OMB APPROVAL #: 2700-0042

AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING	PAGE OF	PAGES
⇒	DO-C9	1	302

2. CONTRACT NO. (*Proc. Inst. Ident.*) NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.
NNJ06JE86C	See 20C	4200106317

5. ISSUED BY: CODE BJ4	6. ADMINISTERED BY (*If other than item 5*) CODE
NASA Johnson Space Center Institutional Procurement Office Mail Code: BJ Houston, TX 77058-3696	

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP	CODE	FACILITY CODE
Science Applications International Corporation, Technology Services Corp. 10260 Campus Point Drive, San Diego, CA 92121 c/o 2200 Space Park Drive, Suite 200, Houston, TX 77058 Attn: James H. Wendling (281-336-3437)	OT5L1	

8. DELIVERY ☐ FOB ORIGIN ☒ OTHER | 9. DISCOUNT FOR PROMPT PAYMENT

10. SUBMIT INVOICES (*4 copies unless other-wise specified*) TO THE ADDRESS SHOWN IN: ⇒ ITEM 5

11. SHIP TO/MARK FOR CODE	12. PAYMENT WILL BE MADE BY: CODE LF231
NASA Johnson Space Center Building 421 – Transportation Officer Houston, TX 77058-3696	NASA Johnson Space Center Accounts Payable Group – Mail Code LF231 Houston, TX 77058-3696

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

14. ACCOUNTING AND APPROPRIATION DATA

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QTY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
1	Safety and Mission Assurance Support Services Contract Phase-In Base Period Total				 $0 $148,575,532

15G. TOTAL AMOUNT OF CONTRACT ⇒ $ 148,575,532

16. TABLE OF CONTENTS

(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
		PART I – THE SCHEDULE				**PART II – CONTRACT CLAUSES**	
X	A	SOLICITATION/CONTRACT FORM	5	X	I	CONTRACT CLAUSES	22
X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	5			**PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER**	
X	C	DESCRIPTIONS/SPECS./WORK STATEMENTS	59	X	J	LIST OF ATTACHMENTS	179
X	D	PACKAGING AND MARKING	1			**PART IV – REPRESENTATIONS AND INSTRUCTIONS**	
X	E	INSPECTION AND ACCEPTANCE	1		K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
X	F	DELIVERIES OR PERFORMANCE	6				
X	G	CONTRACT ADMINISTRATION DATA	16		L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
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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 (s) 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.

19A. NAME AND TITLE OF SIGNER (*Type or print*)	20A. NAME OF CONTRACTING OFFICER
Parri Y. Engelsen, VP for Administration	Craig Burridge, Contracting Officer

19B. NAME OF CONTRACTOR	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA	20C. DATE SIGNED
BY Original Signed By Parri Engelsen (*Signature of person authorized to sign*)	02/01/06	BY Original Signed by Craig Burridge (*Signature of Contracting Officer*)	03/15/06

PART I - THE SCHEDULE

SECTION A – CONTRACT FORM

A.1 DETAILED TABLE OF CONTENTS

This contract consists of the following Sections:

SECTION F DELIVERIES OR PERFORMANCE **PAGE**

SECTION G CONTRACT ADMINISTRATION DATA **PAGE**

SECTION H SPECIAL CONTRACT REQUIREMENTS **PAGE**

SECTION I CONTRACT CLAUSES **PAGE**

SECTION J ATTACHMENTS **PAGE**

SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

None included by reference

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

None included by reference

B.2 ESTIMATED COST AND AWARD FEE

The estimated cost of this contract is $146,355,413. The maximum available award fee is $11,479,262. Total estimated cost and maximum award fee are $157,834,675.

