks for employees with five (5) years of continuous service. On employee's fifth year of continuous service, one week of vacation will be credited to the employee.
- d. Four weeks for employees with eight (8) or more years of continuous service. On the employee's eighth year of continuous service, one week of vacation will be credited to the employee.

Continuous service accumulated with prior SSC/FOS contractors will be counted in determining the amount of vacation for which an employee is eligible. In all other cases, service for vacation purposes will date from the employee's date of hire by the Company.

Scheduling of vacation will be management's responsibility and shall take into consideration the workload commitments of the organization. Vacation time must have been accrued prior to taking of any vacation.

Unscheduled vacation may be granted by management for all or part of a day for reasons of illness, emergency or other unanticipated reasons deemed valid by management.

Terminated employees shall be paid accrued vacation.

Pay for vacation shall be based on the hours scheduled for a normal work week of 40 hours at the straight hourly rate of the employee, except that pay for employees in the Fire Department shall be based on the amount earned in a normal scheduled work week.

If an employee dies while on the payroll of the Company, vacation pay, as provided, shall be paid to his/**her** beneficiary as designated on the IAM Insurance Payroll Deduction Form maintained in the employee's personnel file.

Employees shall be provided each pay period an accounting of their vacation accrual on their pay stub or other appropriate document.

The vacation status of an employee will be converted to sick leave if (s)he is hospitalized and such is verified by documentation.

A bargaining unit employee (donor) may transfer vacation hours to another bargaining unit employee (donee) where the medical condition of the donee, or the medical condition of an immediate family member of the donee, requires the donee to be absent from work and will result in substantial loss of income to the donee because of unavailability of paid leave. In order to become entitled to transfer under this section, the donor and donee employees must qualify under company policy and follow applicable procedures.

Section 3. Sick Leave.

Each employee will accrue 1.54 hours of sick leave time per week to a maximum of 80 hours per year thereby providing for ten (10) days of sick leave time per year -- except 24-hour shift

Fire Department employees will accrue 1.924 hours of sick leave time per week to a maximum of 100 hours per year thereby providing for five (5) days of sick leave per year. Employees may accrue unlimited sick leave.

Sick leave is leave occasioned by the employee's personal illness or injury or the personal illness or injury of an immediate family member whose relationship is defined in The Family and Medical Leave Act (FMLA).

Employees shall not be eligible for accrued sick leave until completing six (6) months of continuous employment, at which time the employee will be credited with 40 hours of sick leave (50 hours for 24-hour shift Fire Department employees). Sick leave time must have been accrued prior to the absence for which it is used -- except in the case of hospitalization of the employee or the employee's immediate family member whose relationship is defined in The Family and Medical Leave Act (FMLA), which the employee shall be eligible for after 60 calendar days.

After three days, the Company may require that absences be supported by a doctor's statement to be considered sick leave; however, if the employee is involved in any attendance disciplinary action, the Company may request a statement on the first day of absence.

The Company may discharge any employee who misuses this provision for sick leave.

Sick leave which would be covered by the FMLA shall be counted toward the twelve (12) weeks of annual FMLA leave.

Compensation for lost time as provided above shall be paid on regular paydays following the absences. The pay for each day of sick leave shall be equal to the amount earned by the employee in a normal scheduled work day.

No payments will be made to any employee for unused sick leave time except that:

- a. Employees who either are laid off and not offered an opportunity to return to work within one year or apply for, but do not receive, employment with a successor contractor to the Company at SSC, will be paid at their straight time rate for the sick leave time accrued, but unused, up to a maximum of sixty (60) days when the employee was laid off by the Company or when the successor contractor took over from the Company. However, employees covered by the former Office/Clerical Agreement who have 400 hours or more of sick leave as of the signing of the **9 June 2000 through 8 June 2005 Agreement** will, in the above described circumstances, be paid at their straight time rate for all sick leave time accrued but unused.
- b. All employees may request, during the first week of June, to be paid for unused sick leave accrued during the current Agreement year, provided they carry over 24 hours of that year's accrual. Sick leave will be paid at the employee's regular rate at the time the leave was accrued. **A maximum annual buyback is limited to 56 hours, 40 hours for 24-hour shift**

Fire Department employees. Example: An employee accrued 80 hours of leave during the year and used 24 hours. This employee is eligible to sell back 32 hours of leave.

- c. **Employees who are employed by the Company on a regular full-time or regular part-time basis as of the signing of this Agreement** who retire at the age of 62 years of age or older and provided they have at least one year of service with the Company, regardless of their eligibility for IAM National Pension Plan retirement benefits, **or who retire at 55 years of age with 20 years of service or at any age with 30 years of service** will be paid for unused sick leave time when the employee leaves the Company.
- d. **Should any employees who are employed by the Company on a regular full-time or regular part-time basis as of the signing of this Agreement** who passed the age of 62 die while in the employment of the Company, their unused sick leave time will be paid to their beneficiary as designated on the IAM Insurance Payroll Deduction Form maintained in the employee's personnel file.

Section 4. Personal Leave.

Each employee will accrue .46 hours of personal leave time per week to a maximum of 24 hours per year thereby providing for three (3) days of personal leave time per year -- except 24-hour shift Fire Department employees will accrue 1.153 hours of personal leave time per week to a maximum of 60 hours per year thereby providing for three (3) days of personal leave per year.

Documentation or a reason for the personal leave is not required, but the employee must obtain prior approval from their Department Manager, or Subcontractor Site Manager if any. However, in cases of an emergency when prior approval is not received, the Department Manager, or Subcontractor Site Manager if any, may require documentation for the personal leave request. Use of personal leave will not negatively impact the employee's attendance percentage.

Employees shall not be eligible for accrued personal leave until completing six (6) months of continuous employment, at which time the employee will be credited with 12 hours of personal leave (30 hours for 24-hour shift Fire Department employees). Personal leave time must have been accrued prior to the absence for which it is used -- except in the case of hospitalization of the employee or the employee's immediate family member whose relationship is defined in The Family and Medical Leave Act (FMLA), which the employee shall be eligible for after 60 calendar days.

Employees may carry over five (5) days of personal leave per year -- 40 hours per year (100 hours for 24-hour shift Fire Department employees). However, at the time of the annual sick leave buyback, employees who have not used at least 24 hours of personal leave (60 hours for 24-hour shift Fire Department employees) will be paid up to 24 hours of personal leave (60 hours for 24-hour shift Fire Department employees) accrued during the current Agreement year to prevent carry over of more than five (5) days personal leave per year. Personal leave will be paid at the employee's regular rate at the time the leave was accrued.

As of the signing of this Agreement, employees who have sufficient sick leave accruals may request, which request will be granted by the Company, to transfer up to five days (40 hours – 100 hours for 24-hour shift Fire Department employees) of their sick leave accruals to their personal leave accruals.

Section 5. On-the-Job Injury.

When an employee is injured on the job, the Company will pay his/her regular salary to be excused from work for time spent for doctors' appointments during regular working hours up to a maximum of four (4) hours **per visit**. Employees will provide proof substantiating doctors' visits.

Section 6. Leave of Absence.

Any employee, upon application in writing, may be granted a leave of absence without pay at the discretion of the Company. A leave of absence without pay shall be granted for a period not to exceed one (1) year because of personal illness, disability or undue hardship. Documentation substantiating the need for leave of absence may be required by the Company. Seniority shall not accrue for a leave of absence in excess of one calendar month except for leave of absence for personal illness, disability or undue hardship.

At the termination of the leave of absence if for personal illness, disability or undue hardship the employee will upon application be returned to his/her former position providing that the position is available and the employee is able to perform the job. In the event the former position has since been abolished or the employee is unable to perform the job, the employee will be assigned to an equivalent position for which (s)he is qualified in accordance with the seniority provisions of this Agreement. In all cases, the employee will receive the prevailing rate of pay for the job to which (s)he is assigned.

Employees accepting full time positions as Union Representatives shall be given an automatic leave of absence without pay for their term of office, or any renewal thereof, without loss of seniority rights and with the privilege of returning to their former position. In the event their former position has since been abolished, and there is no equivalent position vacant, they shall be allowed, if necessary, to bump into an equivalent position at the prevailing rate of pay for that job.

Employees taking a medical leave of absence will not be required to first use accrued vacation.

Section 7. Jury, Witness and Military Pay.

Jury and subpoenaed witness duty shall be considered a paid absence outside of that which is provided elsewhere in this agreement. The employee who serves on a jury or as a witness shall be paid their normal straight time wage rate to a maximum of forty (40) hours per week except Fire Department which will be sixty (60) hours. Any difference in pay due to military leave will be paid for up to 80 hours per calendar year. Fire Department personnel will be paid up to 120 hours per calendar year if on day/night schedule. This payment is not applicable to weekend or monthly inactive drill dates.

Section 8. Pension Plan.

For the duration of this Agreement, the Company agrees to make hourly contributions in the amounts listed below to the IAM National Pension Fund of the International Association of

Machinists and Aerospace Workers for each employee covered by this collective bargaining agreement on the basis of eight (8) hours a day up to a maximum of forty (40) hours per week for each hour the employee is receiving his/her regular rate of pay.

- \$1.95 – effective June 9, 2005**
- 2.10 – effective June 9, 2006**
- 2.20 – effective June 9, 2007**
- 2.30 – effective June 9, 2008**

Payments to the program are due by the twentieth day of the month following the month in which they were accrued.

Section 9. Health and Welfare Benefits.

Effective August 1, 2005, and through the duration of this Agreement, the Company will make available medical, dental and vision insurance for each covered employee. Covered employee means an employee who is regularly scheduled to work a minimum of 30 hours per work week. Employees who currently work at least 20 hours but less than 30 hours per week and are in receipt of Health and Welfare benefits upon the signing of **the June 9, 2000, through June 8, 2005, Agreement** will continue to receive such benefits. Such “20+” coverage shall not continue if the employee changes to either a regular full-time or less than 20-hour status. If the employee returns to a schedule of at least 20 hours but less than 30 hours per week, the “20+” coverage shall not be reinstated unless the return is a result of a layoff and the employee bumps back into the schedule. If husband and wife are both employed by the Company during the same period of time, only one of them may carry the designated coverages.

These plans will provide for tiered coverage for election by the eligible employee (employee only, employee plus child(ren), employee plus spouse, and family for medical and dental coverage; and employee only, employee plus one and family for vision).

The employee will pay 20% of the total MSS premium cost for medical coverage elected by the employee.

Effective August 1, 2005, through July 31, 2006, employee monthly contributions will be 20% of the total monthly premium not to exceed:

Employee Only	\$ 75.95
Employee + Child(ren)	\$121.90
Employee +Spouse	\$171.48
Family	\$223.70

The Company will pay 50% of the total premium cost for dental coverage elected by the employee.

The employee will pay 100% of the total premium cost for vision insurance.

120 calendar days prior to the renewal date of medical or dental insurance, a labor-management Insurance Evaluation Committee will be constituted to evaluate the need to modify the current plan or change providers comprised of three members appointed by the Union President, three members appointed by management, the Union President and the MSS Human Resources Manager. The Union President shall chair this committee. The Insurance Evaluation Committee will be responsible for reviewing insurance experience data and premium cost, soliciting, evaluating and analyzing quotes from insurance carriers and recommending whether a change in provider is warranted or a modification in benefits is best for employees. All decisions and recommendations of the Insurance Evaluation Committee shall be decided by majority vote. In the event of a deadlock, the matter shall be submitted to expedited arbitration through the American Arbitration Association under its Employment Disputes Resolution Rules for a final and binding decision.

For an employee on a leave of absence without pay for personal illness, disability or undue hardship, the Company will continue to pay the Company portion of the medical insurance premium for a period up to six (6) months. Employees who do not participate in the plan will not receive monetary payments. If the leave of absence without pay is for personal illness or disability, the Company will then continue to pay the total medical insurance premium for one (1) month for every forty (40) hours of sick leave accrued, but not utilized, at the on-set of the illness. However, for the duration of the leave of absence without pay for personal illness or disability, the maximum payments by the Company shall not exceed 12 months of Company contributions.

The Company agrees to maintain life/accidental death insurance in the amount of \$25,000, with \$50,000 for accidental death, for the duration of this Agreement.

Section 10. Funeral Leave.

In the event of a death in the current immediate family – parents (including step-parents), grandchild, sister, brother (including half-sister and half-brother), spouse, child (including stepchild), mother or father-in-law, brother or sister-in-law, son or daughter-in-law and grandparents, and grandparents-in-law -- any employee covered by this Agreement will be granted three (3) days of leave to attend the funeral with pay equal to the amount earned by the employee in a normally scheduled work day, but in no event shall the payment for funeral leave cause the employee to receive wages in excess of the amount earned in a normally scheduled work week. The Company will consider requests for additional funeral leave where attendance at the funeral will involve exceptional amounts of travel.

Section 11. 401(k) Plan.

The Company agrees to make payroll deductions for a 401(k) plan that is independently sponsored by the Union provided the following qualifications are met:

1. The Plan Trustee will hold the Company harmless for any administration action and/or deduction. The Plan Trustee will furnish the Company with a document stating that the plan is IRS approved for 401(k) deductions to be made prior to any applicable taxes being withheld.

2. The Union agrees to hold the Company harmless from any administrative or legal action that may result from this agreement to deduct **weekly** contributions for an independent 401(k) plan.

Section 12. Part-time, On-call & Temporary Employees.

A. Definitions

For the purpose of this Agreement, the following definitions will apply:

- Regular Part-time employee – An employee who is regularly scheduled to work at least twenty (20) but less than forty (40) hours per work week.
- On-call employee – An employee who is not regularly scheduled to work, but who is called in to work as needed on either a part-time or full-time basis.
- Temporary employee – An employee who is hired to work either full-time or part-time for a finite period of time not to exceed 30 days unless extended for an additional 30 days upon mutual written agreement of the parties.

B. Benefits

- Regular Part-time employees are entitled to the following benefits: pro rated holiday pay, pro rated vacation and sick leave accruals, pro rated funeral and jury leave, pension contributions for each hour the employee is receiving his/**her** regular rate of pay, and for employees with 30 or more hours per week health insurance.
- **On-call employees will not accrue any benefits except on-call employees working 601 or more hours in a calendar year will receive pension contributions for hours worked in that calendar year where (s)he received his/her regular rate of pay. However, when an on-call employee receives a bid award to a regular part-time or regular full-time position, the date of the bid award is the eligibility date for the commencement of benefits and leave accruals.**
- Temporary employees will not accrue any benefits except holiday pay in accordance with Section 1 of this Article.

C. On-call Callout List

Each business unit or department utilizing on-call employees shall maintain an on-call callout list for the purpose of equalizing callouts of on-call employees. The on-call callout list shall rank the on-call employees by least amount of callouts and the first employee on the list shall be offered the first callout, providing (s)he has the qualifications to perform the job for which the callout is required, and so on down the list. Employees refusing the callout shall be charged for the callout as if actually worked. On-call employees may be removed from the callout list for

documented performance issues about which the employee has been counseled. Article XI, Section 1, paragraphs l, m and n shall not apply to on-call employees.

Section 13. Critical Illness/Injury of Children.

An employee absence, regardless of pay status, necessitated by the critical illness or injury of the employee's child of any age shall not be held against the employee in the employer's attendance program.

**ARTICLE VII
DISCHARGE & DISCIPLINE**

Section 1. Just Cause.

No employee shall be discharged, suspended, demoted, or otherwise disciplined without just cause. Any employee who has been discharged shall be granted an interview with his/her Union Steward or Committeeperson, before (s)he is required to leave the premises. The employee may inform his/her union steward or committeeperson that (s)he does not desire union representation, which request shall be honored.

Section 2. Representation.

In all cases of discharge, demotion or written discipline, the employee involved and the Union representative shall be notified in writing of the action taken and the reason therefore at a meeting among all involved. In addition, the Company shall provide a copy of the written notification to the Union's Recording Secretary.

Section 3. Disputes.

Should there be any dispute between the Company and the Union concerning the existence of just cause for discharge, demotion or discipline, such dispute shall be adjusted in accordance with the Grievance and Arbitration provisions of this Agreement.

When an employee is suspended from work without pay, that absence will not negatively impact the employee's attendance percentage.

Section 4. Letters of Discipline.

Letters of discipline (warning or suspension) will not be used in arbitration or any formal disciplinary action, nor will they prevent promotions, after a period of two (2) years from the date of issuance. No oral warnings that are six months or older will be used in any formal disciplinary procedures.

Section 5. Removal from Work.

Employees involved in violent or hostile circumstances may be removed from Stennis Space Center and sent home pending result of investigation.

ARTICLE VIII SAFETY & SANITATION

Section 1. Regulation.

The Company will comply with all applicable Federal and State safety and health laws to the extent it is permitted to do so by the provisions of its contract with the National Aeronautics and Space Administration.

Section 2. Equipment.

The Company will furnish uniforms and safety glasses for employees when such are required for the efficient and safe performance of the employees' duties.

For employees in the Fire Department, the company will furnish safety hats, working gloves, jackets, boots, bunker coats, bunker pants, fire helmets and any other equipment which the Company requires its firemen to use in the performance of their duties. (The quantity and quality of the foregoing items will be up to accepted standards in the industry). Sanitary facilities, dormitory facilities, including beds, pillows, linens, and lockers shall be provided by the Company. Kitchen facilities and cooking utensils will be provided by the company and each shift will be permitted cooking privileges.

Section 3. Inoculations.

Employees working in areas having unsanitary conditions will be furnished inoculations as good medical practices dictate.

Section 4. Buddy System.

The Buddy System will be required when employees are working in environments as follows:

- a. Inside vessels, lift stations, areas of leaking gas, high voltage (50 volts when energized, or above), high pressure gas (3500 lbs. or higher), chemical cleaning or cryogenic testing, or to work with hoist equipment, necessitating the presence or assistance of another individual under the existing safety regulations, there shall always be two or more employees assigned thereto; however, the "buddy system" will be utilized to comply with any regulatory or safety provisions as required.
- b. When work involves extensive troubleshooting and/or work on top of elevators there will always be two qualified technicians assigned. Elevator work will require the "buddy system" for all work under or over the elevator or for proof testing. (See latest revision of SSC/FOSS Project Article 11-20-008 "Buddy System".)

Section 5. Hazard Premium Pay.

Employees covered by this Agreement shall be paid thirty cents (\$.30) per hour extra for work tasks identified by Hazard Assessments and work performed:

- a. requiring personnel basket (spider), safety harness, or lifeline
- b. cryogenic testing

- c. in test cell or testing on systems with pressures in excess of 3,500 lbs.
- d. chemical cleaning (clean line)
- e. with red leaded paint
- f. with beryllium while wearing Personnel Protective Equipment (PPE)
- g. on commercial x-ray work involving the handling of radioactive cobalt or other radioactive substances
- h. requiring compliance with asbestos maintenance work requirements, i.e., wearing required PPE, completing an Asbestos Maintenance Work Approval Form (Form SSC-740)
- i. by the Fire Department only when performing standby work and requiring use of a safety harness. Staging or positioning of the standby crew will be determined by the customer and the senior fire officer.
- j. In areas of leaking gas
- k. On energized circuits greater than 50 volts

Premium pay will be allowed only for workers actually performing the hazardous work.

Excluded from this provision are the following:

Routine tasks using forklifts, stackers or other material handling machines; Lab/X-Ray Technicians and warehouse personnel scanning parcel packages.

Section 6. Safety & Training.

A committeeperson, or his/her designee, may participate in monthly safety meetings and training sessions. The committeeperson may report any condition (s)he believes to be unsafe to the Safety Department for investigation and response. It is also understood that all employees should participate to the maximum extent possible in safety programs and report any unsafe condition which they believe exists for investigation.

The Company and the Union are deeply committed to support safety in the workplace for all workers and will, therefore, partner to achieve and maintain the OSHA Voluntary Protection Program.

A joint Management Labor Safety Committee will be formed consisting of three management representatives and three labor representatives. The labor representatives will be appointed by the Union President. Either party to the VPP partnership may elect to opt out of the partnership for good cause by providing a ninety (90) day written notice to the other party

stating the basis for its withdrawal. During the 90-day notice period, the parties will endeavor in good faith to provide for the continuation of the VPP.

Section 7. Safety Shoes.

The Company will issue safety shoes to employees who are required to wear them in accordance with OSHA, ANSI, and MSS Safety Standards.

The Company will pay for quality safety shoes when required in accordance with the above. The Company will pay up to \$90 for a quality safety shoe, or up to \$150 for employees required to wear EH (Electrical Hazard) safety shoes. The shoe allowance will increase as follows:

Effective June 9, 2006	Up to \$94
Effective June 9, 2007	Up to \$98
Effective June 9, 2008	Up to \$105

Employees who are designated to wear safety shoes must wear them each day of work. If for any reason they do not have them in their possession on a workday, they will be required to wear safety protective shoe caps consistent with OSHA standards.

Shoes will normally be replaced by the Company every 12 months from the date of issue to the employee. Employees who damage shoes through neglect or lose possession of them will be required to purchase new ones at their expense through payroll deduction within a period of ten days after loss. Employees must contact the Safety Department to initiate the replacement. Prior to obtaining the new shoes, safety protective shoe caps consistent with OSHA standards must be worn as a temporary measure.

**ARTICLE IX
ASSIGNMENT OF WORK**

Section 1. Work Assignments.

Company supervision will make all work assignments.

When an employee is assigned to perform work in a higher paying job classification and performs such work for more than **one (1) hour**, or more than four hours, during any one working day, (s)he shall receive the higher rate of pay for four hours or the entire day, respectively, provided, however, that the employee is assigned and is actually performing the primary duties of the higher paying position. When an employee is temporarily assigned to a lower classification, (s)he shall receive his/her regular rate of pay. Where practical, assignments to lower classifications will be rotated. Employees temporarily assigned to a higher classification at least three (3) working days immediately prior to an absence will receive sick, holiday and vacation pay rate of the higher classification.

When work schedules are posted for the Fire Department, no change may be made without both the Company and the Union agreeing.

The primary duties and responsibilities of a Lead shall be the leading and directing of employees as assigned. However, Leads will not make job assignments.

Exempt/non-represented employees will not be called to work to perform those functions presently certified under the Collective Bargaining Agreement. Notwithstanding the above, an exempt/non-represented employee may be required to inspect and determine the nature of a problem. If it is determined to be other than incidental and a non-emergency situation, an attempt will be made to contact and call in to work appropriate employees covered by the Collective Bargaining Agreement.

The exempt/non-represented employee assigned to the tugboat operations as the Captain shall perform all functions related to the tugboat operations presently certified under the Collective Bargaining Agreement. In addition, represented employees assigned to the tugboat operations may be assigned to perform the functions of the Captain related to the tugboat operations, which are not certified under the Collective Bargaining Agreement.

Any employee scheduled to drive a bus who is precluded from doing so due to mechanical failure shall be placed on the next schedule in the same capacity and will be afforded an additional assignment.

In two shift operations, personnel will be allowed to select the shift of their choice by seniority. However, the Company reserves the right to assign individuals to a given shift in order to assure proper balance of experienced personnel.

Whenever practicable, but excluding subcontracting decisions made by the Company when placing subcontracts with minority, small or disadvantaged businesses, the Company will, when work covered by the collective bargaining agreement is identified for subcontracting, discuss subcontracting plans with the Union. When requested by the Company, the Union may submit a proposal and the Company will review the Union proposal, without commitment on the Company's part, prior to the selection of a subcontractor.

Section 2. Cross Training.

1. With the approval of the Union and the employee, an employee may be assigned to a higher classification, under supervision, for the purpose of gaining experience at his/her regular rate of pay.
2. To enhance employee skills and opportunity for advancement, employees will be cross-trained in other skills. While cross training, the employee will receive his/her regular rate of pay.
3. Employees who do not desire cross training shall decline in writing and will not be considered for the next opening in that position.
4. A cross training program and procedure will be established by the Company, which will meet and consult with a designated union cross-training committee not to exceed three (3) members. The cross training program will be established to encourage senior employees to

identify job classifications for which they hold minimum qualifications and to which they wish to progress.

5. **Quarterly meetings of the cross training committee will be held to review and implement cross training procedures. These meetings will be held immediately following the quarterly labor management meeting as set forth in Article III, Section 2.**
6. **The Company and the Union shall use their best efforts to agree upon a cross training program no later than December 31, 2005.**

ARTICLE X WAGES & CLASSIFICATIONS

Section 1. Wage Rates.

The applicable wage rates and effective dates for the respective classifications are shown in the attached Exhibit A.

Section 2. Pay Practices.

Payment of wages shall be weekly and, at the option of each employee's payroll employer, shall be made by electronic funds transfer with electronic advice (notification) of deposit, or direct distribution of paycheck to the employee. For those employers not electing EFT as provided above, current pay practices regarding check distribution will remain in effect for the duration of this Agreement.

Section 3. Shopleader/Leads.

1. A Shopleader will be a working employee who will, at the direction of his/her supervisor, assist the supervisor in the performance of his/her duties and/or act as a working Shopleader. (S)He must be able to provide initiative and competent leadership. (S)He will be responsible for the continuity of work and quality and quantity of work produced by his/her assigned group. (S)He must be able to properly prepare and process all forms required in conjunction with the group and work assigned.
2. Seniority shall not be controlling in regard to promotion to Shopleader. Selection of individual employees for promotion to Shopleader shall be based upon qualifications, merit and capability; however, seniority will be a factor to be considered by the company.
3. A Shopleader who is selected from a lower classification will continue to accrue his/her seniority, in that lower classification. In the event of a layoff, the most junior employee in the job classification affected will be laid off. For example, a certified welder selected to be a Shopleader of the weld shop would continue to accrue his/her seniority in the certified welder classification. However, if a layoff for certified welders occurs, the most junior employee in that classification would be selected for layoff, and not the Shopleader.

4. Shopleaders can bump back to any job that they have previously worked, in accordance with seniority provisions of this Agreement, provided they give the Company a two (2) week notice in writing.

5. Premium pay for a Lead is \$.40 per hour over the highest rate being paid in the job classification over which (s)he is assigned.

Lead I is \$.60 per hour over the Lead rate over which (s)he is assigned. If there is no Lead, (s)he is paid \$.60 per hour over the highest rate being paid in the job classification over which (s)he is assigned.

Shopleader is \$1.00 per hour over the Lead I rate over which (s)he is assigned. If there is no Lead I, (s)he is paid \$1.00 per hour over the Lead rate over which (s)he is assigned. If there is no Lead and Lead I, (s)he is paid \$1.00 per hour over the highest rate being paid in the job classification over which (s)he is assigned.

6. The classification rate of pay of the EMCS/HVAC Systems Specialist and Electrician/Electrical Control Specialist will be considered in determining Lead, Lead I and Shopleader rates of pay.

7. The Company may establish a Lead I position in certain shops to assist Shopleaders as operations dictate. In such instances, the Lead I will not perform all the duties of Shopleader in any one work-day schedule. It is understood that every shop will not require this position, and the intent is to provide Shopleaders in large shops with qualified assistants.

Section 4. Apprenticeship Program.

The Company and the Union agree to the Apprenticeship Program which is included as Exhibit B to this Agreement.

ARTICLE XI HOURS OF WORK & OVERTIME

Section 1. Applicability.

All Employees except Fire Department and EMCS Personnel:

a. A work day is defined as a 24-hour consecutive period commencing at 0001 and ending at midnight.

b. A work week is defined as a 7-day consecutive period commencing at 0001 Saturday and ending at 2400 (midnight) Friday.

c. The normal work week schedule will be Monday through Friday 40 hours per week with a regular workweek defined as 40 hours per week Saturday through Friday. The normal work week and shift schedules for departments, shops or other organizational units shall be decided as required by operational requirements determined by management. But nothing herein shall prohibit management from establishing the normal work week as required by

operational requirements. Where operating requirements permit, the Company will provide affected employees two working days notice of a change.

d. Employees whose normal work shift begins between the hours of 12:00 noon and 3:30 a.m. will be considered on a night shift. Such employees will receive a shift pay differential of \$.75 per hour, in addition to their regular earnings for all work performed on such shifts. **Effective June 9, 2007, shift differential will increase to \$1.00 per hour.**

e. One and one-half the regular straight time rate will be paid for hours worked in excess of eight (8) hours in a day, except for employees who are subject to reduced daily schedules due to inclement weather and make up time within the same work week, Regular Part-time employees and On-call employees. One and one-half the regular straight time rate will be paid for hours worked in excess of forty (40) hours in a regular work week and on a holiday.

One and one-half (1.5) times the straight-time rate of pay, plus applicable differentials, shall be paid for all time worked on an employee's sixth (6th) consecutive day worked.

Two (2) times the straight-time rate of pay, plus applicable differentials, shall be paid for all time worked on an employee's seventh (7th) consecutive day worked.

f. For the purpose of determining whether or not an employee is entitled to overtime pay for having worked more than eight (8) hours in a day and forty (40) hours in a week, all hours in a pay status except sick and **personal** leave time shall be counted.

For the purpose of determining whether or not an employee has worked a sixth (6th) or seventh (7th) consecutive day, all hours in a pay status up to and including four (4) hours of sick and **personal** leave shall be counted.

g. Premium pay of \$1.00 per hour on Saturday and \$1.50 per hour on Sunday shall be paid in addition to any applicable overtime rate.

h. Two (2) times the straight time rate will be paid for hours worked in excess of twelve (12) hours in a day or in a continuous required work period. If an employee is called back to work during the day of his/her normal work period, the hours worked thereafter shall be added to the hours worked during his/her normal work period for the basis of determining overtime payment. When under this computation, an employee goes into a double the straight time rate pay status, (s)he shall remain in a double the straight time rate pay status until released by the company. For the purpose of computing overtime pay, a shift cutting across two calendar days shall be treated as worked on the day on which the shift begins. If, on the second calendar day, the employee is released by the Company and reports to work for his/her regular shift, the first eight (8) hours will be paid at straight time. When it becomes necessary for employees covered by this Agreement to work overtime, they shall not be laid off during regular working hours to equalize the time except where the employee has worked for twenty-four (24) hours or more in a two (2) day period. (S)He may be sent home for rest without pay at the company's discretion to report back at his/her next regularly scheduled work period provided the employee has had a minimum of eight (8)

hours off for rest. When an employee has worked twenty-four (24) or more hours in a two (2) day period and has not had a minimum of eight (8) hours off for rest between the second and third day, all hours worked on the third day will be paid at two (2) times the straight time rate.

- i. Employees are required to work overtime when assigned. The Company will inventory and attempt to equalize the opportunity for overtime within each classification by crew, by department, by bargaining unit. Records of overtime worked by employees shall be made available each week to Union representatives. Employees from one job classification will not be called upon to work overtime in another classification unless all employees within such other classification request relief from overtime work. Employees who request relief from overtime will be charged the equivalent pay hours of overtime worked. Temporary employees will not be scheduled for any overtime work until the regular employees in that job classification have been offered the overtime.

Among office/clerical employees, overtime shall be the responsibility of the employee normally assigned to work. When necessary, anyone familiar enough with the work can be called upon to help out. When possible, large, pre-planned overtime jobs should be shared within the classification.

- j. When two or more types of premium compensation are applicable to the same hours of work, only one, the higher, shall be paid. In no case shall premium compensation be pyramided.
- k. For the purpose of computing the overtime pay for holidays, a shift cutting across two calendar days shall be treated as worked on the day on which the shift begins.
- l. In the event the employee reports for work at the start of his/her scheduled shift, (s)he shall receive at least four (4) hours of work or pay in lieu thereof unless (s)he was previously notified not to report.
- m. In the event the employee is called back to work after (s)he has completed his/her scheduled hours and after leaving the site for the day, (s)he shall be guaranteed at least four (4) hours of work at the designated overtime rate. For the purpose of computing overtime pay, a shift cutting across two calendar days shall be treated as worked on the day on which the shift begins. If, on the second calendar day, the employee is released by the Company and reports to work for his/her regular shift, the first eight (8) hours will be paid at straight time. In the event the employee is called in to report to work less than four (4) hours before his/her scheduled hours, (s)he shall be guaranteed at least four (4) hours pay at the designated overtime rate. These four (4) hours are guaranteed to be paid in addition to and not inclusive of the regularly scheduled work hours.
- n. In the event the employee is called to work on an unscheduled workday (Saturday or Sunday) (s)he shall be guaranteed at least four (4) hours of work at an overtime rate of 1.5 times for Saturday and 2 times for Sunday. Premium pay provisions related to Saturday and

Sunday will not be applicable to callout pay. The day worked on a call out will be used for computation of the sixth and seventh day worked status.

- o. Employees who began work on an overtime assignment on their sixth (6th) consecutive day worked will be paid at the overtime rate (i.e., 1.5 times the regular straight time rate) for all continuous hours worked up to twelve (12), even though the period of continuous service continues into a seventh (7th) consecutive day worked.
- p. Employees who began work on an overtime assignment on their seventh (7th) consecutive day worked will be paid at the overtime rate (i.e., 2 times the straight time rate) for all continuous hours worked even though the period of continuous service continues into another day.
- q. Further to the above, if an employee normally works the day shift (s)he will not be paid shift differential for overtime hours; however, if any employee normally works the evening shift (s)he will be paid the appropriate shift differential compounded for overtime purposes.
- r. **Any regular part-time employee who is called in to work shall receive a minimum of four (4) hours call-in pay.**

Section 2. Shift Worker (Rotating).

- a. A rotating shift worker is defined as an employee who normally works a rotating shift Providing seven (7) day a week coverage.
- b. The following paragraphs of Section 1 above also apply to the rotating shift workers:
a, b, c, d, g, h, i, j, k, l, m, o, p, q, and r.
- c. Shift workers will be paid 1 and one-half times the straight time rate for hours worked in excess of 8 hours in a day, 40 hours in a week, on the 6th consecutive day of work and on holidays.
- d. Shift workers will be paid at two times the straight time rate for hours worked in excess of 12 in any one day or continuous required work period, and on the 7th consecutive day.
- e. For the purpose of determining whether or not an employee is entitled to overtime pay for working on the 6th and 7th consecutive days of work, all hours in a pay status, up to and including four (4) hours of sick and paid leave, shall be counted.
- f. If an unexpected absence among the shift workers is to be filled by the use of overtime, then the **employee** working the preceding shift will be offered the opportunity to work over four (4) hours into the next shift.

In addition, attempts will be made by the supervisor to reach the **employee** reporting for the succeeding shift as early as possible, and (s)he will be offered the opportunity to report four (4) hours early.

Section 3. Off-site Assignments.

Employees shall receive straight time rates for all hours spent traveling, but not working, not to exceed 8 hours in a calendar day.

Employees who are assigned work while away from the Stennis Space Center will be paid in accordance with the provisions of this Agreement for such hours worked.

Prior to any off-site assignment, the Company and the Union shall meet and confer regarding any special payment provisions for the assignment.

Section 4. Fire Department Employees Only.

1. Work Week

The work week for each employee in the Fire Department covered by this Agreement shall consist of three (3) staggered twenty-four (24) consecutive hours of duty. The compensation for the Fire Department employees during the twenty-four (24) hour period shall be as follows:

- a. The first eight hours starting at 0730 hours, normal work will be performed at straight time rate.
- b. The second eight hours starting at 1530 will be at time and one-half. The only work to be performed during this eight (8) hour period will be ambulance stand-by assignments and responding to alarms and emergencies.
- c. No compensation for the third eight (8) hours starting at 2330 hours. However, an employee shall receive a minimum of one hour of pay at time and one-half the base hourly rate in each instance the employee is called upon to answer alarms during the third period.
- d. Employees who do not get five (5) hours of uninterrupted rest during the combined second and third shift periods due to answering alarms or emergencies will be paid at time and one-half the base rate for the entire eight (8) hour third period.
- e. Any work in addition to regularly scheduled work shall be compensated at time and one-half the base pay. This does not apply to part time employees.
- f. Saturdays are regular work days. An additional \$1.00 per hour will be paid for the first eight (8) hours worked on Saturdays.
- g. Sundays and listed contractual holidays are days on which no work will be scheduled. However, apparatus inspections are required 7 days per week.

2. Consecutive Shifts & Temporary Relief

No firefighter shall be required to work a second consecutive twenty-four (24) hour shift unless (s)he agrees to do so. Under no circumstances will firefighters be allowed to work

more than three consecutive 24-hour days. Temporary relief for employees in the Fire Department will be provided by:

- a. Full-time employees
- b. Use of On-call personnel in accordance with their seniority
- c. **Replacement personnel will be paid for the full 24-hour shift provided they work at least 16 hours. If they do not work at least 16 hours, the first eight (8) will be paid at straight time and the remaining hours will be paid at one and a half (1.5) times the straight time rate.**

A firefighter not wishing to work a second consecutive 24-hour shift will remain on duty for a reasonable period of time to allow for the securing of a temporary relief **firefighter**. The relief **firefighter** will be paid for the full 24-hour shift.

3. Fire Department Shift Exchange

This section sets forth the procedures to be adhered to by all personnel of the SSC Fire Department interested in exchanging a shift with another employee of the Fire Department.

- a. Procedure
 - (1) Requests must be submitted one week in advance of the exchange.
 - (2) Shift exchange will be completed in the same pay period.
 - (3) All exchanges will be made within the same classification.
 - (4) The shift exchange will not result in additional cost to operations.
 - (5) The exchange will not impact the capabilities of the Fire Department.
 - (6) The resulting exchange will not require either person to work more than three consecutive 24-hour shifts.
 - (7) The 40-hour Firefighter classification is exempt from the Shift Exchange Policy.
 - (8) If requestor is going to take vacation in conjunction with the shift exchange, this shall be documented at the time the request is made.
 - (9) When a firefighter is asked to work an extra shift at the request of the Company, the firefighter may request to swap the extra shift later in the **pay period**. The request for exchange must be made at the time of the Company's request. When a firefighter is asked to perform a higher classification, upgrades will be authorized.
- b. Approval/Review
 - (1) The Fire Chief will approve/disapprove all requests for shift exchange and the decision of the Fire Chief will be final.
 - (2) If it is determined that this privilege is being abused, the person found abusing the privilege will lose all rights to exchange shifts.
 - (3) The shift exchange policy is not for long-term changes to the work schedule.

4. All firefighters are required to successfully pass a task-oriented fitness test on an annual basis. Newly hired personnel will be required to pass the fitness test prior to a job offer being tendered. The facility of the Wellness Center and a fitness program will be made available to fire department personnel at no cost to the firefighter.
5. Employees in the firefighter classification who are in a full-time pay status, and EMT certified, and are required for standby emergency medical duty (approximately 6 employees will normally be required) will be compensated one hundred **fifty** dollars (**\$150**) per month for such certified emergency medical duty. Employees who are certified will be selected by seniority. Employees will have to be re-certified as required to maintain the EMT status. Employees will be assigned to shifts to provide proper coverage by seniority.
6. Firefighters shall be paid an additional **\$5.00** per hour when conducting CPR training.

Section 5. Energy Management Control Service Personnel Only.

- a. A work day is defined as a 24-hour consecutive period commencing at 0001 hours and ending at 2400 (midnight). However, such hours may be changed at the discretion of the Company provided they give affected employees a 48-hour notice.
- b. A work week is defined as a 7-day consecutive period commencing at 0001, Saturday and ends at 2400 (midnight) on Friday. However, such work week schedule may be changed by the Company to meet the customers' operational requirements provided they give the affected employees a 48-hour notice.
- c. EMCS personnel assigned to work a rotating shift will normally be scheduled to work twelve (12) hours per shift. The Company desires to maintain the current shift schedule but reserves the right to change. If such a change is made, the new schedule will allow two (2) consecutive weekends off for rotating shift personnel. When a change is made, the Company will give the affected employees a 2-week notice of such a change.
- d. EMCS personnel will be paid one and one-half (1-1/2) times the straight time rate for hours worked in excess of forty (40) hours in a week and on holidays. For hours worked in excess of sixty (60) hours in a work week they will be paid two (2) times the straight time rate. For the purpose of computing overtime pay for EMCS Operators/Trainees, a shift cutting across two work weeks shall, where the employee is in an overtime status, be treated as worked in the work week which the shift begins. For the purpose of computing overtime pay for the Shopleader, a shift cutting across two work weeks, regardless of whether the Shopleader is in an overtime status, shall be treated as worked in the work week which the shift begins. If an employee should work in excess of twelve (12) continuous hours, they shall be paid time and one half (1-1/2) for all hours exceeding twelve (12) hours in a continuous period.
- e. For the purpose of determining whether or not an employee is entitled to overtime pay for having worked more than forty (40) hours in a work week, sixty (60) hours in a work week

and twelve (12) hours in a continuous period, all hours in a pay status except sick and paid leave shall be counted.

- f. The regular shift allowance for all hours worked between 1800 hours and 0600 hours shall be \$.75 per hour. Day shift personnel working an overtime assignment after 1800 hours shall not be eligible for the shift allowance. **Effective June 9, 2007, shift differential will increase to \$1.00 per hour.**
- g. EMCS personnel shall have their vacation requests honored on a first come basis. If there is a conflict, seniority will govern.
- h. Vacation days or weeks will be in hourly entitlements. A 1-day vacation utilizes twelve (12) hours of vacation entitlement for rotating shift workers.
- i. The Company will pay an hourly pension contribution not to exceed forty (40) hours per week for each EMCS personnel who is in a pay status. Pension contributions will be made for forty (40) hours per week when an employee is in a pay status for less than forty (40) hours per week due to the rotating shift schedule of the EMCS Shop.
- j. EMCS personnel who are in their initial training period will not be eligible for overtime until they are qualified, as determined by management. However, this initial period of training should be no longer than six (6) months.
- k. The EMCS overtime list will be one list which includes the following classifications:
 - Shopleader
 - EMCS Operator
 - EMCS Operator Trainee

Shift schedules permitting, the Company will attempt to equalize overtime where practical.

- l. Jury and subpoenaed witness duty shall be paid at the normal straight time of 12 hours per day to a maximum of 40 hours per week.
- m. EMCS Operator duties:
 - (1) Analyze, trouble-shoot and repair all system software problems.
 - (2) When assigned, EMCS personnel will adjust, repair and replace all EMCS hardware devices with the EMCS/HVAC Specialist.
 - (3) EMCS Operators can handle trouble desk calls.
 - (4) Shopleader duties interchange with management responsibilities and that work when performed is not to be classified exclusively as union work.
 - (5) Equipment belongs to the Company and may be used by any qualified person; however, no performance of any EMCS Operator's normal duties will be done, except in cases of emergency.

ARTICLE XII GENERAL

Section 1. Bulletin Boards.

Space on existing bulletin boards will be made available for the sole use of the Union **as follows:**

Notices of Union recreational and social affairs.

Notices of Union elections.

Notices of Union appointments and results of Union elections.

Notices of Union meetings.

Other notices concerning bona fide Union activity such as Cooperatives, Credit Unions, and unemployment compensation information.

Section 2. Emergency Work Stoppages.

Emergency work stoppages not under the Company's control such as weather disasters, riots, and other national disasters, wherein employees are directed not to report to work are considered a normal work day, and personnel shall be allowed their regular salary. A maximum of fourteen (14) days will be paid within a calendar year. However, each employee who is called in by the Company to perform emergency duties during their regular hours of work shall be paid one and one-half times his/her regular straight time rate of pay for actual hours worked in addition to their regular rate of pay. No charges to vacation or other leave will be made by the Company for such emergency work stoppages.

Appropriate announcements made at the SSC or over local radio and/or television stations will be considered as notification not to report to work. Only those employees selected for emergency work shall be entitled for overtime compensation.

It is understood that under such conditions some confusion may exist in the selection of employees who agree to perform emergency work. The selection of employees will be on a voluntary basis and may not necessarily follow the normal provisions of overtime assignments, however, whenever practical every effort will be made to follow the normal provisions of overtime assignments.

When the site is closed, EMCS personnel who perform emergency duties during their regular hours of work shall be paid one and one-half times their regular straight time rate of pay for actual hours worked in addition to their regular rate of pay.

Section 3. Maintenance of Privileges.

Any and all privileges enjoyed by the employees will not be denied to them because of the signing of this Agreement, unless the parties, through collective bargaining mutually agree to change or specifically waive any of these privileges.

Privileges as used herein means advantages or special benefits (i.e., lunches, parties, banking privileges) heretofore granted to employees and subject to reasonable rules and regulations promulgated by the Company or the customer. Privileges does not refer to wages, hours and working conditions negotiated by the parties and made a part of this Agreement.

Section 4. Tool and Work Area Clean Up Period.

Adequate time will be allowed before the end of the shift to clean up work areas, put away tools used during the shift as directed by the Company, and for time-keeping recording.

Section 5. Flexible Work Schedule.

A Flexible Work Schedule will be administered in accordance with a mutually agreed upon policy. Both parties agree to review this policy semi-annually. Changes will be made only by mutual agreement of the parties.

Section 6. 4 Day/10 Hour Workweek.

1. One and one-half the regular straight time rate will be paid for hours worked in excess of forty (40) hours in a work week and on the fifth (5th) consecutive day worked. Two (2) times the straight-time rate of pay shall be paid for hours worked on the sixth (6th) or seventh (7th) consecutive days worked. For the purpose of determining whether or not an employee has worked a fifth (5th), sixth (6th) or seventh (7th) consecutive day, all hours in a pay status, including up to five (5) hours sick and **personal** leave, shall be counted.
2. Employees who are laid off for lack of work will receive 80 working hours notice or 80 working hours pay, at straight time rate, in lieu of notice.
3. Employees who resign their employment with the Company must provide 80 working hours notice.
4. Vacation and sick leave accrual rates will not change. However, absences for vacation, sick or paid leave, or military, jury duty and funeral leave would be charged at the 10 hour per day rate when taken on work days.
5. The Company will make the appropriate contributions per hour to the IAM Pension Plan up to a maximum of 40 hours per week for each hour the employee is receiving his/her regular rate of pay.
6. On weeks with a regularly scheduled holiday, **management of each unit will provide coverage for the remaining regular workdays in that week. Providing work schedules permit, employees may be allowed to flex during holiday weeks provided management determines it is feasible. Management may require the entire unit to revert to an 8-hour/5-day workweek.** On weeks preceding and succeeding a holiday week, the unit will work a 4 day/10 hour workweek period.
7. The normal work week schedule will be Monday through Friday 40 hours per week with a regular workweek defined as 40 hours per week Saturday through Friday. The normal work week and shift schedules for departments, shops or other organizational units shall be decided as required by operational requirements determined by management. But nothing herein shall prohibit management from establishing the normal work week as required by operational requirements. Where operating requirements permit, the Company will provide affected employees two working days notice of a change.

Section 7. Job Descriptions.

Job descriptions, including revised and amended job descriptions, shall be provided to the Union. These job descriptions will be stamped company proprietary and shall be treated as such by the Union. The Union shall not copy these job descriptions and shall retain custody and control of them in a secure manner.

The Company reserves the right to revise, change or amend job descriptions from time-to-time to correspond to duties and qualifications of the position.

Section 8. Use of Forklift Trucks.

Heavy equipment operators will be assigned to lift items weighing up to 8,000 pounds or greater. All other personnel will normally be restricted to movement of 6,000 pounds or less, but in no event more than 8,000 pounds.

If an employee has a need for a forklift truck to perform his/her regular duties at a location other than inside the 2204/2205 industrial complex, the employee may drive it to that location. However, no materials will be transported on the forklift to the job location except by storekeeper personnel and the property administrator, since heavy equipment operators will normally perform this function in accordance with the weight limitation referred to above.

All employees who are operators of forklifts must be certified in accordance with the MSS Certification Plan.

ARTICLE XIII SENIORITY - JOB VACANCIES & LAYOFFS

Section 1. Seniority/Breaks in Seniority.

1. Seniority for employees covered by this Agreement after its execution shall be determined for purposes of promotion, layoff, and callback, according to the Mississippi Space Services SSC Seniority List in effect at the time. A copy of the current Mississippi Space Services SSC Seniority List will be provided to each employee covered by the Collective Bargaining Agreement. The seniority list will be posted on the Union bulletin board for a period of thirty (30) days upon publication of this Agreement during which period any employee covered by this Agreement shall advise his/her Union Representative of any alleged inaccuracy and it shall be the duty of the Union to advise the Company if any change is required in the seniority list. Once an employee agrees that his/her seniority is correct by affixing his/her initials by his/her seniority date, it shall not be changed in any subsequent review. Individuals becoming employees covered by this Agreement after finalization of the attached seniority list shall be added to the list in the appropriate classification according to the time that each became an employee covered by the Agreement. Effective 5 January 1979 the relative seniority of new employees hired on the same date shall be determined by the last four (4) digits of the employee's Social Security Number. The employee with the lowest last four (4) digits shall be deemed the senior.

The seniority date for a temporary employee will always be the date they become a regular employee.

2. Seniority for the employees covered by this Agreement for purposes of promotion, layoff, and callback shall accrue for time actually worked with the Company, time on vacation, holiday, sick or funeral leave, or as specified for leave of absence under the terms of this Agreement. Seniority will be lost whenever the employee covered by this Agreement:
 - a. Voluntarily terminates his/her employment, is discharged, or fails to apply to return to work at the termination of an authorized leave of absence.
 - b. Is absent from work because of personal illness or accident and fails to keep his/her manager notified monthly stating the probable date of his/her return to work.
 - c. Is laid off for a period of more than two (2) years.
 - d. Is notified within two years from date of layoff that (s)he may return but fails to respond within **five (5) working days** and arrange a mutually satisfactory date for re-employment.
 - e. Is absent for three (3) consecutive work days without properly notifying the Company.
3. The seniority list will be revised periodically and provided to the Union representative once a year for a period of forty-five (45) days, during which period of time it shall be the obligation of each employee and the Union to notify the Company in writing of any errors on said list. The list shall be available for inspection by any employee or Union Representative at reasonable times. It is the Union's duty to resolve any dispute between employees covered by this Agreement as to their respective seniority and to advise the company of the resolution thereof. Failure to notify the MSS Manager, Human Resources, or his/her designee, of any errors within the above-mentioned 45-day period shall foreclose any changes to the dates shown on the list.
4. For purposes of this Agreement, there will be three seniority dates: Union Seniority, Classification Seniority and Site Service Seniority.

Union Seniority-represents the total amount of time (adjusted if required) employees have been in a job now covered under the Collective Bargaining Agreement. Union seniority will be used for bidding and bumping purposes only.

Classification Seniority-is the time accrued under each classification in which an employee has worked. Classification seniority will be used to determine the most junior employee in an affected classification in a layoff.

Site Service Seniority-is the length of continuous time an employee has worked at the Government facility performing the kind of work performed by Mississippi Space Services and its predecessors.

Site Service Seniority shall apply for purposes of vacation eligibility. However, for those employees with an adjusted company service date greater than their Site Service, the adjusted company service date shall apply for purposes of vacation eligibility. The seniority described above is that seniority indicated for each employee in the current SSC seniority list.

5. **Layoff date is the date on which an employee was laid off from the Company. The layoff date shall be maintained on the seniority list for the length of callback rights.**

Section 2. Job Vacancies.

1. Notices of job openings in the bargaining unit covered herein will be posted on the Union bulletin board for a period of **five (5)** working days during which time the job shall not be permanently filled. All employees covered by this agreement regardless of employer will be eligible to bid on openings. **Employees on leave may bid by phone or by proxy for any openings posted during their leave time.**
2. Employees desiring transfer to the new job will submit their bid in writing and signed to the MSS Manager Human Resources, who shall provide a copy to the union representative. The Company will provide a designated bid form. If an employee is bidding from one SSC/FOS contractor to another, a completed job application must be submitted with the bid.
3.
 - a. Seniority, qualifications, merit and capabilities shall be the determining factors in filling job vacancies.
 - b. In the event of a posted job opening, the bidding employee with the most union seniority in the most directly related skill classification who has the qualifications, merit and capabilities shall be awarded the position. Where qualifications, merit and capabilities are substantially equal, union seniority shall be the determining factor. In the warehouse and clerical job classifications, seniority within those job classifications, not union seniority, shall be the measurement.
 - c. If there are no qualified bidders in accordance with Section 3B above, then the bidding employee with the most union seniority who has the superior qualifications, merit and capabilities shall be awarded the position. Where qualifications, merit and capabilities are substantially equal, union seniority shall be the determining factor.
4. If the Company determines within a period of thirty (30) working days that an employee selected to fill a job vacancy is not performing the job satisfactorily, the employee will be returned to his/her previous job without loss of seniority. If the employee's previous job has been abolished and there is no other job available for which the employee is qualified and eligible, then the employee shall be put on layoff.
5. When there is no qualified bidder for a posted job opening, the Company may fill the job with a qualified individual available from any source.

6. Employees who bid on a position vacated by an incumbent being placed on a Medical Leave of Absence (MLOA) will be placed into the position on a permanent basis unless the incumbent employee returns from the MLOA. Bid Bulletins will indicate positions vacated by employees placed on a MLOA. Employees displaced by another employee returning from a MLOA may exercise their seniority to bump into another job in accordance with other provisions of this article.
7. When a lateral vacancy occurs within a job classification which is normally filled by reassignment of employees within the classification, employees desiring to make a lateral transfer within their classification shall inform their supervisor and MSS Manager, Human Resources, or subcontractor Site Manager/designee.
8. Newly hired employees from sources external to the SSC/FOS contract will be considered as probationary employees for sixty (60) working days and shall be subject to discipline including discharge at the complete discretion of the Company.
9. Temporary employees will not accrue seniority. If the temporary employee is required beyond the initial thirty (30) days or the date of the agreed upon extension period, whichever is later, the job will be posted for bid.
10. The Company will notify the Union of any new hires, including temporary employees, regular part-time employees and on-call employees.
11. A weekly union/insurance orientation session for newly hired employees will be held on Monday after the employees complete their paperwork in the Human Resources Department and prior to their reporting to work. The Human Resources Office will advise the Union on Friday of each week whether there will be any new employees hired on the following Monday. The Union will be responsible for obtaining the meeting place and furnishing the appropriate completed medical/dental insurance forms to the Human Resources Office by Wednesday of the employee's first week.
12. If on any given date when there are multiple openings in a posted job classification, classification seniority for those awarded such positions will be established as follows:
 - a. A regular employee who bids into that classification on that date will be placed first in seniority order.
 - b. A regular part-time employee placed in that classification on that date will be placed second in seniority order.
 - c. Temporary employees placed into that classification on that date will be placed third in seniority order.
 - d. Newly hired employees into that classification on that date will be placed fourth in seniority order.

13. When filling vacancies, on-call employees will be considered prior to considering sources external to the SSC/FOS contract.

Section 3. Layoffs and Recalls.

1. A layoff is a termination of employment of indefinite length. Any permanent employee who is laid off for lack of work will receive ten (10) working days notice or ten (10) working days pay in lieu of notice.
2. In the event of a layoff, the employee with the least classification seniority in the job classification affected shall be laid off.
3. An employee subject to layoff may exercise his/her union seniority, or in the case of craftsmen listed in Exhibit C his/her classification seniority, to bump into any classification provided (s)he has previously held that job classification or performed like work in a now defunct classification, and provided (s)he has the union seniority, or in the case of craftsmen listed in Exhibit C the classification seniority, and qualifications and capabilities to perform in that classification.
4. Employees on layoff from a classification (onsite/offsite) will be recalled within two years if an opening exists in the classification from which they were laid off. This recall will be done without posting the job and will be processed according to the individual's seniority within the job classification. Notification of offsite recalls will be made by certified mail to the employee at his/her last known address and a failure of said employee to respond within **five (5) working days** of the time of mailing that (s)he will report to work, will constitute a waiver of his/her rights in regard to that recall, and to all future recalls unless (s)he explains his/her failure to respond and report for work to the satisfaction of the Company. If a temporary vacancy occurs, the employee can accept or decline the recall, and it will not interfere with the employee's recall rights.
5. If an employee who has been in a bargaining unit position for a period of one year is transferred to another position within **the Company** so as to be excluded from the coverage of this Agreement, such employee shall retain his/her seniority in the position from which (s)he was transferred. In the event of an unfilled bargaining unit vacancy in his/her previous position and for which (s)he is selected, his/her seniority shall be credited and (s)he shall resume his/her seniority as of the date (s)he is selected.
6. Employees who resign their employment with the Company must provide ten (10) working days notice.

Section 4. Recall of Regular Employees to Temporary Positions.

When Personnel Requisitions are received for temporary positions (positions that do not exceed 60 days), employees who have been laid off from regular positions are contacted prior to filling the requisition with outside candidates. The recall letter sent to the employee should specifically state that it is temporary – not to exceed 60 days – and their recall rights will be maintained if they decline because it is a temporary position. Temporary employees may be extended beyond 30 days

only upon mutual agreement between the Union and the Company. When the temporary assignment ends, the employee is terminated without a 10 day layoff letter issued. Benefits are extended to employees in this category.

The two year recall right for regular employees on layoff who accept recall to temporary positions (positions that do not exceed 60 days) will begin all over again at the end of the temporary assignment. **Seniority will not be accrued while on temporary recall.**

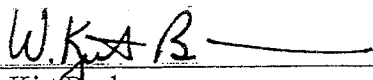
ARTICLE XIV HIGH PERFORMANCE WORK ORGANIZATION

The Company and the Union agree to establish and maintain a High Performance Work Organization in accordance with Exhibit E.

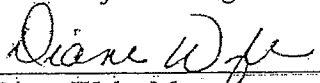
In WITNESS WHEREOF, this instrument is executed as of this 23rd day of June 2005.

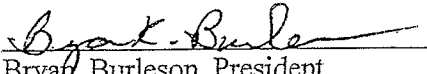
MISSISSIPPI SPACE SERVICES

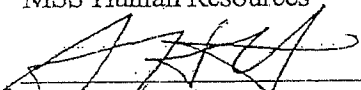
INTERNATIONAL ASSOCIATION
OF MACHINISTS & AEROSPACE
WORKERS, LOCAL 2249


W. Kirt Bush
MSS Project Manager

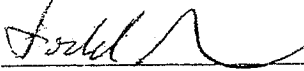

A. B. Wallace, Business Rep.

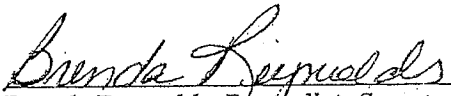

Diane Wyle, Manager
MSS Human Resources



Bryan Burleson, President

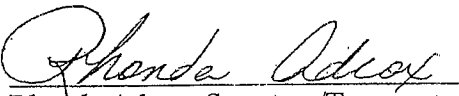

James Holt, Manager
MSS Facilities Systems

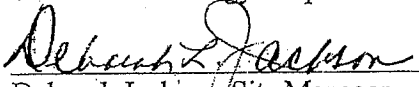

Michael Carr, Vice President

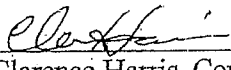

Todd Mannion, Manager
MSS Engineering Project Management

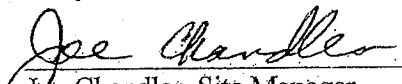

Brenda Reynolds, Recording Secretary


Marla Carpenter, Site Manager
Abacus Technology Corporation

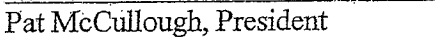

Rhonda Adcox, Secretary/Treasurer


Deborah Jackson, Site Manager
InDyne, Inc.

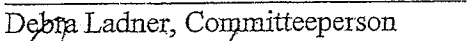

Clarence Harris, Committeeperson

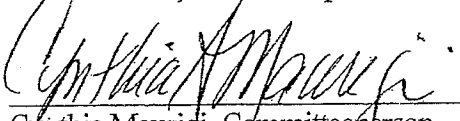

Joe Chandler, Site Manager
Madison Services, Inc.


Jeremiah Hill, Committeeperson


Pat McCullough, President
Occu-Health, Inc.


Marsha King, Committeeperson


Debra Ladner, Committeeperson


Cynthia Maurigi, Committeeperson

In WITNESS WHEREOF, this instrument is executed as of this 23rd day of June 2005.

MISSISSIPPI SPACE SERVICES

INTERNATIONAL ASSOCIATION
OF MACHINISTS & AEROSPACE
WORKERS, LOCAL 2249

W. Kirt Bush
MSS Project Manager

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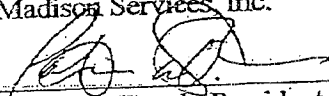
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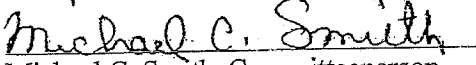
Marshá King, Committeeperson

Debra Ladner, Committeeperson

Cynthia Maurigi, Committeeperson


Douglass Mayberry, Committeeperson


Damon Saul, Committeeperson


Michael C. Smith, Committeeperson

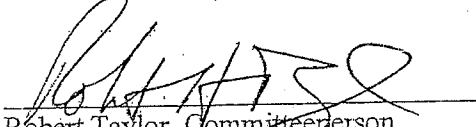

Robert Taylor, Committeeperson

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
Accounting Clerk	13.73	14.14	14.63	15.36
Accounting Clerk, Senior	14.85	15.30	15.84	16.63
Air Conditioning Technician	19.04	19.61	20.30	21.32
Air Conditioning Technician, Certified	19.63	20.22	20.93	21.98
Bus Driver	15.03	15.48	16.02	16.82
Buyer	17.54	18.07	18.70	19.64
Buyer, Jr.	15.12	15.57	16.11	16.92
Carpenter	19.04	19.61	20.30	21.32
Chauffeur	14.45	14.88	15.40	16.17
Chief Storekeeper	17.54	18.07	18.70	19.64
Commodity Specialist/Cataloger	17.54	18.07	18.70	19.64
Component Technician	19.04	19.61	20.30	21.32
Compositor	15.42	15.88	16.44	17.26
Computer Operator	14.63	15.07	15.60	16.38
Configuration Control Clerk	13.15	13.54	14.01	14.71
Configuration Control Clerk, Jr.	12.35	12.72	13.17	13.83
Configuration Coordinator I	17.00	17.51	18.12	19.03
Configuration Coordinator II	15.14	15.59	16.14	16.95
Configuration Coordinator III	14.86	15.31	15.85	16.64
Cook	11.94	12.30	12.73	13.37
Crew Chief	14.13	14.55	15.06	15.81
Documentation Coordinator	19.17	19.75	20.44	21.46
Documentation Specialist	16.00	16.48	17.06	17.91
Driver/Operator	13.79	14.20	14.70	15.44
Elec./Elec. Controls Specialist	20.24	20.85	21.58	22.66
Elec./Elec. Controls Specialist, Certified	20.83	21.45	22.20	23.31
Electrician	19.04	19.61	20.30	21.32
Electrician, Certified	19.63	20.22	20.93	21.98
EMCS Operator (25+ months)	21.93	22.59	23.38	24.55
EMCS Operator (25+ months), Certified	22.52	23.20	24.01	25.21
EMCS Trainee (0-24 months)	20.56	21.18	21.92	23.02
EMCS Trainee (0-24 months), Certified	21.14	21.77	22.53	23.66
EMCS/HVAC Systems Specialist	20.24	20.85	21.58	22.66
EMCS/HVAC Systems Specialist, Certified	20.83	21.45	22.20	23.31
EMCS Specialist Senior, Certified	21.08	21.97	23.00	24.41
Environmental Health Technician	16.63	17.13	17.73	18.62
Environmental Technician	10.55	10.87	11.25	11.81
Environmental Specialist	10.77	11.09	11.48	12.05
Equipment Operator, Jr.	16.53	17.03	17.63	18.51
Equipment Operator, Heavy	19.50	20.09	20.79	21.83

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
Equipment Operator, Heavy, Certified	20.06	20.66	21.38	22.45
Facility Warranty Administrator	16.56	17.06	17.66	18.54
Firefighter	13.54	13.95	14.44	15.16
Fire Inspector	14.57	15.01	15.54	16.32
Food Service Helper	11.15	11.48	11.88	12.47
Food Truck Operator/Sales	11.86	12.22	12.65	13.28
General Clerk	12.35	12.72	13.17	13.83
General Helper	13.94	14.36	14.86	15.60
Graphics Coordinator	19.17	19.75	20.44	21.46
Grounds Technician	16.47	16.96	17.55	18.43
Illustrator	20.36	20.97	21.70	22.79
Illustrator, Senior	23.11	23.80	24.63	25.86
Lab/X-Ray Technician	17.89	18.43	19.08	20.03
Librarian Technician	12.13	12.49	12.93	13.58
Lineman	19.48	20.06	20.76	21.80
Lineman, Certified	20.05	20.65	21.37	22.44
Machinist	19.04	19.61	20.30	21.32
Mail Clerk	11.58	11.93	12.35	12.97
Marine Maintenance Technician	19.35	19.93	20.63	21.66
Material Accounting Specialist	16.69	17.19	17.79	18.68
Mechanic Automotive	19.04	19.61	20.30	21.32
Mechanical Technician	19.04	19.61	20.30	21.32
Mechanical Technician, Certified	19.63	20.22	20.93	21.98
Medical Records Specialist	13.40	13.80	14.28	14.99
Medical Records Specialist, Senior	19.17	19.75	20.44	21.46
Multimedia Graphics Artist	20.36	20.97	21.70	22.79
NAVO Liaison	19.17	19.75	20.44	21.46
Painter	18.09	18.63	19.28	20.24
Payroll Specialist	16.70	17.20	17.80	18.69
Photo Technician	20.57	21.19	21.93	23.03
Photographer	18.31	18.86	19.52	20.50
Pipefitter/Plumber	19.04	19.61	20.30	21.32
Pipefitter/Plumber, Certified	19.63	20.22	20.93	21.98
Planner Scheduler	19.17	19.75	20.44	21.46
PM Mechanic/Pesticide Tech.	17.63	18.16	18.80	19.74
Property Administrator	16.68	17.18	17.78	18.67
Property Administrator, Senior	17.54	18.07	18.70	19.64
PT&I Specialist/Electrician	20.24	20.85	21.58	22.66
PT&I Specialist/Electrician, Certified	20.83	21.45	22.20	23.31
PT&I Specialist/HVAC	20.24	20.85	21.58	22.66

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
PT&I Specialist/HVAC, Certified	20.83	21.45	22.20	23.31
PT&I Technician/Electrician	19.04	19.61	20.30	21.32
1 st Quarter	19.32	19.90	20.60	21.63
2 nd Quarter	19.63	20.22	20.93	21.98
3 rd Quarter	19.94	20.54	21.26	22.32
4 th Quarter	20.24	20.85	21.58	22.66
PT&I Technician/Electrician, Certified	19.63	20.22	20.93	21.98
1 st Quarter	19.91	20.51	21.23	22.29
2 nd Quarter	20.22	20.83	21.56	22.64
3 rd Quarter	20.52	21.14	21.88	22.97
4 th Quarter	20.83	21.45	22.20	23.31
PT&I Technician/HVAC	19.04	19.61	20.30	21.32
1 st Quarter	19.32	19.90	20.60	21.63
2 nd Quarter	19.63	20.22	20.93	21.98
3 rd Quarter	19.94	20.54	21.26	22.32
4 th Quarter	20.24	20.85	21.58	22.66
PT&I Technician/HVAC, Certified	19.63	20.22	20.93	21.98
1 st Quarter	19.91	20.51	21.23	22.29
2 nd Quarter	20.22	20.83	21.56	22.64
3 rd Quarter	20.52	21.14	21.88	22.97
4 th Quarter	20.83	21.45	22.20	23.31
Quality Assurance Technician	18.09	18.63	19.28	20.24
Quality Assurance Technician, Certified	18.67	19.23	19.90	20.90
Radiation Safety Officer	19.70	20.29	21.00	22.05
Rad./X-Ray Quality Technician	18.09	18.63	19.28	20.24
Rad/X-Ray Quality Technician, Certified	18.67	19.23	19.90	20.90
Real Property Specialist	19.09	19.66	20.35	21.37
Receiving/Shipping Clerk	13.59	14.00	14.49	15.21
Records Clerk	12.35	12.72	13.17	13.83
Registered Nurse I	16.96	17.47	18.08	18.98
Registered Nurse II	18.30	18.85	19.51	20.49
Registered Nurse III	19.83	20.42	21.13	22.19
Registered Nurse IV	21.65	22.30	23.08	24.23
Registered Nurse V	23.78	24.49	25.35	26.62
Remediation Waste System Operator	19.63	20.22	20.93	21.98
Reports Coordinator	14.76	15.20	15.73	16.52
Reproduction Operator	18.48	19.03	19.70	20.69
Reproduction Operator, Senior	21.09	21.72	22.48	23.60
Shipping Specialist	17.28	17.80	18.42	19.34
Small Engine Mechanic	17.95	18.49	19.14	20.10
Small Mower Operator	14.20	14.63	15.14	15.90

EXHIBIT A

Effective Date of Increase

**Effective first full pay period following date

CLASSIFICATION	6/9/05	6/9/06**	6/9/07**	6/9/08**
SpecsIntact Clerk	14.76	15.20	15.73	16.52
Stock Specialist	15.12	15.57	16.11	16.92
Storekeeper	14.35	14.78	15.30	16.07
Supply Clerk	15.12	15.57	16.11	16.92
Technical Publications Specialist	16.63	17.13	17.73	18.62
Tractor Operator	16.47	16.96	17.55	18.43
Truck Driver, Medium	14.28	14.71	15.22	15.98
Truck Driver, Heavy	16.96	17.47	18.08	18.98
Truck Driver, Refuse	15.93	16.41	16.98	17.83
Tugboat Deckhand	14.97	15.42	15.96	16.76
Tugboat Pilot	20.90	21.53	22.28	23.39
VEM Maintenance Mechanic	19.50	20.09	20.79	21.83
Visitor Relations Specialist I	10.40	10.71	11.08	11.63
Visitor Relations Specialist II	11.78	12.13	12.55	13.18
Visitor Relations Specialist III	13.19	13.59	14.07	14.77
Warehouseman	13.28	13.68	14.16	14.87
Warranty Administrator	15.12	15.57	16.11	16.92
Welder, Certified	19.63	20.22	20.93	21.98

EXHIBIT B

APPRENTICESHIP PROGRAM

1. The Apprenticeship Program shall be governed by the rules and regulations established by the Joint Apprenticeship Committee (JAC). The JAC shall consist of four members – specifically two (2) Union Committeepersons and two (2) members of Company management. The MSS Manager, Human Resources, or his/her designee, will act in an advisory capacity.
2. The MSS Manager, Human Resources, or his/her designee's, duties shall include:
 - A. Coordinate the JAC Program
 - B. Maintain adequate records showing progress of each apprentice.
 - C. Review related work experience progress with supervision to assure the apprentice is obtaining the necessary on-the-job training.
 - D. Recommend additions, revisions, or modifications to the existing program to the JAC.
3. The JAC Committee's duties shall include:
 - A. Identification and prioritization of apprenticeable occupations.
 - B. Development of apprentice specific program requirements, assessment of duration of apprenticeship, classroom requirements, training materials, involvement of offsite institutions, (i.e., community colleges) and development of evaluation criteria and progression and advancement.
 - C. Determine the appropriate number and qualifications of apprentices.
 - D. Recommend to MSS Manager, Human Resources, or his/her designee, award of credit for prior training and experience, based on recommendations and requests (with supporting documentation) submitted to the JAC.
 - E. Recommend to the Company, after periodically reviewing the job training, attendance and performance of each apprentice, their continuance in, progression or termination from the program.
 - F. Assure that skills training phases of the program are carried out by each apprentice to provide diversified experience for each apprentice and to preserve the integrity of the program.
 - G. Assure each supervisor maintains required training records.
 - H. Receive suggestions or questions concerning the program that have been raised by the apprentice for program improvement.
 - I. Recommend additions, revisions or modifications to the existing program.

EXHIBIT B

4. The supervisor of the apprentice shall be responsible to:
 - A. Develop task evaluation criteria to be used in objective determination of apprentice's qualification to progress to the next successive apprentice rate. Criteria will be established for each successive apprentice rate, and be used to make recommendations to the JAC.
 - B. Recommend to JAC for continuance, progression, or termination of apprentice based on the apprentice's observed progress.
 - C. Orient apprentice on safety, shop responsibilities and procedures prior to work assignments.

5. The apprentice has the following obligations and responsibilities to:
 - A. Perform and complete, diligently and faithfully, skills training and/or assignments and such other pertinent tasks as are assigned by the Company.
 - B. Respect and protect Company property and equipment and abide by Company rules and regulations.
 - C. Maintain such records as may be required by the classification and task at hand.
 - D. Develop and practice safe working habits, and conduct himself/herself in such a manner as to assure his/her own safety and that of his/her fellow workers.
 - E. Maintain a good attendance record. Absences will be documented and records submitted to the JAC to be used as a factor in determining continuance, progression, or termination from the program.

6. Selection of apprentices will be made by the JAC based on a grading system of interviews administered by the Committee. Credit shall be considered for grading candidates pursuing an apprentice being offered for the program, such as attending trade school, correspondence courses, or prior experience. Credit for prior training and experience may be granted in increments as determined by the JAC. The interview records will remain on file with the application. Bid posting will be in accordance with seniority provisions of the Agreement. Apprentices granted credit shall receive the appropriate apprentice rate and shall progress from that point according to the schedule determined by the JAC.

Selection of required apprentices must meet the following qualifications:

- A. Possess a high school diploma, or it equivalent.
 - B. Passage of a company fitness for duty physical.
 - C. Any other established Company employment requirements.
7. The apprentice shall work with and directly under the direction of a qualified mentor or journeyman for the duration of the program except as agreed to by the JAC.

EXHIBIT B

8. Progress in the program is as follows:

A. Apprentices shall be granted increases in their basic rate following a progression criteria determined by the JAC, using the following rate structure as a guideline:

Start 1000 hours – 70% of **Craftsperson** Rate

1000 hours – 75% of **Craftsperson** Rate

2000 hours – 80% of **Craftsperson** Rate

3000 hours – 85% of **Craftsperson** Rate

4000 hours – 90% of **Craftsperson** Rate

5000 hours – 95% of **Craftsperson** Rate

6000 hours – 100% of **Craftsperson** Rate

Wage rates and progression will be determined by the JAC based upon the skills development required, critically of the position, industry progression standards, academic requirements, and other related factors as established by the JAC.

B. Apprentices whose total performance is not satisfactory at the time they are scheduled to receive an increase but who are recommended for retention in the Program by the Company, shall receive no increase. The Company will recommend review of the apprentice's performance by the JAC three (3) months following the date they were originally scheduled to receive an increase to determine if the apprentice should receive the increase, be removed from the Program, or be placed on probation for an additional three (3) months. If after the second 3-month probation period the apprentice's performance is still not satisfactory, (s)he will be terminated from the program.

9. Apprentice will not be given "super seniority" over journey **craftspersons**, unless the apprentice has entered the program prior to the journeyman **craftsperson** entering his/her classification.

10. To ensure program integrity the Apprenticeship program will be initiated in the crafts area first and after a period designated by the JAC it will be opened up to other skill classifications on a schedule to be determined by the JAC.

EXHIBIT C

CRAFTS CLASSIFICATION SENIORITY

Air Conditioning Technician; Electrician; Carpenter; Pipefitter/Plumber; Lineman; Component Technician; Machinist; Certified Welder; Electrician/Electrical Control Specialist; EMCS/HVAC Control Specialist; Mechanical Technician; Painter; PT&I Technician/Electrician; PT&I Specialist/Electrician; PT&I Technician/HVAC and PT&I Specialist/HVAC. Employees in these classifications who transfer into another job classification will have their seniority in their prior job classification frozen on the date of their transfer.

For purposes of layoff or recall, the following classifications shall be considered one classification:

- Pipefitter/Plumber and Mechanical Technician
Pipefitter/Plumber Certified and Mechanical Technician Certified
- Electrician, Electrician/Electrical Control Specialist, PT&I Technician/Electrician and PT&I Specialist/Electrician
Electrician Certified, Electrician/Electrical Control Specialist Certified, PT&I Technician/Electrician Certified and PT&I Specialist/Electrician Certified
- Air Conditioning Technician, EMCS/HVAC Systems Specialist, PT&I Technician/HVAC and PT&I Specialist/HVAC
Air Conditioning Technician Certified, EMCS/HVAC Systems Specialist Certified, PT&I Technician/HVAC Certified and PT&I Specialist/HVAC Certified

**AGREEMENT BETWEEN
IAMAW LOCAL 2249
AND
MISSISSIPPI SPACE SERVICES STENNIS SPACE CENTER/FACILITY OPERATING
SERVICES PROJECT
AND ITS SUBCONTRACTORS (ABACUS TECHNOLOGY CORPORATION, INDYNE,
INC., MADISON SERVICES, INC., AND OCCU-HEALTH INC.)
THEIR SUCCESSORS AND ASSIGNS (HEREINAFTER CALLED "COMPANY")**

This agreement acknowledges that the Company has agreed to allow the IAMAW and its Local 2249, to offer the Custom Choices Worksite Benefits program of supplemental insurance benefits to their employees in the bargaining unit through their designated agent, Employee Benefit Systems, Inc. (EBS). Employees will be given an opportunity to spend up to fifteen minutes with an EBS Counselor at the worksite during normal working hours, once per year, not to exceed 15 minutes absence from work per employee. EBS shall schedule the employee meetings in consultation with Company managers to minimize operational disruption. Further, the Company will honor payroll deduction requests and make payments to the underwriting insurance companies for supplemental life, cancer, long-term and short term disability and critical illness insurance.

All policyholder service will be provided by the underwriter and Employee Benefit Systems, Inc. It is recognized that the Company is not endorsing this program and that participants will pay 100% of the cost through payroll deduction.

EXHIBIT E

The formation of a responsible MSS SSC FOS Project High Performance Work Organization Partnership is essential in our current Service Contract Arena for long-term success. Our HPWO Partnership will create a relationship where all employees are empowered to be successful, are involved in the decision-making process, and mutually share in the benefits of partnering. By creating an atmosphere of mutual trust and respect, through education and training, through open communications, commitment, and to the greatest extent possible, decision making by consensus, we will achieve our goals of continual improvements in safety, quality, customer satisfaction, cost competitiveness, and employment security through innovation and partnering between Mississippi Space Services and its Subcontractors (Company) and the Union.

Agreement to Partner

We, the International Association of Machinists and Aerospace Workers Local Lodge 2249, and the Mississippi Space Services and its Subcontractors (Company) have committed to a HPWO partnership that will accomplish goals that mutually benefit the Company, the Union, all employees, the SSC as our customer, and the community in which we live.

Both the Union and the Company recognize that success and growth will be based largely on the efforts of all employees and those efforts are best achieved through a professional and positive Union-Management relationship.

We agree to develop, through shared decision-making, work processes and practices that will focus on providing services that meet or exceed the needs of our customers. The approach will enable continuous improvement by maximizing the contribution of skills, knowledge, and sharing information. Through this ongoing partnering commitment, people will seek out, learn, and apply competence in our daily work environment.

Cooperative activities or projects undertaken as a result of this commitment shall be in conformity with the provisions of the Collective Bargaining Agreement, which is our contract. The partnership agreement will be enabling language, which will allow leaders of labor and management to expose the entire workforce to their commitment to establish and promote positive, and extensive workplace change. This agreement will highlight the mutual goals and benefits of the partnership and the commitment to establish a new era of labor relations through shared decision making. Working as one, we will participate in understanding our customers' perceptions and definitions of value. The knowledge gained will be integrated with design and development efforts, thereby creating high value in all new products and services that we offer.

The Company and the union recognize that total team effort is required through the HPWO Implementation and development process. As we strive toward service contract excellence, we agree to trust, respect, and help each other throughout all phases of the partnership, and its commitment to positive workplace change. With this partnership agreement we intend to increase operation efficiency, expand the workforces, better educate and train our employees, increase Company profitability, provide the basis for enhancement of wages and benefits, and secure employment for all who participate.

94-2302 MS, PASCAGOULA

WAGE DETERMINATION NO: 94-2302 REV (22) AREA: MS, PASCAGOULA

HEALTH AND WELFARE LEVEL - TOTAL BENEFIT **OTHER WELFARE LEVEL WD:94-2301

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

William W. Gross Division of
Director Wage Determinations

Wage Determination No.: 1994-2302
Revision No.: 22
Date Of Revision: 05/24/2006

State: Mississippi

Area: Mississippi Counties of George, Hancock, Harrison, Jackson, Pearl River, Stone

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	9.41
01012 - Accounting Clerk II	11.36
01013 - Accounting Clerk III	13.71
01014 - Accounting Clerk IV	16.77
01030 - Court Reporter	13.72
01050 - Dispatcher, Motor Vehicle	12.27
01060 - Document Preparation Clerk	10.19
01070 - Messenger (Courier)	8.62
01090 - Duplicating Machine Operator	9.84
01110 - Film/Tape Librarian	8.80
01115 - General Clerk I	8.91
01116 - General Clerk II	10.03
01117 - General Clerk III	10.94
01118 - General Clerk IV	13.67
01120 - Housing Referral Assistant	15.44
01131 - Key Entry Operator I	9.78
01132 - Key Entry Operator II	10.98
01191 - Order Clerk I	10.99
01192 - Order Clerk II	14.67
01261 - Personnel Assistant (Employment) I	11.88
01262 - Personnel Assistant (Employment) II	13.36
01263 - Personnel Assistant (Employment) III	14.17
01264 - Personnel Assistant (Employment) IV	15.76
01270 - Production Control Clerk	15.44
01290 - Rental Clerk	9.29
01300 - Scheduler, Maintenance	10.96
01311 - Secretary I	10.96
01312 - Secretary II	13.72
01313 - Secretary III	15.44
01314 - Secretary IV	16.80
01315 - Secretary V	18.61
01320 - Service Order Dispatcher	9.81
01341 - Stenographer I	9.65
01342 - Stenographer II	10.96
01400 - Supply Technician	16.80
01420 - Survey Worker (Interviewer)	12.10
01460 - Switchboard Operator-Receptionist	9.06
01510 - Test Examiner	13.72
01520 - Test Proctor	13.72

01531 - Travel Clerk I	10.01
01532 - Travel Clerk II	10.62
01533 - Travel Clerk III	11.14
01611 - Word Processor I	10.99
01612 - Word Processor II	12.35
01613 - Word Processor III	13.79
03000 - Automatic Data Processing Occupations	
03010 - Computer Data Librarian	11.12
03041 - Computer Operator I	12.15
03042 - Computer Operator II	14.91
03043 - Computer Operator III	17.40
03044 - Computer Operator IV	18.51
03045 - Computer Operator V	20.44
03071 - Computer Programmer I (1)	17.82
03072 - Computer Programmer II (1)	22.02
03073 - Computer Programmer III (1)	26.47
03074 - Computer Programmer IV (1)	27.62
03101 - Computer Systems Analyst I (1)	25.01
03102 - Computer Systems Analyst II (1)	27.41
03103 - Computer Systems Analyst III (1)	27.62
03160 - Peripheral Equipment Operator	12.15
05000 - Automotive Service Occupations	
05005 - Automotive Body Repairer, Fiberglass	18.95
05010 - Automotive Glass Installer	13.96
05040 - Automotive Worker	13.96
05070 - Electrician, Automotive	14.52
05100 - Mobile Equipment Servicer	12.79
05130 - Motor Equipment Metal Mechanic	15.09
05160 - Motor Equipment Metal Worker	13.96
05190 - Motor Vehicle Mechanic	16.10
05220 - Motor Vehicle Mechanic Helper	12.26
05250 - Motor Vehicle Upholstery Worker	13.38
05280 - Motor Vehicle Wrecker	13.96
05310 - Painter, Automotive	14.52
05340 - Radiator Repair Specialist	13.96
05370 - Tire Repairer	12.36
05400 - Transmission Repair Specialist	15.09
07000 - Food Preparation and Service Occupations	
(not set) - Food Service Worker	8.41
07010 - Baker	11.09
07041 - Cook I	10.17
07042 - Cook II	11.09
07070 - Dishwasher	8.41
07130 - Meat Cutter	11.42
07250 - Waiter/Waitress	8.83
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	15.00
09040 - Furniture Handler	11.53
09070 - Furniture Refinisher	14.52
09100 - Furniture Refinisher Helper	12.26
09110 - Furniture Repairer, Minor	13.38
09130 - Upholsterer	14.52
11030 - General Services and Support Occupations	
11030 - Cleaner, Vehicles	8.41
11060 - Elevator Operator	8.41
11090 - Gardener	10.41
11121 - House Keeping Aid I	8.41
11122 - House Keeping Aid II	8.86
11150 - Janitor	8.86
11210 - Laborer, Grounds Maintenance	9.04
11240 - Maid or Houseman	7.94
11270 - Pest Controller	12.79
11300 - Refuse Collector	11.13
11330 - Tractor Operator	10.52
11360 - Window Cleaner	8.83
12000 - Health Occupations	
12020 - Dental Assistant	11.15
12040 - Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	13.21

12071 - Licensed Practical Nurse I	11.84
12072 - Licensed Practical Nurse II	13.30
12073 - Licensed Practical Nurse III	14.87
12100 - Medical Assistant	10.38
12130 - Medical Laboratory Technician	13.84
12160 - Medical Record Clerk	11.36
12190 - Medical Record Technician	12.93
12221 - Nursing Assistant I	8.72
12222 - Nursing Assistant II	8.93
12223 - Nursing Assistant III	10.81
12224 - Nursing Assistant IV	12.15
12250 - Pharmacy Technician	11.63
12280 - Phlebotomist	12.98
12311 - Registered Nurse I	17.87
12312 - Registered Nurse II	21.85
12313 - Registered Nurse II, Specialist	21.85
12314 - Registered Nurse III	23.17
12315 - Registered Nurse III, Anesthetist	26.45
12316 - Registered Nurse IV	31.70
13000 - Information and Arts Occupations	
13002 - Audiovisual Librarian	19.32
13011 - Exhibits Specialist I	16.53
13012 - Exhibits Specialist II	20.10
13013 - Exhibits Specialist III	25.61
13041 - Illustrator I	16.46
13042 - Illustrator II	20.10
13043 - Illustrator III	25.61
13047 - Librarian	19.72
13050 - Library Technician	11.00
13071 - Photographer I	11.36
13072 - Photographer II	13.07
13073 - Photographer III	15.89
13074 - Photographer IV	20.24
13075 - Photographer V	22.31
15000 - Laundry, Dry Cleaning, Pressing and Related Occupations	
15010 - Assembler	7.71
15030 - Counter Attendant	7.71
15040 - Dry Cleaner	8.92
15070 - Finisher, Flatwork, Machine	7.71
15090 - Presser, Hand	7.71
15100 - Presser, Machine, Drycleaning	7.71
15130 - Presser, Machine, Shirts	7.71
15160 - Presser, Machine, Wearing Apparel, Laundry	7.71
15190 - Sewing Machine Operator	9.46
15220 - Tailor	10.01
15250 - Washer, Machine	8.05
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Toolroom)	15.97
19040 - Tool and Die Maker	18.39
21000 - Material Handling and Packing Occupations	
21010 - Fuel Distribution System Operator	14.45
21020 - Material Coordinator	13.69
21030 - Material Expediter	13.69
21040 - Material Handling Laborer	10.11
21050 - Order Filler	10.73
21071 - Forklift Operator	12.18
21080 - Production Line Worker (Food Processing)	12.42
21100 - Shipping/Receiving Clerk	11.34
21130 - Shipping Packer	11.95
21140 - Store Worker I	12.20
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	14.22
21210 - Tools and Parts Attendant	12.58
21400 - Warehouse Specialist	12.58
23000 - Mechanics and Maintenance and Repair Occupations	
23010 - Aircraft Mechanic	19.03
23040 - Aircraft Mechanic Helper	15.46
23050 - Aircraft Quality Control Inspector	19.69
23060 - Aircraft Servicer	16.87

23070 - Aircraft Worker	17.61
23100 - Appliance Mechanic	14.52
23120 - Bicycle Repairer	12.36
23125 - Cable Splicer	20.17
23130 - Carpenter, Maintenance	14.52
23140 - Carpet Layer	14.15
23160 - Electrician, Maintenance	18.11
23181 - Electronics Technician, Maintenance I	16.52
23182 - Electronics Technician, Maintenance II	17.43
23183 - Electronics Technician, Maintenance III	18.94
23260 - Fabric Worker	15.02
23290 - Fire Alarm System Mechanic	16.68
23310 - Fire Extinguisher Repairer	14.44
23340 - Fuel Distribution System Mechanic	17.01
23370 - General Maintenance Worker	13.96
23400 - Heating, Refrigeration and Air Conditioning Mechanic	15.84
23430 - Heavy Equipment Mechanic	16.79
23440 - Heavy Equipment Operator	15.09
23460 - Instrument Mechanic	17.35
23470 - Laborer	10.21
23500 - Locksmith	16.05
23530 - Machinery Maintenance Mechanic	16.89
23550 - Machinist, Maintenance	16.68
23580 - Maintenance Trades Helper	13.84
23640 - Millwright	18.02
23700 - Office Appliance Repairer	16.13
23740 - Painter, Aircraft	16.13
23760 - Painter, Maintenance	14.52
23790 - Pipefitter, Maintenance	17.59
23800 - Plumber, Maintenance	16.57
23820 - Pneudraulic Systems Mechanic	16.68
23850 - Rigger	16.61
23870 - Scale Mechanic	15.57
23890 - Sheet-Metal Worker, Maintenance	16.61
23910 - Small Engine Mechanic	13.96
23930 - Telecommunication Mechanic I	17.89
23931 - Telecommunication Mechanic II	20.65
23950 - Telephone Lineman	17.93
23960 - Welder, Combination, Maintenance	16.82
23965 - Well Driller	16.68
23970 - Woodcraft Worker	16.68
23980 - Woodworker	14.16
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	7.52
24580 - Child Care Center Clerk	9.95
24600 - Chore Aid	7.94
24630 - Homemaker	11.08
25000 - Plant and System Operation Occupations	
25010 - Boiler Tender	18.70
25040 - Sewage Plant Operator	14.66
25070 - Stationary Engineer	18.70
25190 - Ventilation Equipment Tender	13.84
25210 - Water Treatment Plant Operator	14.52
27000 - Protective Service Occupations	
(not set) - Police Officer	14.75
27004 - Alarm Monitor	12.35
27006 - Corrections Officer	11.87
27010 - Court Security Officer	13.23
27040 - Detention Officer	12.79
27070 - Firefighter	14.48
27101 - Guard I	9.05
27102 - Guard II	13.94
28000 - Stevedoring/Longshoremen Occupations	
28010 - Blocker and Bracer	16.99
28020 - Hatch Tender	15.88
28030 - Line Handler	15.88
28040 - Stevedore I	16.28
28050 - Stevedore II	17.65

29000 - Technical Occupations	
21150 - Graphic Artist	19.07
29010 - Air Traffic Control Specialist, Center (2)	31.49
29011 - Air Traffic Control Specialist, Station (2)	21.71
29012 - Air Traffic Control Specialist, Terminal (2)	23.92
29023 - Archeological Technician I	15.11
29024 - Archeological Technician II	16.94
29025 - Archeological Technician III	20.94
29030 - Cartographic Technician	24.35
29035 - Computer Based Training (CBT) Specialist/ Instructor	25.01
29040 - Civil Engineering Technician	14.65
29061 - Drafter I	14.64
29062 - Drafter II	15.72
29063 - Drafter III	19.12
29064 - Drafter IV	24.35
29081 - Engineering Technician I	13.93
29082 - Engineering Technician II	16.16
29083 - Engineering Technician III	18.58
29084 - Engineering Technician IV	22.62
29085 - Engineering Technician V	28.80
29086 - Engineering Technician VI	31.74
29090 - Environmental Technician	22.04
29100 - Flight Simulator/Instructor (Pilot)	27.41
29160 - Instructor	20.92
29210 - Laboratory Technician	18.70
29240 - Mathematical Technician	20.28
29361 - Paralegal/Legal Assistant I	15.09
29362 - Paralegal/Legal Assistant II	18.49
29363 - Paralegal/Legal Assistant III	22.64
29364 - Paralegal/Legal Assistant IV	27.37
29390 - Photooptics Technician	20.04
29480 - Technical Writer	25.79
29491 - Unexploded Ordnance (UXO) Technician I	20.02
29492 - Unexploded Ordnance (UXO) Technician II	24.22
29493 - Unexploded Ordnance (UXO) Technician III	29.03
29494 - Unexploded (UXO) Safety Escort	20.02
29495 - Unexploded (UXO) Sweep Personnel	20.02
29620 - Weather Observer, Senior (3)	19.04
29621 - Weather Observer, Combined Upper Air and Surface Programs (3)	17.17
29622 - Weather Observer, Upper Air (3)	17.17
31000 - Transportation/ Mobile Equipment Operation Occupations	
31030 - Bus Driver	12.64
31260 - Parking and Lot Attendant	7.06
31290 - Shuttle Bus Driver	10.99
31300 - Taxi Driver	9.49
31361 - Truckdriver, Light Truck	10.99
31362 - Truckdriver, Medium Truck	15.01
31363 - Truckdriver, Heavy Truck	14.38
31364 - Truckdriver, Tractor-Trailer	14.38
99000 - Miscellaneous Occupations	
99020 - Animal Caretaker	9.26
99030 - Cashier	7.31
99041 - Carnival Equipment Operator	9.75
99042 - Carnival Equipment Repairer	11.17
99043 - Carnival Worker	8.41
99050 - Desk Clerk	8.40
99095 - Embalmer	20.02
99300 - Lifeguard	10.52
99310 - Mortician	20.02
99350 - Park Attendant (Aide)	13.21
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	9.24
99500 - Recreation Specialist	14.74
99510 - Recycling Worker	12.96
99610 - Sales Clerk	9.48
99620 - School Crossing Guard (Crosswalk Attendant)	11.72
99630 - Sport Official	10.52
99658 - Survey Party Chief (Chief of Party)	13.44
99659 - Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	12.21

99660 - Surveying Aide	8.90
99690 - Swimming Pool Operator	12.21
99720 - Vending Machine Attendant	12.35
99730 - Vending Machine Repairer	14.04
99740 - Vending Machine Repairer Helper	12.35

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: Life, accident, and health insurance plans, sick leave, pension plans, civic and personal leave, severance pay, and savings and thrift plans. Minimum employer contributions costing an average of \$3.01 per hour computed on the basis of all hours worked by service employees employed on the contract.

VACATION: 1 week paid vacation after 1 year of service with a contractor or successor; 2 weeks after 2 years; 3 weeks after 5 years; and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractor in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.
- 3) WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials

are only applicable to work that has been specifically designated by the agency for ordinance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Under the policy and guidance contained in All Agency Memorandum No. 159, the Wage and Hour Division does not recognize, for section 4(c) purposes, prospective wage rates and fringe benefit provisions that are effective only upon such contingencies as "approval of Wage and Hour, issuance of a wage determination, incorporation of the wage determination in the contract, adjusting the contract price, etc." (The relevant CBA section) in the collective bargaining agreement between (the parties) contains contingency language that Wage and Hour does not recognize as reflecting "arm's length negotiation" under section 4(c) of the Act and 29 C.F.R. 5.11(a) of the regulations. This wage determination therefore reflects the actual CBA wage rates and fringe benefits paid under the predecessor contract.

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C) (vi)}

When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

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

ATTACHMENT J-5

DAVIS-BACON WAGE DETERMINATIONS

REFER TO www.dol.gov

FOR HANCOCK, MS

Attachment J-6

Small Business Subcontracting Plan

**Information is withheld in its entirety under
Exemption (b)(4)**

PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

ATTACHMENT J-7

CONTRACT SECURITY CLASSIFICATION SPECIFICATION DD FORM 254

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>		1. CLEARANCE AND SAFEGUARDING a. FACILITY CLEARANCE REQUIRED SECRET b. LEVEL OF SAFEGUARDING REQUIRED SECRET	
2. THIS SPECIFICATION IS FOR: <i>(X and complete as applicable)</i>		3. THIS SPECIFICATION IS: <i>(X and complete as applicable)</i>	
a. PRIME CONTRACT NUMBER	<input checked="" type="checkbox"/>	a. ORIGINAL <i>(Complete date in all cases)</i>	Date (YYMMDD) 07/08/28
b. SUBCONTRACT NUMBER		b. REVISED <i>(Supersedes all previous specs)</i>	Revision No. Date (YYMMDD)
c. SOLICITATION OR OTHER NUMBER NNS06ZBA004R	Due Date (YYMMDD)	c. FINAL <i>(Complete Item 5 in all cases)</i>	Date (YYMMDD)
4. IS THIS A FOLLOW-ON CONTRACT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO. If Yes, complete the following: NAS13-99030 Classified material received or generated under _____ <i>(Preceding Contract Number)</i> is transferred to this follow-on contract.			
5. IS THIS A FINAL DD FORM 254? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's request dated _____, retention of the classified material is authorized for the period _____.			
6. CONTRACTOR <i>(Include Commercial and Government Entity (CAGE) Code)</i>			
a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> Defense Security Services 2300 Lake Park Drive, Suite 250 Smyrna, Georgia 30080-7606	
7. SUBCONTRACTOR			
a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> Defense Security Services 2300 Lake Park Drive, Suite 250 Smyrna, Georgia 30080-7606	
8. ACTUAL PERFORMANCE			
a. LOCATION National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> Defense Security Services P.O. Box 52289 New Orleans, LA 70182-2289	
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT			
Provide Facility Operating Services (FOS) to the John C. Stennis Space Center and Resident Agencies.			
10. CONTRACTOR WILL REQUIRE ACCESS TO:		11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	YES NO	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	YES NO
b. RESTRICTED DATA	<input type="checkbox"/> <input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	<input checked="" type="checkbox"/> <input type="checkbox"/>
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION	<input type="checkbox"/> <input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	<input type="checkbox"/> <input checked="" type="checkbox"/>
d. FORMERLY RESTRICTED DATA	<input type="checkbox"/> <input checked="" type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	<input type="checkbox"/> <input checked="" type="checkbox"/>
e. INTELLIGENCE INFORMATION	<input type="checkbox"/> <input type="checkbox"/>	e. PERFORM SERVICES ONLY	<input type="checkbox"/> <input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (SCI)	<input type="checkbox"/> <input checked="" type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	<input type="checkbox"/> <input checked="" type="checkbox"/>
(2) Non-SCI	<input type="checkbox"/> <input checked="" type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	<input checked="" type="checkbox"/> <input type="checkbox"/>
f. SPECIAL ACCESS INFORMATION	<input type="checkbox"/> <input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT	<input type="checkbox"/> <input checked="" type="checkbox"/>
g. NATO INFORMATION	<input type="checkbox"/> <input checked="" type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS	<input type="checkbox"/> <input checked="" type="checkbox"/>
h. FOREIGN GOVERNMENT INFORMATION	<input type="checkbox"/> <input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	<input type="checkbox"/> <input checked="" type="checkbox"/>
i. LIMITED DISSEMINATION INFORMATION	<input type="checkbox"/> <input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	<input type="checkbox"/> <input checked="" type="checkbox"/>
j. FOR OFFICIAL USE ONLY INFORMATION	<input type="checkbox"/> <input checked="" type="checkbox"/>	l. OTHER <i>(Specify)</i>	<input type="checkbox"/> <input checked="" type="checkbox"/>
k. OTHER <i>(Specify)</i>	<input type="checkbox"/> <input checked="" type="checkbox"/>		

12. PUBLIC RELEASE Any information (*classified or unclassified*) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release

Direct Through (*Specify*)

Linda Theobald
Public Affairs Officer
John C. Stennis Space Center

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)* for review.
*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (*Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.*)

- a. Issuance of this document will serve as written notice of the letting of a classified service contract. The highest level of classification of the contract is SECRET.
- b. The user activity will furnish complete classification guidance for the service to be performed. Contract performance is restricted primarily to the John C. Stennis Space Center, Hancock County, Mississippi.
- c. Personnel security clearances required or requested for work assignments on the contract will be limited strictly to those required to perform the assigned function. The contractor will be guided by Section 2 of the National Industrial Security Program Operating Manual (NISPOM), DoD 5220.22M, and confer with the responsible official prior to assigning employees in-house.
- d. Personnel assigned to work in-house must comply with pertinent NASA and SSC Security Regulations. Security specifications for each service task will be included in appropriate work requests.
- e. Contractor personnel are required to have "hands-on" access to classified information up to a level of SECRET when providing incinerator burning services. Visual access to classified material cannot be prevented or precluded.
- f. Biennial review of this DD Form 254 is required on date: _____ (*two years from date of issuance*)

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (*If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.*)

Yes No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (*If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.*)

Yes No

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (<i>Include Area Code</i>)
Cynthia Aubin	NASA/SSC Physical Security Officer	(228) 688-3529

d. ADDRESS (<i>Include Zip Code</i>) NASA John C. Stennis Space Center Stennis Space Center, MS 39529-6000	17. REQUIRED DISTRIBUTION	
	<input checked="" type="checkbox"/>	a. CONTRACTOR
e. SIGNATURE	<input type="checkbox"/>	b. SUBCONTRACTOR
	<input checked="" type="checkbox"/>	c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
	<input type="checkbox"/>	d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
	<input checked="" type="checkbox"/>	e. ADMINISTRATIVE CONTRACTING OFFICER
	<input checked="" type="checkbox"/>	f. OTHERS AS NECESSARY NASA HQ/DSMD

**Attachment J-8
Safety & Health Plan
Information is withheld in its entirety under
Exemption (b)(4)**

**Part III - List of Documents, Exhibits
and Other Attachments**

Attachment J-9

U.S. Government Comparable Rates

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

A. Employee Class and Monetary Wage

Non-Represented Employees

Administrative Assistant I (Secretary I)	\$ 13.34
Administrative Assistant II (Secretary II)	\$ 14.30
Administrative Assistant III (Secretary III)	\$ 15.02
Administrative Assistant IV (Secretary IV)	\$ 17.34
CADD Drafter I/Indexed (Drafter I)	\$15.72
CADD Drafter II/Indexed (Drafter II)	\$19.12
CADD Drafter III/Indexed (Drafter III)	\$22.14
CADD Drafter IV/Indexed (Drafter IV)	\$24.35
Fire Lieutenant Casual Firefighter	\$15.69
Exercise Specialist/Indexed (Medical Records Technician)	\$17.44
Tour Guide/Indexed (Stenographer II)	\$ 12.58
Tugboat Captain/Indexed (Electronics Technician, Maintenance III)	\$18.78
Tugboat Pilot/Indexed (Electronics Technician, Maintenance II)	\$18.15

Union Represented Employees

Air Conditioning Technician	CBA
Buyer	CBA
Buyer Jr.	CBA
Carpenter	CBA
Certified Welder	CBA
Chauffeur	CBA
Chief EMCS Operator	CBA
Chief Storekeeper	CBA
Commodity Specialist/Cataloger	CBA
Component Technician	CBA
Cook	CBA
Crew Chief	CBA
Driver/Operator	CBA

Electrician/Electrical Control Specialist	CBA
Electrician	CBA
EMCS Operator	CBA
EMCS/HVAC Systems Specialist	CBA
Firefighter	CBA
Food Service Helper	CBA
Food Truck Operator Sales	CBA
General Helper	CBA
Mechanical Technician	CBA
Mechanic/Automotive	CBA
VEM Maintenance Mechanic	CBA
Heavy Equipment Operator	CBA
Lab/X-Ray Technician	CBA
Leadman I/AC Shop	CBA
Leadman I/Carpenter Shop	CBA
Leadman I/Electrical Shop	CBA
Leadman I/Plumbing	CBA
Leadman I/Weld Shop	CBA
Leadman/Weld Shop	CBA
Lineman	CBA
Machinist	CBA
Mail Clerk	CBA
Marine Maintenance Technician	CBA
Material Accounting Specialist	CBA
Pipefitter/Plumber	CBA
PM Mechanic/Pesticide Technician	CBA
Property Administrator	CBA
Property Administrator, Sr.	CBA
Quality Assurance Technician	CBA
Rad./X-Ray Quality Technician	CBA
Receiving/Shipping Clerk	CBA
Records Clerk	CBA
Registered Nurse	CBA
Shipping Specialist	CBA
Shopleader/AC Shop	CBA
Shopleader/Carpenter Shop	CBA
Shopleader/Component Shop	CBA
Shopleader/Electric Shop	CBA
Shopleader/Equipment Maintenance Shop	CBA
Shopleader/Equipment Operations	CBA
Shopleader/Inventory Control	CBA
Shopleader/Machine Shop	CBA
Shopleader/Mail Room	CBA
Shopleader/Plumbing Shop	CBA
Shopleader/PM Team	CBA

Shopleader/Q.A.	CBA
Shopleader/Shuttle Support	CBA
Shopleader/Supply	CBA
Shopleader/Transportation	CBA
Shopleader/Weld Shop	CBA
Stock Specialist	CBA
Storekeeper	CBA
Warehouseman	CBA
Supply Clerk	CBA
Warranty Administrator	CBA
Computer Operator	CBA
Configuration Control Clerk	CBA
Documentation Specialist	CBA
Environmental Health Technician	CBA
General Clerk	CBA
Configuration Control Clerk, Jr.	CBA
Librarian Technician	CBA
Medical Records Specialist	CBA
Payroll Specialist	CBA
Planner/Scheduler	CBA
Real Property Specialist	CBA
Reports Coordinator	CBA
Specsintact Clerk	CBA
Accounting Clerk, Sr.	CBA
Documentation Coordinator	CBA
Compositor	CBA
Illustrator	CBA
Illustrator, Sr.	CBA
Photographer	CBA
Reproduction Operator, Sr.	CBA
Graphics Coordinator	CBA
General Helper	CBA
Laborer	CBA
Environmental Technician (Janitor)	CBA
Environmental Specialist (Janitor)	CBA
Driver, Medium Truck	CBA
Shopleader, Drayage	CBA
Grounds Technician	CBA
Tractor Operator	CBA
Small Mower Operator	CBA
Tractor Operator	CBA
Refuse Truck Driver	CBA
Small Engine Mechanic	CBA
Leadman, Roads & Grounds	CBA
Painter	CBA

Shopleader, Paint

CBA

B. FRINGE BENEFITS (applicable to all classifications)

1. Health and Insurance

Life, accident, and health insurance and sick leave program, 5.1 percent of basic hourly rate.