The estimated cost and award fee for this contract is broken out as follows:

Base Period	Estimated Cost	Available Award Fee	Total Cost
FFP Phase-In Price	$0	$0	$0
Completion-Form	$30,613,480	$2,403,158	$33,016,638
Level-of-Effort*	$115,619,152	$9,076,103	$124,695,255
New Mexico Gross Receipts Tax	$122,782	$0	$122,782
BASE PERIOD TOTAL*	$146,355,413	$11,479,262	$157,834,675

The pricing of LOE task orders for this contract shall be in accordance with the negotiated and fully burdened average labor rates as shown in Table B-1. The rates should be fully burdened composite of the Team's rates by skill excluding the Prime's Maximum Fee. This rate shall tie to the Contract Rates Section of the Summary Cost Template (SCT) Table for LOE. Note that the bottom of Table B-1 allows for indirect rates applied if applicable to non-labor resources. For example, an application of a material handling rate on materials.

TABLE B-1 - LOE RATES

Applies Only to SOW 5.0, 6.0, 7.0, 8.0 and 9.0

Composite Rates (Based on the Current Contractor Site, Customer Site Rates and Subcontractor Allocations)

FULLY BURDENED LABOR RATES (Exclusive of Fee)	CY1	CY2	CY3	CY4	CY5
Program Manager					
Manager					
Supervisor					
Engineer 1					
Engineer 2					
Engineer 3					
Engineer 4					
Technician 1					
Technician 2					
Technician 3					
Technician 4					
Analyst 1					
Analyst 2					
Analyst 3					
Information Technology 1					
Information Technology 2					
Information Technology 3					
Training Specialist 1					
Training Specialist 2					
Administration 1					
Administration 2					
Secretarial/Clerical					
Business Specialist 1					
Business Specialist 2					
Other 1 - Engineering Aide					
Other 2 - Junior Intern					
Other 3 - Engineer 5					
Other 4 - Senior Intern					

Indirect cost (Rate) applied to Non-Labor Resources if required by a Task Order:
1.Other Direct Costs (excluding Equip/Maint)
2.Equipment and Maintenance

(End of Clause)

The below table is hereby deleted and is marked as "reserved."

RESERVED

TABLE B-2 - CF RATES Applies Only to SOW 3.0, 4.0, and 10.0				
FULLY BURDENED LABOR RATES	**3.0 Contractor Mgmt Responsibilities (excluding 3.3)**	**3.3 Panel Support**	**4.0 Qualification**	**10.0 RITF**
Program Manager				
Manager				
Supervisor				
Engineer 1				
Engineer 2				
Engineer 3				
Engineer 4				
Technician 1				
Technician 2				
Technician 3				
Technician 4				
Analyst 1				
Analyst 2				
Analyst 3				
Information Technology 1				
Information Technology 2				
Information Technology 3				
Training Specialist 1				
Training Specialist 2				
Administration 1				
Administration 2				
Secretarial/Clerical				
Business Specialist 1				
Business Specialist 2				
Other				
Prime Overhead (OH) & Service Centers (SC):				
1.				
Rate				

2.				
Rate				
3.				
Rate				
Total OH & SC				
Prime Total G&A Cost				
G&A Base				
G&A Rate				
Indirect cost (Rate) applied to Non-Labor Resources if required by a Task Order:				
Rate 1				
Rate 2				
Not-to-Exceed Fee Rate				

(End of Clause)

B.3 CONTRACT FUNDING (NFS 1852.232-81) (JUN 1990) (JOHNSON SPACE CENTER)

(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 $52,833,507.33. This allotment is for the safety, reliability, and quality assurance support services and covers the following estimated period of performance: May 1, 2006 through June 1, 2007.

Deleted: 52,806,377.05

(b) An additional amount of $4,500,778.81 is obligated under this contract for payment of fee.

Deleted: 4,498,649.09

(End of Clause)

B.4 LEVEL-OF-EFFORT

(a) During the term of the contract, the Contractor is obligated to provide not less than 95 percent nor more than 105 percent of 1,999,314 total direct labor hours through April 30, 2009.

(b) "Direct labor hours" are those productive hours expended by Contractor personnel, including subcontractors, consultants, and contract labor performing work under this contract that are charged as direct labor under the

Contractor's established accounting policy and procedures. The term does not include sick leave, vacation leave, or any type of administrative leave but does include direct labor hours provided under level-of-effort subcontracts. Hours used for clerical and secretarial are specifically excluded from the level-of-effort hours specified herein.