2. Holidays

- | | |
|----------------------------------|---------------------|
| a. New Year's Day | f. Labor Day |
| b. Martin Luther King's Birthday | g. Columbus Day |
| c. Washington's Birthday | h. Veterans Day |
| d. Memorial Day | i. Thanksgiving Day |
| e. Independence Day | j. Christmas Day |

3. Vacation or Paid Leave

- a. 2 hours of annual leave each week for an employee with less than 3 years of service.
- b. 3 hours of annual leave each week for an employee with 3 but less than 15 years of service.
- c. 4 hours of annual leave each week for an employee with 15 or more years of service.

4. Retirement

1-1/2 percent of basic hourly rate plus Thrift Savings Plan plus Social Security.

(End of clause)

**GOVERNMENT PROVIDED EQUIPMENT
AS OF 8/4/06
Attachment J10 LIST 1
(No Class Exceptions)**

ECN	NOMENCLATURE	COST	FSC	YOM	SUBTOTAL	# ITEMS
Federal Supply Classifications - 1925/1930/1940 - Ships, Small Craft Pontoons and Floating Docks						
0752483	TUG, PUSHBOAT	\$581,817	1925	1983		
S006269	BARGE, CARGO	\$58,500	1930	1952		
S006277	BARGE, CARGO	\$58,500	1930	1952		
S006573	BARGE, CARGO	\$58,500	1930	1954		
0405979	BOAT, ALUMINUM, 16'	\$1,095	1940	1983		
	TOTAL LINE ITEMS 5	\$758,412			\$758,412	5
Federal Supply Classification 2040 - Ship and Marine Equipment, Rigging and Rigging Gear						
G032995	BAR LIFTER, TUGBOAT	\$1,883	2040	1983		
G032996	BAR LIFTER, TUGBOAT	\$1,883	2040	1983		
	TOTAL LINE ITEMS 2	\$3,766			\$3,766	2
Federal Supply Classifications 2320/2330/2340 - Ground Effect Vehicles, Motor Vehicles, Trailers and Cycles						
G033820	TRUCK, OFF-ROAD UTILITY	\$6,806	2320	1988		
G034162	TRUCK, UTILITY ELECTRIC	\$2,690	2320	1989		
0015364	TRUCK, OFF-ROAD UTILITY	\$7,210	2320	1988		
2155870	TRUCK, BOX VAN	\$13,280	2320	1988		
1324652	TRUCK, UTILITY ELECTRIC	\$5,142	2320	1994		
2155934	TRAILER,LOW BED;50 TON	\$74,260	2320	1968		
1940403	TRUCK, DUMP	\$42,052	2320	1975		
0293054	TRUCK, UTILITY, ELECTRIC	\$2,590	2320	1980		
0396504	TRUCK, AERIAL LIFT W/BASKET	\$75,500	2320	1986		
1874378	TRUCK, STAKE BODY	\$58,052	2320	1982		

0590431	TRUCK, UTILITY, ELECTRIC	\$2,590	2320	1980
1540153	TRUCK, FUEL TANKER	\$38,852	2320	1988
2157828	TRUCK, OFF-ROAD UTILITY	\$6,590	2320	2005
0753299	TRUCK, UTILITY, ELECTRIC	\$2,590	2320	1980
0753337	TRUCK, UTILITY, ELECTRIC	\$2,590	2320	1980
0812280	TRUCK, MAINTENANCE	\$115,429	2320	1989
0812337	TRUCK, DUMP	\$57,499	2320	1989
0824858	TRUCK, UTILITY, ELECTRIC	\$2,350	2320	1988
1542246	TRUCK, 4 X 4 JIMMY	\$10,000	2320	1990
2157957	TRUCK, DUMP	\$88,500	2320	2005
1011158	TRUCK, MAINTENANCE	\$21,780	2320	1989
1540902	TRUCK, STAKE BODY	\$17,266	2320	1987
1910759	TRUCK, SERVICE	\$30,257	2320	1997
1173483	TRUCK, UTILITY, ELECTRIC	\$2,690	2320	1991
1941835	TRUCK, UTILITY;ELECTRIC	\$8,558	2320	2001
1323186	TRUCK, SERVICE	\$26,905	2320	1993
1941851	TRUCK, MAINTENANCE	\$65,000	2320	1996
1941852	TRUCK, MAINTENANCE	\$32,619	2320	1995
1223814	TRUCK, UTILITY, ELECTRIC	\$3,501	2320	1992
1224232	TRUCK, WRECKER 5-TON	\$125,000	2320	1972
1322964	TRUCK, UTILITY, ELECTRIC	\$3,188	2320	1993
1325132	TRUCK, DUMP	\$70,400	2320	1980
2158150	TRUCK, FUEL TANKER	\$83,105	2320	2005
1539314	TRAILER, LOWBED	\$5,000	2330	1978
1324537	TRAILER, FLAT BED	\$3,995	2330	1988
0034722	TRAILER	\$3,695	2330	1997
1912664	TRAILER, DROP DECK	\$11,615	2330	1998
1541319	TRAILER, UTILITY	\$7,330	2330	1996
2158195	TRAILER, UTILITY	\$8,850	2330	2006
0015518	TRAILER, 10' X 30'	\$4,950	2330	1988
1940882	TRAILER, FLATBED	\$1,200	2330	1989
1225046	TRAILER, 20-TON ENCLOSED	\$4,972	2330	1984
1010167	TRAILER, HOUSE MOVING MODULE	\$4,800	2330	1983
0289816	TRAILER, W/TANK	\$27,206	2330	1973
0396680	TRAILER, 7' X 34'	\$3,777	2330	1986
1225045	TRAILER, 20-TON ENCLOSED	\$4,972	2330	1984

1939826	TRAILER, FOLD GOOSENECK 50 TON	\$12,500	2330	1965		
1172719	TRAILER, 12-TON ENCLOSED	\$7,000	2330	1984		
0593240	TRAILER, TANK, SEMI	\$5,200	2330	1948		
0752900	TRAILER, PIPE-POLE	\$3,150	2330	1945		
0752901	TRAILER, CABLE, 5-TON REEL	\$3,100	2330	1977		
0752908	TRAILER, CABLE, 5-TON REEL	\$3,100	2330	1977		
0752909	TRAILER, CABLE	\$3,099	2330	1974		
1011198	TRAILER, TRUCK TILTING	\$10,681	2330	1991		
1011199	TRAILER, ENCLOSED	\$3,416	2330	1978		
1172706	TRAILER, SINGLE AXLE	\$3,416	2330	1984		
1223798	TRAILER, LOWBOY	\$22,890	2330	1969		
1172710	TRAILER, TANDEM 20-TON ENCLOSE	\$11,972	2330	1984		
0034627	TRAILER, TANK, FUEL	\$15,064	2330	1988		
2157180	TRAILER, UTILITY	\$2,890	2330	1999		
1911511	TRAILER, CARGO	\$3,910	2330	1997		
1939418	TRAILER, PLATFORM	\$19,095	2330	1996		
2156765	TRAILER	\$1,000	2330	1988		
2097526	CART, ELECTRIC	\$9,094	2340	2001		
	TOTAL LINE ITEMS 64	\$1,337,780			\$1,337,780	64

Federal Supply Classification 2430 - Tractors

0819064	TRACTOR	\$111,409	2430	1991		
	TOTAL LINE ITEMS 1	\$111,409			\$111,409	1

Federal Supply Classifications 2805/2845 - Engines

0591034	OUTBOARD MOTOR, GASOLINE	\$1,141	2805	1983		
1323774	OUTBOARD MOTOR, GASOLINE	\$1,250	2805	1993		
1911083	OUTBOARD MOTOR, GASOLINE	\$2,495	2805	1996		
	TOTAL LINE ITEMS 6	\$4,886			\$4,886	3

Federal Supply Classification 3220 - Woodworking Machinery

G033246	SANDER, BELT, ELECTRIC	\$580	3220	1988		
G033279	SANDER, DISK	\$15,425	3220	1988		
G034459	JOINTER, WOODWORKING	\$15,536	3220	1989		
0014998	TABLE, MARVEL DEAD ROLLER	\$5,587	3220	1988		

0015266	PLANER, SURFACE	\$68,045	3220	1988		
0289736	SAW, RADIAL OVERARM, WOODWORKI	\$1,292	3220	1971		
0591349	SAW, BAND, WOODWORKING	\$9,000	3220	1964		
0752741	SANDER, BELT, ELECTRIC	\$680	3220	1977		
0818992	SAW, CIRCULAR, TABLE TYPE	\$3,978	3220	1991		
1940630	SANDER, BELT, ELECTRIC	\$1,400	3220	1965		
1012429	SANDER, DISK	\$1,072	3220	1990		
1173378	SHAPER, WOOD	\$3,678	3220	1991		
1173419	SANDER, DISK	\$1,325	3220	1991		
1939957	PLANER	\$796	3220	1998		
	TOTAL LINE ITEMS 14	\$128,394			\$128,394	14

Federal Supply Classification 3405 - Saws and Filing Machines

G032877	SAW, BAND 36"	\$16,740	3405	1988		
1940208	SAW, COLD 14"	\$3,795	3405	1998		
1940212	SAW, BAND	\$16,995	3405	1998		
0015626	SAW, CUTOFF 10"	\$535	3405	1988		
0132686	SAW, BAND	\$57,010	3405	1987		
0133468	SAW, BAND METAL CUTTING	\$4,521	3405	1987		
1912745	SAW, BAND	\$43,779	3405	1998		
2156928	SAW, BAND	\$5,414	3405	1979		
1539853	SAW, CUTOFF	\$359	3405	1995		
0590375	SAW, ABRASIVE CUTOFF	\$1,652	3405	1982		
0590943	SAW, POWER HACK	\$2,500	3405	1967		
0753403	SHEAR, HYDRAULIC	\$19,946	3405	1985		
1324287	SAW, BAND	\$2,936	3405	1993		
1324655	SAW, BAND	\$2,712	3405	1994		
1012103	SAW, BAND 14"	\$610	3405	1990		
1912763	SAW, PIPE CUTTING	\$899	3405	1998		
2158040	SAW, CUTOFF	\$890	3405	2005		
1940663	SAW, 10" MITER	\$949	3405	1999		
2158139	SAW, TABLE	\$2,058	3405	2006		
1912764	SAW, PIPE CUTTING	\$899	3405	1998		
1911499	SAW, BAND	\$924	3405	1997		
	TOTAL LINE ITEMS 21	\$186,123			\$186,123	21

Federal Supply Classification 3408 - Machining Centers and Way-Type Machines

2158235	MACHINING CENTER, VERTICAL	\$111,850	3408	2006		
	TOTAL LINE ITEMS	\$111,850			\$111,850	1

Federal Supply Classification 3411 - Boring Machines

2156932	BORING MACHINE, JIG	\$39,535	3411	1979		
0137723	HEAD, BORING	\$4,900	3411	1970		
0591347	BORING MACHINE	\$30,072	3411	1946		
0594305	BORING MACHINE	\$64,962	3411	1942		
0594306	BORING MACHINE	\$56,625	3411	1933		
0594333	BORER, JIG	\$6,736	3411	1939		
1011571	BORING BAR, PORTABLE	\$13,620	3411	1990		
	TOTAL LINE ITEMS 7	\$216,450			\$216,450	7

Federal Supply Classification 3413 - Drilling and Tapping Machines

1323424	DRILLING MACHINE, UPRIGHT	\$3,500	3413	1960		
G034463	DRILLING MACHINE, UPRIGHT	\$446	3413	1989		
1223611	DRILLING MACHINE, UPRIGHT	\$4,099	3413	1991		
2156935	DRILLING MACHINE, RADIAL	\$10,265	3413	1980		
1224320	DRILLING MACHINE, UPRIGHT	\$1,708	3413	1992		
0590957	DRILLING MACHINE, UPRIGHT	\$465	3413	1966		
0591028	DRILLING MACHINE, UPRIGHT	\$475	3413	1974		
0591361	DRILLING MACHINE, UPRIGHT	\$5,326	3413	1965		
0594313	DRILLING MACHINE, UPRIGHT	\$490	3413	1964		
0594334	PRESS, DRILL FLOOR ELECTRIC	\$848	3413	1965		
0752868	DRILLING MACHINE, UPRIGHT	\$2,980	3413	1955		
0819134	DRILLING MACHINE, UPRIGHT	\$4,143	3413	1991		
	TOTAL LINE ITEMS 12	\$34,745			\$34,745	12

Federal Supply Classification 3415 - Grinding Machines

0015681	SANDER/GRINDER	\$309	3415	1987		
1541306	SANDER, BELT/DISC	\$918	3415	1995		
1323798	GRINDER, PEDESTAL ELECTRIC	\$1,468	3415	1993		
G034295	GRINDING MACHINE, BENCH	\$211	3415	1986		
1941253	SANDER, BELT	\$312	3415	2000		

2156930	GRINDER, UNIVERSAL	\$13,568	3415	1975
2156931	GRINDING MACHINE, SURFACE	\$19,995	3415	1989
2156936	GRINDING MACHINE	\$8,950	3415	1980
0590357	GRINDER, PEDESTAL ELECTRIC	\$1,250	3415	1965
0591346	GRINDER, PEDESTAL ELECTRIC	\$1,250	3415	1964
0591352	GRINDING MACHINE, BENCH	\$2,323	3415	1944
0591353	GRINDER, PEDESTAL ELECTRIC	\$575	3415	1965
0591355	GRINDER, MONOSET CUTTER & TOOL	\$6,000	3415	1965
0591444	GRINDING MACHINE, BENCH	\$54	3415	1965
0594323	GRINDER, PEDESTAL ELECTRIC	\$1,151	3415	1964
0752471	GRINDING & BUFFING MACHINE, UT	\$444	3415	1966
0752726	GRINDER, PEDESTAL ELECTRIC	\$1,250	3415	1964
0752871	GRINDER, PEDESTAL ELECTRIC	\$1,250	3415	1964
0753162	GRINDING MACHINE, BENCH	\$111	3415	1982
0824516	GRINDING MACHINE, BENCH	\$316	3415	1987
0824586	GRINDING MACHINE, BENCH	\$355	3415	1987
1010716	GRINDING MACHINE, BENCH	\$200	3415	1990
1541119	GRINDER, BENCH	\$188	3415	1996
1172594	BUFFING MACHINE, PEDESTAL	\$3,000	3415	1990
1324828	GRINDER, BENCH	\$223	3415	1994
1912821	GRINDER, BENCH	\$538	3415	1998
1541625	GRINDING MACHINE, HORIZONTAL	\$42,249	3415	1996
	TOTAL LINE ITEMS 27	\$108,458		
				\$108,458 27

Federal Supply Classifications 3416/3417 - Lathes and Milling Machines

1323425	LATHE	\$4,900	3416	1965
2158175	LATHE	\$84,660	3416	2006
2156934	LATHE	\$21,632	3416	1979
0594319	LATHE, ENGINE MANUAL	\$24,565	3416	1965
0594328	LATHE, ENGINE MANUAL	\$9,331	3416	1953
0594329	LATHE, ENGINE MANUAL	\$10,261	3416	1963
0594342	LATHE, TOOLMAKER W/ACCESSORIES	\$5,272	3416	1965
0818997	LATHE, WOOD	\$2,001	3416	1991
1541419	LATHE	\$19,172	3416	1969
1011932	LATHE, 21"	\$61,720	3416	1990
1225132	LATHE, ENGINE MANUAL	\$22,690	3416	1992

1172846	LATHE	\$11,323	3416	1991		
0594325	LATHE, PLAIN BED	\$45,528	3416	1964		
2155738	EMBOSSER, PLATE	\$11,330	3417	2002		
2155739	EMBOSSER, PLATE	\$11,330	3417	2002		
G033900	MILLING MACHINE	\$180,665	3417	1988		
0133049	MILLING MACHINE	\$47,061	3417	1987		
2156929	MILLING MACHINE	\$15,813	3417	1989		
2156933	MILLING MACHINE	\$29,619	3417	1980		
0591341	MILLING MACHINE, VERT W/ACCESS	\$4,545	3417	1964		
0591364	MILLING MACHINE	\$2,749	3417	1964		
0591446	END MILL SHARPENING FIXTURES	\$1,193	3417	1979		
0591458	MILLING ATTACHMENT, UNIVERSAL	\$2,570	3417	1966		
1172896	MILLING MACHINE	\$13,965	3417	1965		
1322751	ENGRAVING SYSTEM, COMPUTERIZED	\$13,595	3417	1993		
0818996	MILLING MACHINE	\$1,295	3417	1991		
	TOTAL LINE ITEMS 26	\$658,785			\$658,785	26

Federal Supply Classification 3419 - Miscellaneous Machine tools

1219484	WIRE COILING & CUTTING MACHINE	\$15,911	3419	1991		
0016028	BEVELER, MEDIUM DIAMETER	\$15,603	3419	1989		
2156938	COMPARATOR, OPTICAL	\$42,210	3419	1980		
0592429	CUTTING MACHINE, GASKET	\$975	3419	1984		
0818995	PROJECTOR, OPTICAL CONTOUR	\$11,170	3419	1991		
1010708	KEY MILL	\$2,565	3419	1989		
0016027	BEVELER, SMALL DIAMETER	\$5,063	3419	1989		
1912811	BEVELER	\$9,850	3419	1998		
1912812	BEVELER	\$4,095	3419	1998		
1941847	BEVELER SYSTEM	\$8,720	3419	2001		
1941848	BEVELER SYSTEM	\$8,720	3419	2001		
	TOTAL LINE ITEMS 11	\$124,882			\$124,882	11

Federal Supply Classification 3431 - Electric Arc Welding Equipment

1940587	WELDING MACHINE, ARC	\$11,718	3431	1996		
1541601	WELDING MACHINE, ARC	\$11,718	3431	1996		
G034297	WELDING MACHINE, ARC	\$7,060	3431	1989		

G034341	WELDING MACHINE, ARC	\$4,501	3431	1989
G034342	WELDING MACHINE, ARC	\$4,501	3431	1989
G034450	POWER SOURCE, 300 AMPERE	\$2,841	3431	1989
2158204	WELDING MACHINE, ARC	\$3,711	3431	2006
2158205	WELDING MACHINE, ARC	\$3,711	3431	2006
0819154	WELDING MACHINE, ARC	\$2,121	3431	1991
2158251	WELDING MACHINE, DIESEL	\$14,062	3431	2006
2158252	WELDING MACHINE, DIESEL	\$14,062	3431	2006
1224231	WELDING MACHINE, ARC	\$1,030	3431	1976
1539644	WELDING MACHINE, ARC	\$2,483	3431	1995
1224852	WELDING MACHINE, ARC	\$10,993	3431	1992
2156333	WELDER, TRAILBLAZER	\$7,337	3431	1986
1910808	WELDER, TRAILBLAZER	\$7,337	3431	1986
1224853	WELDING MACHINE, ARC	\$10,993	3431	1992
2157234	WELDING MACHINE, ARC	\$3,065	3431	2004
2156332	WELDING MACHINE, ARC	\$2,700	3431	1998
0396993	WELDING MACHINE, ARC	\$2,984	3431	1986
2157580	WELDING MACHINE, ARC	\$3,342	3431	2005
0397088	CUTTING SYSTEM, PLASMA ARC	\$12,381	3431	1986
2156859	WELDING MACHINE, ARC	\$3,065	3431	2003
0589997	WELDING MACHINE, ARC	\$1,978	3431	1977
0590018	WELDING MACHINE, ARC	\$1,030	3431	1976
0590388	CUTTING MACHINE, GAS	\$500	3431	1965
0590399	WELDING GUN, PVC	\$380	3431	1981
0590420	WELDING MACHINE, ARC TWO WHEEL	\$2,331	3431	1976
1940629	WELDER, TRAILBLAZER	\$5,692	3431	1984
1941272	WELDING MACHINE, ARC	\$2,485	3431	2000
1941273	WELDING MACHINE, ARC	\$2,485	3431	2000
0594041	WIRE FEEDER	\$625	3431	1984
0752466	WELDING MACHINE, ARC	\$1,030	3431	1976
1539646	WELDING MACHINE, ARC	\$2,264	3431	1995
1542052	WELDING MACHINE, ARC, AC/DC	\$2,936	3431	1996
1540916	WELDING MACHINE, ARC	\$12,076	3431	1996
1540906	WELDING MACHINE, ARC	\$2,532	3431	1996
1941039	WELDING MACHINE, ARC	\$2,185	3431	2000
1912393	WELDING MACHINE, ARC	\$6,882	3431	1997

1940483	WELDING MACHINE, ARC	\$1,578	3431	1997		
1940484	WELDING MACHINE, ARC	\$1,578	3431	1997		
1324019	WELDING MACHINE, ARC	\$10,488	3431	1993		
1940105	WELDER, INVERTER ARC	\$1,231	3431	1998		
1940106	WELDER, INVERTER ARC	\$1,231	3431	1998		
0397213	WELDING MACHINE, ARC	\$2,579	3431	1986		
1940516	CUTTING MACHINE, PLASMA ARC	\$1,975	3431	1999		
1542053	WELDING MACHINE, ARC, AC/DC	\$2,936	3431	1996		
1541123	WELDING MACHINE, ARC	\$1,175	3431	1996		
1940123	WELDING MACHINE, ARC	\$2,483	3431	1998		
1940122	WELDING MACHINE, ARC	\$4,437	3431	1998		
1939823	WELDING MACHINE, ARC	\$2,311	3431	1998		
1910143	WELDING MACHINE, ARC	\$7,586	3431	1997		
1910144	WELDING MACHINE, ARC	\$7,586	3431	1997		
1939822	WELDING MACHINE, ARC	\$2,311	3431	1998		
1939821	WELDING MACHINE, ARC	\$2,311	3431	1998		
1939820	WELDING MACHINE, ARC	\$2,311	3431	1998		
1939819	WELDING MACHINE, ARC	\$2,311	3431	1998		
1939818	WELDING MACHINE, ARC	\$2,311	3431	1998		
1941432	WELDING MACHINE, ARC	\$2,885	3431	2000		
	TOTAL LINE ITEMS 59	\$258,741			\$258,741	59

Federal Supply Classification 3433 - Gas Welding, Heat Cutting and Metalizing Equipment

0131778	TORCH, LECTRA	\$250	3433	1986		
0293279	CUTTING MACHINE	\$744	3433	1986		
0293280	TORCH, HAND CUTTING	\$460	3433	1985		
0397189	CUTTING MACHINE, PLASMA METAL	\$2,565	3433	1986		
1940844	CUTTING MACHINE, PLASMA ARC	\$2,145	3433	2000		
1910040	CUTTING MACHINE	\$1,881	3433	1997		
	TOTAL LINE ITEMS 6	\$8,045			\$8,045	6

Federal Supply Classification 3436 - Welding Positioners and Manipulators

1912802	POSITIONER	\$11,012	3436	1998		
2157859	POSITIONER, WELDING	\$8,250	3436	2005		
2157260	POSITIONER, WELDING	\$9,610	3436	2004		
1940605	POSITIONER, WELDING	\$8,400	3436	1999		

1941834	POSITIONER, PIPE	\$4,062	3436	2001		
1912424	POSITIONER, WELDING	\$2,939	3436	1998		
0034834	POSITIONER, WELDING	\$3,340	3436	1996		
	TOTAL LINE ITEMS 7	\$47,613			\$47,613	7

Federal Supply Classification 3438 - Miscellaneous Welding Equipment

G033264	LOADBANK, DIGITAL WELDING POWER	\$1,746	3438	1988		
G033771	PIPE CUTTING MACHINE, PORTABLE	\$4,950	3438	1989		
G033772	PIPE CUTTING MACHINE, PORTABLE	\$4,950	3438	1989		
	TOTAL LINE ITEMS 3	\$11,646			\$11,646	3

Federal Supply Classification 3441 - Bending and Forming Machines

G032881	LATHE, 15" GEARED HEAD GAP BED	\$27,228	3441	1988		
G032886	CUTTING MACHINE, OXYFUEL/PLASM	\$100,100	3441	1988		
G033639	THREADING MACHINE	\$4,366	3441	1988		
1322815	FACER, FLANGE	\$10,810	3441	1988		
1539669	BENDER, CONDUIT, HYDRAULIC	\$11,409	3441	1995		
0819136	BRAKE, BOX & PAN STYLE	\$5,730	3441	1991		
1910807	BRAKE, PLAINSTYLE BENDING HAND	\$5,050	3441	1991		
0289633	FLARING MACHINE	\$14,275	3441	1985		
1910806	BENDER, PLATE	\$10,000	3441	1965		
0589987	FORMING MACHINE	\$3,000	3441	1965		
0590010	PRESS, BRAKE	\$13,200	3441	1965		
0590026	FORMING MACHINE	\$4,856	3441	1965		
0590328	SWEDGING-EXPANDING MACHINE	\$11,792	3441	1962		
1940632	BENDER, TUBE	\$2,444	3441	1978		
0591366	SINE, PLATE 10"	\$555	3441	1965		
1324634	THREADING MACHINE	\$4,697	3441	1994		
1011071	FINISHING MACHINE, TUBE END	\$6,985	3441	1990		
1325170	BENDER	\$12,755	3441	1994		
1012131	PLATE, BENDING ROLL	\$102,790	3441	1991		
1172832	TABLE, WATER CUTTING	\$37,454	3441	1991		
1224836	BENDER, CONDUIT	\$9,731	3441	1992		
1322884	BENDER, ELECTRIC	\$3,966	3441	1992		

0589995	FINGER BRAKE	\$500	3441	1966		
1541852	BENDER, ELECTRIC	\$6,891	3441	1996		
	TOTAL LINE ITEMS 24	\$410,584			\$410,584	24

Federal Supply Classification 3442 - Hydraulic and Pneumatic Presses

1225198	PRESS, HYDRAULIC 25-TON	\$1,646	3442	1992		
G034505	PRESS, HYDRAULIC 25 TON	\$891	3442	1989		
1539499	PRESS, HYDRAULIC	\$3,292	3442	1995		
1011234	PRESS, HYDRAULIC	\$3,870	3442	1990		
1912261	PRESS, HYDRAULIC	\$5,260	3442	1997		
1541254	PRESS, HYDRAULIC FLOOR	\$2,499	3442	1996		
1323003	PRESS, ARBOR, POWER OPERATED	\$8,999	3442	1993		
1940069	PRESS, DRILL	\$345	3442	1998		
1939503	PRESS, DRILL	\$6,089	3442	1998		
	TOTAL LINE ITEMS 9	\$32,891			\$32,891	9

Federal Supply Classifications 3443/3444 - Mechanical Presses

0752335	PRESS, HYDRAULIC 17 1/2 TON	\$1,190	3443	1984		
0824553	PUMP, FILTER	\$600	3443	1983		
1541241	PRESS, DRILL	\$441	3443	1996		
0592394	PRESS, DRILL	\$397	3443	1984		
0590458	PRESS, ARBOR, POWER OPERATED	\$173	3444	1975		
0592334	PRESS, SHOP 100 TON	\$8,189	3444	1984		
0594321	PRESS, ARBOR, HAND OPERATED	\$252	3444	1966		
0594330	PRESS, ARBOR, HAND OPERATED	\$72	3444	1965		
	TOTAL LINE ITEMS 8	\$11,314			\$11,314	8

Federal Supply Classification 3445 - Punching and Shearing Machines

0590004	PUNCHING MACHINE, METAL, FOOT	\$8,735	3445	1965		
1010738	SHEAR, HYDRAULIC	\$110,755	3445	1989		
1324750	KNOCK-OUT SET	\$1,116	3445	1994		
1012235	PUNCHING MACHINE, HYDRAULIC	\$935	3445	1990		
1223701	PUNCHING MACHINE, METAL, HAND	\$6,666	3445	1992		
	TOTAL LINE ITEMS 5	\$128,207			\$128,207	5

Federal Supply Classifications 3449/3450/3460 - Portable Machine Tools and Accessories

2157049	CUTTING MACHINE, BAND	\$3,369	3449	2003		
1323845	THREADER, POWER DRIVE	\$885	3450	1993		
0125369	TOOL, REWORKING	\$9,422	3450	1965		
0137042	THREADER, CONDUIT	\$335	3450	1977		
1322609	THREADER, POWER DRIVE	\$882	3450	1992		
0591451	HEAD, MILLING PORTABLE	\$4,218	3450	1965		
0752858	BLOWER	\$125	3450	1976		
1010233	MARKING MACHINE, METAL	\$945	3450	1989		
1012487	THREADER, PIPE	\$621	3450	1989		
1941829	CUTTER,WIRE ROPE;HYDRAULIC	\$857	3450	2001		
1541780	THREADER, PIPE	\$5,191	3450	1996		
2158138	PORTA POWER, HYDRAULIC	\$1,265	3450	2006		
2157005	MARKING SYSTEM, LASER	\$11,995	3450	2003		
0125495	SPACER, SUPER	\$1,280	3460	1965		
0591452	TABLE, ROTARY PL	\$20,000	3460	1964		
0590331	DRIVE UNIT, ASSEMBLY	\$2,600	3460	1978		
	TOTAL LINE ITEMS 16	\$63,990			\$63,990	16

Federal Supply Classification 3540 - Wrapping & Packaging Machines

G032554	SEALING MACHINE	\$2,225	3540	1988		
G032555	SEALING MACHINE	\$2,225	3540	1988		
1540996	SEALER, PRESSURE	\$10,440	3540	1996		
0133681	SEALING MACHINE	\$6,075	3540	1987		
1912665	SEALER, THERMAL IMPULSE	\$9,623	3540	1998		
1542237	ROLL, SLIP	\$5,580	3540	1996		
2157666	LAMINATOR	\$16,175	3540	2005		
0819144	SEALING MACHINE	\$5,675	3540	1991		
	TOTAL LINE ITEMS 8	\$58,018			\$58,018	8

Federal Supply Classification 3590 - Miscellaneous Service and Trade Equipment

1012319	PRESS, LAMINATING, PROTECTIVE	\$396	3590	1990		
1172844	PRESS, LAMINATING, PROTECTIVE	\$485	3590	1991		
1173372	PRESS, LAMINATING, PROTECTIVE	\$235	3590	1991		
1539378	PRESS, LAMINATING, PROTECTIVE	\$1,035	3590	1995		
	TOTAL LINE ITEMS 4	\$2,151			\$2,151	4

Federal Supply Classification 3610 - Printing, Duplicating and Bookbinding Equipment

L008464	COPIER	\$48,720	3610	2002		
L008465	SERVER	\$10,500	3610	2002		
L008466	SCANNER	\$17,280	3610	2002		
1941283	LAMINATOR	\$14,000	3610	2000		
	TOTAL LINE ITEMS 4	\$90,500			\$90,500	4

Federal Supply Classification 3611 - Industrial Marking Machines

0034179	PRINTING MACHINE, LABEL	\$1,726	3611	1994		
1323335	MARKER, DATA PLATE	\$8,740	3611	1993		
	TOTAL LINE ITEMS 2	\$10,466			\$10,466	2

Federal Supply Classification 3615 - Pulp and Paper Industries Machinery

1322908	BALER, VERTICAL	\$6,925	3615	1993		
	TOTAL LINE ITEMS 1	\$6,925			\$6,925	1

Federal Supply Classification 3630 - Concrete Industries Machinery

1541853	SAW, CONCRETE	\$2,327	3630	1996		
	TOTAL LINE ITEMS 1	\$2,327			\$2,327	1

Federal Supply Classification 3685 - Specialized Metal Container Manufacturing

0590002	LOCK FORMER	\$828	3685	1965		
	TOTAL LINE ITEMS 1	\$828			\$828	1

Federal Supply Classification 3694 - Clean Work Stations, Controlled Environment and Related Equipment

0014991	BENCH, LAMINAR FLOW CLEAN	\$4,754	3694	1988		
2156281	CLEANER,SHOE; MOTORIZED	\$1,844	3694	2002		
2157103	BENCH,CLEAN; LAMINAR FLOW	\$4,445	3694	2004		
1224993	CONSOLE, HORIZONTAL FLOW	\$2,610	3694	1992		
	TOTAL LINE ITEMS 4	\$13,653			\$13,653	4

Federal Supply Classification 3805 - Earth Moving & Excavating Equipment

1324516	LOADER, BACKHOE	\$44,155	3805	1993		
1324517	BREAKER, CONCRETE	\$17,970	3805	1993		
2158194	LOADER, SCOOP TYPE	\$52,663	3805	2006		

1324237	LOADER, SCOOP TYPE	\$87,392	3805	1993		
1940395	GRADER, ROAD	\$54,000	3805	1979		
0396497	GRADER, ROAD, MOTORIZED	\$129,684	3805	1975		
0590948	DITCHING MACHINE	\$9,985	3805	1981		
0590966	LOADER, SCOOP TYPE	\$51,137	3805	1976		
0590996	LOADER, BACKHOE	\$23,577	3805	1976		
2157654	EXCAVATOR, TRACK HOE	\$137,869	3805	2005		
1912185	SCRAPER	\$223,470	3805	1977		
1224492	EXCAVATOR, HYDRAULIC	\$121,690	3805	1992		
	TOTAL LINE ITEMS 12	\$953,592			\$953,592	12

Federal Supply Classification 3810 - Cranes and Crane Shovels

1912857	CRANE	\$447,675	3810	1998		
	TOTAL LINE ITEMS 1	\$447,675			\$447,675	1

Federal Supply Classification 3815 - Crane Shovel Attachments

1910665	BALL, WRECKING 3 TON	\$530	3815	1967		
0590997	BUCKET, CLAMSHELL	\$1,664	3815	1965		
0593236	BUCKET, CONCRETE 3/4 CU YD	\$818	3815	1966		
0593239	BUCKET, DRAGLINE 3/4 YARD	\$850	3815	1967		
	TOTAL LINE ITEMS 4	\$3,862			\$3,862	4

Federal Supply Classification 3825 - Road Clearing, Cleaning & Marking Equipment

0133827	SWEeper, HYDRAULIC TRACTOR MTD	\$4,555	3825	1987		
0397130	SWEeper	\$18,000	3825	1986		
0593629	SWEeper, MAGNETIC	\$1,500	3825	1962		
	TOTAL LINE ITEMS 3	\$24,055			\$24,055	3

Federal Supply Classification 3830 - Truck and Tractor

0591003	RAKE, BRUSH 9 FT	\$1,425	3830	1965		
1224932	BULLDOZER	\$127,000	3830	1973		
2157596	BULLDOZER	\$132,531	3830	2005		
2157596	BULLDOZER	\$132,531	3830	2005		
2158157	BULLDOZER	\$202,100	3830	2006		
	TOTAL LINE ITEMS 5	\$595,587			\$595,587	5

Federal Supply Classification 3895 - Miscellaneous Construction Equipment

0590263	MIXER, CONCRETE TILT SIDE DISH	\$1,160	3895	1975		
1322510	COMPACTOR, GARBAGE	\$169,930	3895	1970		
1322864	ROLLER, TOWED, PNEUMATIC TIRED	\$2,263	3895	1969		
1541729	MIXER, CONCRETE	\$2,487	3895	1996		
1542245	COMPACTOR, LANDFILL	\$144,334	3895	1996		
	TOTAL LINE ITEMS 5	\$320,174			\$320,174	5

Federal Supply Classification 3920 - Material Handling Equipment

1322517	TRANSPORTER	\$10,000	3920	1984		
1941052	TRANSPORTER, ROCKET ENGINE	\$17,000	3920	1964		
0397497	TRAILER, BOAT	\$466	3920	1987		
	TOTAL LINE ITEMS 3	\$27,466			\$27,466	3

Federal Supply Classification 3930 - Warehouse Trucks & Tractors

2156127	FORKLIFT, TRUCK	\$19,560	3930	2002		
1939898	FORKLIFT, TRUCK	\$78,773	3930	1998		
G032910	FORKLIFT, TRUCK	\$27,232	3930	1988		
0133471	FORKLIFT, TRUCK	\$15,692	3930	1987		
1173488	FORKLIFT, TRUCK	\$18,967	3930	1991		
0015293	FORKLIFT, TRUCK	\$15,154	3930	1988		
0015312	FORKLIFT, TRUCK	\$15,479	3930	1988		
0015726	FORKLIFT, TRUCK	\$16,613	3930	1988		
2158099	FORKLIFT, TRUCK	\$22,134	3930	1989		
1322702	FORKLIFT, TRUCK	\$21,993	3930	1992		
0133010	FORKLIFT, TRUCK	\$18,566	3930	1987		
1912819	LIFT, MAN	\$22,200	3930	1998		
0592346	FORKLIFT, TRUCK	\$20,501	3930	1984		
2157653	HITCH, POWER	\$2,206	3930	2005		
0753420	FORKLIFT, TRUCK	\$17,690	3930	1982		
0589963	FORKLIFT, TRUCK	\$28,000	3930	1980		
1939816	FORKLIFT, TRUCK	\$61,178	3930	1987		
0133009	FORKLIFT, TRUCK	\$18,566	3930	1987		
2156532	FORKLIFT, TRUCK	\$178,983	3930	1983		
1939825	FORKLIFT, TRUCK	\$17,165	3930	1983		
2157931	FORKLIFT, TRUCK	\$26,238	3930	2005		

1011195	FORKLIFT, TRUCK	\$33,528	3930	1990		
1011236	FORKLIFT, TRUCK	\$21,795	3930	1990		
1012044	FORKLIFT, TRUCK	\$24,153	3930	1990		
2157385	FORKLIFT, TRUCK	\$25,941	3930	2004		
2157386	FORKLIFT, TRUCK	\$25,941	3930	2004		
1323721	FORKLIFT, TRUCK	\$29,675	3930	1993		
1173369	FORKLIFT, TRUCK	\$19,461	3930	1991		
1173498	FORKLIFT, TRUCK	\$19,461	3930	1991		
0397227	TRUCK PALLET	\$690	3930	1986		
0034631	FORKLIFT, TRUCK	\$79,497	3930	1975		
1542249	FORKLIFT, TRUCK	\$79,497	3930	1971		
0396611	TRUCK, HYDRAULIC PALLET	\$564	3930	1986		
1323981	LIFT, PERSONNEL	\$4,628	3930	1993		
1324861	LIFT-A-LOFT	\$46,225	3930	1994		
	TOTAL LINE ITEMS 35	\$1,073,946			\$1,073,946	35

Federal Supply Classification 3940 - Block, Tackle, Rigging & Slings

0752307	CLAMP, CHAIN	\$972	3940	1984		
	TOTAL LINE ITEMS 1	\$972			\$972	1

Federal Supply Classification 3950 - Winches, Hoists, Cranes & Derricks

1941462	HOIST, CHAIN	\$285	3950	2001		
1939238	CRANE, FLOOR	\$697	3950	1998		
1541303	HOIST, CHAIN	\$1,261	3950	1996		
G033278	COMEALONG	\$245	3950	1988		
G033318	HOIST, CHAIN	\$176	3950	1988		
G033531	COMEALONG	\$202	3950	1988		
1940752	HOIST, CHAIN	\$1,930	3950	1999		
1912986	WINCH	\$770	3950	1998		
1912987	WINCH	\$770	3950	1998		
2155762	HOIST, CHAIN	\$279	3950	1999		
2156280	WINCH	\$1,150	3950	2002		
2158219	CRANE, DAVIT; PORTABLE	\$6,786	3950	2006		
1539740	HOIST, CHAIN	\$1,560	3950	1994		
2155899	WINCH, ELECTRIC	\$1,130	3950	2002		
1941254	HOIST, WIREROPE, PORTABLE	\$2,410	3950	2000		

2157225	HOIST, CHAIN	\$420	3950	2004
0041932	HOIST, CHAIN	\$1,162	3950	1996
2157226	HOIST, CHAIN	\$420	3950	2004
0041931	HOIST, CHAIN	\$1,094	3950	1996
0145568	COMEALONG	\$255	3950	1982
0145623	COMEALONG	\$153	3950	1983
0289726	TRUCK, WALKIE REACH	\$11,353	3950	1985
1911175	CRANE, JIB MOBILE 4000 LB CAP	\$601	3950	1981
0289833	SPIDER, STAGING	\$1,488	3950	1968
0289843	SPIDER, STAGING	\$3,595	3950	1982
1539845	HOIST, CHAIN	\$376	3950	1995
2157215	HOIST, CHAIN	\$1,394	3950	2004
1540018	SPIDER, STAGING	\$38,000	3950	1995
0397098	CRANE, HYDRAULIC	\$799	3950	1986
0133423	HOIST, CHAIN	\$287	3950	1966
0589943	HOIST, CHAIN, AIR OPERATED	\$2,117	3950	1976
0590346	HOIST, CHAIN	\$575	3950	1965
0590349	HOIST, CHAIN, AIR OPERATED	\$1,879	3950	1978
0590975	HOIST, CHAIN	\$180	3950	1967
0591023	COMEALONG	\$148	3950	1976
0592393	HOIST, WIRE ROPE	\$7,863	3950	1984
0592691	SPIDER, STAGING	\$3,595	3950	1982
1912836	CRANE	\$74,500	3950	1998
1622516	HOIST, CHAIN	\$176	3950	1998
1622517	HOIST, CHAIN	\$176	3950	1998
0592904	SPIDER, STAGING	\$3,595	3950	1982
2157795	CRANE, BUMPER	\$3,807	3950	2005
0594231	COMEALONG	\$250	3950	1983
0594302	CRANE, MOBILE HYDRAULIC	\$644	3950	1966
0042378	HOIST, CHAIN	\$270	3950	1997
0752446	SPIDER, STAGING	\$1,285	3950	1965
0042100	HOIST, LEVER	\$650	3950	1997
2157135	HOIST, CHAIN	\$616	3950	2004
1910029	HOIST, CHAIN	\$875	3950	1997
1939946	HOIST, CHAIN	\$379	3950	1998
1540739	CRANE, CRAWLER MOUNTED	\$265,536	3950	1988

1941434	HOIST, CHAIN	\$429	3950	2000
0824835	COMEALONG	\$217	3950	1987
1940444	HOIST, CHAIN	\$383	3950	1999
1940445	HOIST, CHAIN	\$383	3950	1999
1941005	HOIST, CHAIN	\$995	3950	2000
1941006	HOIST, CHAIN	\$995	3950	2000
1941007	HOIST, CHAIN	\$995	3950	2000
1941008	HOIST, CHAIN	\$995	3950	2000
1223794	COMEALONG	\$654	3950	1991
1011561	WINCH, RESCUE W/TRIPOD	\$2,013	3950	1990
1323530	CRANE	\$202,518	3950	1972
1011954	CRANE, MOBILE HYDRAULIC	\$82,018	3950	1990
0034846	HOIST, CHAIN	\$395	3950	1996
1939228	HOIST, CHAIN	\$257	3950	1998
1223807	HOIST, CHAIN	\$197	3950	1992
1223808	HOIST, CHAIN	\$197	3950	1992
1940823	HOIST, CHAIN	\$1,855	3950	1999
1940822	HOIST, CHAIN	\$1,855	3950	1999
1223795	COMEALONG	\$654	3950	1991
0034684	CRANE, TRUCK MOUNTED, HYD.	\$98,912	3950	1978
1912851	HOIST, CHAIN	\$1,670	3950	1998
1941676	HOIST, CHAIN	\$1,800	3950	2001
1941677	HOIST, CHAIN	\$3,000	3950	2001
1941678	HOIST, CHAIN	\$1,930	3950	2001
1912837	HOIST, CHAIN	\$1,081	3950	1998
0036757	COMEALONG	\$245	3950	1992
1912872	HOIST, CHAIN	\$271	3950	1998
1940852	HOIST, CHAIN	\$189	3950	1999
1323216	CRANE, BUMPER	\$1,427	3950	1993
1940853	HOIST, CHAIN	\$189	3950	1999
1940854	HOIST, CHAIN	\$279	3950	1999
1012224	COMEALONG	\$198	3950	1990
1940671	HOIST, CHAIN	\$689	3950	1999
1940668	HOIST, CHAIN	\$1,541	3950	1999
1940666	HOIST, CHAIN	\$635	3950	1999
1940669	HOIST, CHAIN	\$1,119	3950	1999

1940670	HOIST, CHAIN	\$1,350	3950	1999		
1912426	CRANE, HYDRAULIC 1/2 TON	\$910	3950	1997		
1173388	HOIST, CHAIN	\$651	3950	1991		
2156995	HOIST, LEVER	\$203	3950	2003		
2156996	HOIST, LEVER	\$203	3950	2003		
1910033	HOIST, CHAIN	\$382	3950	1997		
1910034	HOIST, CHAIN	\$382	3950	1997		
1541591	CRANE, BOOM	\$2,307	3950	1996		
2156997	HOIST, LEVER	\$326	3950	2003		
2156998	HOIST, LEVER	\$326	3950	2003		
2156999	HOIST, LEVER	\$638	3950	2003		
2157000	HOIST LEVER	\$638	3950	2003		
1940672	HOIST, CHAIN	\$689	3950	1999		
1939635	HOIST, CHAIN	\$364	3950	1997		
	TOTAL LINE ITEMS 101	\$872,713			\$872,713	101

Federal Supply Classification 3960 - Freight Elevator

0591815	FORK LEVATOR	\$16,060	3960	1984		
	TOTAL LINE ITEMS 1	\$16,060			\$16,060	1

Federal Supply Classification 3990 - Miscellaneous Materials Handling Equipment

1941217	LIFTGATE	\$1,800	3990	2000		
2156165	LIFTGATE	\$2,049	3990	2002		
1940849	LIFTGATE	\$1,517	3990	1999		
1940687	LIFTGATE	\$1,845	3990	1999		
	TOTAL LINE ITEMS 4	\$7,211			\$7,211	4

Federal Supply Classification 4110 - Refrigeration Equipment

2155854	ICE MAKING MACHINE	\$2,413	4110	2002		
2158257	ICE MAKING MACHINE	\$2,929	4110	2006		
1940396	ICE MAKING MACHINE	\$2,490	4110	1999		
2157118	ICE MAKING MACHINE	\$2,492	4110	2002		
2156103	ICE MAKING MACHINE	\$2,492	4110	2002		
1540263	ICE MAKING MACHINE	\$2,476	4110	1995		
1540402	ICE MAKING MACHINE	\$1,529	4110	1995		
1941009	ICE MAKING MACHINE	\$1,412	4110	2000		

1941793	ICE MAKING MACHINE	\$1,580	4110	2001		
2157406	ICE MAKING MACHINE	\$1,954	4110	2004		
1912824	ICE MAKING MACHINE	\$2,455	4110	1998		
1322748	ICE MAKING MACHINE	\$1,276	4110	1992		
2157416	ICE MAKING MACHINE	\$1,985	4110	2004		
1941325	ICE MAKING MACHINE	\$2,150	4110	2000		
2156184	ICE MAKING MACHINE	\$4,028	4110	2002		
2158101	ICE MAKING MACHINE	\$889	4110	2006		
2158158	ICE MAKING MACHINE	\$2,389	4110	2006		
1940371	ICE MAKING MACHINE	\$2,808	4110	1998		
2156069	ICE MAKING MACHINE	\$1,688	4110	2002		
2156800	ICE MAKING MACHINE	\$1,681	4110	2003		
TOTAL LINE ITEMS 20		\$43,116			\$43,116	20

Federal Supply Classification 4120 - Air Conditioning Equipment

1939904	AIR CONDITIONER	\$3,000	4120	1993		
1939905	AIR CONDITIONER	\$3,000	4120	1993		
0132870	AIR CONDITIONER, PORTABLE	\$2,296	4120	1987		
0132871	AIR CONDITIONER, PORTABLE	\$2,296	4120	1987		
2157315	CHILLER, TRAILER MOUNTED	\$206,500	4120	2004		
2157681	AIR CONDITIONER, PORTABLE	\$3,223	4120	2005		
2157682	AIR CONDITIONER, PORTABLE	\$3,223	4120	2005		
2157683	AIR CONDITIONER, PORTABLE	\$3,223	4120	2005		
2157684	AIR CONDITIONER, PORTABLE	\$3,223	4120	2005		
2157685	AIR CONDITIONER, PORTABLE	\$3,223	4120	2005		
2158038	AIR CONDITIONER, PORTABLE	\$4,195	4120	2005		
2158076	AIR CONDITIONER, PORTABLE	\$6,795	4120	2005		
2158081	CHILLER, TRAILER MOUNTED	\$194,150	4120	2006		
2158102	AIR CONDITIONER, PORTABLE	\$12,449	4120	2006		
TOTAL LINE ITEMS 14		\$450,796			\$450,796	14

Federal Supply Classification 4130 - Refrigeration and Air Conditioning Components

2155809	REFRIGERANT RECOVERY UNIT	\$690	4130	2002		
1623972	REFRIGERANT RECOVERY UNIT	\$650	4130	2004		
1623973	REFRIGERANT RECOVERY UNIT	\$650	4130	2004		

1941583	REFRIGERANT RECOVERY UNIT	\$650	4130	2001		
1941584	REFRIGERANT RECOVERY UNIT	\$650	4130	2001		
2157787	REFRIGERANT RECOVERY UNIT	\$650	4130	2005		
2157610	REFRIGERANT RECOVERY UNIT	\$650	4130	2005		
2157611	REFRIGERANT RECOVERY UNIT	\$650	4130	2005		
1940115	REFRIGERANT RECOVERY UNIT	\$662	4130	1998		
	TOTAL LINE ITEMS 9	\$5,902			\$5,902	9

Federal Supply Classification - 4140 - Fans, Air Circulators and Blower Equipment

2157807	FAN, EVAPORATIVE COOLING	\$2,089	4140	2005		
2157811	FAN, EVAPORATIVE COOLING	\$2,089	4140	2005		
2157806	FAN, EVAPORATIVE COOLING	\$2,264	4140	2005		
2157810	FAN, EVAPORATIVE COOLING	\$2,264	4140	2005		
2157808	FAN, EVAPORATIVE COOLING	\$2,089	4140	2005		
2157809	FAN, EVAPORATIVE COOLING	\$2,264	4140	2005		
1012232	BLOWER, PORTABLE FISH TAPE	\$371	4140	1990		
1172625	BLOWER, EXHAUST	\$1,791	4140	1990		
	TOTAL LINE ITEMS 8	\$15,221			\$15,221	8

Federal Supply Classification 4210 - Fire Fighting Equipment

L006055	TRUCK, FIRE FIGHTING	\$0	4210	1977		
L009440	TRUCK, FIRE FIGHTING	\$0	4210	1980		
0289804	TRUCK, FIRE FIGHTING	\$126,820	4210	1985		
1322537	TRUCK, FIRE FIGHTING	\$68,790	4210	1992		
1224331	SMOKE MACHINE	\$711	4210	1992		
1940402	TRUCK, FIRE FIGHTING	\$172,762	4210	1985		
1225154	TRUCK, FIRE FIGHTING	\$222,362	4210	1992		
	TOTAL LINE ITEMS 7	\$591,445			\$591,445	7

Federal Supply Classification 4240 - Safety and Rescue Equipment

G033844	RESCUE & UTILITY SYSTEM	\$1,478	4240	1988		
2158221	CUTTER, CONFINED SPACE	\$4,296	4240	2006		
2158222	SPREADER	\$4,532	4240	2006		
2158223	CUTTER	\$2,948	4240	2006		
2158224	RAM	\$1,740	4240	2006		
2158225	RAM	\$1,740	4240	2006		

2158226	RAM	\$2,092	4240	2006	
2158227	RAM	\$2,092	4240	2006	
1910667	CYLINDER, RAM RESCUE EXTENSION	\$1,150	4240	1987	
0133611	REEL, HOSE ELECTRIC	\$1,735	4240	1987	
1910669	POWER PACK	\$970	4240	1985	
1910668	SPREADER, HYDRAULIC, PORTABLE	\$4,000	4240	1985	
1323307	SPREADER, JAWS RESCUE	\$3,592	4240	1993	
1323308	POWER UNIT, JAWS RESCUE	\$2,502	4240	1993	
1323309	CUTTER, HYDRAULIC, PORTABLE	\$2,094	4240	1993	
1910666	CUTTER, HYDRAULIC, PORTABLE	\$4,000	4240	1985	
2156112	SAW,RESCUE	\$1,100	4240	2002	
	TOTAL LINE ITEMS 17	\$42,061			\$42,061 17

Federal Supply Classifications 4310/4320/4330 - Pumps and Compressors

G032561	COMPRESSOR, AIR PORTABLE	\$130	4310	1988	
1940154	PUMP, VACUUM	\$654	4310	1998	
1940188	COMPRESSOR, AIR	\$1,699	4310	1998	
0015124	COMPRESSOR, AIR PORTABLE	\$1,142	4310	1988	
0015125	COMPRESSOR, AIR PORTABLE	\$1,142	4310	1988	
2158236	PUMP, VACUUM	\$618	4310	2006	
0132586	COMPRESSOR, AIR PORTABLE	\$11,000	4310	1987	
0132931	COMPRESSOR, AIR PORTABLE	\$16,885	4310	1987	
2157309	COMPRESSOR, AIR	\$1,789	4310	1997	
1940918	COMPRESSOR, AIR	\$1,789	4310	1999	
2157788	PUMP, VACUUM	\$329	4310	2005	
0397136	PUMP, VACUUM	\$1,985	4310	1986	
2157320	COMPRESSOR, AIR	\$1,735	4310	2004	
1941268	COMPRESSOR, AIR	\$199	4310	2000	
0590962	COMPRESSOR, AIR PORTABLE	\$640	4310	1975	
1540338	COMPRESSOR, AIR	\$2,333	4310	1995	
0752067	COMPRESSOR, AIR PORTABLE	\$6,480	4310	1984	
0752332	COMPRESSOR, AIR PORTABLE	\$585	4310	1984	
0753421	PUMP, ELECTRIC	\$1,075	4310	1985	
1223563	PUMP, AIR SAMPLING	\$447	4310	1991	
1539252	COMPRESSOR, AIR PORTABLE	\$804	4310	1995	
0132930	COMPRESSOR, AIR PORTABLE	\$16,885	4310	1987	

1322887	COMPRESSOR, AIR PORTABLE	\$549	4310	1992
1012119	COMPRESSOR, AIR PORTABLE	\$579	4310	1990
1012447	COMPRESSOR, AIR	\$627	4310	1990
1223565	PUMP, AIR SAMPLING	\$447	4310	1991
1223566	PUMP, AIR SAMPLING	\$447	4310	1991
1541256	COMPRESSOR, AIR PORTABLE	\$699	4310	1996
1324504	COMPRESSOR, AIR	\$20,749	4310	1993
G033733	PUMP, TWO-STAGE HIGH VACUUM	\$1,305	4310	1988
1940112	COMPRESSOR, AIR	\$2,278	4310	1998
1225184	PUMP, CHEMICAL TRANSFER	\$1,305	4320	1992
1622840	RAM KIT, HYDRAULIC, 10-TON	\$389	4320	2000
1912150	PUMP, TRASH	\$684	4320	1997
1910166	PUMP, CENTRIFUGAL	\$12,100	4320	1992
1542247	PUMP, 2" DIAPHRAGM	\$1,240	4320	1996
1542248	PUMP, 2" DIAPHRAGM	\$1,240	4320	1996
0396543	PUMP, MULTI-PRES BUCKET	\$422	4320	1986
1224980	PUMP, CENTRIFUGAL	\$376	4320	1992
1539495	PUMP, CENTRIFUGAL, PORTABLE	\$869	4320	1995
0592442	PUMP, POWER DIAPHRAGM	\$995	4320	1984
0593198	PUMP, CENTRIFUGAL	\$548	4320	1981
0752898	PUMP, HYDRAULIC	\$1,180	4320	1981
1939116	PUMP, CENTRIFUGAL, PORTABLE	\$202	4320	1998
1939117	PUMP, CENTRIFUGAL, PORTABLE	\$202	4320	1998
1011066	PUMP, PORTABLE GASOLINE	\$1,065	4320	1990
1173139	PUMP, SELF-PRIMING DIAPHRAGM	\$1,450	4320	1991
1173385	PUMP	\$699	4320	1991
1223815	PUMP, CENTRIFUGAL	\$388	4320	1992
1324047	PUMP, FLOATING FIRE	\$1,195	4320	1993
1541741	PUMP, DIAPHRAGM	\$1,635	4320	1996
1940631	PUMP, ELECTRIC	\$4,825	4320	1999
2155985	PUMP,TRASH	\$1,720	4320	2002
2156000	PUMP,TRASH	\$1,640	4320	2002
G033126	OIL FILTERING SYSTEM	\$3,787	4330	1989
0593203	PUMP, OIL SKIMMER	\$819	4330	1981
1012137	PUMP, TRASH	\$2,135	4330	1990
	TOTAL LINE ITEMS 57	\$141,135		
			\$141,135	57

Federal Supply Classification 4460 - Air Purification Equipment

0824848	AIR CLEANER	\$2,126	4460	1988		
2158062	DUCT CLEANING SYSTEM	\$9,500	4460	2005		
	TOTAL LINE ITEMS 2	\$11,626			\$11,626	2

Federal Supply Classification - 4520 Space and Water Heating Equipment

0016445	HEATER, PORTABLE	\$450	4520	1989		
G033001	HEATER, PORTABLE	\$449	4520	1988		
	TOTAL LINE ITEMS 2	\$899			\$899	2

Federal Supply Classification 4530 - Fuel Burning Equipment Units

2155715	HEATER, PORTABLE OIL	\$350	4530	2001		
	TOTAL LINE ITEMS 1	\$350			\$350	1

Federal Supply Classification 4540 - Waste Disposal Equipment

1324569	RODDER MACHINE	\$3,747	4540	1994		
1912158	CLEANER, DRAIN	\$1,648	4540	1997		
0752935	CLEANER, DRAIN	\$333	4540	1984		
1323918	CLEANER, DRAIN	\$1,948	4540	1993		
	TOTAL LINE ITEMS 4	\$7,676			\$7,676	4

Federal Supply Classification 4630 - Sewage Treatment Equipment

1940226	AERATOR, PORTABLE	\$12,300	4630	1999		
	TOTAL LINE ITEMS 1	\$12,300			\$12,300	1

Federal Supply Classification 4910/4920/4930/4940 - Motor Vehicle Maintenance and Repair Shop Equipment

G033696	JACK, TRANSMISSION 1000 LB.	\$542	4910	1988		
1940633	STAND, HYDROSTATIC TEST	\$15,819	4920	1965		
0824844	GUN, GREASE, AIR OPERATED	\$654	4930	1988		
2155710	WASHER, PRESSURE	\$570	4940	2001		
2155711	WASHER, PRESSURE	\$570	4940	2001		
G033256	BLASTING TOOL, PORTABLE ABRASI	\$675	4940	1988		
G033503	FOGGER, TRI-JET	\$180	4940	1988		
G033504	FOGGER, TRI-JET	\$180	4940	1988		
G034859	PLATFORM, SERVICING TRACTOR MT	\$35,945	4940	1989		

2157933	WASHER, PRESSURE	\$399	4940	2005
2157934	WASHER, PRESSURE	\$399	4940	2005
2158187	WASHER, PRESSURE	\$399	4940	2005
2157937	WASHER, PRESSURE	\$399	4940	2005
2157938	WASHER, PRESSURE	\$399	4940	2005
2158196	CART, OIL FILTERING	\$1,933	4940	2006
1325441	WASHER, PARTS	\$1,762	4940	1995
1912751	LIFT, MAN	\$112,151	4940	1998
1323855	WASHER, PARTS	\$1,425	4940	1993
2157301	STRIPING MACHINE	\$3,995	4940	2004
0133588	PLATFORM, SERVICING	\$2,152	4940	1987
0144843	PLATFORM, SERVICING TRACTOR MT	\$24,000	4940	1987
1539621	WASHER, PRESSURE	\$3,394	4940	1995
1539879	WASHER, PARTS	\$19,895	4940	1995
1910672	BLAST, CLEANING MACHINE	\$2,375	4940	1986
1912165	WASHER, PRESSURE	\$3,600	4940	1997
1941638	WASHER, PRESSURE	\$895	4940	2001
2157325	WASHER, PRESSURE	\$1,350	4940	2004
2157216	A-FRAME, PORTABLE; ADJUSTABLE	\$2,000	4940	1994
2157655	CABINET, PRESSURE BLAST	\$9,249	4940	2005
2157664	LIFT, BOOM	\$46,950	4940	2005
0593651	EXTRACTOR, OIL & WATER	\$143	4940	1980
0752952	PLATFORM, SERVICING TRACTOR MT	\$30,887	4940	1980
0753135	SEWERODER, RODER COIL	\$2,925	4940	1967
0824816	DISPENSER, COLORANT TURNTABLE	\$870	4940	1988
1624170	PULLER, CARPET; POWERED	\$1,540	4940	2005
1540738	WASHER, PRESSURE	\$1,225	4940	1996
1940592	WASHER, PRESSURE	\$1,530	4940	1999
G032989	BLOWER, ELECTRIC, PORTABLE	\$70	4940	1988
1912204	PIPE INSPECTION TOOL	\$5,902	4940	1997
2156538	CHANGER, TIRE	\$4,879	4940	2003
1322876	POWER PACK, PORTABLE	\$3,711	4940	1992
G034633	WASHER, PRESSURE	\$995	4940	1989
1173136	CLEANER, STEAM OIL-FIRED	\$1,920	4940	1991
1223676	BLAST, CLEANING SYSTEM	\$1,134	4940	1991
1223761	OIL STORAGE SYSTEM	\$3,105	4940	1992

1224495	ACTUATOR, HAND VALVE POWER	\$1,130	4940	1992		
1941675	SHAKER, PAINT	\$500	4940	2001		
1322982	BLOWER, GAS, PORTABLE	\$444	4940	1993		
2156347	CRUSHER, OIL FILTER	\$100	4940	1996		
2156348	BOOTH, SAND BLAST	\$1,000	4940	2001		
1323351	SHAKER, PAINT	\$1,556	4940	1993		
1323505	PULLER, CABLE	\$2,430	4940	1993		
1940588	PLATFORM, SERVICING TRACTOR MT	\$123,164	4940	1993		
1940682	WASHER, PRESSURE	\$2,158	4940	1999		
1324856	CRUSHER, OIL FILTER	\$1,330	4940	1994		
1911024	WASHER, PRESSURE	\$437	4940	1997		
2156376	LIFT, PERSONNEL BOOM	\$133,550	4940	2003		
	TOTAL LINE ITEMS 57	\$622,891			\$622,891	57

Federal Supply Classification 5210 - Measuring Tools

0014797	MICROMETER, SCREW THREAD	\$198	5210	1987		
0014838	MICROMETER, SCREW THREAD	\$160	5210	1987		
0014839	MICROMETER, SCREW THREAD	\$160	5210	1987		
0014840	MICROMETER, SCREW THREAD	\$220	5210	1987		
0014841	MICROMETER, SCREW THREAD	\$220	5210	1987		
0014842	MICROMETER, SCREW THREAD	\$262	5210	1987		
0014843	MICROMETER, SCREW THREAD	\$262	5210	1987		
0133016	MICROMETER SET	\$363	5210	1987		
0133018	GAGE BLOCK SET	\$1,090	5210	1987		
0133019	CALIPER, DIAL	\$123	5210	1987		
0133020	CALIPER, DIAL	\$123	5210	1987		
0133023	MICROMETER SET	\$82	5210	1987		
0133024	MICROMETER SET	\$82	5210	1987		
0591367	MICROMETER SET	\$1,260	5210	1966		
2156531	LEVEL, AUTOMATIC	\$1,008	5210	2003		
0753318	COUNTER, WIRE & CABLE	\$435	5210	1981		
1323236	MICROMETER, BENCH	\$1,311	5210	1993		
0014798	MICROMETER, SCREW THREAD	\$198	5210	1987		
	TOTAL LINE ITEMS 18	\$7,557			\$7,557	18

Federal Supply Classification 5410 - Prefabricated and Portable Buildings

1910798	BUILDING, PORTABLE	\$1,700	5410	1980		
1910800	BUILDING, PORTABLE	\$672	5410	1979		
0753292	BUILDING, PORTABLE	\$1,600	5410	1980		
1173409	BUILDING, PORTABLE	\$2,880	5410	1987		
1173410	BUILDING, PORTABLE	\$2,880	5410	1987		
1910799	BUILDING, PORTABLE	\$1,000	5410	1980		
0824692	TRAILER PORTABLE DARK ROOM	\$12,300	5410	1988		
	TOTAL LINE ITEMS 7	\$23,032			\$23,032	7

Federal Supply Classification 5430 - Storage Tanks

G034272	TANK BALLAST	\$21,213	5430	1967		
1910650	BASKET, PERSONNEL	\$4,055	5450	1997		
	TOTAL LINE ITEMS 2	\$25,268			\$25,268	2

Federal Supply Classification 5805 - Telephone Equipment

1911650	TELEPHONE, VIDEO	\$3,077	5805	1997		
1911529	TELEPHONE, VIDEO	\$3,077	5805	1997		
1911628	TELEPHONE, VIDEO	\$3,077	5805	1997		
1911652	TELEPHONE, VIDEO	\$3,077	5805	1997		
1911653	TELEPHONE, VIDEO	\$3,077	5805	1997		
1911244	TELEPHONE, VIDEO	\$3,250	5805	1997		
	TOTAL LINE ITEMS 6	\$18,635			\$18,635	6

Federal Supply Classification 5815 - Teletype and Facsimile Equipment

2157445	FACSIMILE MACHINE	\$500	5815	2004		
2156276	FACSIMILE MACHINE	\$585	5815	2002		
2156277	FACSIMILE MACHINE	\$585	5815	2002		
2157176	FACSIMILE MACHINE	\$588	5815	2004		
2156133	FACSIMILE MACHINE	\$170	5815	2002		
1941986	FACSIMILE MACHINE	\$451	5815	2001		
2156261	FACSIMILE MACHINE	\$585	5815	2002		
	TOTAL LINE ITEMS 7	\$3,464			\$3,464	7

Federal Supply Classification 5820 - Radio and Television Communication Equipment

0042331	RADIO, PORTABLE	\$2,137	5820	1997		
0042330	RADIO, PORTABLE	\$2,137	5820	1997		

1623832	RADIO, PORTABLE	\$2,720	5820	2004
1623320	RADIO, PORTABLE	\$3,226	5820	2003
1623321	RADIO, PORTABLE	\$3,226	5820	2003
1623322	RADIO, PORTABLE	\$3,226	5820	2003
1224441	RADIO, CB	\$170	5820	1992
1623033	TRANSMITTER, MICROPHONE	\$299	5820	2002
1623034	RECEIVER, MICROPHONE	\$200	5820	2002
1623035	TRANSMITTER, MICROPHONE	\$299	5820	2002
1623036	RECEIVER, MICROPHONE	\$200	5820	2002
0036627	RADIO, PORTABLE	\$2,263	5820	1992
1623323	RADIO, PORTABLE	\$3,226	5820	2003
0014891	DISPLAY UNIT	\$1,000	5820	1987
1623325	RADIO, PORTABLE	\$3,226	5820	2003
2158200	STATION, WEATHER	\$611	5820	2006
1623204	RADIO, PORTABLE	\$293	5820	2002
1623205	RADIO, PORTABLE	\$293	5820	2002
1623206	RADIO, PORTABLE	\$293	5820	2002
1623207	RADIO, PORTABLE	\$293	5820	2002
0034324	RADIO, PORTABLE	\$2,217	5820	1995
0034323	RADIO, PORTABLE	\$2,217	5820	1995
0034440	RADIO, PORTABLE	\$2,164	5820	1996
1623326	RADIO, PORTABLE	\$3,226	5820	2003
1622700	RADIO, PORTABLE	\$2,164	5820	1996
0034438	RADIO, PORTABLE	\$2,164	5820	1996
0034437	RADIO, PORTABLE	\$2,164	5820	1996
1622793	RADIO, PORTABLE	\$2,217	5820	1995
1623328	RADIO, PORTABLE	\$3,226	5820	2003
0041950	RADIO, PORTABLE	\$2,364	5820	1996
0041951	RADIO, PORTABLE	\$2,364	5820	1996
1622646	RADIO, PORTABLE	\$2,137	5820	1997
1623111	RADIO, PORTABLE	\$2,137	5820	1997
0042153	RADIO, PORTABLE	\$2,137	5820	1997
1623544	TRANCEIVER, VHF MARINE	\$1,007	5820	2003
0034378	RADIO, PORTABLE	\$2,407	5820	1995
0036873	RADIO, PORTABLE	\$2,308	5820	1995
0036264	RADIO, MOBILE	\$969	5820	1992

0036268	RADIO, MOBILE	\$969	5820	1992
1623157	RADIO, PORTABLE	\$293	5820	2002
1622212	RADIO, PORTABLE	\$169	5820	1997
1622211	RADIO, PORTABLE	\$169	5820	1997
1622210	RADIO, PORTABLE	\$169	5820	1997
1622209	RADIO, PORTABLE	\$169	5820	1997
1623158	RADIO, PORTABLE	\$293	5820	2002
1623156	RADIO, PORTABLE	\$293	5820	2002
1622208	RADIO, PORTABLE	\$169	5820	1997
1622942	RADIO, PORTABLE	\$169	5820	1997
1622206	RADIO, PORTABLE	\$169	5820	1997
1622205	RADIO, PORTABLE	\$169	5820	1997
1622204	RADIO, PORTABLE	\$169	5820	1997
1622699	RADIO, PORTABLE	\$169	5820	1997
1622202	RADIO, PORTABLE	\$169	5820	1997
1622201	RADIO, PORTABLE	\$169	5820	1997
0036258	RADIO, PORTABLE	\$969	5820	1992
0036265	RADIO, MOBILE	\$1,342	5820	1992
1623695	RADIO, PORTABLE	\$2,720	5820	2004
1623696	RADIO, PORTABLE	\$2,720	5820	2004
1623697	RADIO, PORTABLE	\$2,720	5820	2004
0036162	RADIO, MOBILE	\$1,903	5820	1992
0036163	RADIO, MOBILE	\$1,903	5820	1992
1623698	RADIO, PORTABLE	\$2,720	5820	2004
1623699	RADIO, PORTABLE	\$2,720	5820	2004
1224846	RADIO, BASE/CONTROL STATION	\$2,513	5820	1992
0036283	RADIO, PORTABLE	\$1,753	5820	1992
1623700	RADIO, PORTABLE	\$2,720	5820	2004
1623701	RADIO, PORTABLE	\$2,720	5820	2004
1623702	RADIO, PORTABLE	\$2,720	5820	2004
1623703	RADIO, PORTABLE	\$2,720	5820	2004
1623704	RADIO, PORTABLE	\$2,720	5820	2004
0036287	RADIO, PORTABLE	\$1,753	5820	1992
1623705	RADIO, PORTABLE	\$2,720	5820	2004
1623706	RADIO, PORTABLE	\$2,720	5820	2004
1623707	RADIO, PORTABLE	\$2,720	5820	2004

1623709	RADIO, PORTABLE	\$2,720	5820	2004
1623710	RADIO, PORTABLE	\$2,720	5820	2004
1623711	RADIO, PORTABLE	\$2,720	5820	2004
1623712	RADIO, PORTABLE	\$2,720	5820	2004
1623713	RADIO, PORTABLE	\$2,720	5820	2004
1623714	RADIO, PORTABLE	\$2,720	5820	2004
1623333	RADIO, PORTABLE	\$3,226	5820	2003
1623716	RADIO, PORTABLE	\$2,720	5820	2004
1623718	RADIO, PORTABLE	\$2,720	5820	2004
1623719	RADIO, PORTABLE	\$2,720	5820	2004
1623720	RADIO, PORTABLE	\$2,720	5820	2004
1623725	RADIO, PORTABLE	\$2,720	5820	2004
1173477	MONITOR, 9" COLOR VIDEO	\$415	5820	1988
1223501	RADIO, MARINE	\$190	5820	1991
1622975	MONITOR,5" LCD	\$1,275	5820	2001
1623727	RADIO, PORTABLE	\$2,720	5820	2004
1623728	RADIO, PORTABLE	\$2,720	5820	2004
1623732	RADIO, PORTABLE	\$2,720	5820	2004
1623733	RADIO, PORTABLE	\$2,720	5820	2004
1623734	RADIO, PORTABLE	\$2,720	5820	2004
1623735	RADIO, PORTABLE	\$2,720	5820	2004
1224400	RADIO, CB	\$170	5820	1992
1623736	RADIO, PORTABLE	\$2,720	5820	2004
1623737	RADIO, PORTABLE	\$2,720	5820	2004
1623739	RADIO, PORTABLE	\$2,720	5820	2004
1623741	RADIO, PORTABLE	\$2,720	5820	2004
1623742	RADIO, PORTABLE	\$2,720	5820	2004
1623743	RADIO, PORTABLE	\$2,720	5820	2004
1623744	RADIO, PORTABLE	\$2,720	5820	2004
0036626	RADIO, PORTABLE	\$2,263	5820	1992
1623745	RADIO, PORTABLE	\$2,720	5820	2004
1623747	RADIO, PORTABLE	\$2,720	5820	2004
1623749	RADIO, PORTABLE	\$2,720	5820	2004
1623751	RADIO, PORTABLE	\$2,720	5820	2004
1623752	RADIO, PORTABLE	\$2,720	5820	2004
1623753	RADIO, PORTABLE	\$2,720	5820	2004

1623754	RADIO, PORTABLE	\$2,720	5820	2004
1623888	RADIO, PORTABLE	\$1,545	5820	1992
1623755	RADIO, PORTABLE	\$2,720	5820	2004
1623757	RADIO, PORTABLE	\$2,720	5820	2004
1623758	RADIO, PORTABLE	\$2,720	5820	2004
1623761	RADIO, PORTABLE	\$2,720	5820	2004
1622672	RADIO, PORTABLE	\$2,727	5820	1999
1622671	RADIO, PORTABLE	\$2,727	5820	1999
1622670	RADIO, PORTABLE	\$2,727	5820	1999
0034033	RADIO, PORTABLE	\$2,267	5820	1993
1623765	RADIO, PORTABLE	\$2,720	5820	2004
1623889	RADIO, PORTABLE	\$2,463	5820	1994
1623766	RADIO, PORTABLE	\$2,720	5820	2004
1623476	RADIO, PORTABLE	\$2,788	5820	2003
1623768	RADIO, PORTABLE	\$2,720	5820	2004
1623772	RADIO, PORTABLE	\$2,720	5820	2004
0034136	RECEIVER-TRANSMITTER, RADIO	\$2,267	5820	1994
1623477	RADIO, PORTABLE	\$2,788	5820	2003
1623478	RADIO, PORTABLE	\$2,788	5820	2003
1623479	RADIO, PORTABLE	\$2,788	5820	2003
0034150	RADIO, PORTABLE	\$2,464	5820	1994
1623480	RADIO, PORTABLE	\$2,788	5820	2003
1623773	RADIO, PORTABLE	\$2,720	5820	2004
1623481	RADIO, PORTABLE	\$2,788	5820	2003
1623482	RADIO, PORTABLE	\$2,788	5820	2003
1623312	RADIO, PORTABLE	\$3,226	5820	2003
1623774	RADIO, PORTABLE	\$2,720	5820	2004
1623483	RADIO, PORTABLE	\$2,788	5820	2003
1623351	RADIO, PORTABLE	\$3,226	5820	2003
1623313	RADIO, PORTABLE	\$3,226	5820	2003
1623775	RADIO, PORTABLE	\$2,720	5820	2004
1623776	RADIO, PORTABLE	\$2,720	5820	2004
1623484	RADIO, PORTABLE	\$2,788	5820	2003
1623777	RADIO, PORTABLE	\$2,720	5820	2004
1622653	RADIO, PORTABLE	\$2,157	5820	1995
1623778	RADIO, PORTABLE	\$2,720	5820	2004

1623485	RADIO, PORTABLE	\$2,788	5820	2003
1623779	RADIO, PORTABLE	\$2,720	5820	2004
1623781	RADIO, PORTABLE	\$2,720	5820	2004
1623782	RADIO, PORTABLE	\$2,720	5820	2004
1623783	RADIO, PORTABLE	\$2,720	5820	2004
1623785	RADIO, PORTABLE	\$2,720	5820	2004
1623786	RADIO, PORTABLE	\$2,720	5820	2004
1623787	RADIO, PORTABLE	\$2,720	5820	2004
1623788	RADIO, PORTABLE	\$2,720	5820	2004
1623486	RADIO, PORTABLE	\$2,788	5820	2003
1623789	RADIO, PORTABLE	\$2,720	5820	2004
1623790	RADIO, PORTABLE	\$2,720	5820	2004
1623791	RADIO, PORTABLE	\$2,720	5820	2004
1623487	RADIO, PORTABLE	\$2,788	5820	2003
1623793	RADIO, PORTABLE	\$2,720	5820	2004
1623795	RADIO, PORTABLE	\$2,720	5820	2004
1623314	RADIO, PORTABLE	\$3,226	5820	2003
1623488	RADIO, PORTABLE	\$2,788	5820	2003
1623489	RADIO, PORTABLE	\$2,788	5820	2003
1623802	RADIO, PORTABLE	\$2,720	5820	2004
1623490	RADIO, PORTABLE	\$2,788	5820	2003
1539868	RADIO, MOBILE	\$2,400	5820	1995
1539869	RADIO, MOBILE	\$2,400	5820	1995
1623491	RADIO, PORTABLE	\$2,788	5820	2003
1623803	RADIO, PORTABLE	\$2,720	5820	2004
1623804	RADIO, PORTABLE	\$2,720	5820	2004
1623805	RADIO, PORTABLE	\$2,720	5820	2004
1623806	RADIO, PORTABLE	\$2,720	5820	2004
1623492	RADIO, PORTABLE	\$2,788	5820	2003
0042334	RADIO, PORTABLE	\$2,137	5820	1997
0042333	RADIO, PORTABLE	\$2,137	5820	1997
0042332	RADIO, PORTABLE	\$2,137	5820	1997
1623493	RADIO, PORTABLE	\$2,788	5820	2003
1623812	RADIO, PORTABLE	\$2,720	5820	2004
1623315	RADIO, PORTABLE	\$3,226	5820	2003
1623815	RADIO, PORTABLE	\$2,720	5820	2004

1623818	RADIO, PORTABLE	\$2,720	5820	2004
1623494	RADIO, PORTABLE	\$2,788	5820	2003
1623316	RADIO, PORTABLE	\$3,226	5820	2003
1623821	RADIO, PORTABLE	\$2,720	5820	2004
1623822	RADIO, PORTABLE	\$2,720	5820	2004
1623824	RADIO, PORTABLE	\$2,720	5820	2004
1623495	RADIO, PORTABLE	\$2,788	5820	2003
1623825	RADIO, PORTABLE	\$2,720	5820	2004
1623826	RADIO, PORTABLE	\$2,720	5820	2004
1623317	RADIO, PORTABLE	\$3,226	5820	2003
1623496	RADIO, PORTABLE	\$2,788	5820	2003
1623497	RADIO, PORTABLE	\$2,788	5820	2003
1623498	RADIO, PORTABLE	\$2,788	5820	2003
1623499	RADIO, PORTABLE	\$2,788	5820	2003
1623500	RADIO, PORTABLE	\$2,788	5820	2003
1623501	RADIO, PORTABLE	\$2,788	5820	2003
1623318	RADIO, PORTABLE	\$3,226	5820	2003
1623319	RADIO, PORTABLE	\$3,226	5820	2003
1623502	RADIO, PORTABLE	\$2,788	5820	2003
1623503	RADIO, PORTABLE	\$2,788	5820	2003
1623504	RADIO, PORTABLE	\$2,466	5820	2003
1623339	RADIO, PORTABLE	\$3,226	5820	2003
1623332	RADIO, PORTABLE	\$3,226	5820	2003
1623334	RADIO, PORTABLE	\$3,226	5820	2003
1623335	RADIO, PORTABLE	\$3,226	5820	2003
1623336	RADIO, PORTABLE	\$3,226	5820	2003
1623337	RADIO, PORTABLE	\$3,226	5820	2003
1623338	RADIO, PORTABLE	\$3,226	5820	2003
1623344	RADIO, PORTABLE	\$3,226	5820	2003
1623350	RADIO, PORTABLE	\$3,226	5820	2003
1623352	RADIO, PORTABLE	\$3,226	5820	2003
1623353	RADIO, PORTABLE	\$3,226	5820	2003
1623354	RADIO, PORTABLE	\$3,226	5820	2003
1623355	RADIO, PORTABLE	\$3,226	5820	2003
1623356	RADIO, PORTABLE	\$3,226	5820	2003
1623357	RADIO, PORTABLE	\$3,226	5820	2003

1623358	RADIO, PORTABLE	\$3,226	5820	2003
1623359	RADIO, PORTABLE	\$3,226	5820	2003
1623360	RADIO, PORTABLE	\$3,226	5820	2003
1623361	RADIO, PORTABLE	\$3,226	5820	2003
1623362	RADIO, PORTABLE	\$3,226	5820	2003
1623363	RADIO, PORTABLE	\$3,226	5820	2003
1623364	RADIO, PORTABLE	\$3,226	5820	2003
1623365	RADIO, PORTABLE	\$3,226	5820	2003
1623366	RADIO, PORTABLE	\$3,226	5820	2003
1623367	RADIO, PORTABLE	\$3,226	5820	2003
1623368	RADIO, PORTABLE	\$3,226	5820	2003
1623369	RADIO, PORTABLE	\$3,226	5820	2003
1623370	RADIO, PORTABLE	\$3,226	5820	2003
1623371	RADIO, PORTABLE	\$3,226	5820	2003
1623372	RADIO, PORTABLE	\$3,226	5820	2003
1623373	RADIO, PORTABLE	\$3,226	5820	2003
1623374	RADIO, PORTABLE	\$3,226	5820	2003
1623375	RADIO, PORTABLE	\$3,226	5820	2003
1623376	RADIO, PORTABLE	\$3,226	5820	2003
1623377	RADIO, PORTABLE	\$3,226	5820	2003
1623378	RADIO, PORTABLE	\$3,226	5820	2003
1623379	RADIO, PORTABLE	\$3,226	5820	2003
1623380	RADIO, PORTABLE	\$3,226	5820	2003
1623383	RADIO, PORTABLE	\$3,226	5820	2003
1623385	RADIO, PORTABLE	\$3,226	5820	2003
1623387	RADIO, PORTABLE	\$3,226	5820	2003
1623388	RADIO, PORTABLE	\$3,226	5820	2003
1623390	RADIO, PORTABLE	\$3,226	5820	2003
1623391	RADIO, PORTABLE	\$3,226	5820	2003
1623392	RADIO, PORTABLE	\$3,226	5820	2003
1623395	RADIO, PORTABLE	\$3,226	5820	2003
1623396	RADIO, PORTABLE	\$3,226	5820	2003
1623397	RADIO, PORTABLE	\$3,226	5820	2003
1623398	RADIO, PORTABLE	\$3,226	5820	2003
1623400	RADIO, PORTABLE	\$3,226	5820	2003
1623402	RADIO, PORTABLE	\$3,226	5820	2003

1623404	RADIO, PORTABLE	\$3,226	5820	2003		
1623411	RADIO, PORTABLE	\$3,226	5820	2003		
1623412	RADIO, PORTABLE	\$3,226	5820	2003		
1623413	RADIO, PORTABLE	\$3,226	5820	2003		
1623414	RADIO, PORTABLE	\$3,226	5820	2003		
1623415	RADIO, PORTABLE	\$3,226	5820	2003		
1623416	RADIO, PORTABLE	\$3,226	5820	2003		
1623418	RADIO, PORTABLE	\$3,226	5820	2003		
1623419	RADIO, PORTABLE	\$3,226	5820	2003		
1623421	RADIO, PORTABLE	\$3,226	5820	2003		
1623422	RADIO, PORTABLE	\$3,226	5820	2003		
1623426	RADIO, PORTABLE	\$3,226	5820	2003		
1623427	RADIO, PORTABLE	\$3,226	5820	2003		
1623429	RADIO, PORTABLE	\$3,226	5820	2003		
1623431	RADIO, PORTABLE	\$3,226	5820	2003		
1623432	RADIO, PORTABLE	\$3,226	5820	2003		
1623433	RADIO, PORTABLE	\$3,226	5820	2003		
1623434	RADIO, PORTABLE	\$3,226	5820	2003		
1623435	RADIO, PORTABLE	\$3,226	5820	2003		
1623438	RADIO, PORTABLE	\$3,226	5820	2003		
1623439	RADIO, PORTABLE	\$3,226	5820	2003		
1623441	RADIO, PORTABLE	\$3,226	5820	2003		
1623442	RADIO, PORTABLE	\$3,226	5820	2003		
1623444	RADIO, PORTABLE	\$3,226	5820	2003		
1623445	RADIO, PORTABLE	\$3,226	5820	2003		
1623446	RADIO, PORTABLE	\$3,226	5820	2003		
1623447	RADIO, PORTABLE	\$3,226	5820	2003		
1623448	RADIO, PORTABLE	\$3,226	5820	2003		
1623449	RADIO, PORTABLE	\$3,226	5820	2003		
1623450	RADIO, PORTABLE	\$3,226	5820	2003		
1623828	RADIO, PORTABLE	\$2,720	5820	2004		
TOTAL LINE ITEMS 285		\$727,103			\$727,103	285

Federal Supply Classification 5825 - Radio Navigation Equipment

0132627	RADAR MARINE W/4" SCANNER	\$5,848	5825	1986		
1624046	POSITIONING SYSTEM, GLOBAL	\$342	5825	2005		

1623253	POSITIONING SYSTEM, GLOBAL	\$310	5825	2003		
1623254	POSITIONING SYSTEM, GLOBAL	\$310	5825	2003		
1623255	POSITIONING SYSTEM, GLOBAL	\$2,347	5825	2003		
1623256	POSITIONING SYSTEM, GLOBAL	\$2,347	5825	2003		
TOTAL LINE ITEMS 6		\$11,504			\$11,504	6

Federal Supply Classification - 5835 Sound Recording and Reproducing Equipment

G032915	RECORDER-REPRODUCER, SOUND	\$40	5835	1988		
2155784	DUPLICATOR,CD	\$2,487	5835	2002		
0014913	RECORDER-REPRODUCER, SOUND	\$67	5835	1988		
0015691	RECORDER-REPRODUCER, SOUND	\$50	5835	1988		
0015962	RECORDER-REPRODUCER, SOUND	\$144	5835	1989		
0132712	RECORDER-REPRODUCER, SOUND	\$72	5835	1987		
1539316	RECORDER-REPRODUCER, SOUND	\$150	5835	1987		
0034923	RECORDER-REPRODUCER, SOUND	\$46	5835	1996		
0034306	RECORDER-REPRODUCER, SOUND	\$139	5835	1995		
0818671	RECORDER-REPRODUCER, SOUND	\$95	5835	1990		
0594182	RECORDER-REPRODUCER, SOUND	\$53	5835	1973		
0036102	RECORDER-REPRODUCER, SOUND	\$179	5835	1992		
0812459	RECORDER-REPRODUCER, SOUND	\$75	5835	1990		
0042087	RECORDER-REPRODUCER, SOUND	\$38	5835	1997		
1622235	RECORDER-REPRODUCER, SOUND	\$58	5835	1997		
1323605	RECORDER-REPRODUCER, SOUND	\$32	5835	1993		
0812458	RECORDER-REPRODUCER, SOUND	\$75	5835	1990		
2156776	RECORDER-REPRODUCER, SOUND	\$304	5835	2003		
TOTAL LINE ITEMS 18		\$4,104			\$4,104	18

Federal Supply Classification - 5836 Video Recording and Reproducing Equipment

1623932	RECORDER-REPRODUCER, VIDEO	\$690	5836	2004		
2156417	RECORDER-REPRODUCER, VIDEO	\$157	5836	2003		
1623941	CAMCORDER, DIGITAL	\$350	5836	2004		
1623946	CAMCORDER, DIGITAL	\$350	5836	2004		
G033836	RECORDER-REPRODUCER, VIDEO	\$5,345	5836	1988		
2155740	MONITOR, TELEVISION	\$150	5836	2002		
2155741	MONITOR, TELEVISION	\$150	5836	2002		
1622389	MONITOR, TELEVISION	\$133	5836	1997		

2158209	RECORDER-REPRODUCER, VIDEO	\$132	5836	2006
2155836	RECORDER-REPRODUCER,VIDEO	\$130	5836	2002
2155903	RECORDER-REPRODUCER,VIDEO	\$89	5836	2002
1224990	RECORDER-REPRODUCER, VIDEO	\$385	5836	1992
0396062	RECORDER-REPRODUCER, VIDEO	\$558	5836	1985
1838244	RECORDER	\$339	5836	1998
0034308	CAMCORDER	\$500	5836	1995
2157588	RECEIVER, AUDIO/VIDEO	\$399	5836	2005
2157589	PLAYER, DVD	\$130	5836	2005
1542104	MONITOR, TELEVISION	\$2,011	5836	1996
2157591	RECEIVER, AUDIO/VIDEO	\$2,588	5836	2005
2157613	DUPLICATOR, CD	\$2,395	5836	2005
1540196	RECORDER-REPRODUCER, VIDEO	\$179	5836	1995
2157675	RECORDER-REPRODUCER, VIDEO	\$333	5836	2005
0015149	RECORDER-REPRODUCER, VIDEO	\$523	5836	1988
2156589	PLAYER, VIDEO/DVD	\$3,620	5836	2003
1540420	RECORDER-REPRODUCER, VIDEO	\$389	5836	1995
1541060	RECORDER-REPRODUCER, VIDEO	\$188	5836	1996
1540545	MONITOR, TELEVISION	\$2,011	5836	1996
1322953	MONITOR, VIDEO RECORDER	\$2,275	5836	1993
1223623	RECORDER-REPRODUCER, VIDEO	\$227	5836	1991
1941749	PLAYER,CD/DVD	\$177	5836	2001
1941750	PLAYER,CD/DVD	\$177	5836	2001
0042102	RECORDER-REPRODUCER, VIDEO	\$239	5836	1997
1911354	RECORDER-REPRODUCER, VIDEO	\$169	5836	1997
1541158	MONITOR, TELEVISION	\$2,058	5836	1996
1623913	MONITOR, TELEVISION	\$920	5836	2004
0034894	RECORDER-REPRODUCER, VIDEO	\$189	5836	1996
1223855	RECORDER-REPRODUCER, VIDEO	\$211	5836	1992
1223856	RECORDER-REPRODUCER, VIDEO	\$211	5836	1992
1623917	RECORDER-REPRODUCER, VIDEO	\$85	5836	2004
1623919	RECORDER-REPRODUCER, VIDEO	\$120	5836	2004
0042101	RECORDER-REPRODUCER, VIDEO	\$239	5836	1997
1941061	MONITOR, TELEVISION	\$236	5836	2000
1941060	MONITOR, TELEVISION	\$236	5836	2000
1941059	MONITOR, TELEVISION	\$236	5836	2000

2157422	RECORDER-REPRODUCER, VIDEO	\$151	5836	2004		
1941058	MONITOR, TELEVISION	\$236	5836	2000		
2157423	RECORDER-REPRODUCER, VIDEO	\$151	5836	2004		
2158056	RECORDER-REPRODUCER, VIDEO	\$70	5836	2005		
2157153	RECORDER-REPRODUCER, VIDEO	\$345	5836	2004		
1323768	RECORDER-REPRODUCER, VIDEO	\$275	5836	1993		
0036095	RECORDER-REPRODUCER, VIDEO	\$987	5836	1993		
1941072	MONITOR, TELEVISION	\$236	5836	2000		
1941071	MONITOR, TELEVISION	\$236	5836	2000		
1670531	CAMCORDER	\$1,149	5836	2006		
1622655	CAMCORDER	\$1,049	5836	1999		
1622656	RECORDER-REPRODUCER, VIDEO	\$1,550	5836	1999		
1939442	RECORDER-REPRODUCER, VIDEO	\$299	5836	1998		
1939444	RECORDER-REPRODUCER, VIDEO	\$299	5836	1998		
2156706	RECORDER-REPRODUCER, VIDEO	\$225	5836	2003		
	TOTAL LINE ITEMS 59	\$39,487			\$39,487	59

Federal Supply Classification 5840 - Radar Equipment

1324175	RADAR DISPLAY UNIT	\$12,953	5840	1993		
0034055	SOUNDER, COLOR VIDEO	\$1,193	5840	1993		
	TOTAL LINE ITEMS 2	\$14,146			\$14,146	2

Federal Supply Classification 5865 - Electronic Countermeasures

0753129	PSYCHRON BATTERY OPERATED	\$112	5865	1980		
	TOTAL LINE ITEMS 1	\$112			\$112	1

Federal Supply Classification 5895 - Miscellaneous Communications Equipment

G033022	POWER SUPPLY	\$1,330	5895	1986		
1623011	HEADSET, RADIO-RECEIVER	\$1,127	5895	2001		
1623012	HEADSET, RADIO-RECEIVER	\$1,127	5895	2001		
	TOTAL LINE ITEMS 3	\$3,584			\$3,584	3

Federal Supply Classification 5950 - Coils and Transformers

0592426	TRANSFORMER, CURRENT	\$741	5950	1984		
0592427	TRANSFORMER, CURRENT	\$741	5950	1984		
0592428	TRANSFORMER, CURRENT	\$741	5950	1984		
	TOTAL LINE ITEMS 3	\$2,223			\$2,223	3

Federal Supply Classification 6115 - Generators and Generator Sets, Electrical

2157452	GENERATOR, PORTABLE	\$774	6115	2004
G034369	GENERATOR, DIESEL	\$15,930	6115	1989
0015702	GENERATOR, DIESEL	\$11,773	6115	1988
0015703	GENERATOR, DIESEL	\$11,773	6115	1988
0015704	GENERATOR, DIESEL	\$9,338	6115	1988
0015705	GENERATOR, DIESEL	\$9,338	6115	1988
2158220	GENERATOR, PORTABLE	\$4,484	6115	2006
1322534	GENERATOR, DIESEL	\$21,510	6115	1992
1322588	GENERATOR, DIESEL	\$14,511	6115	1992
1324528	GENERATOR, 200KW	\$49,440	6115	1987
0396778	GENERATOR	\$1,525	6115	1986
0034872	GENERATOR, PORTABLE	\$2,287	6115	1996
0415232	GENERATOR, PORTABLE	\$1,153	6115	1983
1322528	GENERATOR	\$1,534	6115	1989
1940328	GENERATOR, PORTABLE	\$1,699	6115	1998
1323374	GENERATOR, PORTABLE	\$1,865	6115	1993
1323408	GENERATOR, DIESEL	\$35,141	6115	1981
2157875	GENERATOR, DIESEL	\$23,225	6115	2005
1323510	GENERATOR	\$9,260	6115	1993
1323511	GENERATOR	\$8,256	6115	1993
2157918	GENERATOR, PORTABLE	\$37,280	6115	2005
2157919	GENERATOR, PORTABLE	\$37,280	6115	2005
1012376	GENERATOR, PORTABLE	\$674	6115	1990
1323420	GENERATOR, DIESEL	\$35,141	6115	1984
2156789	GENERATOR, PORTABLE	\$36,500	6115	2003
1173406	GENERATOR, PORTABLE	\$915	6115	1991
1323234	GENERATOR, TRAILER	\$22,077	6115	1993
1940984	GENERATOR	\$798	6115	1994
1324531	GENERATOR, PORTABLE	\$49,440	6115	1987
2158116	GENERATOR, PORTABLE	\$559	6115	2005
2158117	GENERATOR, PORTABLE	\$559	6115	2005
2158118	GENERATOR, PORTABLE	\$559	6115	2005
2158119	GENERATOR, PORTABLE	\$559	6115	2005
2158120	GENERATOR, PORTABLE	\$559	6115	2005

2158121	GENERATOR, PORTABLE	\$559	6115	2005		
2158122	GENERATOR, PORTABLE	\$559	6115	2005		
2158123	GENERATOR, PORTABLE	\$559	6115	2005		
2158124	GENERATOR, PORTABLE	\$559	6115	2005		
2158125	GENERATOR, PORTABLE	\$559	6115	2005		
2158126	GENERATOR, PORTABLE	\$559	6115	2005		
2158127	GENERATOR, PORTABLE	\$559	6115	2005		
2158128	GENERATOR, PORTABLE	\$559	6115	2005		
2158129	GENERATOR, PORTABLE	\$559	6115	2005		
2158130	GENERATOR, PORTABLE	\$559	6115	2005		
2158131	GENERATOR, PORTABLE	\$559	6115	2005		
2158132	GENERATOR, PORTABLE	\$559	6115	2005		
2158133	GENERATOR, PORTABLE	\$559	6115	2005		
2158134	GENERATOR, PORTABLE	\$559	6115	2005		
2158135	GENERATOR, PORTABLE	\$559	6115	2005		
1912807	GENERATOR	\$35,987	6115	1998		
2156555	GENERATOR, PORTABLE	\$18,900	6115	2003		
2156556	GENERATOR, PORTABLE	\$18,900	6115	2003		
2156557	GENERATOR, PORTABLE	\$22,982	6115	2003		
	TOTAL LINE ITEMS 53	\$562,870			\$562,870	53

Federal Supply Classification 6120 - Transformers, Distribution and Power Stations

0752895	POWER SUPPLY 40KV	\$2,476	6120	1975		
0824825	TRANSFORMER TURN RATIO	\$2,440	6120	1988		
	TOTAL LINE ITEMS 2	\$4,916			\$4,916	2

Federal Supply Classification 6125 - Converters, Electrical, Rotating

0590954	CHARGER, BATTERY	\$474	6125	1978		
0752903	IMPULSE UNIT FAULT LOCATE 25KV	\$2,253	6125	1975		
	TOTAL LINE ITEMS 2	\$2,727			\$2,727	2

Federal Supply Classification 6130 - Converters, Electrical, Nonrotating

G032764	CHARGER, BATTERY	\$112	6130	1988		
0752914	CHARGER, BATTERY	\$515	6130	1980		
0133518	LOADBANK ELECTRICAL	\$6,931	6130	1987		
0593767	GENERATOR POWER PLANT	\$1,700	6130	1983		

2156007	POWER SUPPLY, UNINTERRUPTIBLE	\$1,000	6130	2002		
	TOTAL LINE ITEMS 5	\$10,258			\$10,258	5

Federal Supply Classification 6150 - Miscellaneous Electric Power and Distribution Equipment

1010222	POWER SYSTEM, UNINTERRUPTIBLE	\$10,947	6150	1989		
1011503	FILTER, MOBILE OIL CARTRIDGE	\$3,847	6150	1990		
0042072	INTENSIFIER, DYNAPRESS	\$1,595	6150	1989		
	TOTAL LINE ITEMS 3	\$16,389			\$16,389	3

Federal Supply Classification 6210 - Indoor and Outdoor Electric Lighting Fixtures

0590774	LUMINAIRE SURGICAL	\$655	6210	1965		
	TOTAL LINE ITEMS 1	\$655			\$655	1

Federal Supply Classification 6230 - Electrical, Portable and Hand Lighting Equipment

0015317	FLOODLIGHT TRAILER MOUNTED	\$3,146	6230	1988		
0592982	LIGHTING SYSTEM PORTABLE	\$889	6230	1983		
	TOTAL LINE ITEMS 2	\$4,035			\$4,035	2

Federal Supply Classification 6515 - Drugs and Biologicals

0132512	GENERATOR	\$2,460	6515	1987		
0289631	SUCTION UNIT PORTABLE	\$1,063	6515	1985		
0590772	HYDROCOLLATOR	\$695	6515	1981		
0590773	SPYGMOMANOMETER	\$82	6515	1981		
0590775	SPYGMOMANOMETER	\$82	6515	1982		
0590797	RESPIRATOR	\$494	6515	1982		
0592451	ULTRASOUND/STIMULATOR	\$2,673	6515	1984		
0824405	COUNTER DIFFERENTIAL	\$228	6515	1987		
0824406	MODULE/CHAIR BLOOD COLLECTING	\$505	6515	1987		
0824686	SPIROMETER, WATERLESS	\$495	6515	1988		
0824688	DATAMITE V	\$4,495	6515	1988		
1224796	BATTERY SUPPORT SYSTEM	\$1,218	6515	1992		
1322622	SPIROMETER, WATERLESS	\$2,980	6515	1992		
1322623	COMPUTER/PRINTER, PULMONARY	\$1,000	6515	1992		
1323081	DEFIBRILLATOR, CARDIAC MONITOR	\$7,826	6515	1993		
1622794	PUMP, INFUSION	\$900	6515	2000		
1622795	OXIMETER, PULSE	\$1,049	6515	2000		

1622877	MONITOR,VITAL SIGN	\$942	6515	2001
1624052	SPIROMETER	\$2,130	6515	2005
1912207	DEFIBRILLATOR	\$3,100	6515	1997
1912208	DEFIBRILLATOR	\$3,100	6515	1997
1940414	TESTER, COLOR VISION	\$4,210	6515	1999
1940433	TESTER, VISION	\$4,590	6515	1999
1940476	TONOMETER	\$7,990	6515	1999
1941034	PUMP, SUCTION, PORTABLE	\$580	6515	2000
1941125	DEFIBRILLATOR	\$3,124	6515	2000
2155961	DEFIBRILLATOR	\$2,796	6515	2002
2155962	DEFIBRILLATOR	\$2,796	6515	2002
2155963	DEFIBRILLATOR	\$2,796	6515	2002
2156128	EKG MACHINE	\$16,280	6515	2002
2156129	EKG MACHINE	\$16,280	6515	2002
2156182	DEFIBRILLATOR	\$2,970	6515	2002
2157430	DEFIBRILLATOR	\$2,446	6515	2004
2157431	DEFIBRILLATOR	\$2,446	6515	2004
2157432	DEFIBRILLATOR	\$2,446	6515	2004
2157433	DEFIBRILLATOR	\$2,446	6515	2004
2157434	DEFIBRILLATOR	\$2,331	6515	2004
2157435	DEFIBRILLATOR	\$2,331	6515	2004
2157535	STERILIZER, AUTOCLAVE	\$3,395	6515	2004
2157558	ANALYZER, MOLE	\$18,881	6515	2005
2157774	DEFIBRILLATOR	\$2,248	6515	2005
2157775	DEFIBRILLATOR	\$2,248	6515	2005
2157776	DEFIBRILLATOR	\$2,248	6515	2005
2157777	DEFIBRILLATOR	\$2,248	6515	2005
2157778	DEFIBRILLATOR	\$2,248	6515	2005
2157779	DEFIBRILLATOR	\$2,248	6515	2005
2157780	DEFIBRILLATOR	\$2,248	6515	2005
2157798	ELECTROCARDIOGRAPH	\$5,700	6515	2005
2157897	DEFIBRILLATOR	\$2,447	6515	2005
2157898	DEFIBRILLATOR	\$2,447	6515	2005
2157899	DEFIBRILLATOR	\$2,447	6515	2005
2157900	DEFIBRILLATOR	\$2,447	6515	2005
2157901	DEFIBRILLATOR	\$2,447	6515	2005