(c) Once the maximum number of direct labor hours is reached or the contract term has ended, the Contractor's requirements under the contract are fulfilled, even though the specified work may not have been completed. The Contractor is not authorized to exceed the maximum of the direct labor hours specified in paragraph (a) unless a bilateral contract modification is executed. Any estimated cost and fee (s) adjustments for any additional direct labor hours shall be based solely upon the quantity of additional hours being added to the maximum number of direct labor hours specified in this clause.

(d) The fee, if any, is based upon the furnishing of at least the specified minimum number of direct labor hours, including subcontract hours. If the Contractor provides less than specified minimum number of hours prior to expiration of the contract term, and the Government has not invoked its rights under the Termination clause of this contract to adjust the contract for such reduced effort, the Contracting Officer may unilaterally make an equitable downward adjustment to the contract fee. The downward adjustment in fee will be based upon the difference between the minimum direct labor hours specified under this clause and the amount of direct labor hours provided by the Contractor. Prior to making such an adjustment, the Contracting Officer will request the Contractor provide a written discussion of any extenuating circumstances (e.g., productivity improvements or reductions in contract scope), which contributed to the under run. Any information provided by the Contractor will be considered by the Contracting Officer in determining the amount of the downward adjustment in fee.

(End of Clause)

[END OF SECTION]

SECTION C

DESCRIPTION/SPECIFICATION/WORK STATEMENT

C.1 STATEMENT OF WORK

The Contractor shall furnish all resources and facilities necessary for the performance of this Statement of Work (SOW), except for those items specifically identified as Government-furnished or installation-provided. The resources and facilities include personnel, materials, supplies, and equipment.

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7.2 Integrated Supplier Assurance Management Program (ISAMP)

7.3 Software Continuous Process Improvement

8.0 ADVANCED PROGRAMS, ASSURANCE METHODOLOGIES, AND SPECIAL PROCESSES

8.1 Advanced Programs and Projects

8.1.1 Risk Analyses

8.1.2 Requirements Development

8.1.3 Vehicle S&MA Engineering

8.1.4 Procurement Quality Assurance (PQA)

8.2 Assurance Methodologies and Technologies

8.2.1 Assurance Methodologies

8.2.2 Assurance Technologies

8.3 Special Processes

8.4 Electrical, Electronic, and Electromechanical (EEE) Parts

8.5 NASA Advisories and Government-Industry Data Exchange Program (GIDEP) / Acute Launch Emergency Reliability Tip (ALERT) System

9.0 INSTITUTIONAL SAFETY AND QUALITY

9.1 Pressure Systems

9.2 White Sands Test Facility (WSTF)

10.0 RECEIVING INSPECTION TEST FACILITY (RITF)

10.1 Mechanical and Electrical Testing and Analysis

10.2 Training

10.3 Quality

10.4 Laboratory Equipment and Facilities

10.5 Maintenance

10.6 Shipping and Receiving

10.7 Laboratory Information Management System

1.0 INTRODUCTION AND BACKGROUND

1.1 The effort described by this SOW provides for the assurance, engineering, and risk assessment in the disciplines of safety, reliability, maintainability, supportability, availability and quality within the Johnson Space Center (JSC) and outside JSC, both domestic and abroad.

1.2 This contract provides for continuity of services to the NASA JSC Safety and Mission Assurance (S&MA) Directorate in the areas of safety, reliability, maintainability, and quality. The Government maintains responsibility for S&MA policies and decisions. The Contractor shall provide services and products that accomplish those policies and decisions as defined in this SOW.

1.3 This effort includes the review of work done by other contractors, International Space Station (ISS) Program International Partners (IPs), and other National Aeronautics and Space Administration (NASA) organizations. In addition, this SOW applies to future Programs and Projects as directed by NASA task order.

1.4 The major part of this work is located at JSC in Houston, Texas. However, resident support is required at JSC field offices at White Sands Test Facility (WSTF), New Mexico; Kennedy Space Center (KSC), Florida; and Huntington Beach, California. Contractor services shall be required at other locations, NASA contractor, subcontractor, or vendor facilities as requirements warrant.