2157902	DEFIBRILLATOR	\$2,447	6515	2005		
2157903	DEFIBRILLATOR	\$2,447	6515	2005		
2157904	DEFIBRILLATOR	\$2,447	6515	2005		
2157905	DEFIBRILLATOR	\$2,447	6515	2005		
2157906	DEFIBRILLATOR	\$2,447	6515	2005		
2157907	DEFIBRILLATOR	\$2,447	6515	2005		
2157908	DEFIBRILLATOR	\$2,447	6515	2005		
2158149	DEFIBRILLATOR	\$2,315	6515	2006		
2158160	CENTRIFUGE	\$1,115	6515	2006		
	TOTAL LINE ITEMS 62	\$192,881			\$192,881	62

Federal Supply Classification 6525 - X-Ray Equipment and Supplies

0015152	VIEWING MACHINE X-RAY	\$494	6525	1988		
0396612	ILLUMINATOR X-RAY	\$482	6525	1986		
0594102	TABLE BUCK	\$28,306	6525	1984		
2156367	X-RAY TUBE	\$33,306	6525	1984		
0594104	CONSOLE POWER	\$23,306	6525	1984		
0594108	X-RAY FILM CHEST	\$14,287	6525	1984		
0594138	GENERATOR	\$30,040	6525	1983		
1225151	PROCESSOR, FILM, X-RAY	\$6,301	6525	1992		
	TOTAL LINE ITEMS 8	\$136,522			\$136,522	8

Federal Supply Classification 6530 - Hospital Furniture, Equipment and Supplies

0590753	CABINET TREATMENT	\$645	6530	1982		
0590767	CABINET TREATMENT	\$645	6530	1981		
0590782	CHAIR/TREATMENT	\$600	6530	1982		
0590785	CABINET TREATMENT	\$645	6530	1981		
0590789	TABLE TREATMENT	\$706	6530	1981		
0590791	CABINET TREATMENT	\$645	6530	1981		
0590798	CABINET INSTRUMENT	\$896	6530	1981		
0590799	ROLLER PATIENT TRANSFER	\$155	6530	1982		
0590806	CHAIR EVAC	\$630	6530	1982		
0590801	TABLE OPERATING-EXAMING	\$1,369	6530	1964		
1010312	CABINET, PROCEDURES CENTER	\$1,605	6530	1989		
1010313	CHAIR, OTOLARYNGOLOGY	\$3,372	6530	1989		
2157951	TABLE, PROCEDURES	\$7,213	6530	2005		

1011150	TABLE, PROCTOSCOPIC EXAM	\$5,698	6530	1990		
2158013	STRETCHER	\$2,290	6530	2005		
0590765	STRETCHER	\$1,855	6530	1982		
	TOTAL LINE ITEMS 16	\$28,969			\$28,969	16

Federal Supply Classification 6540 - Ophthalmic Instruments, Equipment and Supplies

0131902	VISION TESTER	\$1,295	6540	1986		
0132393	TONOMETER	\$6,450	6540	1986		
0592404	LAMP SLIT	\$2,712	6540	1984		
	TOTAL LINE ITEMS 3	\$10,457			\$10,457	3

Federal Supply Classifications 6605/6610/6615/6620/6625 - Instruments and Laboratory Equipment

0145045	INDICATOR, SWING-MASTER	\$2,125	6605	1987		
1159040	DISTRIBUTION UNIT, POWER	\$28,000	6610	1992		
0131945	STETHOSCOPE, ELECTRONIC	\$201	6615	1986		
1941974	DEFIBRILLATOR	\$3,084	6615	2001		
2158077	OIL SKIMMER	\$2,968	6620	1981		
0034298	MULTIMETER	\$298	6625	1995		
1940121	TESTER, BREAKER	\$5,900	6625	1998		
0036902	AMPMETER	\$68	6625	1993		
1623200	METER, CONDUCTIVITY	\$470	6625	2002		
1623474	ANALYZER, POWER QUALITY	\$8,650	6625	2003		
G033116	PROBE, PORTABLE ANALOG CLAMP	\$75	6625	1988		
1541038	AMMETER, CLAMP-ON	\$289	6625	1996		
1623025	MULTIMETER	\$349	6625	2002		
1623026	MULTIMETER	\$349	6625	2002		
G033494	LIGHT SOURCE	\$2,866	6625	1988		
G033670	X-RAY SYSTEM, MICROFOCUS	\$408,697	6625	1988		
0033935	MULTIMETER	\$369	6625	1996		
G033970	GAUGE, ULTRASONIC THICKNESS	\$1,911	6625	1988		
1224515	DOSIMETER, NOISE LOGGING	\$1,518	6625	1992		
1224516	DOSIMETER, NOISE LOGGING	\$1,518	6625	1992		
G034460	AMMETER, DIGITAL CLAMP-ON VOLT	\$381	6625	1989		
0034300	MULTIMETER	\$298	6625	1995		
2158177	LOCATER, PIPE AND CABLE	\$2,811	6625	2006		
0014992	IMMERSION LIQUID PENETRANT SYS	\$9,490	6625	1988		

1541103	TESTER, BATTERY IMPEDANCE	\$6,995	6625	1996
0015092	TESTER PORTABLE OIL	\$1,570	6625	1988
1912689	TESTER, CIRCUIT BREAKER	\$46,983	6625	1998
0015593	MULTIMETER	\$119	6625	1989
0034301	MULTIMETER	\$298	6625	1995
0015800	FIBERSCOPE, FLEXIBLE	\$9,323	6625	1988
0015849	MULTIMETER	\$260	6625	1989
0034299	MULTIMETER	\$298	6625	1995
1622722	AMMETER	\$818	6625	1999
1539583	METER, CABLE PHASING	\$1,700	6625	1995
0034296	MULTIMETER	\$298	6625	1995
0036081	MULTIMETER	\$299	6625	1993
0042298	MULTIMETER	\$325	6625	1993
1324239	METER, POWER HARMONICS	\$1,200	6625	1993
1324263	TESTER, GROUND RESISTANCE	\$1,975	6625	1993
1623627	MULTIMETER	\$177	6625	2000
1623628	MULTIMETER	\$277	6625	2000
1623629	MULTIMETER	\$231	6625	2000
1623630	MULTIMETER	\$175	6625	2000
0131955	MILLIAMMETER, PORTABLE ANALOG	\$126	6625	1986
0131956	MILLIAMMETER, PORTABLE ANALOG	\$126	6625	1986
0131959	MILLIAMMETER, PORTABLE ANALOG	\$126	6625	1986
0131960	MILLIAMMETER, PORTABLE ANALOG	\$126	6625	1986
0132317	MULTIMETER	\$132	6625	1987
0132446	METER AC-DC	\$132	6625	1986
0132765	MILLIAMMETER, PORTABLE ANALOG	\$126	6625	1986
0132818	MULTIMETER	\$145	6625	1987
0034334	TRACER, CURRENT	\$760	6625	1995
0132910	MULTIMETER	\$287	6625	1987
0132911	MULTIMETER	\$287	6625	1987
0133177	YOKE	\$420	6625	1987
1539748	MULTIMETER	\$298	6625	1995
1539747	MULTIMETER	\$298	6625	1995
0133390	TESTER ELECTRONIC COMBUSTION	\$685	6625	1987
1224517	DOSIMETER, NOISE LOGGING	\$1,518	6625	1992
1224518	DOSIMETER, NOISE LOGGING	\$1,518	6625	1992

1325452	MULTIMETER	\$259	6625	1995
1325454	MULTIMETER	\$259	6625	1995
0144961	METER ULTRAVIOLET	\$430	6625	1987
0145078	METER SURVEY RADIATION ION CH	\$950	6625	1987
0145079	METER SURVEY RADIATION PORTABL	\$395	6625	1987
0289619	GAUGE, THICKNESS	\$335	6625	1985
0289716	OSCILLOSCOPE	\$2,544	6625	1983
0034302	TESTER, HOT STICK	\$968	6625	1995
0293292	METER VIBROGROUND	\$515	6625	1986
0396390	ANALYZER, COMBUSTION PORTABLE	\$2,457	6625	1986
0034246	AMPROBE	\$130	6625	1995
0396713	TEST SET DC	\$4,600	6625	1986
0396820	DETECTOR, LEAK	\$168	6625	1986
0396821	DETECTOR, LEAK	\$168	6625	1986
0396992	MULTIMETER, DIGITAL	\$228	6625	1986
0397186	MEGOHMMETER	\$1,895	6625	1986
0397201	TESTER PHASING	\$701	6625	1986
0034060	MULTIMETER	\$390	6625	1993
0397266	CIRCUIT BREAKER TEST SET	\$22,010	6625	1986
1223816	TESTER, MEGGER	\$970	6625	1992
2156854	TEST SET, UNIVERSAL	\$4,827	6625	2003
1223783	MEGOHMMETER	\$825	6625	1991
1325469	MILLIOHMMETER	\$4,890	6625	1995
0034387	METER, CONDUCTIVITY	\$1,025	6625	1995
0590101	DETECTOR, LEAK	\$115	6625	1984
0591666	VOLTAGE ANALYSIS	\$4,075	6625	1982
0591730	MULTIMETER	\$50	6625	1976
0592423	OHMMETER, DIGITAL	\$2,450	6625	1984
0034248	AMPROBE	\$130	6625	1995
0034247	AMPROBE	\$130	6625	1995
1540236	STROBOSCOPE	\$2,995	6625	1995
0034019	MULTIMETER	\$287	6625	1995
0594029	METER SURVEY	\$305	6625	1984
0594284	MULTIMETER	\$50	6625	1964
0594739	METER ULTRAVIOLET LONG WAVE	\$285	6625	1984
0036870	MULTIMETER	\$623	6625	1995

1223551	MILLIAMMETER, VOLT-OHM	\$209	6625	1991
1223550	MILLIAMMETER, VOLT-OHN	\$209	6625	1991
1223552	AMMETER, CLAMP-ON	\$72	6625	1991
1223553	AMMETER, CLAMP-ON	\$72	6625	1991
0752295	TEST SET POWER FACTOR	\$9,930	6625	1984
0752334	MAGNETIC PARTICLE TESTING UNIT	\$2,900	6625	1984
0752353	TRANSDUCER	\$2,110	6625	1984
0752359	SOURCE LIGHT	\$441	6625	1984
0752360	FIVERSCOPE FLEXIBLE	\$8,835	6625	1984
0035985	MULTIMETER	\$325	6625	1991
1622631	METER, CLAMP-ON	\$109	6625	1999
0752878	FAULTOMETER	\$545	6625	1972
0752951	TESTER MEGGAR MARK IV	\$399	6625	1982
1623541	MULTIMETER	\$330	6625	2003
1623542	MULTIMETER	\$330	6625	2003
1622635	AMMETER, CLAMP-ON, DIGITAL	\$318	6625	1999
0753462	GAUGE, THICKNESS DIGITAL ULTRA	\$1,995	6625	1983
2157844	METER TEST SYSTEM, WATTHOUR	\$25,889	6625	2005
0033893	MULTIMETER	\$199	6625	1996
0797401	PROBE CURRENT	\$106	6625	1986
0797403	PROBE PORTABLE ANALOG	\$149	6625	1986
0797409	PROBE PORTABLE ANALOG	\$149	6625	1986
G033695	MULTIMETER, PORTABLE ANALOG	\$319	6625	1988
0824385	AMMETER	\$637	6625	1987
0824513	AMMETER, AC/DC CLAMP-ON	\$620	6625	1987
0033896	MULTIMETER	\$335	6625	1996
1010588	DETECTOR, METAL	\$1,710	6625	1988
1940989	ANALYZER, MOTOR	\$39,340	6625	2000
1010308	POWER SUPPLY	\$1,087	6625	1989
1010309	POWER SUPPLY	\$1,087	6625	1989
1010416	METER, RADIATION SURVEY	\$380	6625	1989
0036103	AMMETER, AC CLAMP-ON	\$655	6625	1992
1010600	LOCATOR, SHEATH FAULT & CABLE	\$2,183	6625	1989
1010834	SPECTROMETER	\$2,533	6625	1990
0033908	AMPROBE	\$149	6625	1996
0033892	MULTIMETER	\$199	6625	1996

1540633	MULTIMETER	\$279	6625	1996
1540634	MULTIMETER	\$279	6625	1996
1540635	MULTIMETER	\$279	6625	1996
1011175	DETECTOR, HOLIDAY	\$1,895	6625	1990
1322971	ANALYZER, MACHINERY	\$29,506	6625	1993
0396712	GENERATOR IMPULSE	\$2,235	6625	1986
1539318	METER, POWER	\$908	6625	1995
0752879	TESTER SENSITIVITY	\$275	6625	1980
1622217	MULTIMETER	\$295	6625	1997
1911373	MULTIMETER	\$90	6625	1997
1012365	ANALYZER, PORTABLE COMBUSTION	\$2,380	6625	1990
1172881	POWER SUPPLY	\$2,098	6625	1991
1223504	TRACER, CURRENT	\$542	6625	1991
0819157	AMPROBE	\$70	6625	1991
0035992	AMMETER	\$93	6625	1991
0035991	AMMETER	\$93	6625	1991
0036010	MULTIMETER	\$300	6625	1991
0036011	MULTIMETER	\$300	6625	1991
0036013	MULTIMETER	\$300	6625	1991
0036007	AMMETER	\$850	6625	1992
1223878	MULTIMETER	\$90	6625	1992
1223925	CABLE FAULT LOCATING SYSTEM	\$29,150	6625	1992
1224392	LOCATOR, VALVE & BOX	\$562	6625	1992
0034045	SCOPEMETER	\$1,950	6625	1993
0034261	MULTIMETER	\$320	6625	1995
1910698	ANALYZER, MACHINERY	\$16,780	6625	1997
0036634	MULTIMETER	\$299	6625	1992
0036633	MULTIMETER	\$299	6625	1992
0036887	MULTIMETER	\$295	6625	1993
0015984	MULTIMETER, DIGITAL	\$259	6625	1989
1622240	MULTIMETER	\$295	6625	1997
1323716	TRACER, CURRENT	\$304	6625	1993
1323954	MILLIAMMETER, VOLT-OHM	\$280	6625	1993
1323955	MILLIAMMETER, VOLT-OHM	\$280	6625	1993
1323957	MILLIAMMETER, VOLT-OHM	\$293	6625	1993
1324160	ANALYZER/RECORDER, POWER	\$3,590	6625	1993

1324651	TESTER, MEGGER	\$990	6625	1994	
0034073	MULTIMETER	\$212	6625	1994	
0034074	MULTIMETER	\$212	6625	1994	
0034097	AMMETER, VOLT-OHM	\$295	6625	1994	
0034123	MULTIMETER	\$372	6625	1994	
0034124	MULTIMETER	\$372	6625	1994	
1912417	MULTIMETER	\$285	6625	1997	
1912419	MULTIMETER	\$285	6625	1997	
1224519	DOSIMETER, NOISE LOGGING	\$1,518	6625	1992	
0797405	PROBE PORTABLE ANALOG	\$149	6625	1986	
1940113	LOCATOR, PIPE AND CABLE	\$2,350	6625	1998	
0034163	MULTIMETER	\$485	6625	1994	
0034162	MULTIMETER	\$485	6625	1994	
0033894	MULTIMETER	\$335	6625	1996	
1940118	TESTER, MEGGER	\$770	6625	1998	
1622696	METER, CLAMP-ON	\$126	6625	1999	
1622695	METER, CLAMP-ON	\$126	6625	1999	
0042080	AMMETER, CLAMP-ON	\$270	6625	1997	
2157003	TEST SET, BREAKERS	\$7,101	6625	2003	
1911464	AMMETER, CLAMP-ON	\$299	6625	1997	
1623015	MULTIMETER	\$335	6625	2001	
1623016	MULTIMETER	\$335	6625	2001	
1623017	MULTIMETER	\$335	6625	2001	
	TOTAL LINE ITEMS 191	\$849,560			\$849,560 191

Federal Supply Classification 6630 - Chemical Analysis Instruments

1623948	MONITOR, GAS	\$1,768	6630	2004
1623949	MONITOR, GAS	\$1,768	6630	2004
2157518	FLOWMETER, ULTRASONIC	\$6,240	6630	2004
2155785	SENSOR, ALCOHOL	\$2,250	6630	2002
0015724	TESTER, MULTISCALE HARDNESS	\$18,941	6630	1988
2158230	GAUGE, VACUUM	\$652	6630	2006
0034318	METER, PH	\$2,277	6630	1995
0034317	METER, PH	\$2,277	6630	1995
0034316	METER, PH	\$2,277	6630	1995
1910942	ANALYZER, MOISTURE	\$7,920	6630	1997

1910943	ANALYZER, MOISTURE	\$7,920	6630	1997	
2156451	THERMOCYCLER, AIR	\$43,400	6630	2001	
2157541	DATALOGGER	\$3,320	6630	2004	
1940393	MONITOR, GAS	\$9,950	6630	1999	
1624047	ANALYZER, GAS	\$1,849	6630	2005	
1624048	ANALYZER, GAS	\$1,849	6630	2005	
1624049	ANALYZER, GAS	\$1,849	6630	2005	
1624050	ANALYZER, GAS	\$1,849	6630	2005	
1912756	ANALYZER, MOISTURE	\$6,000	6630	1998	
2157847	FLOWMETER	\$1,274	6630	2005	
2157848	FLOWMETER	\$1,274	6630	2005	
1622632	ANALYZER, OXYGEN	\$557	6630	1999	
1011270	DETECTOR, ELECTRON CAPTURE	\$1,895	6630	1990	
1623473	METER, PH	\$485	6630	2003	
2156976	ANALYZER, REFRIGERANT	\$1,100	6630	2003	
1322705	HYDROMETER, OPTICAL	\$1,995	6630	1992	
1322940	ANALYZER, OIL	\$7,995	6630	1993	
1623472	METER, DISSOLVED OXYGEN	\$399	6630	2003	
	TOTAL LINE ITEMS 28	\$141,330			\$141,330 28

Federal Supply Classification 6635 - Physical Properties Testing and Inspection Equipment

G033225	METER, CABLE LENGTH	\$995	6635	1988
G033654	TESTER, PORTABLE DIGITAL HARD.	\$4,800	6635	1988
2155735	INSPECTION MACHINE, X-RAY	\$72,160	6635	2002
1622583	METER, DENSITY	\$1,600	6635	1998
1323337	VALVE TESTER, RELIEF	\$56,435	6635	1993
2157210	DYNAMOMETER, ELECTRONIC	\$4,390	6635	2004
0131595	X-RAY UNIT	\$25,885	6635	1985
1541391	CALIBRATOR, TORQUE	\$1,100	6635	1996
1623967	DETECTOR, GAS	\$935	6635	2004
1223562	GAUGE, ULTRASONIC THICKNESS	\$1,665	6635	1991
0289884	X-RAY UNIT	\$25,885	6635	1985
0034835	GAUGE, ULTRASONIC THICKNESS	\$1,495	6635	1996
0397208	DETECTOR CRACK	\$9,148	6635	1986
1622898	GILIBRATOR	\$1,394	6635	2001
1323656	TESTER, LOAD	\$1,103	6635	1993

1622857	METER, SOUND LEVEL	\$1,198	6635	2000		
G097072	GRIPPER, PNEUMATIC PARALLEL	\$1,000	6635	1989		
1624060	ANALYZER, ALLOY; PORTABLE	\$38,440	6635	2005		
2157066	AUDIOMETER	\$1,995	6635	2003		
0824544	YOKE KIT	\$510	6635	1988		
2157896	DENSITOMETER	\$1,418	6635	2005		
1622769	TESTER, INSULATION	\$4,500	6635	2000		
1624179	SHAFT ALIGNMENT SYSTEM, LASER	\$19,800	6635	2005		
2157390	DETECTOR, FLAW; ULTRASONIC	\$7,560	6635	2004		
2157391	DETECTOR, FLAW; ULTRASONIC	\$7,560	6635	2004		
1173380	GAUGE, THICKNESS DIGITAL ULTRA	\$3,180	6635	1991		
1940570	SURFACE ROUGHNESS TESTER	\$1,790	6635	1999		
0036006	GAUGE, THICKNESS	\$1,158	6635	1992		
2158069	X-RAY INSPECTION SYSTEM	\$49,076	6635	2005		
2158070	X-RAY SOURCE	\$5,037	6635	2005		
0016291	GAUGE, ULTRASONIC THICKNESS	\$995	6635	1989		
2156807	DYNAMOMETER	\$3,540	6635	2003		
	TOTAL LINE ITEMS 32	\$357,747			\$357,747	32

Federal Supply Classification 6645 - Time Measuring Instruments

0396152	MACHINE TIME/DATE	\$515	6645	1985		
	TOTAL LINE ITEMS 1	\$515			\$515	1

Federal Supply Classification 6650 - Optical Instruments, Test Equipment, Components and Accessories

0036998	BINOCULARS	\$622	6650	1993		
G033963	MICROSCOPE	\$2,235	6650	1988		
0015584	BINOCULARS	\$273	6650	1990		
0015795	FIBERSCOPE, FLEXIBLE	\$12,199	6650	1988		
2157304	PROBE, VIDEO	\$21,900	6650	2004		
2157402	CAMERA, THERMAL IMAGING	\$4,850	6650	1997		
2157242	MICROSCOPE	\$2,999	6650	2004		
1541769	IMAGER, FIRE	\$5,000	6650	1996		
1623463	BOROSCOPE	\$295	6650	2003		
0590340	MICROSCOPE	\$795	6650	1965		
0591016	BINOCULARS, 7X50MM FIELD	\$165	6650	1964		
0591032	BINOCULARS, 7X50MM FIELD	\$165	6650	1964		

0591793	BINOCULARS, 7X50MM FIELD	\$170	6650	1964		
1912822	TELESCOPE	\$349	6650	1998		
1912823	TELESCOPE	\$349	6650	1998		
0594088	BINOCULARS, 7X50MM FIELD	\$165	6650	1964		
1624023	CAMERA, INFRARED	\$52,137	6650	2005		
2157814	BOROSCOPE	\$1,549	6650	2005		
0752880	PHOTOMETER PORTABLE	\$713	6650	1977		
0753429	HARDNESS KIT TELEBRINELLER	\$595	6650	1983		
0753659	SPECTROMETER MASS	\$13,560	6650	1984		
2156717	IMAGER, THERMAL	\$11,410	6650	2003		
1623689	BINOCULARS	\$61	6650	2004		
2157894	ILLUMINATOR	\$1,159	6650	2005		
1322954	RADIOMETER, THERMAL IMAGING	\$34,197	6650	1993		
1322955	CAMERA, THERMAL IMAGING	\$34,197	6650	1993		
1010273	MICROSCOPE	\$2,758	6650	1989		
1941833	CAMERA, THERMAL IMAGING	\$23,758	6650	2001		
0036115	BINOCULARS	\$281	6650	1992		
1623637	BINOCULARS	\$108	6650	2004		
1623647	BINOCULARS	\$108	6650	2004		
0036905	BINOCULARS	\$98	6650	1993		
1940501	RADIOMETER, INFRARED IMAGING	\$64,901	6650	1999		
0034068	BORESCOPE	\$5,368	6650	1994		
1623001	BINOCULARS	\$260	6650	2001		
0034148	BOROSCOPE	\$5,368	6650	1994		
1941649	IMAGER, FIRE	\$5,000	6650	1997		
0014890	FLUOROSCOPE MICROFOCUS	\$37,795	6650	1987		
1622439	FIBERSCOPE	\$12,687	6650	1998		
	TOTAL LINE ITEMS 39	\$360,599			\$360,599	39

Federal Supply Classification 6655 - Geophysical Instruments

1323655	METER, AIR VELOCITY	\$1,230	6655	1993		
	TOTAL LINE ITEMS 1	\$1,230			\$1,230	1

Federal Supply Classification 6660 - Meteorological Instruments and Aparatus

0132759	RADIOMETER/PHOTOMETER	\$633	6660	1986		
0752551	COMPASS NAVIGATION	\$700	6660	1983		

TOTAL LINE ITEMS 2 **\$1,333** **\$1,333** **2**

Federal Supply Classification 6665 - Hazard Detecting Instruments and Apparatus

1623928	DETECTOR, LEAK	\$306	6665	2004
0034061	ALARM, RADIATION RATE	\$139	6665	1994
G034627	RADIACMETER (GAMMA ALARM)	\$940	6665	1989
2157860	EXPOSURE DEVICE, RADIOACTIVE	\$8,695	6665	1990
1323854	METER, SOUND LEVEL	\$4,601	6665	1993
1670601	DETECTOR, GAS	\$1,648	6665	2006
1670602	DETECTOR, GAS	\$1,648	6665	2006
1670603	DETECTOR, GAS	\$1,648	6665	2006
1670604	DETECTOR, GAS	\$1,648	6665	2006
1670605	DETECTOR, GAS	\$1,648	6665	2006
1670606	DETECTOR, GAS	\$1,648	6665	2006
1623952	DOSIMETER, NOISE	\$1,457	6665	2004
1623953	DOSIMETER, NOISE	\$1,457	6665	2004
1623954	DOSIMETER, NOISE	\$1,457	6665	2004
1623955	DOSIMETER, NOISE	\$1,457	6665	2004
1623956	DOSIMETER, NOISE	\$1,457	6665	2004
2158228	DETECTOR, GAS	\$1,429	6665	2006
2158229	DETECTOR, GAS	\$1,429	6665	2006
2158231	GAUGE, VACUUM	\$652	6665	2006
2158232	DETECTOR, GAS	\$2,118	6665	2006
2158233	DETECTOR, GAS	\$2,118	6665	2006
2158234	DETECTOR, GAS	\$2,118	6665	2006
1910639	DETECTOR, LEAK	\$510	6665	1997
1940895	METER, SURVEY	\$515	6665	1999
2155898	LEVEL, AUTO	\$765	6665	2002
1940894	METER, SURVEY	\$515	6665	1999
1940893	METER, SURVEY	\$515	6665	1999
1940949	DETECTOR, GAS	\$2,105	6665	1995
1910637	DETECTOR, LEAK	\$510	6665	1997
1910636	DETECTOR, LEAK	\$510	6665	1997
0042048	DETECTOR, LEAK	\$390	6665	1997
0034062	ALARM, RADIATION RATE	\$139	6665	1994
1941593	DETECTOR, GAS	\$2,594	6665	2001

0293126	DETECTOR, LEAK	\$125	6665	1985
0396299	MONITOR, RADIATION	\$790	6665	1986
0396301	MONITOR, RADIATION	\$195	6665	1986
0396302	MONITOR, RADIATION	\$195	6665	1986
0396350	MONITOR, RADIATION SYSTEM	\$790	6665	1986
1224304	TESTER, MICROWAVE LEAKAGE	\$612	6665	1992
1010581	METER, PORTABLE	\$965	6665	1989
0397000	DETECTOR, LEAK	\$168	6665	1986
1542238	PROJECTOR, COBALT	\$49,552	6665	1996
2157324	DETECTOR, GAS	\$2,515	6665	2004
1223732	EXPOSURE DEVICE, GAMMA RAY	\$8,695	6665	1992
1323912	MONITOR, HEAT STRESS	\$2,595	6665	1993
0034800	DETECTOR, HELIUM LEAK	\$8,230	6665	1996
1624079	DETECTOR, GAS	\$568	6665	2005
1624080	DETECTOR, GAS	\$568	6665	2005
1624081	DETECTOR, GAS	\$568	6665	2005
1624082	DETECTOR, GAS	\$568	6665	2005
0034255	DETECTOR, LEAK	\$349	6665	1995
0034254	DETECTOR, LEAK	\$349	6665	1995
0034253	DETECTOR, LEAK	\$349	6665	1995
0034252	DETECTOR, LEAK	\$349	6665	1995
1622683	DETECTOR, GAS LEAK	\$2,900	6665	2000
1010582	METER, PORTABLE	\$965	6665	1989
1010730	HOLDER, RADIAC DETECTOR	\$2,533	6665	1990
1940436	DETECTOR, GAS, PORTABLE	\$2,243	6665	1999
1223661	DETECTOR, HALOGEN LEAK	\$248	6665	1991
1540640	DETECTOR, LEAK	\$379	6665	1996
0034250	DETECTOR, LEAK	\$349	6665	1995
1011378	DETECTOR, PORTABLE LEAK	\$12,290	6665	1990
1323608	DETECTOR, ULTRASONIC FLAW	\$4,995	6665	1990
1323196	DETECTOR, HALOGEN LEAK	\$350	6665	1993
1624189	LAMP, ULTRAVIOLET	\$883	6665	2005
1624190	LAMP, ULTRAVIOLET	\$883	6665	2005
1012452	DETECTION SYSTEM, FLUORESCENT	\$569	6665	1990
0036405	VACUUM SYSTEM, ASBESTOS	\$975	6665	1992
0036400	VACUUM SYSTEM, ASBESTOS	\$975	6665	1992

0036399	VACUUM SYSTEM, ASBESTOS	\$975	6665	1992		
0034540	SAMPLER, AIR	\$623	6665	1996		
0034539	SAMPLER, AIR	\$623	6665	1996		
1173418	DETECTOR, FLAW	\$10,854	6665	1991		
1910217	DETECTOR, ULTRASONIC	\$8,328	6665	1997		
1223733	EXPOSURE DEVICE, GAMMA RAY	\$8,695	6665	1992		
1223662	DETECTOR, HALOGEN LEAK	\$248	6665	1991		
1223776	ANALYZER, DATALOGGER	\$5,525	6665	1992		
1939734	DETECTOR, GAS	\$2,325	6665	1997		
1912844	METER, RADIATION SURVEY	\$2,826	6665	1998		
1912370	MONITOR, AIR QUALITY	\$3,352	6665	1997		
1912371	MONITOR, AIR QUALITY	\$3,352	6665	1997		
1912388	METER, RADIATION SURVEY	\$475	6665	1997		
1912389	METER, RADIATION SURVEY	\$475	6665	1997		
1225171	METER, RADIATION SURVEY	\$1,045	6665	1992		
1541564	MONITOR, RADIATION	\$398	6665	1996		
1323195	DETECTOR, HALOGEN LEAK	\$350	6665	1993		
1323198	DETECTOR, HALOGEN LEAK	\$350	6665	1993		
1323199	DETECTOR, HALOGEN LEAK	\$350	6665	1993		
1940661	DETECTOR, LEAK, HELIUM	\$27,350	6665	1999		
1324171	MONITOR, HEAT STRESS	\$2,757	6665	1993		
1324653	TESTER, RESPIRATOR FIT	\$7,100	6665	1994		
1325180	SAMPLER, AIR	\$623	6665	1994		
1325181	SAMPLER, AIR	\$623	6665	1994		
1325183	SAMPLER, AIR	\$623	6665	1994		
1325184	SAMPLER, AIR	\$623	6665	1994		
1541929	SAMPLER, AIR	\$1,195	6665	1996		
1541928	SAMPLER, AIR	\$1,195	6665	1996		
2158148	SAMPLER, AIR	\$1,035	6665	2006		
1623245	DETECTOR, GAS	\$1,375	6665	2003		
1324172	MONITOR, HEAT STRESS	\$2,757	6665	1993		
1325182	SAMPLER, AIR	\$623	6665	1994		
	TOTAL LINE ITEMS 101	\$260,466			\$260,466	101

Federal Supply Classification 6670 - Scales and Balances

0590748	SCALE UPWRIGHT	\$213	6670	1983		
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0753281	SCALE BENCH TYPE	\$718	6670	1969		
1173428	SCALE, WEIGHT	\$1,895	6670	1991		
2158154	SCALE, PLATFORM	\$2,423	6670	2006		
	TOTAL LINE ITEMS 4	\$5,249			\$5,249	4

Federal Supply Classification 6675 - Drafting, Surveying and Mapping Instruments

2165874	PLOTTER/PRINTER	\$12,000	6675	2000		
0131949	SURVEY METER	\$395	6675	1983		
0131950	SURVEY METER	\$395	6675	1983		
0131951	SURVEY METER	\$395	6675	1983		
1623989	LEVEL, LASER	\$1,475	6675	2005		
1623990	RECEIVER, LASER	\$395	6675	2005		
1623991	RECEIVER, MACHINE CONTROL	\$2,290	6675	2005		
1623464	PROTIMETER	\$399	6675	2003		
0033943	COLLECTOR, DATA	\$982	6675	1996		
0591665	LEVEL, AUTOSET	\$1,200	6675	1983		
0592383	TRANSIT	\$989	6675	1984		
0033956	LEVEL, AUTO	\$1,522	6675	1996		
1622983	METER, LASER; HAND-HELD	\$699	6675	2001		
0033959	LEVEL, LASER HAND	\$837	6675	1996		
1541121	MEASURING DEVICE, ULTRASONIC	\$10,407	6675	1996		
	TOTAL LINE ITEMS 15	\$34,380			\$34,380	15

Federal Supply Classification 6680 - Liquid and Gas Flow Measuring Instruments

0033936	CALIBRATOR, PRIMARY FLOW	\$2,304	6680	1996		
1622391	TACHOMETER	\$214	6680	1998		
0594204	HOOD FLOW	\$1,580	6680	1980		
1224350	TACHOMETER, PHOTOELECTRIC	\$156	6680	1992		
1224351	TACHOMETER, PHOTOELECTRIC	\$156	6680	1992		
1224352	TACHOMETER, PHOTOELECTRIC	\$156	6680	1992		
0035999	TACHOMETER, PHOTO/CONTACT	\$229	6680	1992		
1323015	FLOWMETER	\$2,290	6680	1993		
	TOTAL LINE ITEMS 8	\$7,085			\$7,085	8

Federal Supply Classification 6685 - Pressure, Temperature and Humidity Measuring Equipment

1622579	THERMOMETER, INFRARED	\$449	6685	1998		
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	THERMOMETER/PYROMETER HAND				
G033789	HELD	\$1,001	6685	1988	
G033620	HYGROMETER	\$495	6685	1988	
0131825	THERMOMETER THERMOCOUPLE	\$230	6685	1986	
1541394	METER, CHARGING	\$449	6685	1996	
1541393	METER, CHARGING	\$449	6685	1996	
1622297	GAUGE, VACUUM	\$1,005	6685	1998	
0397149	THERMOMETER, DIGITAL	\$307	6685	1986	
0397151	THERMOMETER, DIGITAL	\$307	6685	1986	
0041911	THERMOMETER, DIGITAL	\$153	6685	1997	
1912162	THERMOANEMOMETER	\$1,595	6685	1997	
1622858	MANOMETER	\$535	6685	2000	
0041891	THERMOMETER, DIGITAL	\$208	6685	1996	
0041890	THERMOMETER, DIGITAL	\$208	6685	1996	
1541255	THERMOMETER, INFRARED	\$1,295	6685	1996	
1173131	THERMOMETER, DIGITAL	\$279	6685	1991	
1223547	THERMOMETER, INFRARED	\$2,785	6685	1991	
1223644	THERMOMETER, INFRARED	\$690	6685	1991	
1223675	HYGROMETER	\$895	6685	1991	
0036000	THERMOMETER, DIGITAL	\$100	6685	1992	
0036001	THERMOMETER, DIGITAL	\$100	6685	1992	
0036002	THERMOMETER, DIGITAL	\$100	6685	1992	
0036004	THERMOMETER, DIGITAL	\$100	6685	1992	
0036005	THERMOMETER, DIGITAL	\$100	6685	1992	
1224554	METER, CHARGING	\$361	6685	1992	
0036503	THERMOANEMOMETER	\$1,607	6685	1992	
1670511	THERMOMETER, INFRARED	\$107	6685	2005	
1670512	THERMOMETER, INFRARED	\$107	6685	2005	
1323382	METER, AIR VELOCITY	\$1,443	6685	1993	
0131830	THERMOMETER, THERMOCOUPLE	\$230	6685	1986	
1622265	MANOMETER, DIGITAL	\$688	6685	1998	
	TOTAL LINE ITEMS 31	\$18,378			\$18,378 31

Federal Supply Classification 6695 - Combination and Miscellaneous Equipment

1940677	BACK FLOW TEST KIT	\$752	6695	1999	
	TOTAL LINE ITEMS 1	\$752			\$752 1

Federal Supply Classifications 6720/6730/6740/6760 - Photographic Equipment

1623929	CAMERA, DIGITAL	\$803	6720	2004
G033230	CAMERA, STILL PICTURE	\$190	6720	1988
1622422	CAMERA, DIGITAL	\$1,034	6720	1998
1623049	CAMERA, DIGITAL	\$599	6720	2002
1670594	CAMERA, DIGITAL	\$1,230	6720	2006
1670599	CAMERA, DIGITAL	\$430	6720	2006
1623866	CAMERA, DIGITAL	\$562	6720	2004
1623868	CAMERA, DIGITAL	\$562	6720	2004
0034049	CAMERA	\$286	6720	1993
1623867	CAMERA, DIGITAL	\$562	6720	2004
1670607	CAMERA, DIGITAL	\$210	6720	2006
1670608	CAMERA, DIGITAL	\$210	6720	2006
1670609	CAMERA, DIGITAL	\$210	6720	2006
1670610	CAMERA, DIGITAL	\$210	6720	2006
1623963	CAMERA, DIGITAL	\$320	6720	2004
1670611	CAMERA, DIGITAL	\$235	6720	2006
1670612	CAMERA, DIGITAL	\$235	6720	2006
1670613	CAMERA, DIGITAL	\$235	6720	2006
1670614	CAMERA, DIGITAL	\$235	6720	2006
1670615	CAMERA, DIGITAL	\$235	6720	2006
1670616	CAMERA, DIGITAL	\$235	6720	2006
1670617	CAMERA, DIGITAL	\$235	6720	2006
1670618	CAMERA, DIGITAL	\$235	6720	2006
1670619	CAMERA, DIGITAL	\$235	6720	2006
1670620	CAMERA, DIGITAL	\$235	6720	2006
1624045	CAMERA, DIGITAL	\$262	6720	2005
1670621	CAMERA, DIGITAL	\$4,267	6720	2006
1539851	CAMERA	\$52	6720	1995
1623465	CAMERA, DIGITAL	\$1,430	6720	2003
2156028	CAMERA, DIGITAL	\$617	6720	2002
1623995	CAMERA, DIGITAL	\$811	6720	2005
1623122	CAMERA, DIGITAL	\$300	6720	2002
1623880	CAMERA, DIGITAL	\$1,899	6720	2004
0592375	CAMERA, STILL PICTURE	\$40	6720	1984

1622664	CAMERA	\$1,029	6720	1999
1622666	CAMERA	\$929	6720	1999
1623155	CAMERA, DIGITAL	\$359	6720	2002
1622855	CAMERA	\$143	6720	2000
1623123	CAMERA, DIGITAL	\$300	6720	2002
1622912	CAMERA	\$880	6720	2001
1622914	CAMERA	\$1,015	6720	2001
1623543	CAMERA, DIGITAL	\$699	6720	2003
1939894	CAMERA	\$63	6720	1998
0753692	CAMERA, STILL PICTURE	\$129	6720	1984
1624066	CAMERA, DIGITAL	\$155	6720	2005
1624067	CAMERA, DIGITAL	\$155	6720	2005
1624068	CAMERA, DIGITAL	\$155	6720	2005
1624069	CAMERA, DIGITAL	\$155	6720	2005
1624070	CAMERA, DIGITAL	\$155	6720	2005
1624071	CAMERA, DIGITAL	\$155	6720	2005
0818722	CAMERA, STILL PICTURE	\$360	6720	1989
1624078	CAMERA, DIGITAL	\$450	6720	2005
0042232	CAMERA	\$679	6720	1997
0033946	CAMERA	\$237	6720	1996
1623834	CAMERA, DIGITAL	\$400	6720	2004
1941832	CAMERA, DIGITAL	\$9,674	6720	2001
1670510	CAMERA, DIGITAL	\$220	6720	2005
1622995	CAMERA, DIGITAL	\$1,304	6720	2001
1622994	CAMERA, DIGITAL	\$1,304	6720	2001
1622679	CAMERA	\$520	6720	1999
1622681	CAMERA	\$530	6720	1999
1670532	CAMERA, DIGITAL	\$164	6720	2006
1670533	CAMERA, DIGITAL	\$164	6720	2006
1622665	CAMERA	\$929	6720	1999
1623261	CAMERA, DIGITAL	\$379	6720	2003
1622817	CAMERA	\$1,099	6720	2000
1622829	CAMERA, DIGITAL, STILL	\$1,092	6720	2000
1623274	CAMERA, DIGITAL	\$908	6720	2003
1623120	CAMERA, DIGITAL	\$1,002	6720	2002
2156027	CAMERA, DIGITAL	\$617	6720	2002

1670509	CAMERA, DIGITAL	\$1,430	6720	2003
1623452	CAMERA, DIGITAL	\$330	6720	2003
1623454	CAMERA, DIGITAL	\$330	6720	2003
1940855	PROJECTOR	\$4,950	6730	1999
1225187	PRESENTER, VISUAL	\$2,311	6730	1992
G033218	ILLUMINATOR, X-RAY FILM VIEWER	\$656	6730	1988
2157459	PROJECTOR, OVERHEAD	\$2,609	6730	2004
1324574	BOARD, ELECTRONIC COPY	\$3,759	6730	1994
1940746	PROJECTOR	\$4,950	6730	1999
1322683	PROJECTOR, SLIDE	\$717	6730	1992
1322698	PRESENTER, VISUAL	\$2,310	6730	1992
2158246	PROJECTOR, LCD	\$1,981	6730	2006
2158247	PROJECTOR, LCD	\$1,981	6730	2006
2158248	PROJECTOR, LCD	\$1,981	6730	2006
2158249	PROJECTOR, LCD	\$901	6730	2006
2158250	PROJECTOR, LCD	\$901	6730	2006
1941917	PROJECTOR, LCD	\$3,866	6730	2001
0132461	PROJECTOR SLIDE	\$365	6730	1986
0590886	PROJECTOR OVERHEAD	\$589	6730	1984
1939448	PROJECTOR, OVERHEAD	\$239	6730	1998
0752002	PROJECTOR 16MM	\$2,029	6730	1984
0752629	PROJECTOR 16MM	\$2,290	6730	1984
1225078	PROJECTOR, COLOR VIDEO	\$3,277	6730	1992
0753436	VIEWER FILM	\$311	6730	1980
2157349	PROJECTOR, LCD	\$4,449	6730	2004
1010493	PROJECTOR, PORTABLE OVERHEAD	\$590	6730	1989
1941875	PROJECTOR	\$5,094	6730	2001
1224528	PROJECTOR, OVERHEAD	\$475	6730	1992
1224580	PROJECTOR, OVERHEAD	\$349	6730	1992
1941955	SCANNER, FILM	\$2,690	6730	2001
1939447	PROJECTOR, OVERHEAD	\$239	6730	1998
1542177	PROCESSOR, FILM	\$15,657	6740	1996
G032880	DRYER, X-RAY FILM	\$396	6740	1988
2156411	PRINTER, THERMAL	\$15,495	6740	2003
2156066	PRINTER, PHOTO	\$442	6740	2002
0396715	MOUNT TRIPOD CAMERA	\$287	6760	1986

1940189	FLASH SYSTEM, ELECTRONIC	\$1,153	6760	1998		
2155719	CONTROLLER, LIGHT	\$300	6760	2001		
1912915	DENSITOMETER	\$1,350	6760	1998		
0397155	TRIPOD	\$625	6760	1986		
0396714	TRIPOD FLUID HEAD	\$287	6760	1986		
0753677	FILM READING	\$315	6760	1984		
0812260	HEAD, VIDEO	\$361	6760	1989		
0033951	METER, LIGHT	\$430	6760	1996		
G033222	DENSITOMETER	\$896	6760	1988		
	TOTAL LINE ITEMS 115	\$144,897			\$144,897	115

Federal Supply Classification 6910 - Training Aids

0752743	RESUSCI BABY	\$195	6910	1980		
1272773	MOBILE SHUTTLE	\$45,534	6910	1992		
	TOTAL LINE ITEMS 14	\$45,729			\$45,729	14

Federal Supply Classification 7021 - ADP Central Processing Unit

2157008	COMPUTER, MICRO	\$800	7021	2003		
2157009	COMPUTER, MICRO	\$800	7021	2003		
2157010	COMPUTER, MICRO	\$800	7021	2003		
2157446	COMPUTER, LAPTOP	\$1,950	7021	2004		
2157737	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157738	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157739	COMPUTER, LAPTOP	\$1,052	7021	2005		
2156840	WORKSTATION	\$2,850	7021	2003		
2157743	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157744	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157745	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157746	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157747	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157748	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157749	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157750	COMPUTER, LAPTOP	\$1,052	7021	2005		
2156841	WORKSTATION	\$2,850	7021	2003		
2157751	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157752	COMPUTER, LAPTOP	\$1,052	7021	2005		

2157753	COMPUTER, LAPTOP	\$1,052	7021	2005		
2156842	WORKSTATION	\$2,850	7021	2003		
2157754	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157755	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157756	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157757	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157758	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157759	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157760	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157761	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157762	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157763	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157764	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157765	COMPUTER, LAPTOP	\$1,052	7021	2005		
2157766	COMPUTER, LAPTOP	\$1,052	7021	2005		
2156452	COMPUTER, LAPTOP	\$5,000	7021	2001		
2157576	COMPUTER, MICRO	\$3,000	7021	2004		
0034680	COMPUTER, MICRO	\$2,500	7021	1996		
2157247	COMPUTER, INDUSTRIAL	\$3,850	7021	2004		
2157248	COMPUTER, INDUSTRIAL	\$3,850	7021	2004		
2157249	COMPUTER, INDUSTRIAL	\$3,850	7021	2004		
1941284	COMPUTER, MICRO	\$1,850	7021	2000		
1941285	COMPUTER, MICRO	\$1,850	7021	2000		
1940990	COMPUTER, LAPTOP	\$3,000	7021	2000		
1939441	COMPUTER, LAPTOP	\$2,298	7021	1998		
2157136	COMPUTER, MICRO	\$2,500	7021	2004		
2157425	COMPUTER, MICRO	\$950	7021	2004		
1911030	COMPUTER, MICRO	\$4,367	7021	1997		
1939629	COMPUTER, MICRO	\$3,000	7021	1998		
0724901	COMPUTER, MICRO	\$15,000	7021	1986		
1941157	COMPUTER, LAPTOP	\$4,172	7021	2000		
1939420	COMPUTER, MICRO	\$946	7021	1997		
	TOTAL LINE ITEMS 51	\$103,287			\$103,287	51

Federal Supply Classification 7025 - ADP Input/Output and Storage Devices

2156910	SERVER	\$6,152	7025	2003		
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2156911	DISPLAY UNIT	\$150	7025	2003
2155706	PRINTER,ADP	\$150	7025	2001
1940152	DISPLAY UNIT	\$730	7025	1999
1941232	COMPUTER, LAPTOP	\$4,172	7025	2000
2156561	PRINTER, ADP	\$300	7025	2003
1323785	PRINTER, ADP	\$1,467	7025	1993
1910008	PRINTER, ADP	\$497	7025	1996
2156458	PRINTER, ADP	\$1,369	7025	1997
2157007	PRINTER, BARCODE	\$2,235	7025	2003
1912646	PRINTER, ADP	\$1,517	7025	1997
1910699	PRINTER, ADP	\$3,520	7025	1997
2155736	DISPLAY UNIT	\$300	7025	2002
2155737	DISPLAY UNIT	\$300	7025	2002
2157451	PRINTER, ADP	\$15,961	7025	2004
2157458	PRINTER, ADP	\$590	7025	2004
G034582	DISPLAY UNIT	\$384	7025	1989
1939824	PRINTER, ADP	\$1,050	7025	1999
1911432	PRINTER, ADP	\$349	7025	1997
1910007	PRINTER, ADP	\$497	7025	1996
2157729	PRINTER, ADP	\$458	7025	2005
2157730	PRINTER, ADP	\$458	7025	2005
2157731	DISPLAY UNIT	\$679	7025	2005
0015468	PRINTER, ADP	\$1,739	7025	1988
1323840	PRINTER, ADP	\$1,460	7025	1993
1323841	PRINTER, ADP	\$1,460	7025	1993
2156838	SERVER	\$12,500	7025	2003
1941483	PLOTTER	\$24,552	7025	2001
1324225	PRINTER, ADP	\$1,475	7025	1993
2155829	SCANNER,OPTICAL	\$296	7025	2002
2155831	PRINTER, ADP	\$1,352	7025	2002
2156839	SERVER	\$12,500	7025	2003
1623258	DISK DRIVE UNIT	\$202	7025	2003
2155839	PLOTTER	\$7,195	7025	2002
1323853	PRINTER, ADP	\$1,500	7025	1994
1539429	PRINTER, ADP	\$1,925	7025	1995
2155847	PRINTER, ADP	\$2,110	7025	1993

2155855	PRINTER,LASER	\$8,718	7025	2002
2155889	PRINTER, ADP	\$199	7025	2002
2155902	PRINTER, ADP	\$415	7025	2002
2155904	SCANNER,OPTICAL	\$319	7025	2002
1224947	DISPLAY UNIT	\$403	7025	1992
L008467	DISPLAY UNIT	\$991	7025	2002
1941565	PRINTER, ADP	\$488	7025	2001
2157403	DISPLAY UNIT	\$445	7025	1997
1539819	PRINTER, ADP	\$1,429	7025	1995
2155909	PRINTER, ADP	\$31,784	7025	2002
2156132	PRINTER, ADP	\$190	7025	2002
2158258	PRINTER, ADP	\$235	7025	2006
2158259	PRINTER, ADP	\$340	7025	2006
2158260	PRINTER, ADP	\$340	7025	2006
2157542	PRINTER, ADP	\$134	7025	2004
1911209	PRINTER, ADP	\$3,866	7025	1997
1623458	DISPLAY UNIT	\$350	7025	2003
2158261	PRINTER, ADP	\$340	7025	2006
1623151	COMPUTER,HANDHELD	\$394	7025	2002
1623152	COMPUTER,HANDHELD	\$394	7025	2002
1623153	COMPUTER,HANDHELD	\$394	7025	2002
1623459	DISPLAY UNIT	\$350	7025	2003
1910015	PRINTER, ADP	\$293	7025	1997
2156316	PRINTER, ADP	\$299	7025	2003
2157553	PRINTER/PLOTTER	\$12,777	7025	2004
2156945	PRINTER, ADP	\$1,075	7025	2003
1224991	PRINTER, ADP	\$1,430	7025	1992
2157556	DISPLAY UNIT	\$300	7025	2004
2157557	PRINTER, ADP	\$99	7025	2004
1623460	DISPLAY UNIT	\$350	7025	2003
1623461	DISPLAY UNIT	\$350	7025	2003
2157562	PRINTER, ADP	\$162	7025	2005
1623462	DISPLAY UNIT	\$350	7025	2003
2157574	DISPLAY UNIT	\$850	7025	2004
2157575	DISPLAY UNIT	\$850	7025	2004
1322595	PRINTER, ADP	\$1,338	7025	1992

0034929	PRINTER, ADP	\$3,750	7025	1997
0397649	DIGITAL READOUT FOR LATHE	\$3,743	7025	1986
0818921	PRINTER, ADP	\$1,440	7025	1991
2156860	PRINTER, ADP	\$169	7025	2003
1010355	PRINTER, ADP	\$1,489	7025	1990
0818931	PRINTER, ADP	\$1,440	7025	1991
2157586	PRINTER, ADP	\$672	7025	2005
2157794	PRINTER, ADP	\$104	7025	2005
1325497	PRINTER, ADP	\$1,680	7025	1995
2157767	PRINTER, ADP	\$360	7025	2004
0034682	PRINTER, ADP	\$293	7025	1996
1540994	PRINTER, ADP	\$1,408	7025	1996
1940348	PLOTTER	\$20,910	7025	1999
2157772	DISPLAY UNIT	\$680	7025	2005
2157773	DISPLAY UNIT	\$680	7025	2005
1624015	DISPLAY UNIT	\$521	7025	2005
1540262	PRINTER, ADP	\$3,749	7025	1995
1540260	PRINTER, ADP	\$3,749	7025	1995
1540259	PRINTER, ADP	\$3,749	7025	1995
1540261	PRINTER, ADP	\$3,749	7025	1995
2157334	PRINTER, ADP	\$134	7025	2004
1911032	DISPLAY UNIT	\$575	7025	1997
1940542	PRINTER, ADP	\$2,710	7025	1999
2156533	PRINTER, BAR CODE	\$853	7025	2003
2157815	PRINTER, ADP	\$3,026	7025	2005
1941658	PRINTER, ADP	\$1,515	7025	2001
1540356	PLOTTER	\$6,904	7025	1995
2157819	PRINTER, ADP	\$497	7025	2005
1540978	PRINTER, ADP	\$1,408	7025	1996
2157822	PRINTER, ADP	\$3,837	7025	2005
2157823	DISPLAY UNIT	\$679	7025	2005
2157826	PRINTER, ADP	\$3,025	7025	2005
1624062	DISPLAY UNIT	\$1,024	7025	2005
2157829	DISPLAY UNIT	\$78	7025	2005
2157830	DISPLAY UNIT	\$78	7025	2005
2157831	DISPLAY UNIT	\$78	7025	2005

2157832	DISPLAY UNIT	\$78	7025	2005
2157833	DISPLAY UNIT	\$1,055	7025	2005
2157838	SERVER	\$5,930	7025	2005
2157839	SERVER	\$2,300	7025	2005
1541333	PLOTTER, GRAPHICS	\$8,825	7025	1996
0753461	ULTRASCOPE DIGITAL	\$489	7025	1981
1541221	PRINTER, THERMAL	\$17,290	7025	1996
1940431	PRINTER, ADP	\$475	7025	1999
1540388	PRINTER, ADP	\$1,817	7025	1995
1939054	DISPLAY UNIT	\$500	7025	1998
1624076	TABLET, PC	\$1,906	7025	2005
1624077	TAPE DRIVE UNIT	\$3,519	7025	2005
1541064	PRINTER, ADP	\$1,555	7025	1996
1541099	PRINTER, ADP	\$383	7025	1996
1541096	PRINTER, ADP	\$383	7025	1996
1911029	DISPLAY UNIT	\$575	7025	1997
2156178	SERVER	\$1,127	7025	2002
1940988	PRINTER, ADP	\$759	7025	2000
1939927	PRINTER, ADP	\$500	7025	1998
1010349	PRINTER, ADP	\$1,489	7025	1990
1911003	PRINTER, ADP	\$1,228	7025	1997
1941302	PRINTER, ADP	\$175	7025	2000
1941303	PRINTER, ADP	\$175	7025	2000
1011315	MINIFILE, PORTABLE FLOPPY DISK	\$2,993	7025	1990
1324255	PRINTER, ADP	\$1,700	7025	1993
1941741	PRINTER, THERMAL	\$1,340	7025	2001
1541224	PRINTER, ADP	\$2,685	7025	1996
1624087	COMPUTER, MOBILE	\$1,915	7025	2005
1624088	COMPUTER, MOBILE	\$1,915	7025	2005
1624089	COMPUTER, MOBILE	\$1,915	7025	2005
1624090	COMPUTER, MOBILE	\$1,915	7025	2005
1624091	COMPUTER, MOBILE	\$1,915	7025	2005
1624092	COMPUTER, MOBILE	\$1,915	7025	2005
1624093	COMPUTER, MOBILE	\$1,915	7025	2005
1624094	COMPUTER, MOBILE	\$1,915	7025	2005
1624095	COMPUTER, MOBILE	\$1,915	7025	2005

1624096	COMPUTER, MOBILE	\$1,915	7025	2005
1624097	COMPUTER, MOBILE	\$1,915	7025	2005
1624098	COMPUTER, MOBILE	\$1,915	7025	2005
1624099	COMPUTER, MOBILE	\$1,915	7025	2005
1624100	COMPUTER, MOBILE	\$1,915	7025	2005
1624101	COMPUTER, MOBILE	\$1,915	7025	2005
1941305	PRINTER, ADP	\$2,229	7025	2000
1624102	COMPUTER, MOBILE	\$1,915	7025	2005
1624103	COMPUTER, MOBILE	\$1,915	7025	2005
1624104	COMPUTER, MOBILE	\$1,915	7025	2005
0034620	PRINTER, ADP	\$761	7025	1996
1624105	COMPUTER, MOBILE	\$1,915	7025	2005
1624106	COMPUTER, MOBILE	\$1,915	7025	2005
1624107	COMPUTER, MOBILE	\$1,915	7025	2005
1624108	COMPUTER, MOBILE	\$1,915	7025	2005
1624109	COMPUTER, MOBILE	\$1,915	7025	2005
1624110	COMPUTER, MOBILE	\$1,915	7025	2005
1624111	COMPUTER, MOBILE	\$1,915	7025	2005
1624112	COMPUTER, MOBILE	\$1,915	7025	2005
1624113	COMPUTER, MOBILE	\$1,915	7025	2005
1624114	COMPUTER, MOBILE	\$1,915	7025	2005
1624115	COMPUTER, MOBILE	\$1,915	7025	2005
1624116	COMPUTER, MOBILE	\$1,915	7025	2005
1624117	COMPUTER, MOBILE	\$1,915	7025	2005
1624118	COMPUTER, MOBILE	\$1,915	7025	2005
1624119	COMPUTER, MOBILE	\$1,915	7025	2005
1624120	COMPUTER, MOBILE	\$1,915	7025	2005
1624121	COMPUTER, MOBILE	\$1,915	7025	2005
1624122	COMPUTER, MOBILE	\$1,915	7025	2005
1941759	DISK DRIVE UNIT,CD ROM	\$329	7025	2001
1433877	PRINTER, ADP	\$633	7025	1994
1624123	COMPUTER, MOBILE	\$1,915	7025	2005
1624124	COMPUTER, MOBILE	\$1,915	7025	2005
1624125	COMPUTER, MOBILE	\$1,915	7025	2005
1624126	COMPUTER, MOBILE	\$1,915	7025	2005
1624127	COMPUTER, MOBILE	\$1,915	7025	2005

1624128	COMPUTER, MOBILE	\$1,915	7025	2005
1624129	COMPUTER, MOBILE	\$1,915	7025	2005
1540988	PRINTER, ADP	\$1,408	7025	1996
1624130	COMPUTER, MOBILE	\$1,915	7025	2005
1624131	COMPUTER, MOBILE	\$1,915	7025	2005
1624132	COMPUTER, MOBILE	\$1,915	7025	2005
1624133	COMPUTER, MOBILE	\$1,915	7025	2005
1624134	COMPUTER, MOBILE	\$1,915	7025	2005
1624149	COMPUTER, MOBILE	\$1,915	7025	2005
1624150	COMPUTER, MOBILE	\$1,915	7025	2005
1624151	COMPUTER, MOBILE	\$1,915	7025	2005
1624152	COMPUTER, MOBILE	\$1,915	7025	2005
1624153	COMPUTER, MOBILE	\$1,915	7025	2005
1624154	COMPUTER, MOBILE	\$1,915	7025	2005
1624155	COMPUTER, MOBILE	\$1,915	7025	2005
1223910	PRINTER, ADP	\$1,460	7025	1992
1624156	COMPUTER, MOBILE	\$1,915	7025	2005
1624157	COMPUTER, MOBILE	\$1,915	7025	2005
1624158	COMPUTER, MOBILE	\$1,915	7025	2005
1624159	COMPUTER, MOBILE	\$1,915	7025	2005
1624160	COMPUTER, MOBILE	\$1,915	7025	2005
1624161	COMPUTER, MOBILE	\$1,915	7025	2005
1624162	COMPUTER, MOBILE	\$1,915	7025	2005
2157392	DISPLAY UNIT	\$480	7025	2004
1624163	COMPUTER, MOBILE	\$1,915	7025	2005
1624164	COMPUTER, MOBILE	\$1,915	7025	2005
1624165	COMPUTER, MOBILE	\$1,915	7025	2005
1624166	COMPUTER, MOBILE	\$1,915	7025	2005
1624167	COMPUTER, MOBILE	\$1,915	7025	2005
1624168	COMPUTER, MOBILE	\$1,915	7025	2005
1941800	PRINTER, ADP	\$225	7025	2001
1223969	PRINTER, ADP	\$1,447	7025	1992
1941837	DISK DRIVE UNIT	\$400	7025	2001
1941838	DISK DRIVE UNIT	\$400	7025	2001
1941855	PLOTTER	\$8,606	7025	2001
1941856	PLOTTER	\$8,606	7025	2001

1941865	PRINTER, ADP	\$181	7025	2001
1941866	PRINTER, ADP	\$181	7025	2001
1325164	PRINTER, ADP	\$1,682	7025	1994
1940413	DISPLAY UNIT	\$1,015	7025	1998
1323394	DISPLAY UNIT	\$4,400	7025	1990
1623635	DISPLAY UNIT	\$1,966	7025	2004
2158026	PRINTER, PHOTO THERMAL	\$815	7025	2005
2157137	PRINTER, ADP	\$294	7025	2004
1011644	PRINTER, ADP	\$679	7025	1990
1911271	PRINTER, ADP	\$375	7025	1997
2158039	PRINTER, ADP	\$400	7025	2005
1912063	PRINTER, ADP	\$1,900	7025	1997
1940487	PRINTER, ADP	\$395	7025	1999
1224455	PRINTER, ADP	\$1,480	7025	1992
1912865	PRINTER, ADP	\$745	7025	1998
2157426	DISPLAY UNIT	\$429	7025	2004
1670520	COMPUTER, MOBILE	\$2,078	7025	2005
1670521	COMPUTER, MOBILE	\$2,078	7025	2005
1912862	PRINTER, ADP	\$745	7025	1998
1912860	PRINTER, ADP	\$745	7025	1998
1912859	PRINTER, ADP	\$745	7025	1998
1912858	PRINTER, ADP	\$745	7025	1998
0034683	MODEM	\$1,830	7025	1996
1912866	PRINTER, LASERJET	\$1,064	7025	1998
1324133	PRINTER, ADP	\$1,464	7025	1994
1324134	PRINTER, ADP	\$1,464	7025	1994
1324617	PRINTER, ADP	\$1,500	7025	1994
1912864	PRINTER, ADP	\$745	7025	1998
1941085	PRINTER, ADP	\$476	7025	2000
1941084	PRINTER, ADP	\$499	7025	2000
1324825	PRINTER, ADP	\$1,962	7025	1994
1912884	PRINTER, ADP	\$482	7025	1998
1940517	PRINTER, ADP	\$24,807	7025	1999
2158104	PRINTER, ADP	\$686	7025	2006
0042173	PRINTER, ADP	\$249	7025	1997
1325378	PRINTER, ADP	\$2,971	7025	1995

1541779	PRINTER, ADP	\$3,750	7025	1996
1541931	PRINTER, ADP	\$1,248	7025	1996
1541953	PRINTER, ADP	\$5,875	7025	1996
1541986	PRINTER, ADP	\$1,248	7025	1996
1939723	PRINTER, ADP	\$2,130	7025	1994
1542011	PRINTER, ADP	\$2,776	7025	1996
1941146	COMPUTER, MICRO	\$4,027	7025	1999
2157001	PRINTER, ADP	\$276	7025	2003
2156546	PRINTER, ADP	\$6,795	7025	2003
1941176	PRINTER, ADP	\$120	7025	2000
2157002	PRINTER, ADP	\$276	7025	2003
0042174	PRINTER, ADP	\$249	7025	1997
1911000	PRINTER, ADP	\$1,228	7025	1997
1911001	PRINTER, ADP	\$1,228	7025	1997
1911515	PRINTER, ADP	\$2,898	7025	1997
1941311	DISPLAY UNIT	\$883	7025	2000
1941312	DISPLAY UNIT	\$883	7025	2000
0042203	PRINTER, ADP	\$910	7025	1997
2156249	PRINTER, ADP	\$1,376	7025	2002
1911278	PRINTER, ADP	\$399	7025	1997
1939086	DISPLAY UNIT	\$350	7025	1998
2156253	PRINTER, ADP	\$352	7025	2002
2156254	PRINTER, ADP	\$352	7025	2002
1941424	DISPLAY UNIT	\$7,194	7025	2000
1939732	PRINTER, ADP	\$314	7025	1998
2155981	PRINTER, ADP	\$244	7025	2002
2156005	SERVER	\$14,210	7025	2002
2156006	DISPLAY UNIT	\$150	7025	2002
2156265	PRINTER, ADP	\$1,500	7025	1993
2156267	PRINTER, ADP	\$1,800	7025	1994
1939421	DISPLAY UNIT	\$250	7025	1997
2156786	PRINTER, ADP	\$327	7025	2003
2156810	PRINTER, ADP	\$449	7025	2003
2156811	DISK DRIVE UNIT,CD/DVD	\$380	7025	2003
	TOTAL LINE ITEMS 287	\$616,522		
			\$616,522	287

Federal Supply Classification 7110 - Office Furniture

G033737	SAFE, FIREGUARD	\$2,978	7110	1988		
0594756	LECTERN, ADJUSTABLE	\$1,091	7110	1984		
0824799	PLANFILE	\$2,294	7110	1988		
0824801	PLANFILE	\$2,294	7110	1988		
0824800	PLANFILE	\$2,294	7110	1988		
	TOTAL LINE ITEMS 5	\$10,951			\$10,951	5

Federal Supply Classification 7310 - Food Preparation and Serving Equipment

1225160	OVEN, CONVECTION, GAS BAKING	\$5,568	7310	1992		
G032603	REFRIGERATOR, 65 CU.FT.	\$8,450	7310	1988		
G032604	CABINETS, HEATED, PASS-THROUGH	\$3,975	7310	1988		
2155718	CHARBROILER,GAS	\$1,946	7310	2001		
1940229	SERVING UNIT, DRY STORAGE	\$2,551	7310	1998		
0132563	FRYER, ELECTRIC	\$2,235	7310	1987		
1910663	FRYER, ELECTRIC	\$2,235	7310	1987		
2158262	OVEN, CONVECTION; GAS	\$5,250	7310	2006		
2157543	COOLER, UNDERCOUNTER	\$1,389	7310	2004		
2157545	MERCHANDISER, TABLETOP	\$995	7310	2004		
2157563	REFRIGERATOR, REACH-IN	\$2,379	7310	2005		
2157564	CABINET, HEATER	\$1,989	7310	2005		
2157571	OVEN, ELECTRIC	\$4,714	7310	2005		
1322601	GRIDDLE, ELECTRIC	\$1,710	7310	1992		
1322602	CUTTER, FOOD	\$3,619	7310	1992		
1224998	REFRIGERATOR, MECHANICAL, FOOD	\$5,263	7310	1992		
2157677	OVEN, CONVEYOR	\$2,271	7310	2005		
0752554	OVEN, MICROWAVE	\$329	7310	1983		
1912253	CHARBROILER	\$3,058	7310	1997		
2156880	FRYER, GAS	\$5,262	7310	2003		
2156881	OVEN, CONVECTION; GAS BAKING	\$4,268	7310	2003		
2156882	OVEN, CONVECTION; GAS BAKING	\$4,268	7310	2003		
1323391	KETTLE, STEAM JACKETED	\$2,892	7310	1993		
1910662	FRYER SYSTEM	\$6,828	7310	1992		
1910660	PAN, BRAISING 42"	\$5,349	7310	1993		
1910661	PAN, BRAISING 42"	\$5,349	7310	1993		

1912399	REFRIGERATOR	\$5,186	7310	1997		
1322603	GRIDDLE, GAS	\$2,085	7310	1992		
1323392	KETTLE, STEAM JACKETED	\$2,892	7310	1993		
2156257	STEAMER,PRESSURE	\$13,078	7310	2002		
	TOTAL LINE ITEMS 30	\$117,383			\$117,383	30

Federal Supply Classification 7320 - Kitchen Equipment and Appliances

2158201	DISHWASHER	\$1,299	7320	2006		
1939008	FILTRATOR	\$960	7320	1998		
2157070	MIXER, ELECTRIC	\$5,394	7320	1986		
1322788	SLICER, MEAT	\$3,149	7320	1992		
1322789	SLICER, MEAT	\$3,149	7320	1992		
1912189	FILTRATOR, PORTABLE	\$960	7320	1998		
0042385	THERMOMETER, PORTABLE	\$324	7320	1998		
1225162	WASHER, POT, PAN & UTENSIL	\$22,286	7320	1991		
2156731	MIXER, FOOD	\$370	7320	2003		
	TOTAL LINE ITEMS 9	\$37,891			\$37,891	9

Federal Supply Classifications 7435 - Office Information System Equipment

2157520	SCANNER, OPTICAL	\$19,525	7435	2004		
2158212	SCANNER, OPTICAL	\$179	7435	2006		
2155907	SCANNER, OPTICAL	\$150	7435	2002		
1623997	SCANNER, BARCODE	\$2,498	7435	2005		
1623998	SCANNER, BARCODE	\$2,498	7435	2005		
2157628	SCANNER, OPTICAL	\$13,736	7435	2005		
1939417	SCANNER, OPTICAL	\$7,542	7435	1998		
1541850	SCANNER, OPTICAL	\$3,245	7435	1996		
1941693	SCANNER, OPTICAL	\$3,245	7435	1996		
2157845	READER, BARCODE	\$1,906	7435	2005		
2157139	SCANNER, OPTICAL	\$13,995	7435	2004		
1622494	ORGANIZER	\$399	7435	1998		
1622430	ORGANIZER	\$264	7435	1998		
1912046	SCANNER, OPTICAL	\$295	7435	1997		
1623925	SCANNER, OPTICAL	\$97	7435	2004		
1623648	READER, BARCODE; HANDHELD	\$2,159	7435	2004		
1623651	READER, BARCODE; HANDHELD	\$2,165	7435	2003		

1623652	READER, BARCODE; HANDHELD	\$2,165	7435	2003		
1623653	READER, BARCODE; HANDHELD	\$2,165	7435	2003		
1623654	READER, BARCODE; HANDHELD	\$2,165	7435	2003		
1623655	READER, BARCODE; HANDHELD	\$2,165	7435	2003		
1623656	READER, BARCODE; HANDHELD	\$2,165	7435	2003		
1623657	READER, BARCODE; HANDHELD	\$2,165	7435	2003		
2155977	READER, BARCODE	\$9,150	7435	2002		
1941113	SCANNER, OPTICAL	\$15,625	7435	2000		
1941975	SCANNER, OPTICAL	\$386	7435	2001		
1910823	SCANNER, OPTICAL	\$641	7435	1997		
1911015	SCANNER, OPTICAL	\$725	7435	1997		
2156070	SCANNER, OPTICAL	\$809	7435	2002		
1623291	SCANNER, OPTICAL	\$361	7435	2003		
1623292	SCANNER, OPTICAL	\$361	7435	2003		
1623293	SCANNER, OPTICAL	\$361	7435	2003		
1623294	SCANNER, OPTICAL	\$361	7435	2003		
1623295	SCANNER, OPTICAL	\$361	7435	2003		
	TOTAL LINE ITEMS 34	\$116,029			\$116,029	34

Federal Supply Classification 7460 - Visible Record Equipment

G034436	LEKTRIEVER	\$4,880	7460	1989		
0015057	LEKTRIEVER	\$7,905	7460	1988		
0015137	LEKTRIEVER	\$4,777	7460	1988		
0132136	LEKTRIEVER	\$11,075	7460	1986		
1324532	LEKTRIEVER	\$111,213	7460	1992		
	TOTAL LINE ITEMS 5	\$139,850			\$139,850	5

Federal Supply Classification 7520 - Office Devices & Accessories

1939895	STENCIL MACHINE	\$1,996	7520	1998		
	TOTAL LINE ITEMS 1	\$1,996			\$1,996	1

Federal Supply Classification 7730 - Phonograph, Radio & Television Sets

2155716	RECEIVING SET, TELEVISION	\$1,000	7730	2001		
1325192	RECEIVING SET, TELEVISION	\$625	7730	1995		
G034590	RECEIVING SET, TELEVISION	\$544	7730	1989		
G034592	RECEIVING SET, TELEVISION	\$544	7730	1989		

G034596	RECEIVING SET, TELEVISION	\$544	7730	1989
G034597	RECEIVING SET, TELEVISION	\$544	7730	1989
0015119	RECEIVING SET, TELEVISION	\$340	7730	1988
1539496	RECEIVING SET, TELEVISION	\$542	7730	1995
2156298	RECEIVING SET, TELEVISION	\$400	7730	2003
2156300	RECEIVING SET, TELEVISION	\$400	7730	2003
2156301	RECEIVING SET, TELEVISION	\$400	7730	2003
2157594	RECEIVING SET, TELEVISION	\$2,500	7730	2005
2157598	RECEIVING SET, TELEVISION	\$1,991	7730	2005
2157790	RECEIVING SET, TELEVISION	\$249	7730	2005
1540152	RECEIVING SET, TELEVISION	\$233	7730	1994
2157656	RECEIVING SET, TELEVISION	\$212	7730	2005
2157657	RECEIVING SET, TELEVISION	\$212	7730	2005
2157658	RECEIVING SET, TELEVISION	\$212	7730	2005
2157660	RECEIVING SET, TELEVISION	\$212	7730	2005
1624018	RECORDER-REPRODUCER, VIDEO	\$172	7730	2005
1624019	RECORDER-REPRODUCER, VIDEO	\$172	7730	2005
1624020	RECORDER-REPRODUCER, VIDEO	\$172	7730	2005
1624021	RECORDER-REPRODUCER, VIDEO	\$172	7730	2005
0594761	RECEIVING SET, TELEVISION	\$636	7730	1984
2157853	RECEIVING SET, TELEVISION	\$1,331	7730	2005
0824634	RECEIVING SET, TELEVISION	\$329	7730	1987
1010295	RECEIVING SET, TELEVISION	\$479	7730	1989
1010296	RECEIVING SET, TELEVISION	\$479	7730	1989
2157911	RECEIVING SET, TELEVISION	\$375	7730	2005
0448047	RECEIVING SET, TELEVISION	\$89	7730	1981
1941711	RECEIVING SET, TELEVISION	\$320	7730	2001
1939951	RECEIVING SET, TELEVISION	\$662	7730	1998
1939952	RECEIVING SET, TELEVISION	\$439	7730	1998
1011120	RECEIVING SET, TELEVISION	\$361	7730	1990
1011121	RECEIVING SET, TELEVISION	\$361	7730	1990
1325219	RECEIVING SET, TELEVISION	\$389	7730	1994
1539964	RECEIVING SET, TELEVISION	\$4,632	7730	1995
1910635	RECEIVING SET, TELEVISION	\$741	7730	1997
1012110	RECEIVER-REPRODUCER SET, TV	\$849	7730	1990
1012112	RECEIVING SET, TELEVISION	\$320	7730	1990

1172842	RECEIVING SET, TELEVISION	\$305	7730	1991
2157389	RECEIVING SET, TELEVISION	\$3,399	7730	2004
1223858	RECEIVING SET, TELEVISION 25"	\$371	7730	1992
1223763	RECEIVING SET, TELEVISION	\$370	7730	1992
0034895	RECEIVING SET, TELEVISION	\$179	7730	1996
2157396	RECEIVING SET, TELEVISION	\$118	7730	2004
1324630	RECEIVING SET, TELEVISION	\$750	7730	1994
2157405	RECEIVING SET, TELEVISION	\$320	7730	2004
2157420	RECEIVING SET, TELEVISION	\$254	7730	2004
2157421	RECEIVING SET, TELEVISION	\$254	7730	2004
2158055	RECEIVING SET, TELEVISION	\$90	7730	2005
1941938	RECEIVING SET, TELEVISION	\$380	7730	2001
2158140	RECEIVING SET, TELEVISION	\$2,500	7730	2006
2158141	RECEIVING SET, TELEVISION	\$2,500	7730	2006
1012298	RECEIVING SET, TELEVISION	\$530	7730	1987
G033273	RECEIVING SET, TELEVISION	\$495	7730	1988
1910886	RECEIVING SET, TELEVISION	\$529	7730	1997
1910887	RECEIVING SET, TELEVISION	\$529	7730	1997
1224240	RECEIVER-REPRODUCER SET, TV	\$799	7730	1989
1939543	RECEIVING SET, TELEVISION	\$329	7730	1998
1939668	RECEIVING SET, TELEVISION	\$1,499	7730	1998
1939669	RECEIVING SET, TELEVISION	\$1,499	7730	1998
1941444	RECEIVING SET, TELEVISION	\$525	7730	2000
1940442	RECEIVING SET, TELEVISION	\$359	7730	1999
2156783	RECEIVING SET, TELEVISION	\$1,300	7730	2003
2156785	RECEIVING SET, TELEVISION	\$390	7730	2003
TOTAL LINE ITEMS 66		\$45,757		
				\$45,757
				66

Federal Supply Classification 7830 - Recreational and Gymnasium Equipment

1941218	TRAINER, CROSS	\$3,057	7830	2000
1941219	TRAINER, CROSS	\$3,057	7830	2000
1225186	EXERCISE MACHINE, STATIONARY	\$1,695	7830	1992
2157856	TREADMILL	\$4,443	7830	2004
2157857	TREADMILL	\$4,443	7830	2004
2156845	EXERCISE MACHINE, STATIONARY	\$2,028	7830	2003
2157456	TREADMILL	\$5,290	7830	1991

2156846	EXERCISE MACHINE, STATIONARY	\$2,028	7830	2003		
2157243	EXERCISE MACHINE, STATIONARY	\$2,026	7830	2003		
2157578	MACHINE, PULLOVER	\$2,241	7830	2005		
1223704	STAIRMASTER	\$2,074	7830	1992		
2157827	TREADMILL	\$4,278	7830	2005		
2157849	TRAINER, CROSS	\$3,079	7830	2005		
2157850	BIKE, EXERCISE	\$2,026	7830	2005		
2157955	TREADMILL	\$4,278	7830	2005		
2157956	TREADMILL	\$4,278	7830	2005		
1172711	STAIRMASTER	\$2,289	7830	1990		
2158027	BIKE, EXERCISE	\$2,073	7830	2005		
2158028	BIKE, EXERCISE	\$2,073	7830	2005		
1172712	STAIRMASTER	\$2,289	7830	1990		
1941912	CROSSOVER,CABLE	\$2,344	7830	2001		
1941919	ASSIST MACHINE, DIP & CHIN	\$2,044	7830	2001		
1941409	TRAINER, CROSS	\$3,058	7830	2000		
1941920	TRAINER, CROSS	\$3,058	7830	2000		
2156782	EXERCISE MACHINE, STATIONARY	\$3,500	7830	2003		
	TOTAL LINE ITEMS 25	\$73,049			\$73,049	25
	GRAND TOTAL ALL LIST 1				\$16,575,433	2,400

**Attachment J10 LIST 2
(Class Exceptions)**

ECN	NOMENCLATURE	COST	FSC	YOM	SUBTOTAL	# ITEMS
Federal Supply Classification 2330 - Trailers for Ground Maintenance						
1910795	TRAILER, MOWER TRANSPORTER	1400	2330	1988		
0015174	TRAILER, MOWER TRANSPORTER	1400	2330	1988		
G034296	TRAILER, HYDRAULIC	3660	2330	1984		
	TOTAL LINE ITEMS 3	6460			6460	3
Federal Supply Classification 2420 - Tractors						
0132855	TRACTOR, AGRICULTURE	27420	2420	1987		
0593633	TRACTOR	8514	2420	1978		
0593645	TRACTOR, AGRICULTURE	5545	2420	1975		
0824715	TRACTOR, AGRICULTURE	12850	2420	1988		
	TOTAL LINE ITEMS 4	54329			54329	4
Federal Supply Classification 3695 - Miscellaneous Special Industry Machinery						
1670554	SAW, CHAIN	149	3695	2005		
1670555	SAW, CHAIN	149	3695	2005		
1670556	SAW, CHAIN	149	3695	2005		
1670557	SAW, CHAIN	149	3695	2005		
1670558	SAW, CHAIN	149	3695	2005		
1670559	SAW, CHAIN	149	3695	2005		
1670560	SAW, CHAIN	149	3695	2005		
1670561	SAW, CHAIN	149	3695	2005		
1670562	SAW, CHAIN	149	3695	2005		
1670563	SAW, CHAIN	149	3695	2005		

1670564	SAW, CHAIN	149	3695	2005		
1670565	SAW, CHAIN	149	3695	2005		
1670566	SAW, CHAIN	149	3695	2005		
1670567	SAW, CHAIN	149	3695	2005		
1670568	SAW, CHAIN	149	3695	2005		
1670569	SAW, CHAIN	149	3695	2005		
1670570	SAW, CHAIN	149	3695	2005		
1670571	SAW, CHAIN	149	3695	2005		
1670572	SAW, CHAIN	149	3695	2005		
1910859	SAW, CHAIN	415	3695	1997		
1322675	SAW, CHAIN	469	3695	1992		
0134068	SAW, CHAIN	856	3695	1987		
2156138	SAW, CHAIN	525	3695	2002		
1539458	SAW, CHAIN	349	3695	1995		
0752851	SAW, CHAIN	203	3695	1981		
0824548	SAW, CHAIN	895	3695	1987		
1624135	SAW, CHAIN	403	3695	2005		
1624136	SAW, CHAIN	403	3695	2005		
1624137	SAW, CHAIN	403	3695	2005		
1624138	SAW, CHAIN	403	3695	2005		
1624139	SAW, CHAIN	403	3695	2005		
1624140	SAW, CHAIN	403	3695	2005		
1624141	SAW, CHAIN	403	3695	2005		
1624142	SAW, CHAIN	403	3695	2005		
1624143	SAW, CHAIN	403	3695	2005		
1624144	SAW, CHAIN	403	3695	2005		
2157939	SAW, POLE; EXTENSION	600	3695	2005		
2157940	SAW, POLE; EXTENSION	600	3695	2005		
1012156	SAW, CIRCULAR, CHOP	525	3695	1990		
1012157	SAW, CIRCULAR, CHOP	525	3695	1990		
1939954	SAW, CHAIN	489	3695	1998		
1939955	SAW, CHAIN	102	3695	1998		
	TOTAL LINE ITEMS 42	13414			13414	42

Federal Supply Classifications 3710/3740/3750 - Agricultural Machinery and Equipment

1012296	CUTTER, SOD	2288	3710	1989		
1912926	SPRAYER, HIGH PRESSURE	2204	3740	1998		
1939207	TRIMMER/WEEDEATER	409	3750	1998		
1540303	DIGGER, POST HOLE	953	3750	1995		
1540311	TRIMMER, HEDGE, POWER	383	3750	1995		
1540312	TRIMMER, HEDGE, POWER	383	3750	1995		
2157941	BLOWER, GAS; PORTABLE	150	3750	2005		
1539537	EDGER/TRIMMER	356	3750	1995		
1172892	MOWER, BATWING	19712	3750	1991		
1172853	CHIPPER, LANDSCAPE	11020	3750	1991		
1172891	MOWER, BATWING	19712	3750	1991		
1940091	DIGGER, POST HOLE	639	3750	1998		
1324792	PRUNER	599	3750	1994		
1939301	MOWER, LAWN	1149	3750	1998		
1539536	EDGER/TRIMMER	356	3750	1995		
1539535	EDGER/TRIMMER	356	3750	1995		
1539534	EDGER/TRIMMER	356	3750	1995		
1912968	TRIMMER, WEEDEATER	409	3750	1998		
	TOTAL LINE ITEMS 18	61434			61434	18

Federal Supply Classifications 5110/5120/5130/5180 - Hand Tools

0591439	PUNCH, DRIVER SET	187	5110	1965		
0752874	PUNCH, KNOCKOUT DRIVE SET	180	5110	1974		
G033703	TOOL, HOSE ASSEMBLY	475	5120	1989		
G034021	JACK, 20-TON AIR HYDRAULIC	520	5120	1989		
G034022	JACK, 20-TON AIR HYDRAULIC	520	5120	1989		
G034023	JACK, 10-TON MANUALLY OPERATED	969	5120	1989		
G034024	JACK, 10-TON MANUALLY OPERATED	969	5120	1989		
G034025	JACK, 1-TON TRANSMISSION	693	5120	1989		
1324699	JACK, FORKLIFT	666	5120	1994		

0138499	GRINDER, PNEUMATIC	195	5120	1978
0145580	PULLER/ADOPTOR	124	5120	1983
0590916	WASHER, PARTS CLEAN O MATIC	995	5120	1979
0590938	JACK, HYDRAULIC 10 TON	522	5120	1979
0590952	JACK, HYDRAULIC 10 TON	522	5120	1979
0590955	JACK, HYDRAULIC 10 TON	522	5120	1979
1539947	JACK, TRANSMISSION LOCK	447	5120	1982
0591024	CRANE, HYDRAULIC FLOOR	1399	5120	1982
0591379	JACK, HYDRAULIC 10 TON TAPE SYSTEM, FISH	188	5120	1981
0752902	VACUUM/BLOWR	247	5120	1976
0752932	PULLER, CABLE & WIRE POWERED	1014	5120	1976
1010495	JACK, 100-TON HYDRAULIC	1110	5120	1989
1010496	JACK, 100-TON HYDRAULIC	1110	5120	1989
1324199	CRIMPER, DIELESS	1052	5120	1993
G032553	DRILL	1040	5130	1988
1010173	DRILL, 1/2"	173	5130	1989
1324180	SAW, JIG	130	5130	1993
1541351	GRINDER, DIE 2"	243	5130	1996
G032706	DRILL, 1/2"	159	5130	1988
1224783	UNDERCUTTER, PORTABLE	860	5130	1992
1541349	GRINDER, DIE 2"	243	5130	1996
1541347	GRINDER, DIE 2"	243	5130	1996
2155707	DRILL, 1/2"	160	5130	2001
2155764	ROUTER	166	5130	2001
2155708	SAW, CIRCULAR; 7 1/4"	200	5130	2001
2155709	SAW, BAND	272	5130	2001
G033066	DRILL, 3/8"	123	5130	1988
G033067	DRILL, 3/8"	123	5130	1988
1910178	SAW, 12" MITER	445	5130	1997
G033275	DRILL, 1/2"	148	5130	1988
G033292	HOLESHOOTER, 1/2"	122	5130	1988
G033293	HOLESHOOTER, 1/2"	122	5130	1988
G033295	HOLESHOOTER, 1/2"	122	5130	1988

G033352	SAW, JIG	194	5130	1988
G033354	SAW, RECIPROCATING	167	5130	1988
1622384	GRINDER, 4 1/2" ANGLE	63	5130	1998
1912650	GRINDER, 5" DISC	153	5130	1997
G033574	GRINDER, 4" ANGLE	386	5130	1988
G033575	GRINDER, 4" ANGLE	386	5130	1988
G033576	GRINDER, 4" ANGLE	386	5130	1988
G033577	GRINDER, 4" ANGLE	386	5130	1988
1912652	GRINDER, 5" DISC	153	5130	1997
G033621	GRINDER, HEAVY DUTY 9"	165	5130	1988
G033626	SAW, PORTABLE BAND	455	5130	1988
G033689	WRENCH, 3/8" AIR RATCHET	173	5130	1988
G033690	WRENCH, 3/8" AIR IMPACT	173	5130	1988
0041986	SANDER/GRINDER, 4 1/2"	136	5130	1997
0034688	SAW, 7 1/4" CIRCULAR	249	5130	1996
G033747	GRINDER, 7" ANGLE	151	5130	1988
G033748	GRINDER, 7" ANGLE	151	5130	1988
G033750	GRINDER, 7" ANGLE	151	5130	1988
G033811	WRENCH, IMPACT 1/2" AIR	195	5130	1988
G033812	WRENCH, IMPACT 1/2" AIR	195	5130	1988
G033813	WRENCH, IMPACT 1/2" AIR	195	5130	1988
G033866	DRILL, 1/2"	156	5130	1988
G033936	PLANE, VERSA	387	5130	1988
0034695	DRILL, 3/8" CORDLESS	130	5130	1996
1224620	SANDER/GRINDER, 4 1/2"	116	5130	1992
G034018	SANDER/GRINDER, 5"	189	5130	1989
1910139	PRESS, DRILL ELECTROMAGNETIC	1646	5130	1997
1323472	NIBBLER, PIPE	2798	5130	1993
1912693	DRILL, 3/8"	86	5130	1997
1912694	SCALER, NEEDLE	447	5130	1997
1912696	SCALER, NEEDLE	447	5130	1997
1539466	SAW, BAND	275	5130	1995
1910140	PRESS, DRILL ELECTROMAGNETIC	1646	5130	1997

G034196	GRINDER	165	5130	1989
1539465	SAW, BAND	275	5130	1995
G034273	DRILL, 3/8"	137	5130	1989
G034357	SANDER	148	5130	1989
G034392	FASTENER, POWER ACTUATED	674	5130	1989
1539464	SAW, BAND	275	5130	1995
G034605	POLISHER, 7"	180	5130	1989
2155763	DRILL, ROTARY HAMMER	675	5130	1999
G034862	DRILL, 1/2"	162	5130	1989
G034864	DRILL, 1/2" HAMMER	284	5130	1989
1622275	DRILL, 3/8"	73	5130	1996
1323830	DRILL, HAMMER	714	5130	1993
0014988	DRILL, MAGNETIC, PORTABLE	1485	5130	1988
0015010	SAW, PORTABLE ELECTRIC	186	5130	1988
0015011	SAW, PORTABLE ELECTRIC	186	5130	1988
0015144	DRILL, 3/8" REVERSING	180	5130	1988
0015311	SANDER, ANGLE 7"/9"	129	5130	1988
1939409	SANDER, GRINDER, 9"	197	5130	1998
0015801	GRINDER, 5" ANGLE	157	5130	1989
1939410	SANDER, GRINDER, 9"	197	5130	1998
1541396	GRINDER, ANGLE	360	5130	1996
1541435	GRINDER	348	5130	1996
1223780	SHEAR, POWER	200	5130	1991
1940245	DRILL, 3/8" REVERSING	152	5130	1998
1323987	SANDER, BELT	42	5130	1993
1622557	DRILL, 3/8"	160	5130	1998
1010920	GRINDER, 5" ANGLE	87	5130	1990
1622547	DRILL, 3/8"	160	5130	1998
G033064	DRILL, 3/8" CORDLESS	127	5130	1988
1939422	DRILL, 3/8"	149	5130	1998
0016461	PLANE, PORT-A	302	5130	1989
0125475	SHEAR, PORTABLE SHEET METAL	140	5130	1965
0125498	WRENCH, IMPACT	142	5130	1975

0125634	SHEAR, SHEET METAL	140	5130	1965
0125650	HAMMER, JACK AIR	258	5130	1975
0125658	PLANE, ELECTRIC PORTABLE	140	5130	1965
1539568	SANDER/GRINDER, 4 1/2"	123	5130	1995
1539567	SANDER/GRINDER, 4 1/2"	123	5130	1995
1539573	SAW, 14" CHOP	289	5130	1995
1539574	SAW, 14" CHOP	289	5130	1995
0131839	DRILL, 3/8"	125	5130	1986
0131840	DRILL, 3/8"	125	5130	1986
0132231	DRILL, ELECTRIC 3/8"	115	5130	1986
0125621	WRENCH, IMPACT	344	5130	1967
1541442	WRENCH, IMPACT 1/2"	198	5130	1996
1223509	DRILL, 3/8" CORDLESS	186	5130	1991
1539270	GRINDER, 1 1/2" DIE	172	5130	1995
0041984	GRINDER, 2" DIE	246	5130	1997
1541436	GRINDER	348	5130	1996
1541434	GRINDER	320	5130	1996
0134069	WRENCH, IMPACT	901	5130	1987
0134070	DRILL	861	5130	1987
1541441	DRILL, 3/8"	177	5130	1996
0135519	SAW, BAND, HAND PORTABLE	232	5130	1975
0136489	SANDER, DISC ELECTRIC PORTABLE	124	5130	1976
0136928	SAW, ELECTRIC PORTABLE	136	5130	1977
0137374	SKILLDRILL	84	5130	1977
0139188	WRENCH, IMPACT ELECTRIC	500	5130	1979
0139629	DRILL, HAMMER	305	5130	1980
1541439	SAW, BAND	357	5130	1996
1322694	SAW, 7 1/4" HYPOID	177	5130	1992
1912765	SANDER, ORBITAL	147	5130	1998
0144895	DRILL, 3/8"	78	5130	1982
0145009	SANDER/GRINDER, 7"	200	5130	1987
0145738	SANDER, HEAVY DUTY	113	5130	1983
1224283	WRENCH, 3/8" AIR IMPACT	132	5130	1992

1224284	WRENCH, 3/4" AIR IMPACT	347	5130	1992
1224285	WRENCH, IMPACT 1/2" AIR	232	5130	1992
1224286	WRENCH, IMPACT 1/2" AIR	232	5130	1992
1224287	WRENCH, IMPACT 1/2" AIR	232	5130	1992
1912732	DRILL, 3/8" CORDLESS	187	5130	1997
2157555	DRILL, HAMMER	675	5130	2000
1912734	GRINDER, 2" DIE	311	5130	1997
1912735	GRINDER, 2" DIE	246	5130	1997
1912736	GRINDER, 2" DIE	246	5130	1997
1912737	GRINDER, 2" DIE	246	5130	1997
1539611	SCALER, NEEDLE	1095	5130	1995
0041987	SANDER/GRINDER, 4 1/2"	136	5130	1997
0041988	SANDER/GRINDER, 4 1/2"	136	5130	1997
1622730	DRIVER, DRYWALL	93	5130	1999
1622729	DRIVER, DRYWALL	93	5130	1999
1939017	GRINDER, 4 1/2"	283	5130	1998
1622728	DRIVER, DRYWALL	93	5130	1999
1622727	DRIVER, DRYWALL	93	5130	1999
1325461	WRENCH, IMPACT	595	5130	1995
1939019	GRINDER, 4 1/2"	283	5130	1998
1939020	GRINDER, 4 1/2"	283	5130	1998
1939021	GRINDER, 4 1/2"	283	5130	1998
0033964	SAW, 3 3/8" CORDLESS CIRCULAR	216	5130	1996
1939022	GRINDER, 4 1/2"	283	5130	1998
0034506	HAMMER, ROTARY 3/4"	227	5130	1996
0034505	DRILL, 3/8"	102	5130	1996
0034528	PLANE, ELECTRIC	126	5130	1996
0396971	SAW, CIRCULAR	590	5130	1984
0034502	DRILL, 3/8"	212	5130	1996
1939023	GRINDER, 4 1/2"	283	5130	1998
0131837	DRILL, 3/8"	125	5130	1986
0397117	DRILL, HOLGUN 3/8"	120	5130	1986
0397119	DRILL, HOLGUN 3/8"	120	5130	1986

0397120	DRILL, HOLGUN 3/8"	120	5130	1986
0397293	DRILL, 1/4"	38	5130	1986
0397303	DRILL, 1/2" ELECTRIC	125	5130	1985
0398052	ROTARY TOOL KIT, ELECTRIC	411	5130	1986
0398055	WRENCH, IMPACT	89	5130	1986
0398057	GRINDER, PNEUMATIC	192	5130	1986
0591012	SANDER, ELECTRIC PORTABLE HD	118	5130	1974
1539940	NAILER, PNEUMATIC	379	5130	1995
1324639	DRILL, 1/2"	490	5130	1994
G033065	DRILL, 3/8"	123	5130	1988
G034363	SAW, PORTABLE BAND	295	5130	1989
1912931	GRINDER, 2" DIE	246	5130	1998
1540019	HAMMER, PNEUMATIC 3"	619	5130	1995
1912932	GRINDER, 2" DIE	246	5130	1998
1940095	DRILL, 1/2"	168	5130	1998
1912934	GRINDER, 2" DIE	246	5130	1998
1539470	SAW, BAND	343	5130	1995
1539472	DRILL, 3/8"	86	5130	1995
1939165	HOLESHOOTER, 3/4"	785	5130	1998
0591030	SCALER, NEEDLE PNEUMATIC	223	5130	1976
1325241	DRILL, 3/8"	72	5130	1994
0591357	SANDER, BELT	250	5130	1967
0591440	GRINDER, TOOL POST ELECTRIC	354	5130	1967
0592422	SAW, PORTABLE HAND	850	5130	1984
1939908	RATCHET, 3/8" AIR	49	5130	1998
1939909	RATCHET, 3/8" AIR	49	5130	1998
1224358	WRENCH, 3/8" IMPACT	207	5130	1992
1224359	WRENCH, 3/8" IMPACT	207	5130	1992
0014580	DRILL, DYMO	2013	5130	1988
0398053	ROTARY TOOL KIT, ELECTRIC	411	5130	1986
1224360	WRENCH, 3/8" IMPACT	207	5130	1992
1224361	WRENCH, 3/8" IMPACT	207	5130	1992
0593217	WRENCH, IMPACT	176	5130	1983

1622522	SANDER, ORBIT	173	5130	1998
1622521	JOINER, PLATE	429	5130	1998
G034604	DRILL, 3/8"	167	5130	1989
1323905	WRENCH, IMPACT	450	5130	1993
1323906	WRENCH, IMPACT	450	5130	1993
0593688	DRILL, 3/8" ELECTRIC PORTABLE	45	5130	1975
0015175	SANDER/POLISHER	495	5130	1988
0594224	DRILL, 1/4" ELECTRIC PORTABLE	102	5130	1977
1539474	DRILL	134	5130	1995
1539494	SAWZALL	187	5130	1995
1623469	GRINDER, DIE; 1/4" ANGLE	157	5130	2003
G034387	DRILL, 1/2" REVERSING	207	5130	1989
1623470	GRINDER, DIE; 1/4" ANGLE	157	5130	2003
1539487	GRINDER, 4 1/2"	123	5130	1995
1912184	SAW, BAND	292	5130	1997
0752337	DRILL, 3/8"	65	5130	1984
0042000	GRINDER, 7"	246	5130	1997
2157338	CRIMPING TOOL, CORDLESS	2407	5130	2004
1912181	SAW, BAND	292	5130	1997
1224145	STAPLER, PNEUMATIC	398	5130	1992
1912222	GRINDER, 4" DISC	91	5130	1997
1224355	RATCHET, AIR	324	5130	1992
1224356	NAILER, PNEUMATIC	399	5130	1992
1912205	HAMMER, ROTARY	695	5130	1997
0819129	STAPLER, PNEUMATIC	478	5130	1991
0824382	DRILL, 3/8" SHORTY	145	5130	1987
1911417	SAW, BAND	292	5130	1997
0824832	GRINDER, 4 1/2" ANGLE	90	5130	1987
0824833	HAMMER, AIR	29	5130	1987
0824834	SANDER, ANGLE 7"	138	5130	1987
1010019	SANDER/GRINDER, 7"/9"	185	5130	1990
1010024	SAW, 7 1/4" CIRCULAR	103	5130	1989
1010043	SANDER, BELT	172	5130	1989

1010054	WRENCH, IMPACT 1/2"	73	5130	1989
1940343	SAW, JIG	125	5130	1998
1010135	WRENCH, IMPACT 1/2"	120	5130	1988
1010152	DRILL, 3/8"	98	5130	1989
1010154	DRILL, 3/8"	98	5130	1989
0144945	DRILL, 3/8" HAMMER	100	5130	1987
1010196	GRINDER, 4" ANGLE	340	5130	1989
1010239	SAW, BAND, PORTABLE	181	5130	1989
1939936	WRENCH, IMPACT 1/2"	353	5130	1998
2157920	SAW, BAND	299	5130	2005
1540796	SAW, BAND	378	5130	1996
1540794	GRINDER, DIE	192	5130	1996
1912260	POWER DRIVE	900	5130	1997
1624145	DRILL, 1/2"; CORDLESS	269	5130	2005
1624146	DRILL, 1/2"; CORDLESS	269	5130	2005
1624147	DRILL, 1/2"; CORDLESS	269	5130	2005
1624148	DRILL, 1/2"; CORDLESS	269	5130	2005
1010744	SAW, PORTABLE ELECTRIC	437	5130	1990
1540608	DRILL, 3/8" CORDLESS	247	5130	1996
1223779	DRILL, REVERSING 1/2"	300	5130	1991
1622705	GRINDER, DIE, 1 1/2"	144	5130	1999
1010903	WRENCH, IMPACT PNEUMATIC	74	5130	1990
1010904	WRENCH, IMPACT PNEUMATIC	72	5130	1990
1010905	WRENCH, IMPACT PNEUMATIC	72	5130	1990
1010919	SANDER, BELT	276	5130	1990
1010948	SAW, JIG	98	5130	1990
1010949	SANDER, BELT	172	5130	1990
1912695	SCALER, NEEDLE	447	5130	1997
1322600	WRENCH, IMPACT 3/8"	239	5130	1992
1011511	DRILL, 1/2"	189	5130	1990
1010052	WRENCH, IMPACT 1/2"	73	5130	1989
1323826	DRILL, 3/8"	90	5130	1993
1911130	SCREWDRIVER, DRYWALL	159	5130	1997

1541227	SAWZALL	257	5130	1996
1325412	DRILL, 3/8" CORDLESS	193	5130	1995
1323931	DRILL, 3/8" CORDLESS	73	5130	1993
1542035	NAILER, PNEUMATIC	403	5130	1996
1012184	GRINDER, 2" DIE	240	5130	1990
1012472	DRILL	196	5130	1989
1012478	DRILL, AIR	150	5130	1989
1012480	DRILL	339	5130	1989
0036771	WRENCH, TORQUE HYDRAULIC	2469	5130	1992
1541228	DRILL, 1/2"	186	5130	1996
1541229	SAW, BAND	378	5130	1996
1541238	DRILL, 1/4"	178	5130	1996
1541239	WRENCH, IMPACT 1/2"	223	5130	1996
1541240	SAWZALL	257	5130	1996
1541235	GRINDER, 4 1/2" ANGLE	119	5130	1996
1541236	GRINDER, 4 1/2" ANGLE	119	5130	1996
1939217	SANDER/GRINDER, 4 1/2"	141	5130	1998
0397118	DRILL, HLGUN 3/8"	120	5130	1986
1939214	SANDER/GRINDER, 4 1/2"	141	5130	1998
1939213	SANDER/GRINDER, 4 1/2"	141	5130	1998
1541237	HAMMER, ROTARY	775	5130	1996
1323933	DRILL, 1/2"	220	5130	1993
1223532	HAMMER, ROTARY 3/4"	256	5130	1991
1223652	DRILL, 1/2"	162	5130	1991
1323932	DRILL, 1/4"	128	5130	1993
1223671	WRENCH, IMPACT 1/2"	369	5130	1991
0752338	DRILL, 3/8"	65	5130	1984
1912845	PRESS, DRILL	2012	5130	1998
1541232	NAILER, PNEUMATIC	505	5130	1996
1223802	DRILL, HAMMER 1/2"	288	5130	1992
1223844	GRINDER, 5" ANGLE	146	5130	1992
1223931	GRINDER, 5" ANGLE	146	5130	1992
1223848	GRINDER, 5" ANGLE	146	5130	1992

1939999	TRIMMER	189	5130	1998
1325413	DRILL, 3/8"	86	5130	1995
1224488	SANDER	192	5130	1992
1224486	SAW, JIG	186	5130	1992
0036113	DRILL, MAGNETIC, PORTABLE	1553	5130	1992
0036110	DRILL, MAGNETIC, PORTABLE	1589	5130	1992
1224334	SANDER	92	5130	1992
1224335	SANDER	92	5130	1992
1224336	SANDER	92	5130	1992
1224340	DRILL, HAMMER	288	5130	1992
1224339	SAW, RECIPROCATING	176	5130	1992
1224496	NAILER, PNEUMATIC	474	5130	1992
0036114	DRILL, MAGNETIC, PORTABLE	1589	5130	1992
1224658	DRILL, 1/2"	155	5130	1992
1224670	SANDER/GRINDER, 4 1/2"	116	5130	1992
1224631	SANDER/GRINDER, 4 1/2"	116	5130	1992
1224633	SANDER/GRINDER, 4 1/2"	116	5130	1992
1224634	SANDER/GRINDER, 4 1/2"	116	5130	1992
1224637	DRILL, 3/8"	107	5130	1992
1224640	DRILL, 3/8"	107	5130	1992
1224641	DRILL, 3/8"	107	5130	1992
1224642	DRILL, 3/8"	107	5130	1992
1224616	SANDER/GRINDER, 4 1/2"	116	5130	1992
1224628	DRILL, 3/8"	107	5130	1992
1224629	DRILL, 3/8"	107	5130	1992
1224646	SAW, BAND	349	5130	1992
1224648	SAWZALL	187	5130	1992
1541299	SAW, 5 1/2" CIRCULAR	168	5130	1996
1541222	DRILL, 3/8" REVERSING	155	5130	1996
1940656	DRILL, GAS ENGINE	506	5130	1999
2158023	SAW, MITER; 10"	88	5130	2005
1912876	SAW, 12" MITER	599	5130	1998
1622340	ROUTER	166	5130	1998

1622341	ROUTER	166	5130	1998
1940070	WRENCH, IMPACT 1/2"	258	5130	1998
1940076	WRENCH, IMPACT 1/2"	258	5130	1998
1323224	GRINDER, END	104	5130	1993
1323225	DRILL	104	5130	1993
1622548	DRILL, 3/8"	160	5130	1998
1912403	DRILL, 1/2" CORDLESS	238	5130	1997
1940088	DRILL, 1/2"	195	5130	1998
1940089	DRILL, 1/2"	195	5130	1998
1323767	DRILL, 3/8" CORDLESS	127	5130	1993
1622554	DRILL, 3/8"	160	5130	1998
1622553	DRILL, 3/8"	160	5130	1998
1622552	DRILL, 3/8"	160	5130	1998
1622558	DRILL, 3/8"	160	5130	1998
1323990	GRINDER, 6" STRAIGHT	201	5130	1993
1323989	DRILL, 3/8"	110	5130	1993
1323988	DRILL, 3/8"	110	5130	1993
1622556	DRILL, 3/8"	160	5130	1998
1622555	DRILL, 3/8"	160	5130	1998
1324181	ROUTER	298	5130	1993
1324205	WRENCH, IMPACT 1/2"	406	5130	1993
1324190	SAW	179	5130	1993
1223847	GRINDER, 5" ANGLE	146	5130	1992
1940103	GRINDER, 4 1/2"	152	5130	1998
1940096	DRILL, 1/2"	176	5130	1998
1940097	DRILL, 1/2"	176	5130	1998
1324729	DRILL, HAMMER	583	5130	1994
1324775	SAWZALL	240	5130	1994
1324774	HAMMER, ROTARY	487	5130	1994
1324773	HAMMER, ROTARY	450	5130	1994
1324770	DRILL, 1/2"	177	5130	1994
1910945	HAMMER, ROTARY	675	5130	1997
1324803	HAMMER, ROTARY	657	5130	1994

1324806	DRILL, 1/2"	168	5130	1994
0396491	DRILL, PORTABLE	129	5130	1986
1910989	DRILL, 3/8"	239	5130	1997
0014979	DRILL, 3/8" AIR	82	5130	1987
1910946	HAMMER, ROTARY	675	5130	1997
1912874	DRILL, SCREWDRIVER	249	5130	1998
1324881	SANDER	291	5130	1994
1324880	SANDER	291	5130	1994
1324879	SANDER	291	5130	1994
1324877	SAW, 7 1/4" CIRCULAR	149	5130	1994
1324874	DRILL, 3/8"	91	5130	1994
1324872	DRILL, 3/8"	91	5130	1994
1912875	DRILL, SCREWDRIVER	249	5130	1998
1541344	GRINDER, 4 1/2"	134	5130	1996
1539490	GRINDER, 4 1/2"	123	5130	1995
0034864	SAW, BAND	381	5130	1996
0042324	NIBBLER	366	5130	1997
0397284	ROUTER	84	5130	1986
1622687	DRILL, CORDLESS	60	5130	1999
1911050	WRENCH, IMPACT 1/2" AIR	148	5130	1997
1622569	TRIMMER, LAMINATE	149	5130	1998
1622568	DRILL, 1/2"	153	5130	1998
1325417	STAPLER, PNEUMATIC	228	5130	1995
0396761	SAW, CIRCULAR 8-1/4"	269	5130	1986
1325418	STAPLER, PNEUMATIC	228	5130	1995
1325419	ROUTER	201	5130	1995
1325414	DRILL, 3/8"	86	5130	1995
1325411	DRILL, 3/8" CORDLESS	193	5130	1995
1622572	WRENCH, 3/8" IMPACT	119	5130	1998
1541196	SANDER, 7"/9"	173	5130	1996
1541195	SANDER, 7"/9"	173	5130	1996
1622573	WRENCH, 3/8" IMPACT	119	5130	1998
1542041	SAW, 7 1/4" CIRCULAR	66	5130	1996

1542040	SAW, 7 1/4" CIRCULAR	66	5130	1996
1542039	SAW, 6" CIRCULAR	127	5130	1996
1542036	SAW, 7 1/4"	207	5130	1996
1542032	DRILL, 3/8"	141	5130	1996
1542034	NAILER, PNEUMATIC	209	5130	1996
1541982	WRENCH, PNEUMATIC	741	5130	1996
1541984	GRINDER, 4" DISC	69	5130	1996
1541985	GRINDER, DIE	44	5130	1996
1622574	DRILL, 3/8" CORDLES	189	5130	1998
0041983	GRINDER, 2" DIE	246	5130	1997
0041985	GRINDER, 2" DIE	246	5130	1997
0041994	SANDER/GRINDER, 4 1/2"	136	5130	1997
0042001	GRINDER, 7"	246	5130	1997
0042002	GRINDER, 2" DIE	246	5130	1997
0042003	GRINDER, 2" DIE	246	5130	1997
0042005	GRINDER, 2" DIE	246	5130	1997
0042008	GRINDER, 2" DIE	246	5130	1997
0042009	GRINDER, 2" DIE	246	5130	1997
0042010	SANDER/GRINDER, 4 1/2"	136	5130	1997
0042012	SANDER/GRINDER, 4 1/2"	136	5130	1997
1541340	GRINDER, 4 1/2"	134	5130	1996
0041957	DRILL, 3/8" CORDLESS	189	5130	1997
0041958	SAW, JIG	37	5130	1997
1940736	GREASE GUN, CORDLESS	280	5130	1999
1910982	WRENCH, 1" AIR IMPACT	790	5130	1997
1010950	SANDER, BELT	172	5130	1990
1224635	SANDER/GRINDER, 4 1/2"	116	5130	1992
1940078	DRILL, 1/2"	195	5130	1998
1939024	GRINDER, 4 1/2"	283	5130	1998
0042200	NAILER, PNEUMATIC	225	5130	1997
0042201	NAILER, PNEUMATIC	454	5130	1997
1911010	JOINER, PLATE	189	5130	1997
1911009	ROUTER	212	5130	1997

G033355	SAW, RECIPROCATING	167	5130	1988		
1940104	GRINDER, 4 1/2"	152	5130	1998		
1939135	WRENCH, IMPACT 1/2"	169	5130	1998		
1940155	RATCHET, 3/8" AIR	185	5130	1998		
1322706	DRILL, 3/8"	156	5130	1992		
1940890	TOOL OUTFIT, TRAILER MOUNTED	2000	5180	1978		
0591020	TOOL SET	600	5180	1983		
0594424	PULLER WHEEL	233	5180	1983		
1940891	TOOL OUTFIT, TRAILER MOUNTED	2000	5180	1978		
	TOTAL LINE ITEMS 447	135653			135653	447

Federal Supply Classification 7420/7430/7435/7450/7460/7490 - Office Machines, Text Processing Systems, and Visible Record Equipment

1323276	CALCULATOR, ELECTRONIC	230	7420	1993		
1622839	CALCULATOR, ELECTRONIC	115	7420	2000		
1912662	CALCULATOR, ELECTRONIC	129	7420	1997		
1912659	CALCULATOR, ELECTRONIC	129	7420	1997		
1912658	CALCULATOR, ELECTRONIC	128	7420	1997		
1912656	CALCULATOR, ELECTRONIC	129	7420	1997		
1912653	CALCULATOR, ELECTRONIC	129	7420	1997		
1940179	CALCULATOR, ELECTRONIC	159	7420	1998		
0592468	CALCULATOR, ELECTRONIC	200	7420	1984		
1940185	CALCULATOR, ELECTRONIC	159	7420	1998		
G033485	CALCULATOR, ELECTRONIC	151	7420	1988		
G033489	CALCULATOR, ELECTRONIC	151	7420	1988		
1940191	CALCULATOR, ELECTRONIC	159	7420	1998		
1940192	CALCULATOR, ELECTRONIC	159	7420	1998		
1225230	CALCULATOR, ELECTRONIC	178	7420	1992		
1225223	CALCULATOR, ELECTRONIC	240	7420	1992		
1225218	CALCULATOR, ELECTRONIC	240	7420	1992		
1912707	CALCULATOR, ELECTRONIC	204	7420	1997		
1623091	CALCULATOR, ELECTRONIC	162	7420	2002		
0015882	CALCULATOR, ELECTRONIC	313	7420	1988		

0015883	CALCULATOR, ELECTRONIC	313	7420	1988
0015910	CALCULATOR, ELECTRONIC	156	7420	1988
0015924	CALCULATOR, ELECTRONIC	156	7420	1988
0015925	CALCULATOR, ELECTRONIC	156	7420	1988
1539695	CALCULATOR, ELECTRONIC	110	7420	1995
0132141	CALCULATOR, ELECTRONIC	161	7420	1986
0132268	CALCULATOR, ELECTRONIC	161	7420	1986
0592469	CALCULATOR, ELECTRONIC	200	7420	1984
1010835	CALCULATOR, ELECTRONIC	210	7420	1986
0144861	CALCULATOR, ELECTRONIC	86	7420	1987
0812303	CALCULATOR, ELECTRONIC	304	7420	1989
0592457	CALCULATOR, ELECTRONIC	200	7420	1984
1540326	CALCULATOR, ELECTRONIC	189	7420	1995
0752406	CALCULATOR, ELECTRONIC	184	7420	1980
0812306	CALCULATOR, ELECTRONIC	152	7420	1989
0812317	CALCULATOR, ELECTRONIC	152	7420	1989
0812318	CALCULATOR, ELECTRONIC	152	7420	1989
0812417	CALCULATOR, ELECTRONIC	249	7420	1990
0812418	CALCULATOR, ELECTRONIC	249	7420	1990
0812419	CALCULATOR, ELECTRONIC	249	7420	1990
1011926	CALCULATOR, ELECTRONIC	179	7420	1990
1012102	CALCULATOR, ELECTRONIC	152	7420	1989
1172645	CALCULATOR, ELECTRONIC	178	7420	1990
1172646	CALCULATOR, ELECTRONIC	178	7420	1990
1172657	CALCULATOR, ELECTRONIC	240	7420	1990
1223747	CALCULATOR, ELECTRONIC	180	7420	1992
1223841	CALCULATOR, ELECTRONIC	280	7420	1992
1223842	CALCULATOR, ELECTRONIC	280	7420	1992
0036137	CALCULATOR, ELECTRONIC	340	7420	1992
1323271	CALCULATOR, ELECTRONIC	170	7420	1993
1323295	CALCULATOR, ELECTRONIC	170	7420	1993
0034202	CALCULATOR	130	7420	1994
1541975	CALCULATOR, ELECTRONIC	112	7420	1996

G033333	TYPEWRITER, WHEELWRITER 10	365	7430	1988
1940238	TYPEWRITER, WHEELWRITER 3500	828	7430	1998
1940231	TYPEWRITER, WHEELWRITER 3500	828	7430	1998
1940881	TYPEWRITER	169	7430	1999
0015439	TYPEWRITER, WHEELWRITER 10	365	7430	1988
0015444	TYPEWRITER, WHEELWRITER 10	365	7430	1988
0015450	TYPEWRITER, WHEELWRITER 10	365	7430	1988
0015455	TYPEWRITER, WHEELWRITER 10	365	7430	1988
0015456	TYPEWRITER, WHEELWRITER 10	365	7430	1988
0015550	TYPEWRITER, WHEELWRITER 30	812	7430	1988
0131888	TYPEWRITER, WHEELWRITER 6	710	7430	1986
0133474	TYPEWRITER, WHEELWRITER 6	710	7430	1987
1941684	TYPEWRITER, WHEELWRITER 6	710	7430	1987
0133483	TYPEWRITER, WHEELWRITER 6	710	7430	1987
0133515	TYPEWRITER, WHEELWRITER 6	710	7430	1987
0293061	TYPEWRITER	575	7430	1985
0396782	TYPEWRITER	799	7430	1986
2156181	TYPEWRITER	731	7430	1985
1540159	TYPEWRITER, WHEELWRITER 3500	828	7430	1995
1225210	TYPEWRITER	812	7430	1992
0752017	TYPEWRITER	610	7430	1984
1011087	TYPEWRITER, WHEELWRITER 30	812	7430	1990
1011088	TYPEWRITER, WHEELWRITER 30	812	7430	1990
1172520	TYPEWRITER, WHEELWRITER 30	812	7430	1990
1223757	TYPEWRITER, WHEELWRITER 30	812	7430	1992
1910835	TYPEWRITER, WHEELWRITER 3500	828	7430	1997
1910836	TYPEWRITER, WHEELWRITER 3500	828	7430	1997
G032963	TRANSCRIBER, MICROCASSETTE	250	7450	1988
0753393	DICTATING MACHINE	228	7450	1985
1622708	TRANSCRIBER	199	7450	1999
2157719	PUNCH, ELECTRIC	718	7490	2005
2155856	CUTTER, HYDRAULIC	16100	7490	2002
1623870	REGISTER, CASH	3935	7490	2004

1623871	REGISTER, CASH	3935	7490	2004		
1623872	REGISTER, CASH	3935	7490	2004		
1623873	REGISTER, CASH	3935	7490	2004		
2157117	SHREDDING MACHINE, PAPER	1695	7490	2004		
1540160	SHREDDING MACHINE, PAPER	1308	7490	1996		
0036498	LABELING SYSTEM, ELECTRONIC	406	7490	1992		
0824670	TIME/DATE STAMP MACHINE	355	7490	1987		
1010393	DRILL, PAPER ELECTRIC	4676	7490	1989		
1011159	SHREDDING MACHINE, PAPER	879	7490	1990		
2157285	MAILING MACHINE	3768	7490	2004		
2157286	MAILING MACHINE	1956	7490	2004		
1623230	LABELING SYSTEM, ELECTRONIC	180	7490	2003		
	TOTAL LINE ITEMS 98	75936			75936	98

Federal Supply Classification 7910 - Floor Polishers and Vacuum Cleaning Equipment

1541585	CLEANER, VACUUM, ELECTRIC	162	7910	1996
1912648	CLEANER, VACUUM, BACKPACK	1193	7910	1998
G033527	CLEANER, VACUUM, ELECTRIC	473	7910	1988
2156582	CLEANER, VACUUM; ELECTRIC	805	7910	2003
1911408	CLEANER, VACUUM, ELECTRIC	508	7910	1997
1225289	CLEANER, VACUUM, ELECTRIC	996	7910	1992
1323868	CLEANER, VACUUM, ELECTRIC	324	7910	1993
1539794	CLEANER, VACUUM, ELECTRIC	729	7910	1995
1940766	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940765	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940763	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940762	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940761	CLEANER, VACUUM, ELECTRIC	441	7910	1999
0819155	BLOWER, TURBO	213	7910	1991
1940758	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940757	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940756	CLEANER, VACUUM, ELECTRIC	441	7910	1999
1940755	CLEANER, VACUUM, ELECTRIC	441	7910	1999

0753108	CLEANER, VACUUM, GAS	1026	7910	1982
1325491	CLEANER, VACUUM, ELECTRIC	324	7910	1995
0594296	CLEANER, TUBE	875	7910	1983
1940783	CLEANER, VACUUM, ELECTRIC	1375	7910	1999
1940779	CLEANER, VACUUM, ELECTRIC	571	7910	1999
1940780	CLEANER, VACUUM, ELECTRIC	571	7910	1999
1323378	CLEANER, VACUUM, ELECTRIC	1484	7910	1993
1325482	CLEANER, VACUUM, ELECTRIC	324	7910	1995
0036142	CLEANER, VACUUM	488	7910	1992
1940781	EXTRACTOR, CARPET	4153	7910	1999
1940782	EXTRACTOR, CARPET	4153	7910	1999
1539353	SCRUBBER, FLOOR	582	7910	1995
1010291	CLEANER, VACUUM, ELECTRIC	355	7910	1989
1540611	CLEANER, VACUUM, ELECTRIC	595	7910	1996
1940784	SCRUBBER, FLOOR	3401	7910	1999
1940786	FLOOR MACHINE	1265	7910	1999
1940790	CLEANER, VACUUM, ELECTRIC	305	7910	1999
1940789	CLEANER, VACUUM, ELECTRIC	305	7910	1999
1940788	CLEANER, VACUUM, ELECTRIC	305	7910	1999
1912362	CLEANER, VACUUM, ELECTRIC	835	7910	1998
1012393	CLEANER, STEAM, PRESSURE JET	795	7910	1990
1941836	SCRUBBING MACHINE, FLOOR	11076	7910	2001
1940825	CLEANER, VACUUM, ELECTRIC	915	7910	1999
0131980	CLEANER, VACUUM, ELECTRIC	753	7910	1986
0036140	CLEANER, VACUUM	488	7910	1992
0036141	CLEANER, VACUUM	488	7910	1992
0036144	CLEANER, VACUUM	488	7910	1992
0036145	CLEANER, VACUUM	488	7910	1992
1322899	CLEANER, VACUUM, ELECTRIC	475	7910	1993
1322896	CLEANER, VACUUM, ELECTRIC	475	7910	1993
1322895	CLEANER, VACUUM, ELECTRIC	475	7910	1993
1322894	CLEANER, VACUUM, ELECTRIC	475	7910	1993
1324536	CLEANER, VACUUM, ELECTRIC	475	7910	1993

1324654	VACUUM SYSTEM, FISH TAPE	1823	7910	1994		
2158097	CLEANER, VACUUM; ELECTRIC	467	7910	2006		
1541761	CLEANER, VACUUM	999	7910	1996		
1911005	CLEANER, VACUUM, ELECTRIC	118	7910	1997		
	TOTAL LINE ITEMS 55	53937			53937	55

**Attachment J-10, List 3
Buildings Housing for Facility Operating
Services
Contractor/Subcontractor Personnel at SSC**

*Bldg Number

1003

1100

1103

1105

1200

2104

2105

2119

2201

2204

2205

2409

3201

4010

4302

5005

7001

7020

8101

8301

TRL-C3

(Trailer)

S-2126

2403

S-2127

2202

2203

2207

2310
4220

* Building Drawings are included in the Technical Reference Library (TRL) and Central Engineering Files.

**GOVERNMENT PROVIDED FACILITIES
AS OF 8/4/06
Attachment J10 LIST 3**

**Type of
Space**

- 1 Office Type with heat and air
- 2 Shop/Lab Tech Space heated no air
- 3 Storage no heat or air

Building	Occupant	Type	Sq. Ft.
1100	BASE/MSS	1	9,855
1105	BASE/MSS	1	8,262
1105	BASE/MSS	3	33
1200	BASE/MSS	1	20,524
1200	BASE/MSS	3	50
1207	BASE/MSS	1	20
2104	BASE/MSS	1	13,687
2105	BASE/MSS	1	5,857
2105	BASE/MSS	2	12,500
2105	BASE/MSS	3	888
2106	BASE/MSS	3	142
2108	BASE/MSS	1	5,590

2109	BASE/MSS	1	899
2119	BASE/MSS	1	3,540
2201	BASE/MSS	1	18,698
2201	BASE/MSS	2	19,062
2201	BASE/MSS	3	8,953
2202	BASE/MSS	3	5,815
2203	BASE/MSS	1	208
2203	BASE/MSS	3	7,158
2204	BASE/MSS	1	15,890
2204	BASE/MSS	2	3,187
2204	BASE/MSS	3	76,130
2205	BASE/MSS	1	20,722
2205	BASE/MSS	2	21,406
2205	PROP/MSS	1	3,950
2205	PROP/MSS	2	434
2206	BASE/MSS	2	1,237
2207	BASE/MSS	3	3,946
2210	BASE/MSS	3	2,639
2310	BASE/MSS	1	19
2310	BASE/MSS	2	200
2403	BASE/MSS	1	233
3201	BASE/MSS	1	401
3201	BASE/MSS	2	1,699
3201	BASE/MSS	3	602
3225	PROP/MSS	1	106
3226	BASE/MSS	1	318
4010	PROP/MSS	1	1,098
4220	PROP/MSS	1	1,154
4220	PROP/MSS	2	301
4220	PROP/MSS	3	2,080
4302	PROP/MSS	1	979
4302	PROP/MSS	3	6,117
7020	BASE/MSS	1	89

7020	BASE/MSS	3	945
8101	BASE/MSS	1	3,409
8301	PROP/MSS	1	2,251

**GOVERNMENT PROVIDED GSA LEASED VEHICLE
AS OF 8/4/06
Attachment J10 LIST 4**

**NUMBER AND TYPE OF VEHICLES SUBJECT TO CHANGE
AS DIRECTED BY THE NASA/SSC/TRANSPORTATION
OFFICER**

<u>TAG NUMBER</u>	<u>YEAR</u>	<u>MAKE</u>	<u>MODEL</u>	<u>FUEL TYPE</u>
G10-1885D	2006	DODGE	STRATUS	ETH E- 85/GAS
G10-7816B	2005	DODGE	STRATUS	ETH E- 85/GAS
G10-7818B	2005	DODGE	STRATUS	ETH E- 85/GAS
G12-46233	2004	DODGE	STRATUS	ETH E- 85/GAS
G12-46243	2004	DODGE	STRATUS	ETH E- 85/GAS
G12-46245	2004	DODGE	STRATUS	ETH E- 85/GAS
G12-46251	2004	DODGE	STRATUS	ETH E- 85/GAS
G31-00258	2000	FORD	E350	DIESEL
G31-00259	2000	FORD	E350	DIESEL
G32-0138A	2006	THOMAS BUILT BUS	130YN 37 P	DIESEL
G32-01951	2002	THOMAS BUILT BUS	SHBUS 110HN/23 P	DIESEL
G32-01952	2002	THOMAS BUILT BUS	SHBUS 110HN/23 P	DIESEL

G32-02454	1992	FORD	E350 19 P	DIESEL
G41-0825D	2006	DODGE	GR CARAVAN	ETH E-85/GAS
G41-2646B	2005	DODGE	GR CARAVAN	ETH E-85/GAS
G41-2650B	2005	DODGE	CARAVAN	ETH E-85/GAS
G41-49741	2000	DODGE	CARAVAN	85/GAS
G41-49752	2001	DODGE	1500	GAS
G41-49753	2001	DODGE	1500	GAS
G41-49757	2001	DODGE	1500	GAS
G41-49771	2001	DODGE	1500	GAS
G41-49773	2001	DODGE	1500	GAS
G41-49775	2001	DODGE	1500	GAS
G41-49777	2001	DODGE	1500	GAS
G41-49778	2001	DODGE	1500	GAS
G41-49779	2001	DODGE	1500	GAS
G41-49781	2001	DODGE	1500	GAS
G41-49782	2001	DODGE	1500	GAS
G41-49783	2001	DODGE	1500	GAS
G41-49784	2001	DODGE	1500	GAS
G41-49787	2001	DODGE	1500	GAS
G41-49788	2001	DODGE	1500	GAS
G41-49790	2001	DODGE	1500	GAS
G41-49791	2001	DODGE	1500	GAS
G41-55178	2001	FORD	WINDSTAR	GAS
G41-57094	2001	DODGE	CARAVAN	ETH E-85/GAS
G41-57096	2001	DODGE	CARAVAN	ETH E-85/GAS
G41-65034	2002	CHEVROLET	VENTURE	GAS
G41-69724	2003	DODGE	CARAVAN	ETH E-85/GAS
G41-69730	2003	CHEVROLET	S10	GAS

G41-69731	2003	CHEVROLET	S10	GAS
G41-69732	2003	CHEVROLET	S10	GAS
G41-69733	2003	CHEVROLET	S10	GAS
G41-69734	2003	CHEVROLET	S10	GAS
G42-0487D	2006	DODGE	1500	ETH E- 85/GAS
G42-0488D	2006	DODGE	1500	ETH E- 85/GAS
G42-0489D	2006	DODGE	1500	ETH E- 85/GAS
G42-0490D	2006	DODGE	1500	ETH E- 85/GAS
G42-0492D	2006	DODGE	1500	ETH E- 85/GAS
G42-0493D	2006	DODGE	1500	ETH E- 85/GAS
G42-0494D	2006	DODGE	1500	ETH E- 85/GAS
G42-0495D	2006	DODGE	1500	ETH E- 85/GAS
G42-0500D	2006	DODGE	1500	ETH E- 85/GAS
G42-0503D	2006	DODGE	1500	ETH E- 85/GAS
G42-0504D	2006	DODGE	1500	ETH E- 85/GAS
G42-0507D	2006	DODGE	1500	ETH E- 85/GAS
G42-0509D	2006	DODGE	1500	ETH E- 85/GAS
G42-0510D	2006	DODGE	1500	ETH E- 85/GAS
G42-0515D	2006	DODGE	1500	ETH E- 85/GAS
G42-0516D	2006	DODGE	1500	ETH E- 85/GAS
G42-0517D	2006	DODGE	1500	ETH E-

				85/GAS
G42-0519D	2006	CHEVROLET	C2500	ETH E-
				85/GAS
G42-0520D	2006	CHEVROLET	C2500	ETH E-
				85/GAS
G42-0522D	2006	CHEVROLET	C2500	ETH E-
				85/GAS
G42-1300A	2004	DODGE	RAM 1500	ETH E-
				85/GAS
G42-1302A	2004	DODGE	RAM 1500	ETH E-
				85/GAS
G42-1303A	2004	DODGE	RAM 1500	ETH E-
				85/GAS
G42-1305A	2004	DODGE	RAM 1500	ETH E-
				85/GAS
G42-1306A	2004	DODGE	RAM 1500	ETH E-
				85/GAS
G42-1307A	2004	DODGE	RAM 1500	ETH E-
				85/GAS
G42-1555B	2005	CHEVROLET	C1500	ETH E-
				85/GAS
G42-1556B	2005	CHEVROLET	C1500	ETH E-
				85/GAS
G42-1560B	2005	CHEVROLET	C1500	ETH E-
				85/GAS
G42-1562B	2005	CHEVROLET	C1500	85/GAS
G42-1563B	2006	CHEVROLET	C2500	GAS
G42-1564B	2006	CHEVROLET	C2500	GAS
				ETH E-
G42-2547B	2004	DODGE	RAM 1500	85/GAS
G42-39917	2000	DODGE	B2500	GAS
G42-39921	2000	DODGE	B2500	GAS
G42-39924	2000	FORD	F150	GAS
G42-39925	2000	FORD	F150	GAS
G42-39926	2000	FORD	F150	GAS

G42-39927	2000	FORD	F150	GAS
G42-39928	2000	CHEVROLET	2500	GAS
G42-43746	2001	DODGE	B2500	GAS
G42-43752	2001	FORD	F150	CNG/GAS
G42-43753	2001	FORD	F150	CNG/GAS
G42-43757	2001	FORD	F150	CNG/GAS
G42-43758	2001	FORD	F150	CNG/GAS
G42-43767	2001	DODGE	1500	GAS
G42-48424	2002	CHEVROLET	C1500	ETH E- 85/GAS
G42-48425	2002	CHEVROLET	C1500	ETH E- 85/GAS
G42-48428	2002	CHEVROLET	C1500	ETH E- 85/GAS
G42-48430	2002	CHEVROLET	C1500	ETH E- 85/GAS
G42-48431	2002	CHEVROLET	C1500	ETH E- 85/GAS
G42-48438	2002	CHEVROLET	G1500	GAS
G42-49410	2002	FORD	F150	CNG/GAS
G42-51567	2003	CHEVROLET	C1500	ETH E- 85/GAS
G42-53611	2003	FORD	F150	CNG/GAS
G42-81770	2000	CHEVROLET	G2500	GAS
G43-03854	1999	FORD	E350	GAS
G43-03855	1999	FORD	E350	GAS
G43-09380	2000	DODGE	B3500	GAS
G43-09395	2001	DODGE	2500	GAS
G43-09396	2000	WORKHORSE	P30	GAS
G43-09397	2000	WORKHORSE	P30	GAS
G43-09405	2001	DODGE	3500	GAS
G43-09408	2001	DODGE	3500	GAS
G43-09410	2001	DODGE	3500	GAS
G43-09413	2001	DODGE	3500	GAS
G43-16154	2001	CHEVROLET	G2500	CNG/GAS

G43-16155	2001	CHEVROLET	2500	CNG/GAS
G43-16159	2001	DODGE	2500	GAS
G43-20530	2002	CHEVROLET	G3500	GAS
G43-24672	2003	FORD	E350	GAS
G43-24679	2003	FORD	E250	GAS
G43-24680	2003	CHEVROLET	C3500LD	GAS
G43-24683	2003	FORD	F250	GAS
G43-2507A	2004	CHEVROLET	G2300	CNG/GAS
G43-2508A	2004	CHEVROLET	G2300	CNG/GAS
G43-2509A	2004	CHEVROLET	G2300	CNG/GAS
G43-2510A	2004	CHEVROLET	G2300	CNG/GAS
G43-2512A	2004	CHEVROLET	G2300	CNG/GAS
G43-2513A	2004	CHEVROLET	G2300	CNG/GAS
G43-2514A	2004	CHEVROLET	G2300	CNG/GAS
G43-2517A	2004	FORD	E350	GAS
G43-4112A	2000	CHEVROLET	G2500	GAS
G62-1951D	2006	CHEVROLET	TAHOE	GAS
G62-1952D	2006	CHEVROLET		GAS
G63-1215A	2004	CHEVROLET	K2500HD	CNG/GAS
G63-1218A	2004	CHEVROLET	K2500HD	CNG/GAS
G63-1769B	2005	DODGE	2500	GAS
G71-02701	2003	INTERNATIONAL	4300	DIESEL
G71-02702	2003	INTERNATIONAL	4300	DIESEL
G71-17338	1998	FORD	F800	DIESEL
G71-17349	1998	FORD	F700	DIESEL
G82-06436	1998	FORD	L9000	DIESEL
G82-07051	2004	FREIGHTLINER	FL112	DIESEL

Contract NNS07AB21C

Attachment J16 LIST 5 Contractor Acquired Property Being Depreciated Against the Contract										
DATE	CK NO	PO NO	DESCRIPTION	ACCT SUB	AMOUNT	RESIDUAL	USEFUL LIFE	MONTHLY DEPREC	Jun-00	
Office Equipment/Machinery										
5/23/2000	15306967	10 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
5/23/2000	15306968	08 NAS1399030	NEW HOLLAND TRACTOR	161 000	27775.00	5555.00	100	222.20	264.52	
5/23/2000	15306968	08 NAS1399030	BOOM MOWER	161 000	16890.00	337.80	120	137.94	160.86	
5/23/2000	15306969	09 NAS1399030	NEW HOLLAND TRACTOR	161 000	23600.00	4720.00	100	188.80	224.76	
5/23/2000	15306967	14 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
5/23/2000	15306967	09 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
5/23/2000	15306969	06 NAS1399030	NEW HOLLAND TRACTOR	161 000	23600.00	4720.00	100	188.80	224.76	
5/23/2000	15306969	07 NAS1399030	NEW HOLLAND TRACTOR	161 000	23600.00	4720.00	100	188.80	224.76	
5/23/2000	15306967	16 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
5/23/2000	15306967	15 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
5/23/2000	15306967	12 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
5/23/2000	15306967	13 NAS1399030	RIDING MOWER	161 000	14151.00	1415.10	84	151.62	134.77	
9/21/2000	15310351	01 NAS1399030	HYDRAULIC VALVE	161 000	249.00	24.90	140	1.60		
9/21/2000	15310351	01A NAS1399030	BATWING MOWER	161 000	8970.00	897.00	140	57.66		
9/21/2000	15310351	02 NAS1399030	HYDRAULIC VALVE	161 000	249.00	24.90	140	1.60		
9/21/2000	15310351	02A NAS1399030	BATWING MOWER	161 000	8970.00	897.00	140	57.66		
9/21/2000	15310351	03 NAS1399030	HYDRAULIC VALVE	161 000	249.00	24.90	140	1.60		
9/21/2000	15310351	03A NAS1399030	BATWING MOWER	161 000	8970.00	897.00	140	57.66		
9/21/2000	15310351	04 NAS1399030	BATWING CUTTER	161 000	5262.00	526.20	140	35.86		
9/21/2000	15310345	17 NAS1399030	TROY BILT TILLER	161 000	1998.00	199.80	120	14.98		
9/28/2000	15310671	04 NAS1399030	BATWING CUTTER	161 000	3688.00	368.80	140	23.71		
9/28/2000	15310671	04 NAS1399030	BATWING CUTTER - WARRANTY	161 000	249.00	24.90	140	1.60		
10/16/2000	15311179	0	MILEAGE-WARRANTY REPAIR	161 000	675.17	135.03	84	6.43		
10/20/2000	15311337	0	NEW HOLLAND TRACTOR	161 000	52145.00	5214.50	90	521.45		
4/22/2001	15315821	16091	OFFICE EQUIPMENT	161 000	181.98	181.20	60	29.88		
4/22/2001	15315871	16570	BATWING MOWER	161 000	6899.00	689.90	140	57.21		
4/22/2001	15315871	16570	BUSH HOG MOWER	161 000	3249.00	324.90	140	20.89		
4/22/2001	15315871	16570	TILLER	161 000	349.00	34.90	120	2.62		
4/22/2001	15315871	16570	BOXBLADE	161 000	890.00	89.00	120	6.68		
4/22/2001	15315871	16570	DISC HARROW	161 000	2735.00	273.50	140	17.58		
5/27/2001	15317305	04 NAS1399030	WARRANTY/PICK UP	161 000	221.20	22.12	84	2.37		
5/27/2001	15316718	16570	BATWING MOWER	161 000	889.90	88.99	140	57.21		
6/24/2001	15317956	14870	PRESLAB NEW HOLLAND	161 000	2561.39	512.28	100	20.40		
7/22/2001	15318598	14870	WARRANTY PICK UP	161 000	204.47	40.89	100	1.64		
12/23/2001	15322003	0	TIRES FOR NEW HOLLAND TRACTOR	161 000	4533.20	906.64	100	37.07		
1/27/2002	15323870	27717	GILBRATOR FLOW ADAP	161 000	5475.81	547.58	55	89.60		
2/24/2002	15324037	27515	OFFICE EQUIPMENT	161 000	1742.65	174.27	60	28.14		
4/21/2002	15325824	30486	2002 DODGE DAKOTA FOOD TRK	161 000	29739.00	2973.90	60	446.09		
5/26/2002	15326749	30486	TAXES ON FOOD TRUCKS	161 000	297.39	297.39	80	44.61		
5/26/2002	15326934	27612	AIR ANALYZER	161 000	2074.00	2074.00	52	358.96		
5/26/2002	15326740	30517	CALCULATORS	161 000	181.15	181.15	60	27.17		
4/21/2002	15325609	29539	TYPEWRITER/CALCULATOR	161 000	1859.99	186.00	60	27.50		
7/21/2002	15328193	33056	12 VOLT SYSTEM CONVERTER	161 000	284.22	28.42	60	4.28		
7/21/2002	15328193	33056	ELECTRONIC CASH REGISTER	161 000	779.97	78.00	60	11.70		
7/21/2002	15328130	30486	FOOD TRUCK PICK UP & DEL	161 000	2600.00	260.00	60	38.00		
7/21/2002	15328130	30486	FOOD TRANSPORT BASKETS	161 000	2548.00	254.80	60	38.22		
7/21/2002	15327958	32349	BATTERY (WINDOWS CE OS)	161 000	1203.00	120.30	60	18.05		
8/25/2002	15329115	34131	OFFICE EQUIPMENT	161 000	1834.78	183.48	60	27.52		
8/25/2002	15329115	34528	CASH REGISTER & ACCESSORIES	161 000	1214.67	121.47	60	18.22		
9/29/2000	15310347	19-NAS-13-99030	2 LAWNMOWERS	161 000	339.88	33.99	48	6.37		
11/24/2002	15332546	39075	OFFICE EQUIPMENT	161 000	3844.40	384.44	60	57.67		
2/23/2003	15333830	40706	OFFICE EQUIPMENT	161 000	1971.12	197.11	60	29.57		
4/20/2003	15335370	43339	OFFICE EQUIPMENT	161 000	1326.00	132.60	60	19.92		
4/20/2003	15335370	43258	STREET SWEEPER	161 000	5704.00	570.40	60	85.63		
6/22/2003	15336668	45229	BINDING EQUIPMENT	161 000	9271.56	927.16	60	139.07		
6/22/2003	15337664	45185	BINDING EQUIPMENT	161 000	12335.81	1233.58	60	185.04		
7/20/2003	15338239	45185	BINDING EQUIPMENT	161 000	44.25	4.43	60	0.66		
10/19/2003	15340783	50154	FIRE/RESCUE VEHICLE	161 000	297000.00	80000.00	120	2208.00		
2/15/2004	15344333	54760	NEGATIVE AIR MACHINES	161 000	2090.52	209.05	60	31.36		
5/15/2004	15346748	57372	OFFICE EQUIPMENT	161 000	1022.97	102.30	60	15.34		
6/10/2004	15347447	58718	OFFICE EQUIPMENT	161 000	1174.00	117.40	60	17.61		
6/10/2004	15347667	59395	MATERIAL LIFT	161 000	1858.00	185.80	60	27.67		
12/18/2004	15352713	63862	ATV UTILITY VEHICLE	161 000	24534.00	2453.40	60	368.01		
1/16/2005	15353388	66071	COLOR PRINTING CALCULATOR	161 000	1242.90	124.29	60	18.64		
2/13/2005	15354227	66124	HONDA GENERATORS	161 000	4669.00	466.90	60	70.04		
4/17/2005	15356130	69097	TORO MOWERS	161 000	64178.43	6417.84	84	687.63		
7/16/2006	83798		CASH REGISTER & ACCESSORIES	161 000	199.48	3.00	60	3.32		
					\$ 943,805.09	\$ 163,974.28		\$ 9,538.50	\$ 2,177.84	

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DATE	CK NO.	PO NO	DESCRIPTION	ACCT SUB	AMOUNT	RESIDUAL	USEFUL LIFE	MONTHLY DEPRECI	Jun-00
161-100 Equip/Hand Tools Capitalized									
6/1/2000	15307242	6699	AIR IMPACT WRENCHES	161 100	2803.53	280.35	60	42.05	42.05
6/1/2000	15307242	6699	AIR IMPACT WRENCHES	161 100	2646.36	264.64	60	39.70	39.70
6/23/2000	15307818	6616	BAND SAW	161 100	1157.00	115.70	60	17.36	17.36
8/21/2000	15309798	7555	HAMMER KIT	161 100	224.98	22.50	60	3.37	3.37
8/21/2000	15309798	7555	CORLESS DRILL	161 100	539.98	54.00	60	8.10	8.10
8/21/2000	15309798	7555	DRYWALL DRIVER	161 100	79.99	8.00	60	1.20	1.20
8/22/2000	15309798	7556	CORLESS DRILL	161 100	274.98	27.50	60	4.12	4.12
8/22/2000	15309798	7556	CLAW HAMMER	161 100	43.98	4.40	60	0.66	0.66
9/8/2000	15310092	9888	SADDLE BOX	161 100	497.80	49.78	60	7.47	7.47
9/8/2000	15310092	9888	UNDER BED BOX	161 100	920.55	92.06	60	13.81	13.81
10/13/2000	15311141	7779	MASTER TOOL SET	161 100	5487.84	548.78	60	82.32	82.32
12/15/2000	15312877	12620	VACUUM CLEANER	161 100	1375.00	27.50	36	37.43	37.43
2/13/2001	15314572	14701	HAND TOOLS	161 100	2196.62	219.66	60	32.99	32.99
2/15/2001	15314493	15747	HAND TOOLS	161 100	1554.00	155.40	60	23.31	23.31
3/25/2001	15315033	14870	HAND TOOLS	161 100	116.00	11.60	60	1.74	1.74
3/25/2001	15315042	15720	HAND TOOLS	161 100	518.76	51.88	60	7.78	7.78
3/25/2001	15315047	15720	HAND TOOLS	161 100	1844.01	184.40	60	27.66	27.66
3/25/2001	15314861	15762	HAND TOOLS	161 100	430.00	43.00	60	6.45	6.45
3/25/2001	15314791	16138	HAND TOOLS	161 100	2192.25	219.23	60	32.88	32.88
3/25/2001	15315558	16632	HAND TOOLS	161 100	2480.60	248.06	60	37.21	37.21
4/22/2001	15316000	15747	NAIL GUN	161 100	1040.00	104.00	60	15.60	15.60
4/22/2001	15315841	14701	SCREW EXTRACTOR	161 100	40.28	4.03	60	0.60	0.60
5/27/2001	15316960	18122	CARPETWIN 18 VACUUM	161 100	2142.00	42.84	36	58.31	58.31
6/24/2001	1531771545	19983	HAND TOOLS	161 100	2993.69	299.37	60	44.91	44.91
6/24/2001	15317745	19983	VACUUM CLEANER	161 100	132.00	2.64	36	3.59	3.59
7/22/2001	15318461	14870	HAND TOOLS	161 100	161.00	16.10	60	2.72	2.72
7/22/2001	15318727	19983	HAND TOOLS	161 100	69.30	6.93	60	1.04	1.04
8/28/2001	15319971	21247	HAND TOOLS	161 100	999.00	99.90	60	14.99	14.99
8/28/2001	15319971	21247	VACUUM CLEANER	161 100	617.74	123.55	36	18.62	18.62
2/24/2002	15323970	27524	VACUUM CLEANER	161 100	1146.40	22.93	36	31.21	31.21
2/24/2002	15324252	27817	HAND TOOLS	161 100	2184.57	218.46	60	32.47	32.47
3/24/2002	15324766	28895	IMPACT WRENCH(2)	161 100	4500.00	450.00	60	67.50	67.50
2/1/2002	15324013	27913	HAND TOOLS	161 100	2088.60	208.86	60	31.33	31.33
2/8/2002	15324190	26129	VACUUM CLEANER (20)	161 100	7360.00	147.20	36	203.36	203.36
4/21/2002	15325903	30944	BAND SAW	161 100	1075.00	107.50	60	16.13	16.13
4/21/2002	15325803	30644	RIP FENCE FOR BAND SAW	161 100	70.95	7.10	60	1.06	1.06
5/28/2002	15326508	30959	WET DRY VACUUM CLEANERS(2)	161 100	1261.59	25.23	36	34.34	34.34
5/28/2002	15326625	31719	HAND TOOLS	161 100	1147.55	114.78	60	17.21	17.21
6/23/2002	15327783	31344	HAND TOOLS	161 100	425.80	42.58	60	6.39	6.39
6/23/2002	15327783	31344	HAND TOOLS	161 100	569.99	57.00	60	8.55	8.55
6/23/2002	15327189	31344	HAND TOOLS	161 100	326.76	32.68	60	4.90	4.90
7/21/2002	15327999	33308	CORLESS DRILL	161 100	2595.00	259.50	60	38.48	38.48
7/21/2002	15327999	33309	PRESSURE WASHER HOSE & WAND	161 100	1725.00	172.50	60	25.68	25.68
7/21/2002	15327999	33309	GENERATOR	161 100	795.00	79.50	60	11.93	11.93
2/23/2001	15314729	14701	WRENCH SET	161 100	1002.00	100.20	60	15.03	15.03
3/25/2001	15315605	14701	HAND TOOLS	161 100	1086.87	108.69	60	16.30	16.30
3/25/2001	15315606	15326	HAND TOOLS	161 100	63.11	6.31	60	0.95	0.95
12/7/2002	15325669	27431	TSI PORTACOUNT RESPIRATOR	161 100	7528.51	752.85	60	112.93	112.93
8/25/2002	15329388	34982	PALLET JACK (HYDRAULIC LIFT)	161 100	1996.69	199.67	60	29.95	29.95
9/30/2002	15330403	35540	PARTS STORAGE CABINET	161 100	1999.00	199.90	60	29.99	29.99
10/27/2002	15330900	37131	MULTIMETER, CIRCUIT TESTER	161 100	4076.55	407.66	60	61.15	61.15
10/27/2002	15331172	37345	HAND TOOLS ELECTRIC SHOP	161 100	4543.83	454.38	60	68.16	68.16
10/27/2002	15331210	37130	HAND TOOLS ELECTRIC SHOP	161 100	9577.90	957.79	60	143.67	143.67
11/24/2002	15331793	37131	HAND TOOLS ELECTRIC SHOP	161 100	5712.21	571.22	60	85.68	85.68
11/24/2002	15331904	37345	HAND TOOLS ELECTRIC SHOP	161 100	56.03	5.60	60	0.84	0.84
11/24/2002	15331437	37966	HAND TOOLS ELECTRIC SHOP	161 100	4004.15	400.42	60	60.06	60.06
12/22/2002	15332481	38112	TRUCK TOOL BOXES	161 100	4330.00	433.00	60	64.95	64.95
11/24/2002	15332481	39264	HAND TOOLS ELECTRIC SHOP	161 100	1395.00	139.50	60	20.93	20.93
9/30/2002	15330444	37129	HAND TOOLS ELECTRIC SHOP	161 100	4199.30	419.93	60	62.99	62.99
1/28/2003	15333207	37726	CHAIN SAWS	161 100	1715.00	171.50	60	25.73	25.73
1/28/2003	15333266	39239	METAL CUTTING SAWS	161 100	899.60	89.96	60	13.49	13.49
1/28/2003	15333554	41157	HAND TOOLS ELECTRIC SHOP	161 100	4448.20	444.82	60	66.72	66.72
2/23/2003	15334292	39239	METAL CUTTING SAW	161 100	659.90	65.99	60	9.90	9.90
2/23/2003	15334105	41499	HAND TOOLS	161 100	3469.25	346.93	60	52.04	52.04
3/23/2003	15334702	42528	HAND TOOLS PLUMBING SHOP	161 100	1694.80	169.48	60	25.42	25.42
3/23/2003	15334480	41157	HAND TOOLS ELECTRIC SHOP	161 100	239.95	24.00	60	3.60	3.60
3/23/2003	15334649	40833	HAND TOOLS	161 100	1034.77	103.48	60	15.52	15.52
3/23/2003	15335006	42976	HAND TOOLS	161 100	2207.70	220.77	60	33.12	33.12
3/23/2003	15335099	43322	HAND TOOLS	161 100	1399.65	139.97	60	20.99	20.99
3/23/2003	15335099	43357	HAND TOOLS	161 100	38.30	3.83	60	0.57	0.57
3/23/2003	15335099	43422	HAND TOOLS	161 100	1290.60	129.06	60	19.36	19.36
4/20/2003	15335370	43322	HAND TOOLS	161 100	4938.00	493.80	60	74.07	74.07
4/20/2003	15335601	43357	HAND TOOLS	161 100	1133.87	113.39	60	17.01	17.01
4/20/2003	15335370	43422	TRUCK TOOL BOXES	161 100	1792.00	179.20	60	26.88	26.88
4/20/2003	15335370	39722	GENERATORS	161 100	1640.00	164.00	60	24.60	24.60
5/11/2003	15336161	43357	HAND TOOLS	161 100	1544.90	154.49	60	23.17	23.17
5/11/2003	15336161	44624	HAND TOOLS	161 100	1437.14	143.71	60	21.56	21.56
5/11/2003	15336437	43430	HAND TOOLS	161 100	4715.48	471.55	60	70.73	70.73
6/22/2003	15336940	46191	HAND TOOLS ELECTRIC SHOP	161 100	2288.34	228.83	60	34.33	34.33
7/29/2003	15338208	47170	GAS DRILL	161 100	1138.27	113.83	60	17.07	17.07

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DATE	CK NO	PO NO	DESCRIPTION	ACCT SUB	AMOUNT	RESIDUAL	USEFUL LIFE	MONTHLY DEPRECI	Jun-00
7/20/2003	15338117	45468	HAND TOOLS	161 100	839.03	83.90	60	12.59	
7/20/2003	15338423	46181	HAND TOOLS ELECTRIC SHOP	161 100	279.00	27.90	60	4.19	
7/20/2003	15338648	46009	HAND TOOLS	161 100	3678.50	367.85	60	55.18	
8/24/2003	15339713	49826	HAND TOOLS	161 100	5692.21	569.22	60	85.32	
9/30/2003	15339863	47170	HAND TOOLS	161 100	461.85	46.19	60	6.93	
9/30/2003	15340226	47170	HAND TOOLS	161 100	67.00	6.70	60	1.05	
9/30/2003	15340238	46865	BUFFING MACHINE	161 100	2634.00	52.68	36	71.70	
10/19/2003	15340680	31719	HAND TOOLS	161 100	21.90	2.19	60	0.33	
11/16/2003	15341986	52391	HAND TOOLS	161 100	181.00	18.10	60	2.72	
11/16/2003	15341986	52400	HAND TOOLS	161 100	1292.84	129.28	60	19.39	
12/22/2003	15342337	52391	HAND TOOLS	161 100	499.00	49.90	60	7.34	
12/22/2003	15342337	52391	VACUUM CLEANERS	161 100	1334.90	26.70	36	36.34	
12/22/2003	15342337	52400	HAND TOOLS	161 100	551.31	55.13	60	8.27	
12/22/2003	15342339	52729	HAND TOOLS	161 100	1221.00	122.10	60	18.32	
12/22/2003	15342366	48826	HAND TOOLS	161 100	140.70	14.07	60	2.11	
12/22/2003	15342450	52457	HAND TOOLS	161 100	1760.00	176.00	60	26.40	
12/22/2003	15342450	52456	HAND TOOLS	161 100	463.29	46.33	60	6.95	
12/22/2003	15342720	52945	HAND TOOLS	161 100	2791.10	279.11	60	41.42	
1/18/2004	15343361	52391	HAND TOOLS	161 100	53.55	5.36	60	0.80	
1/18/2004	15343673	53999	HAND TOOLS	161 100	4403.25	440.33	60	66.05	
1/18/2004	15343974	52945	HAND TOOLS	161 100	1218.88	121.89	60	18.28	
2/15/2004	15344168	52845	HAND TOOLS	161 100	2444.40	244.44	60	36.67	
2/15/2004	15344342	52456	HAND TOOLS	161 100	662.50	66.25	60	9.94	
2/15/2004	15344397	52391	HAND TOOLS	161 100	146.90	14.69	60	2.20	
2/15/2004	15344440	53168	HAND TOOLS	161 100	3753.62	375.36	60	56.30	
3/21/2004	15344764	55438	HAND TOOLS	161 100	1215.00	121.50	60	18.23	
3/21/2004	15344979	55824	HAND TOOLS	161 100	1440.45	144.05	60	21.61	
4/18/2004	15345461	55917	HAND TOOLS	161 100	1350.19	135.02	60	20.25	
4/18/2004	15345719	56959	HAND TOOLS	161 100	1217.00	121.70	60	18.26	
4/18/2004	15346224	53168	HAND TOOLS	161 100	54.13	5.41	60	0.81	
5/16/2004	15347081	58848	HAND TOOLS	161 100	2923.00	292.30	60	43.85	
6/10/2004	15347355	45430	HAND TOOLS	161 100	9.56	0.96	60	0.14	
6/10/2004	15347484	58812	HAND TOOLS	161 100	2165.06	216.51	60	32.48	
6/10/2004	15347667	59636	HAND TOOLS	161 100	2976.30	297.63	60	44.64	
6/10/2004	15347886	58848	HAND TOOLS	161 100	942.95	94.30	60	14.14	
6/10/2004	15347267	59395	HAND TOOLS	161 100	39.50	3.95	60	0.59	
7/18/2004	15348349	60341	WET DRY VACUUM CLEANERS	161 100	6212.91	124.26	36	169.13	
7/18/2004	15348609	60775	HAND TOOLS	161 100	2730.00	273.00	60	40.95	
7/18/2004	15348728	60019	HAND TOOLS ELECTRIC SHOP	161 100	1475.59	147.56	60	22.13	
9/30/2004	15350445	63067	HAND TOOLS	161 100	889.65	88.97	60	13.34	
10/17/2004	15350758	63067	HAND TOOLS	161 100	1380.00	138.00	60	20.70	
10/17/2004	15350979	53168	HAND TOOLS	161 100	117.54	11.75	60	1.76	
10/17/2004	15350948	63242	HAND TOOLS	161 100	884.05	88.41	60	13.26	
10/17/2004	15351277	63981	HAND TOOLS	161 100	1519.00	151.90	60	22.79	
11/14/2004	15352166	63981	HAND TOOLS	161 100	1352.00	135.20	60	20.28	
11/14/2004	15352188	65349	HAND TOOLS	161 100	19.29	1.93	60	0.29	
11/14/2004	15351622	64338	HAND TOOLS	161 100	998.00	99.80	60	14.97	
11/14/2004	15352166	63242	HAND TOOLS	161 100	208.70	20.87	60	3.10	
12/19/2004	15352959	65385	HAND TOOLS	161 100	1460.80	146.08	60	21.91	
12/19/2004	15352656	65771	HAND TOOLS	161 100	31.92	3.19	60	0.48	
12/19/2004	15352731	63981	HAND TOOLS	161 100	106.00	10.60	60	1.59	
1/16/2005	15353530	63981	HAND TOOLS	161 100	106.00	10.60	60	1.59	
3/20/2005	15354766	67594	HAND TOOLS	161 100	6327.00	632.70	60	94.91	
3/20/2005	15355072	68546	HAND TOOLS	161 100	2947.01	294.70	60	44.21	
5/15/2005	15356584	70005	HAND TOOLS	161 100	3897.83	389.78	60	58.32	
5/15/2005	15356762	70420	INJECTORY HP SYSTEM	161 100	2957.00	295.70	60	44.36	
5/15/2005	15356600	67594	HAND TOOLS	161 100	4.61	0.46	60	0.07	
6/19/2005	15357561	70447	HAND TOOLS	161 100	1791.18	179.12	60	26.87	
6/19/2005	15357561	71235	EUROCLEAN HEPA VACUUM CLEANER	161 100	1890.00	189.00	60	28.20	
7/17/2005	15357987	70005	HAND TOOLS	161 100	23.41	2.34	60	0.35	
7/17/2005	15358136	70447	HAND TOOLS	161 100	160.15	16.02	60	2.40	
7/17/2005	15358179	71235	FLOOR NOZZLE FOR HEPA VACUUM	161 100	236.00	23.60	60	3.54	
7/17/2005	15358304	72020	HAND TOOLS	161 100	4313.15	431.32	60	64.70	
8/22/2005	15359005	71971	HAND TOOLS	161 100	886.95	88.70	60	13.00	
8/22/2005	15358588	72871	HAND TOOLS	161 100	1660.00	166.00	60	24.90	
10/16/2005	15360013	75179	CUSTODIAL EQUIPMENT	161 100	2553.00	0.00	60	42.55	
10/16/2005	15359864	74925	HAND TOOLS	161 100	9896.90	0.00	60	164.95	
11/13/2005	15360179	75084	CUSTODIAL EQUIPMENT	161 100	3247.02	0.00	60	54.02	
11/13/2005	15360244	75880	AIR COMPRESSOR	161 100	1718.29	0.00	60	28.64	
12/18/2005	15360673	74925	HAND TOOLS	161 100	1905.50	0.00	60	31.76	
12/18/2005	18361118	75084	CUSTODIAL EQUIPMENT	161 100	10742.53	0.00	60	179.04	
11/15/2006	15361806	68893	SHINDIAWA EDGER	161 100	1052.97	0.00	60	17.55	
2/12/2006	15361942	74925	HAND TOOLS	161 100	233.88	0.00	60	3.90	
2/12/2006	15361856	75485	HAND TOOLS	161 100	365.22	0.00	60	6.09	
2/12/2006	15362359	78239	ADVANCE REEL CLEANER	161 100	2553.00	0.00	60	42.55	
3/19/2006	15362655	75485	HAND TOOLS	161 100	10.24	0.00	60	0.17	
4/16/2006	15363767	79993	HAND TOOLS	161 100	2956.93	0.00	60	49.28	
4/16/2006	15363586	80098	HAND TOOLS	161 100	3031.17	0.00	60	50.52	
5/14/2006	15364094	79993	HAND TOOLS	161 100	289.00	0.00	60	4.82	
6/18/2006	15364622	75485	HAND TOOLS	161 100	804.26	0.00	60	13.40	
6/18/2006	81650	81650	HAND TOOLS	161 100	1141.59	0.00	60	19.03	
6/18/2006	15365319	81516	HAND TOOLS	161 100	2180.00	0.00	60	36.33	
6/18/2006	15365119	82635	HAND TOOLS	161 100	1737.05	0.00	60	28.95	
7/16/2006	15365523	82862	HEAVY DUTY VACUUM	161 100	1939.58	0.00	60	32.33	
7/16/2006	15365913	83095	HAND TOOLS	161 100	3554.00	0.00	60	59.23	
7/16/2006	15365913	74925	HAND TOOLS	161 100	631.60	0.00	60	10.56	
7/16/2006	15365913	82635	HAND TOOLS	161 100	120.00	0.00	60	2.00	
7/16/2006	15365986	83093	HAND TOOLS	161 100	2619.40	0.00	60	43.66	
					\$ 334,445.93	\$ 23,041.95		\$ 5,453.76	\$ 99.10

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DATE	CK NO.	PO NO	DESCRIPTION	ACCT SUB	AMOUNT	RESIDUAL	USEFUL LIFE	MONTHLY DEPREC	Jun-00
161-200 Garden Equip - Capitalized									
7/23/2000	15308540	7236	BUSH HOG MOWER	161 200	1550.00	155.00	140	9.96	
8/7/2000	15309327	7476	GAS WEED EATERS	161 200	2243.50	224.35	48	42.07	
8/25/2002	15329073	33307	OPEN TRAILER	161 200	1057.00	105.70	60	15.86	
11/24/2002	15331721	37785	HYDRO SEEDING SYSTEM SKID	161 200	3895.00	389.50	60	58.43	
2/23/2003	15333780	40926	RAYCO STUMP GRINDER	161 200	4116.00	411.60	120	30.87	
2/23/2003	15334192	40962	WEED EATERS, BLOWER & EDGERS	161 200	2878.52	287.85	48	53.97	
2/23/2003	15334192	41432	RIDING MOWER	161 200	4791.88	479.19	80	53.91	
6/22/2003	15337114	45468	TRAILER	161 200	433.00	43.30	60	6.50	
6/22/2003	15337266	43858	LOADER WITH BUCKET	161 200	4200.00	420.00	60	63.00	
11/16/2003	15341998	52244	GARDEN EQUIPMENT	161 200	3421.48	342.15	60	51.32	
12/22/2003	15342347	52244	GARDEN EQUIPMENT	161 200	486.47	48.65	60	7.30	
3/20/2005	15355072	68693	HAND TOOLS	161 200	3473.90	347.39	60	52.11	
4/16/2006	15363802	79821	RED MAX WEED EATER	161 200	1269.96	0.00	60	21.17	
					\$ 33,616.71	\$ 3,254.68		\$ 466.45	\$ -
Computer Equipment									
2/23/2003	15334381	42223	HANDHELD COMPUTERS	165 000	7595.00	1519.00	60	101.27	
5/11/2003	15336183	44638	HANDHELD ACCESSORIES	165 000	1672.32	334.46	60	22.30	
11/22/2000		INVD1 ORG107	COMPUTER EQUIPMENT	165 000	3653.29	730.66	60	48.71	
12/09/2000	15312999	0	LAPTOP COMPUTERS	165 000	7068.65	1413.73	60	94.25	
1/11/2001	15313533		CDRW EXTER DRIVE LAPTOPS	165 000	381.40	72.28	60	4.82	
3/25/2001	15315422		COMPUTER SERVER	165 000	18537.00	3667.40	60	244.49	
8/26/2001	15316973		3 3/2 BIT CARDS - LAPTOP	165 000	163.47	32.69	60	2.18	
8/26/2001	15319770		HP LAPTOP	165 000	2144.94	428.99	60	28.60	
2/23/2001	15314629		COMPUTER	165 000	2636.00	527.20	60	35.15	
7/20/2001	15319039		CARRY CASES-LAPTOPS	165 000	54.51	17.10	60	1.14	
3/24/2002	15324651		CD TOWER BURNER/PRINTER	165 000	2879.56	575.91	60	38.39	
8/25/2002	15328878		LAPTOP COMPUTERS	165 000	1799.98	360.00	60	24.00	
1/26/2003	15333354		CDRW DRIVES/MEMORY CAMERA	165 000	1187.35	237.47	60	15.63	
3/23/2003	15334918		LAPTOP COMPUTERS	165 000	6069.99	1214.00	60	80.93	
5/11/2003	15336183		SERVER UPGRADE	165 000	12107.00	2421.40	60	161.43	
6/22/2003	15337337		COMPAQ LAPTOPS	165 000	1999.98	400.00	60	29.67	
8/24/2003	15338939	48645	PROJECTOR AND ACCESSORIES	165 000	1614.68	322.94	60	21.53	
8/24/2003	15338957	48311	DELL POWEREDGE SERVER	165 000	12796.00	2559.20	60	170.61	
12/21/2003	15342902	53301	DELL POWEREDGE SERVER CONTIN	165 000	8653.19	1730.64	60	115.38	
4/18/2004	15345962	57327	SERVER NETWORK CARD & ACC	165 000	144.00	28.80	60	1.92	
4/18/2004	15345962	57493	WINDOWS SERVER OP SYS	165 000	3481.00	696.20	60	46.15	
5/16/2004	15346866	57327	8-PORT WORKGROUP SWITCH	165 000	144.00	28.80	60	1.92	
5/16/2004	15346866	57327	QUANTUM SUPER LDR SCSI	165 000	5899.00	1179.80	60	76.65	
4/17/2005	15356191	69561	HP IPAQ POCKET PC	165 000	1299.98	260.00	60	17.33	
6/19/2005	15357401	71729	HP COMPAQ TABLET PC	165 000	4081.90	816.38	60	54.43	
6/19/2005	15357538	71636	DELL POWEREDGE SERVER 6800	165 000	22663.65	4532.73	60	302.18	
9/30/2005	15359232	72477	DVD/CD COPY MASTER II	165 000	1195.00	239.00	60	15.93	
10/16/2005	15359805	74765	HP IPAQ POCKET PC	165 000	6389.33	0.00	60	106.49	
10/16/2005	15359858	74763	IPAQ HARDWARE	165 000	1325.00	0.00	60	22.08	
					\$ 139,428.17	\$ 26,342.77		\$ 1,864.76	\$ -
Unallowable									
DATE	CK NO.	PO NO	DESCRIPTION	ACCT SUB	AMOUNT				
8/23/2000	15307918	6614	DIE GRINDERS	161 100	-793.00				
8/23/2000	15307918	6615	ANGLE GRINDERS	161 100	-389.00				
8/9/2000	15309315	6910		161 100	-755.46				
8/18/2000	15309604	7497		161 100	-283.00				
8/18/2000	15309604	7498		161 100	-293.29				
8/9/2000	15309263	7514		161 100	-346.00				
8/23/2000	15307911	7554		161 100	-66.78				
8/22/2000	15309798	7556		161 100	-399.94				
8/22/2000	15309721	7573	LAMINATING TRIMMER	161 100	-189.75				
8/9/2000	15309311	7573	PORTA PONY	161 100	-7.19				
9/16/2000	15310568	7560	ARBOR SAW	161 100	-389.95				
8/22/2000	15309013	8850	GRINDER ELEC KIT	161 100	-560.57				
8/22/2000	15309722	8851	BATTERY DRILL	161 100	-796.00				
8/22/2000	15309798	9649		161 100	-346.93				
9/8/2000	15310126	9616		161 100	-173.18				
9/30/2000	15310856		STANDARD DEAD BLOW HAMM		-141.51				
9/30/2000	15310854		3/4" IMPACT WRENCH		-403.75				
10/29/2000	G65M	9021			-349.19				
10/29/2000	G65M	7479			-130.47				
10/29/2000	G65M	7478			-54.49				
11/3/2000	15311676	12037	CUTTER WHEELS	161 000	-58.02				
11/3/2000	15311726	7499	SIDE CUTTERS	161 100	-21.77				
11/3/2000	15311726	7499	TAPE MEASURE	161 100	-31.18				
3/23/2003	15334979	42270	HANDHELD SFTWRE UPGRADE	165 000	-160.00				
			UNALLOWABLE DEPRECIATION	913 000	7130.42				

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Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
264.52	264.52	264.52	264.52	264.52	264.52	264.52	264.52	222.20	222.20	222.20	222.20
160.86	160.86	160.86	160.86	160.86	160.86	160.86	160.86	137.94	137.94	137.94	137.94
224.76	224.76	224.76	224.76	224.76	224.76	224.76	224.76	188.80	188.80	188.80	188.80
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
224.76	224.76	224.76	224.76	224.76	224.76	224.76	224.76	188.80	188.80	188.80	188.80
224.76	224.76	224.76	224.76	224.76	224.76	224.76	224.76	188.80	188.80	188.80	188.80
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
134.77	134.77	134.77	134.77	134.77	134.77	134.77	134.77	151.62	151.62	151.62	151.62
2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	1.60	1.60	1.60	1.60
85.43	85.43	85.43	85.43	85.43	85.43	85.43	85.43	57.66	57.66	57.66	57.66
2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	1.60	1.60	1.60	1.60
85.43	85.43	85.43	85.43	85.43	85.43	85.43	85.43	57.66	57.66	57.66	57.66
2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	1.60	1.60	1.60	1.60
85.43	85.43	85.43	85.43	85.43	85.43	85.43	85.43	57.66	57.66	57.66	57.66
50.30	50.30	50.30	50.30	50.30	50.30	50.30	50.30	33.96	33.96	33.96	33.96
19.03	19.03	19.03	19.03	19.03	19.03	19.03	19.03	14.99	14.99	14.99	14.99
35.12	35.12	35.12	35.12	35.12	35.12	35.12	35.12	23.71	23.71	23.71	23.71
1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.10	1.10	1.10	1.10
2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	1.60	1.60	1.60	1.60
6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43
496.62	496.62	496.62	496.62	496.62	496.62	496.62	496.62	521.45	521.45	521.45	521.45
								28.98	28.98	28.98	28.98
								57.21	57.21	57.21	57.21
								20.89	20.89	20.89	20.89
								2.62	2.62	2.62	2.62
								6.68	6.68	6.68	6.68
								17.58	17.58	17.58	17.58
								2.37	2.37	2.37	2.37
								57.21	57.21	57.21	57.21
											20.49
\$ 2,177.84	\$ 2,177.84	\$ 2,549.70	\$ 3,052.75	\$ 3,052.75	\$ 3,052.75	\$ 3,052.75	\$ 3,052.75	\$ 2,920.51	\$ 3,054.47	\$ 3,114.05	\$ 3,134.54

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Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
222.20	222.20	222.20	222.20	222.20	222.20	222.20	222.20	222.20	222.20	222.20	222.20
137.94	137.94	137.94	137.94	137.94	137.94	137.94	137.94	137.94	137.94	137.94	137.94
188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62	151.62
188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80	188.80
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66
1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66	57.66
33.96	33.96	33.96	33.96	33.96	33.96	33.96	33.96	33.96	33.96	33.96	33.96
14.99	14.99	14.99	14.99	14.99	14.99	14.99	14.99	14.99	14.99	14.99	14.99
23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71
1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43
521.45	521.45	521.45	521.45	521.45	521.45	521.45	521.45	521.45	521.45	521.45	521.45
28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98
57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21
20.89	20.89	20.89	20.89	20.89	20.89	20.89	20.89	20.89	20.89	20.89	20.89
2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62
6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.68
17.58	17.58	17.58	17.58	17.58	17.58	17.58	17.58	17.58	17.58	17.58	17.58
2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21
20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49
1.64	1.64	0.11	0.11	-1.70	-1.64	1.64	1.64	1.64	1.64	1.64	1.64
37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07	37.07
89.60	89.60	89.60	89.60	89.60	89.60	89.60	89.60	89.60	89.60	89.60	89.60
28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14
446.09	446.09	446.09	446.09	446.09	446.09	446.09	446.09	446.09	446.09	446.09	446.09
358.96	358.96	358.96	358.96	358.96	358.96	358.96	358.96	358.96	358.96	358.96	358.96
27.17	27.17	27.17	27.17	27.17	27.17	27.17	27.17	27.17	27.17	27.17	27.17
27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90
4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26
11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70
39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00
38.22	38.22	38.22	38.22	38.22	38.22	38.22	38.22	38.22	38.22	38.22	38.22
18.05	18.05	18.05	18.05	18.05	18.05	18.05	18.05	18.05	18.05	18.05	18.05
27.52	27.52	27.52	27.52	27.52	27.52	27.52	27.52	27.52	27.52	27.52	27.52
18.22	18.22	18.22	18.22	18.22	18.22	18.22	18.22	18.22	18.22	18.22	18.22
6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37
					57.67	57.67	57.67	57.67	57.67	57.67	57.67
									855.63	855.63	855.63
										139.07	139.07
											185.04
\$ 4,712.77	\$ 4,759.51	\$ 4,756.99	\$ 4,756.99	\$ 4,761.58	\$ 4,816.19	\$ 4,816.19	\$ 4,816.19	\$ 4,809.64	\$ 5,774.08	\$ 5,714.94	\$ 6,663.73

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Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04
12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59
4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19
55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.18
	85.27	85.38	85.38	85.38	85.38	85.38	85.38	85.38	85.38	85.38	85.38	85.38
		6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
		10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05
		71.70	71.70	71.70	71.70	71.70	71.70	71.70	71.70	71.70	71.70	71.70
			0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
				2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72
				18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31
					7.34	7.34	7.34	7.34	7.34	7.34	7.34	7.34
					36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34
					8.27	8.27	8.27	8.27	8.27	8.27	8.27	8.27
					18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32
					2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11
					26.40	26.40	26.40	26.40	26.40	26.40	26.40	26.40
					6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
					41.42	41.42	41.42	41.42	41.42	41.42	41.42	41.42
					0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
					66.05	66.05	66.05	66.05	66.05	66.05	66.05	66.05
					18.28	18.28	18.28	18.28	18.28	18.28	18.28	18.28
						36.67	36.67	36.67	36.67	36.67	36.67	36.67
						9.94	9.94	9.94	9.94	9.94	9.94	9.94
						2.20	2.20	2.20	2.20	2.20	2.20	2.20
						56.30	56.30	56.30	56.30	56.30	56.30	56.30
							18.23	18.23	18.23	18.23	18.23	18.23
								21.61	21.61	21.61	21.61	21.61
									20.25	20.25	20.25	20.25
									18.26	18.26	18.26	18.26
									0.73	0.81	0.81	0.81
										43.85	43.85	43.85
											0.14	0.14
											32.48	32.48
											44.64	44.64
											14.14	14.14
											0.59	0.59
											169.13	169.13
											40.95	40.95
											22.13	22.13
\$ 2,515.19	\$ 2,600.46	\$ 2,689.25	\$ 2,689.58	\$ 2,708.61	\$ 2,816.33	\$ 2,903.46	\$ 3,011.65	\$ 3,051.49	\$ 3,090.73	\$ 3,076.35	\$ 3,164.78	\$ 3,396.93

Contract NNS07AB21C

Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05
9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.96	15.96	15.96	15.96	15.96	15.96	15.96	15.96	15.96	15.96	15.96	15.96
58.43	58.43	58.43	58.43	58.43	58.43	58.43	58.43	58.43	58.43	58.43	58.43
30.87	30.87	30.87	30.87	30.87	30.87	30.87	30.87	30.87	30.87	30.87	30.87
53.97	53.97	53.97	53.97	53.97	53.97	53.97	53.97	53.97	53.97	53.97	53.97
53.91	53.91	53.91	53.91	53.91	53.91	53.91	53.91	53.91	53.91	53.91	53.91
6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
63.00	63.00	63.00	63.00	63.00	63.00	63.00	63.00	63.00	63.00	63.00	63.00
51.32	51.32	51.32	51.32	51.32	51.32	51.32	51.32	51.32	51.32	51.32	51.32
7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	52.11	52.11	52.11	52.11
\$ 351.12	\$ 351.12	\$ 351.12	\$ 351.12	\$ 351.12	\$ 351.12	\$ 351.12	\$ 403.23	\$ 403.23	\$ 403.23	\$ 403.23	\$ 403.23
101.27	101.27	101.27	101.27	101.27	101.27	101.27	101.27	101.27	101.27	101.27	101.27
48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71	48.71
94.25	94.25	94.25	94.25	94.25	94.25	94.25	94.25	94.25	94.25	94.25	94.25
4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82
244.49	244.49	244.49	244.49	244.49	244.49	244.49	244.49	244.49	244.49	244.49	244.49
2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18
28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60
35.15	35.15	35.15	35.15	35.15	35.15	35.15	35.15	35.15	35.15	35.15	35.15
1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
38.39	38.39	38.39	38.39	38.39	38.39	38.39	38.39	38.39	38.39	38.39	38.39
24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83
80.93	80.93	80.93	80.93	80.93	80.93	80.93	80.93	80.93	80.93	80.93	80.93
161.43	161.43	161.43	161.43	161.43	161.43	161.43	161.43	161.43	161.43	161.43	161.43
26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67
21.53	21.53	21.53	21.53	21.53	21.53	21.53	21.53	21.53	21.53	21.53	21.53
170.61	170.61	170.61	170.61	170.61	170.61	170.61	170.61	170.61	170.61	170.61	170.61
115.35	115.35	115.35	115.35	115.35	115.35	115.35	115.35	115.35	115.35	115.35	115.35
1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
46.15	46.15	46.15	46.15	46.15	46.15	46.15	46.15	46.15	46.15	46.15	46.15
78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65
								17.33	17.33	17.33	17.33
										54.43	54.43
										302.18	302.18
\$ 1,366.29	\$ 1,366.29	\$ 1,366.29	\$ 1,366.29	\$ 1,366.29	\$ 1,366.29	\$ 1,366.29	\$ 1,366.29	\$ 1,383.62	\$ 1,383.62	\$ 1,740.23	\$ 1,740.23

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Jul-06	TOTAL DEP TO DATE	TOTAL LEFT TO DEPREC.
151.62	11219.72	1516.18
222.20	16442.80	5777.20
137.94	10207.19	6345.01
188.80	13971.20	4908.80
151.62	11219.72	1516.18
151.62	11219.72	1516.18
188.80	13971.20	4908.80
151.62	11219.72	1516.18
151.62	11219.72	1516.18
151.62	11219.72	1516.18
151.62	11219.72	1516.18
1.80	113.66	110.45
57.66	4094.16	3978.84
1.60	113.66	110.45
57.66	4094.16	3978.84
1.60	113.66	110.45
57.66	4094.16	3978.84
33.96	2410.86	2342.94
14.98	1003.94	734.26
23.71	1683.31	1635.89
1.10	78.45	78.23
1.60	113.66	110.45
6.43	456.54	83.59
521.45	37022.95	9907.55
0.00	1738.79	0.00
57.21	3661.33	4347.77
20.88	1336.77	1587.33
2.62	167.55	146.65
6.68	427.26	373.74
17.58	1125.23	1336.27
2.37	149.31	49.77
57.21	3661.33	4404.86
20.49	1270.44	778.67
1.64	100.02	63.66
37.07	2375.69	1630.87
89.60	4838.62	89.61
26.14	1411.55	156.84
446.09	23196.43	3568.88
446.09	23196.43	3568.88
44.61	2275.25	401.26
368.96	18306.96	359.04
27.17	1385.67	244.88
27.90	1478.70	195.29
4.26	208.74	47.05
11.70	573.30	128.67
39.00	1911.00	429.00
38.22	1872.78	420.42
18.05	884.44	198.26
27.52	1320.96	330.34
18.22	874.56	218.64
0.00	305.90	0.00
67.67	2537.48	922.48
29.57	1241.94	532.07
19.92	796.80	398.40
855.63	34225.20	17112.60
139.07	5284.66	3059.74
185.04	7031.52	4070.71
0.66	24.42	15.41
2208.00	96600.00	110400.00
31.36	840.60	940.87
15.34	414.18	506.49
17.61	457.86	598.74
27.87	724.62	947.58
368.01	8096.22	13984.38
16.64	354.16	764.45
70.04	1260.72	2941.38
687.83	11002.06	46758.51
3.32	198.16	198.16
\$ 9,503.16	\$ 484,468.28	\$ 295,362.53

Contract NNS07AB21C

Jul-06	TOTAL DEP TO DATE	TOTAL LEFT TO DEPREC
	2523.18	0.00
	2381.72	0.00
	1041.30	0.00
	202.48	0.00
	485.98	0.00
	71.89	0.00
	247.48	0.00
	39.58	0.00
	455.49	-7.47
	842.30	-13.81
	4957.33	-18.28
0.00	1347.50	0.00
	197.85	0.00
	1398.60	0.00
	104.40	0.00
	466.87	0.02
	1659.81	0.00
	387.00	0.00
	1972.98	0.05
	2232.55	-0.01
0.00	936.00	0.00
0.00	36.20	0.05
0.00	2099.16	0.00
0.00	2694.37	-0.05
0.00	129.36	0.00
2.72	165.90	-2.99
1.04	63.41	-1.04
8.99	539.14	-0.04
0.00	605.39	0.00
0.00	1123.48	0.00
32.47	1753.30	194.81
87.50	3577.50	472.50
31.33	1691.77	187.97
0.00	7212.81	-0.01
16.13	836.51	129.00
1.06	55.34	8.52
-34.22	791.50	444.86
17.21	877.71	155.08
6.38	319.49	63.73
8.55	427.50	85.49
4.90	245.00	49.08
38.48	1885.52	422.98
25.88	1268.12	284.38
11.93	564.57	130.84
0.00	901.80	0.00
0.00	976.18	0.00
0.00	56.80	0.00
112.93	6211.15	564.51
29.95	1437.60	359.42
29.99	1409.53	399.57
61.15	2812.90	855.09
68.16	3135.36	654.09
143.67	6608.82	2011.29
85.88	3855.80	1285.39
0.84	37.80	12.83
60.06	2755.12	848.62
64.95	2857.80	1039.20
20.93	920.92	334.58
62.99	2960.53	818.84
25.73	1106.18	437.33
15.46	580.24	229.40
66.72	2899.09	1134.29
9.90	415.80	176.11
52.04	2185.68	936.65
25.42	1041.44	483.88
3.60	147.60	68.36
15.52	636.32	294.97
33.12	1357.92	629.01
20.99	860.59	399.10
0.57	23.37	11.10
19.36	793.76	367.78
74.07	2992.80	1481.40
17.01	890.40	340.08
26.88	1075.20	537.80
20.15	808.00	670.00
23.17	903.63	486.78
21.56	840.84	452.59
70.73	2758.48	1485.45
34.33	1304.54	754.97
17.07	631.59	392.85

Contract NNS07AB21C

Jul-06	TOTAL DEP TO DATE	TOTAL LEFT TO DEPREC
12.59	465.83	289.30
4.18	155.03	96.07
55.18	2041.66	1268.99
85.38	3073.57	2049.30
6.93	242.55	173.12
10.05	351.75	251.25
71.70	2509.50	71.82
0.33	11.22	8.49
2.72	89.76	73.14
19.39	630.63	532.03
7.34	234.88	205.22
36.34	1162.88	145.32
8.27	264.64	231.54
16.32	586.24	512.66
2.11	67.52	59.11
26.40	844.80	739.20
6.95	222.40	194.56
41.42	1325.44	1159.55
0.80	24.80	23.40
66.05	2047.55	1915.38
18.28	566.68	530.31
36.87	1100.10	1059.86
9.94	298.20	298.05
2.20	66.00	66.21
66.30	1689.00	1689.06
18.23	528.67	564.83
21.61	626.69	669.72
20.25	567.00	648.17
18.26	511.28	584.02
0.81	22.60	20.12
43.85	1183.95	1446.75
0.14	3.64	4.96
32.48	844.48	1104.07
44.64	1160.64	1518.03
14.14	367.64	481.02
0.59	15.34	20.21
169.13	4228.25	1860.40
40.95	1023.75	1433.25
22.13	553.25	774.79
13.34	306.82	493.87
20.70	455.40	786.80
2.06	45.32	78.47
13.26	291.72	503.93
22.79	501.38	865.72
20.28	448.16	770.84
0.29	6.38	10.98
14.94	328.68	569.52
3.10	68.20	117.83
21.91	482.02	832.70
0.48	10.56	18.17
1.59	34.98	60.42
1.59	30.21	65.19
94.91	1613.47	4080.83
44.21	751.57	1900.74
58.32	874.80	2624.25
44.36	665.40	1995.90
0.07	1.05	3.10
26.87	376.18	1236.88
28.20	394.80	1297.20
0.35	4.55	16.52
2.40	31.20	112.94
3.54	46.02	166.39
64.70	841.10	3040.74
13.00	156.00	624.26
24.90	298.80	1185.20
42.55	425.50	2127.60
164.95	1649.50	8247.40
540.28	4892.52	27654.50
28.64	257.76	1460.53
31.76	254.08	1651.42
179.04	1432.32	9310.21
17.55	122.85	930.12
0.00	13.44	200.44
6.09	36.54	328.88
42.55	255.30	2297.70
0.17	0.85	9.39
49.28	197.12	2759.81
50.52	202.08	2629.09
4.82	14.46	274.54
13.40	26.80	777.46
19.03	38.06	1103.53
36.33	72.66	2107.34
28.95	57.90	1679.15
32.33	32.33	1907.25
56.23	56.23	3494.77
13.86	13.86	817.74
2.00	2.00	118.00
43.66	43.66	2675.74
\$ 4,675.20	\$ 164,701.80	\$ 148,702.18

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

ATTACHMENT J-11

LIST OF APPLICABLE MANUALS, REGULATIONS, AND PROCEDURES

SEE TECHNICAL REFERENCE LIBRARY: <https://sscinfo.ssc.nasa.gov/fosc/trl/>

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

ATTACHMENT J-12

CONFLICT OF INTEREST AVOIDANCE PLAN

(TO BE PROVIDED BY OFFEROR)

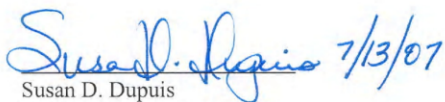
**PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER
ATTACHMENTS**

ATTACHMENT J-13

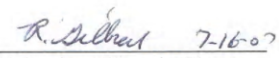
AWARD TERM PLAN

JOHN C. STENNIS SPACE CENTER
FACILITY OPERATING SERVICES CONTRACT
AWARD TERM PLAN
JACOBS TECHNOLOGY, INC
CONTRACT NNS07AB21C
Effective August 28, 2007

Concurred by:


Susan D. Dupuis
Procurement Officer

Approval by:


Richard J. Gilbrech, Ph.D.
Center Director

AWARD TERM PLAN
FOR
FACILITY OPERATING SERVICES CONTRACT
Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007
Contents

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IV. Method for Determining Award Term.....	5
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Attachments

- III-A Evaluation Periods and Available Award Term Periods
- III-B Grading Table
- III-C Performance Categories and Evaluation Criteria
- IV-A Actions and Schedules for Evaluation Rating and Award Term Determinations
- IV-B General Instructions for Performance Monitors

I. Introduction

1. This Award Term Plan (ATP) covers the administration of the award term provision of the Facility Operating Services Contract (FOSC), Contract No. NNS07AB21C, dated August 28, 2007, with Jacobs Technology, Inc. The FOSC is a cost-plus-incentive-fee (CPIF)/Award Term (AT) performance-based contract. The contract was awarded in accordance with the provisions of RFP No. NNS06ZBA004R.

2. General - The purpose of the award-term incentive is to motivate the contractor to provide excellent performance during the life of the contract. This incentive is designed to foster long-term relationships by rewarding contractors with additional period(s) of performance in compensation for achieving desired objectives at a high level of performance and reduced costs. For this contract, it is possible that the contractor may earn up to a ten year period of performance without further competition.

The contractor may furnish for consideration a self-evaluation for each evaluation period tailored to the award-term evaluation factors given in Attachment III-C. The self-evaluation must be received by the CO within ten calendar days prior to the end of each performance period. The self-evaluation shall be limited to 10 pages

3. The following matters, among others, are covered in the contract:

- a. The contractor is required to perform facility operating services at NASA/Stennis Space Center (SSC).
- b. The term of the contract is from August 28, 2007 through August 27, 2010.
- c. The estimated cost of performing the contract is shown in the most recent contract modification.
- d. The available award term is shown in Attachment III-A.
- e. The evaluation ratings and award term earned will be determined periodically by the Term Determination Official (TDO) in accordance with this plan.

II. Organizational Structure for Award Term Administration

The following organizational structure is established for administering the award term provision of the contract.

1. Term Determination Official (TDO)

- a. The TDO is the Director of the John C. Stennis Space Center or designee.
- b. Primary responsibilities of the TDO are:

- (1) Determining the evaluation rating for each evaluation period and award term earned for each award term period, as addressed in Part IV.
- (2) Changing the matters covered in this plan as addressed in Part V as appropriate.

2. Performance Evaluation Board (PEB)

- a. The Chair of the PEB is the Director, Center Operations Directorate or designee.
- b. Primary responsibilities of the Board are:
 - (1) Conducting periodic evaluations of contractor performance and the submission of a Performance Evaluation Board Report (PEBR) to the TDO covering the Board's findings and recommendations for each evaluation period, as addressed in Part IV.
 - (2) Considering changes in this plan and recommending those it determines appropriate for adoption by the TDO, as addressed in Part V.

3. Performance Monitors

- a. A Performance Monitor will be assigned to each performance area to be evaluated. The assignment will be made by the PEB Chair as addressed in Part IV.
- b. Each Performance Monitor will be responsible for complying with the "General Instructions for Performance Monitors," Attachment IV-B, and any specific instructions of the PEB Chair as addressed in Part IV. The primary Performance Monitor responsibilities are:
 - (1) Monitoring, evaluating, and assessing contractor performance in assigned areas.
 - (2) Periodically preparing a Performance Monitor Report for the PEB, or others as appropriate.
 - (3) Recommending any Special Emphasis Areas to the PEB Chair.
 - (4) Recommending appropriate changes in this plan for consideration, as addressed in Part IV.

III. Evaluation Requirements

The applicable evaluation requirements are indicated below.

<u>Requirement</u>	
Evaluation Periods and Available Award Term Periods	Attachment III-A
Grading Table	Attachment III-B
Performance Categories and Evaluation Criteria	Attachment III-C
Performance Requirements Summary	Included in contract
Quality Assurance Plan	Provided separately

IV. Method For Determining Award Term

A determination of the evaluation rating for each one (1) year evaluation period, and award term earned for each 1-year award term period, will be made by the TDO within 40 days after the end of the period. The method to be followed in monitoring, evaluating and assessing contractor performance during the period, as well as for determining the award term earned, is described below. Attachment IV-A summarizes the principal activities and schedules involved.

1. The PEB Chair will ensure a monitor is assigned for each performance category to be evaluated under the contract. Monitors will be selected on the basis of their expertise relative to prescribed performance area emphasis. Normally, monitor duties will be in addition to, or an extension of, regular responsibilities. The PEB Chair may change monitor assignments at any time without advance notice to the contractor. The PEB Chair will notify the contractor promptly of all monitor assignments and changes.
2. The PEB Chair will ensure that each monitor receives the following:
 - a. A copy of this plan along with any changes made in accordance with Part V.
 - b. Appropriate orientation and guidance.
 - c. Specific instructions applicable to the monitors' assigned performance areas.
3. Monitors will evaluate and assess contractor performance and discuss the results with contractor personnel as appropriate, in accordance with the "General Instructions for Performance Monitors," Attachment IV-B, and the specific instructions and guidance furnished by the PEB Chair.

4. Monitors will submit Performance Monitor Reports every six months.
5. The PEB Chair will request and obtain performance information from other units or personnel normally involved in observing contractor performance, as appropriate.
6. The PEB will meet once a year to consider Performance Monitor Reports and other performance information it obtains and discuss the reports and information. At the meeting, the PEB will establish findings and recommendations to be included in the PEBR.
7. As requested by the PEB Chair, monitors and other personnel involved in the performance evaluations will attend the meeting and participate in discussions.
8. At the PEB meeting, the contractor will be given an opportunity to submit information on its behalf, including a written assessment of its performance during the evaluation period. The PEB will consider matters presented by the contractor.
9. The PEB Chair will prepare the PEBR for the period and submit it to the TDO for use in determining the evaluation rating. The report will contain an adjectival rating and a recommended performance score with supporting documentation.
10. The TDO will consider the PEBR and discuss it with the PEB Chair and other personnel, as appropriate.
11. The TDO will consider the recommendations of the PEB and any other pertinent information in determining the evaluation rating for the period. The TDO's determination of the evaluation rating, including award term earned for each award term period, and the basis for this determination will be stated in the TDO Letter.
12. The contractor will be notified by the Contracting Officer of the TDO's determination.
13. If additional award-term is earned, the CO will issue a unilateral contract modification extending the contract period of performance in accordance with the TDO's determination and the terms and conditions of the contract.

V. Changes in Plan Coverage

1. Right to Make Unilateral Changes

The Government may unilaterally change aspects of this plan provided the Contractor receives notice of the changes prior to the beginning of the evaluation period to which the changes apply. Changes may be made to the plan during an evaluation period if mutually agreed to by both parties.

2. Steps to Change Plan Coverage

The following is a summary of the principal actions involved in changing plan coverage.

<u>Action</u>	<u>Schedule</u>
a. PEB drafts proposed changes.	Ongoing.
b. PEB submits recommended changes to TDO for approval.	NLT 15 days prior to beginning of evaluation period.
c. Contracting Officer notifies contractor of changes.	Prior to beginning of evaluation period.

The PEB will establish subsidiary actions and schedules, as necessary, to meet the above schedules.

3. Method for Changing Plan Coverage

The method to be followed for changing the plan coverage is described below:

a. Personnel involved in the administration of the award term provisions of the contract are encouraged to recommend plan changes with a view toward changing management emphasis, motivating higher performance levels or improving the award term determination process. Recommended changes should be sent to the PEB Chair for consideration and drafting.

b. Prior to the beginning of each evaluation period, the PEB will submit recommended changes, if any, for approval by the Procurement Officer and TDO with appropriate comments and justification as required.

c. Prior to the beginning of each evaluation period, the Contracting Officer will notify the contractor in writing of any changes to be applied during the next period. If the contractor is not provided with this notification then the existing plan will continue in effect for the next evaluation period.

4. Special Emphasis Areas

Emphasis will be directed at particular areas under the contract, which appear to the Government to be in need of special attention. No later than 45 days prior to the start of each evaluation period, the Contractor may submit to the Contracting Officer recommended areas of special emphasis for the ensuing evaluation period that are within the evaluation criteria listed in Attachment III-C. Consideration will be given to the Contractor's recommendations; however, it is the Government's responsibility to establish the areas of emphasis. The Contractor will be

advised by letter from the Contracting Officer of the specific areas of emphasis indicating where the Contractor is to place management attention. This notification will be provided to the Contractor 30 days prior to the beginning of each annual evaluation period. The Contracting Officer may notify the Contractor at a later date of any alteration of areas of emphasis.

VI. Cost Control (Weight =N/A (Meet/Does Not Meet Cost Gate)

Award-Term requires a cost gate be met for the Contractor to earn an additional term. The cost gate is a target that the contractor must meet before an additional term may be awarded. The cost gate is based on the cost baseline, including government directed cost, as modified through contract changes if any. The contractor must meet or under-run cost for the period before an award-term determination can take place. The cost baseline will be established for annual periods. If an agreement between the Government and the Contractor on the cost baseline is not reached, the Government will unilaterally determine the cost baseline and apprise the contractor.

VII. Award Term Incentive Distribution

The award-term incentive will be distributed as follows:

The Contract has a base period of three (3) years with the potential to earn seven (7) one (1) year award terms. Contract Year 1 is a shadow year in that performance is evaluated once a year, but the evaluation does not determine if the contractor has earned an award term period. The shadow year is meant to resolve any transition issues associated with the new contract and/or new technical requirements without prejudice to the contractor.

Contract Year 2 begins the award-term evaluations. A contractor must earn a Very Good adjective rating in Contract Year two (2) and an Excellent adjective rating starting year three (3) (see Attachment III-B) to earn one additional year, not to exceed a total contract period of performance of ten years. (As an example: the Contractor would earn Contract Year four (4) with a Very Good rating of year two (2) performance and Contract Year five (5) with an Excellent rating of year three (3) performance etc. (see Attachment III-A).

In the event that the Contractor earns a rating less than Very Good in Contract Year two and an Excellent in Contract Years 3 or later, no additional term will be earned and the Government may recomplete the contract at the end of the Contract base period or previously earned Contract year(s). Additionally, in order to allow sufficient time for the Government to reprocur the FOOSC services, the Government may require continued performance of any services within the limits and at the rates specified in the Contract for a period not to exceed 6 months from the end of the Contract base period or previously earned contract year(s).

ATTACHMENT III-A TO ATP FOR
FACILITY OPERATING SERVICES CONTRACT

Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007

**EVALUATION PERIODS AND
AVAILABLE AWARD TERM PERIODS**

Evaluation Period	Performance Required for Award Term	Available Award Term
Year 1	n/a	n/a
Year 2	Very Good (81 – 90)	1 year
Year 3	Excellent (91 -100)	1 year
Year 4	Excellent (91 -100)	1 year
Year 5	Excellent (91 -100)	1 year
Year 6	Excellent (91 -100)	1 year
Year 7	Excellent (91 -100)	1 year
Year 8	Excellent (91 -100)	1 year
Year 9	n/a	n/a
Year 10	n/a	n/a

ATTACHMENT III-B TO ATP FOR
 FACILITY OPERATING SERVICES CONTRACT

Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007

GRADING TABLE

The following grading table is to be used for this contract. The overall evaluation rating is calculated by applying the numerical scores from each performance category and weighting them appropriately as identified in Attachment III-C, "Performance Categories and Evaluation Criteria." The table below lists the adjectival ratings with their corresponding evaluation rating ranges.

Adjectival Rating	Range of Evaluation Rating	Description
Excellent	(91-100)	Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies 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 and economical manner for the most part; only minor deficiencies.
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, but not substantial, effects on overall performance.
Poor/Unsatisfactory	(less than 61)	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas which adversely affect overall performance.

ATTACHMENT III-C TO ATP FOR
 FACILITY OPERATING SERVICES CONTRACT

Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007

PERFORMANCE CATEGORIES AND EVALUATION CRITERIA

The contractor's performance to the defined Award-Term evaluation factors for the period will be the basis for the Government's subjective determination of the contractor's performance for awarding an additional Award-Term, if any. Award-Term evaluation factors defined for a period are contingent upon the contractor meeting the cost gate as outlined in this plan. The performance categories to be evaluated are identified below.

Performance Category	Evaluation Weight
Project Management	
- Management initiative in preventing, detecting, correcting, and reporting problems	
- Understanding of and response to Government Requirements	
- Business Management	
- Subcontract Management	
- Special Emphasis Areas	
Total	75%

Performance Category	Evaluation Weight
Safety and Health Performance	
- Maintenance of an effective safety and health program (e.g. lost time frequency rate, number of lost time injuries)	
- Compliance with Mississippi Department of Environmental Quality	
- Conformance to Contract safety requirements, clauses, and procedures	
Total	25%

ATTACHMENT IV-A TO ATP FOR
FACILITY OPERATING SERVICES CONTRACT

Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007

**ACTIONS AND SCHEDULES FOR EVALUATION RATING AND AWARD TERM
DETERMINATIONS**

The following is a summary of the principal actions involved in determining the evaluation ratings for the evaluation periods and the award term earned for award term periods.

<u>Action</u>	<u>Schedule</u>
1. Monitors assess performance, discuss results with contractor, and recommend Special Emphasis Areas.	Ongoing
2. Contractor submits self-evaluation.	NLT 10 days after end of evaluation period.
3. Monitors submit Performance Monitor Reports.	NLT 15 days after end of evaluation period.
4. PEB meets and establishes findings and recommendations for PEBR.	NLT 30 days after end of evaluation period.
5. PEB Chair meets with TDO to discuss PEBR.	NLT 35 days after end of evaluation period.
6. C.O. sends TDO Letter to contractor.	NLT 40 days after end of evaluation period.
7. Award term made to contractor based on contract modification.	NLT 45 days after end of award term period.

The PEB will establish subsidiary actions and schedules, as necessary, to meet the above schedules.

ATTACHMENT IV-B TO ATP FOR
FACILITY OPERATING SERVICES CONTRACT

Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007

GENERAL INSTRUCTIONS FOR PERFORMANCE MONITORS

1. Monitoring and Assessing Performance

- a. Monitors will prepare outlines of their assessment plans, and discuss them with appropriate contractor personnel to assure complete understanding of the evaluation and assessment process.
- b. Monitors will plan and carry out on-site assessment visits, as necessary.
- c. Monitors will conduct all assessments in an open, objective and cooperative spirit so that a fair and accurate evaluation is obtained. This will ensure that the contractor receives accurate and complete information from which to plan improvements in performance. Positive performance accomplishments should be emphasized just as readily as negative ones.
- d. The monitor will discuss the assessment with contractor personnel as appropriate, noting any observed accomplishments and/or deficiencies. This affords the contractor an opportunity to clarify possible misunderstandings regarding areas of poor performance and to correct or resolve deficiencies.
- e. Monitors must remember that contacts and visits with contractor personnel are to be accomplished within the context of official contractual relationships. Monitors will avoid any activity or association that might cause, or give the appearance of, a conflict of interest.
- f. Monitor discussions with contractor personnel are not to be used as an attempt to instruct, to direct, to supervise or to control these personnel in the performance of the contract. The role of the monitor is to monitor, assess and evaluate, not to manage the contractor's effort.

2. Documenting Evaluation/Assessment

Monitors will prepare a formal Performance Monitor Report every six months and submit it to the PEB in accordance with the following instructions.

- a. Include an impact statement and performance score for each performance category identified in Attachment III-C.

ATTACHMENT IV-B TO ATP FOR
FACILITY OPERATING SERVICES CONTRACT

Contract No. NNS07AB21C With JACOBS TECHNOLOGY, INC.

Effective August 28, 2007

- b. Evaluation of any areas included in the Statement of Work, or any new tasks, which are not explicitly covered by an existing performance requirement may be evaluated by an individual write up on the event. Individual events that are covered by an existing performance requirement may also be written up separately if the significance of the event warrants it.
- c. Notification of deficiencies and weaknesses shall be made as soon as possible after identification of the deficiency so that corrective action may be taken. The contractor and performance monitors shall not delay this notification until the submission of the end of period evaluations.

3. Verbal Reports

Monitors will be prepared to make verbal reports of their evaluations and assessments as required by the PEB Chair.

Enclosure to PIC 06-01

PIV Card Issuance Procedures in accordance with FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

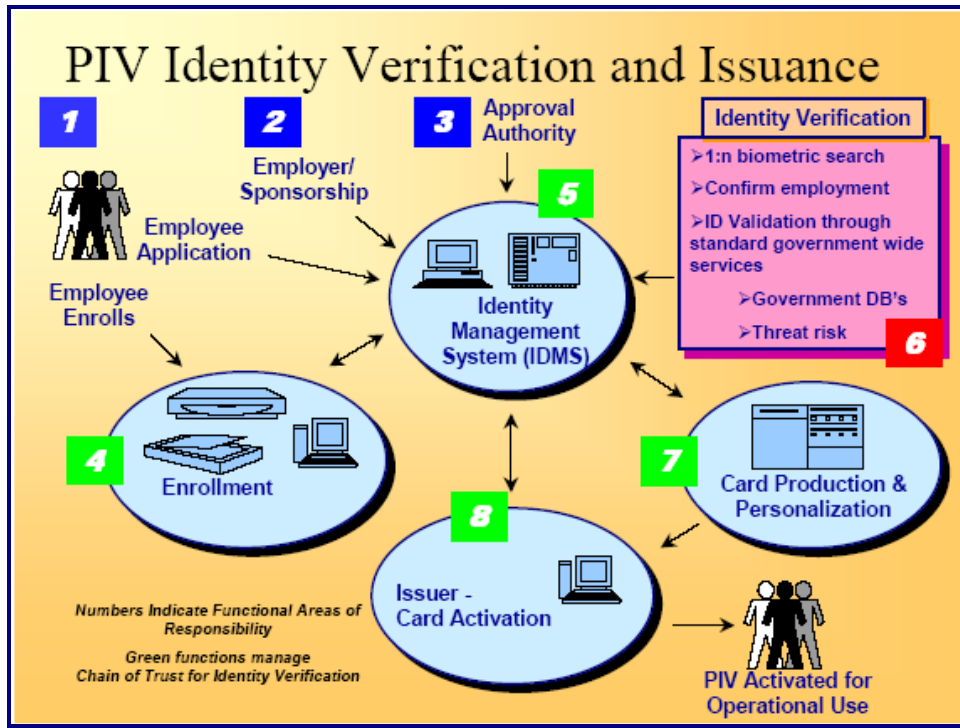


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

Step 1:

The Contractor’s Corporate Security Officer (CSO), Program Manager (PM), or Facility Security Officer (FSO) submits a formal letter that provides a list of contract employees (applicant) names requesting access to the NASA Contracting Officer’s Technical Representative (COTR). In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFMMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a contract where a COTR has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the COTR mentioned herein. In each case, the letter shall provide notification of the contract or foreign national employee’s (hereafter the “applicant”) full name (first, middle and last), social security number (SSN) or NASA Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the contract employee has a current satisfactorily completed

National Agency Check with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that contract employees may be denied access to NASA information or information systems based on an unsatisfactory background investigation/adjudication. .

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the COTR/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the COTR/host information and instructions on how to access the e-QIP for each contract or foreign national employee requiring access

Step 2:

Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one which must be a Federal¹ or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear **no later than** the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

Step 3:

Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

Step 4:

¹ A non-PIV government identification badge, including the NASA Photo Identification Badge, **MAY NOT BE USED** for the original issuance of a PIV vetted credential

Prior to authorizing physical access of a contractor employee to a federally-controlled facility or access to a Federal information system, the CCS will ensure that a check has been performed with the National Crime Information Center (NCIC) and Interstate Identification Index. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the COTR/host of the determination regarding access made by the CCS.

Step 5:

Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the COTR will advise the contractor that the employee is being denied physical access to all federally-controlled facilities and Federal information systems.

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the COTR/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

Step 6:

Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

Step 7:

The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential.

The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9) documents. These documents **must** be the same documents submitted for registration.

The credential issuing operator will verify that the facial image, and optionally reference finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, et al.) may be modified to more accurately record the employee's information.

The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance.

ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED AND ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.
2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination if an additional extension will be granted for the temporary identification card.
3. Upon return of the completed NAC, the process will continue from Step 5.

For professional level employees see government employee classifications in accordance with The Office of Personnel Management: Websites

<http://www.opm.gov/qualifications/SEC-III/A/0800-NDX.HTM> and
<http://www.opm.gov/fedclass/html/gsseries.asp#0800>

The professional classifications are as follows:

General Schedule 800 Engineering:(Mechanical, Electrical, Civil, Maintenance, Environmental, Safety, Quality Assurance and Industrial)

- Senior Engineer
- Engineer
- Junior Engineer
- Engineer in Training
- Construction Manager
- Project Manager
- Energy Manager

General Schedule 500 Accounting:

- Senior Accountant
- Accountant
- Junior Accountant
- Budget Analyst
- Payroll Specialist
- Project Analyst

General Schedule 1100 Acquisition:

- Contract Specialist
- Contract Analyst

General Schedule 600 Medical:

- Medical Director/Senior Doctor
- Doctor
- Employee Assistance Program Director
- Wellness Center Director
- Fitness Technician
- Industrial Hygienist

General Schedule 081 Fire Department:

- Chief
- Lieutenant

Crew Chief

General Schedule 300 Management:

Project Manager
Deputy Project Manager
Division Manager
ISO Manager
Program Analyst
Technical Analyst
Work Control Specialist

General Schedule 201 Human Resources Specialist