1.5 Functions and tasks described herein shall not be construed as implying that the Contractor has the authority to approve or disapprove Government policies, procedures, specifications, or requirements or those of any other Government contractor. Nor will language herein be construed to mean that the Contractor has the authority to accept or reject on the Government's behalf any products or services. The Contractor's functions shall require presentation of its analysis to the appropriate Government official for further action. The Contractor is not authorized to act as an agent of the Government or to represent itself as such. Specific exceptions to this approval restriction will be directed by the Government in writing on a case-by-case basis.

2.0 GENERAL

The fundamental requirements for the work described in this SOW are based on NASA safety, reliability, maintainability, and quality policies, and Program and Project specific requirements. The work performed under this contract shall conform to the JSC processes.

2.1 Work Authorization

2.1.1 Work under paragraphs **3.0 CONTRACTOR MANAGEMENT RESPONSIBILITIES**, **4.0 S&MA PERSONNEL QUALIFICATION PROGRAM**, and **10.0 RECEIVING INSPECTION TEST FACILITY (RITF)** shall be performed as a completion form based effort. The completion form based effort is required for the duration of the contract.

2.1.2 All remaining paragraphs of the SOW shall be performed as Level-of-Effort (LOE). Work to accomplish LOE tasks shall be performed only through the issuance of task orders to the Contractor.

2.2 Data Requirements

2.2.1 The Data Requirements List (DRL) and the Data Requirements Descriptions (DRDs), found in Section J, are part of this SOW.

2.2.2 In addition to the data deliverables described in Section J, the Contractor shall manage all documentation and data produced in performance of this contract (e.g., assessments, evaluations, reports, presentations, reviews, and statuses) in accordance with the requirements of SOW Section 3.7 Information Technology (IT).

2.3 Reference

See Section J for applicable documents, definition of terms, and acronyms used in this SOW.

3.0 CONTRACTOR MANAGEMENT RESPONSIBILITIES (Completion Form)

The Contractor shall manage and administer all contract activity. The Contractor shall provide and maintain management interfaces to the S&MA Directorate, Contracting Officer (CO), Contracting Officer Technical Representative (COTR), and Technical Management. The Contractor shall report formally as required in the contract, and shall respond to JSC S&MA Management queries related to contracted activities.

3.1 Program Management

3.1.1 The Contractor shall develop and implement management functions to ensure that all contracted activities are accomplished in accordance with contract terms and conditions. The contractor shall accomplish these management functions through management approach, organization, and controls that are determined by the contractor to be optimum. The contractor shall provide and maintain management systems for the planning, organization, control, and reporting of all activities required by this contract. These systems shall assure accomplishment of program technical and schedule requirements, and cost objectives.

3.1.2 The Contractor shall integrate all tasks and elements of the contract to facilitate cross department communications, common processes and tools across appropriate support areas, effective measurement of performance, and identification of initiatives to improve overall safety or mission assurance for human spaceflight.

3.1.3 The Contractor shall perform in accordance with the Management Plan (DRD 01). The Contractor shall determine and document lessons learned in the performance of tasks under this SOW in accordance with DRD 02, Lessons Learned.

3.1.4 The Contractor shall provide Integrated Technical Management Reports in accordance with DRD 03, Integrated Technical Management Report.

Performance Standards - Program Management:

1. 90% of employees trained to do the job they are working on based on established and approved qualification standards and training plans.

2. Customer Satisfaction - Performance of all technical areas (resources, skills, and materials) receive an overall minimum rating of "good."

3. 100% of Contract Data Deliverables delivered on time.

3.2 Cost and Schedule

The Contractor shall establish a Work Breakdown Structure (WBS) in accordance with DRD 04, Work Breakdown Structure, to serve as the framework for contract planning, budgeting, cost reporting and schedule status reporting. The Contractor shall report accrued costs to NASA in accordance with DRD 05, Contractor Financial Management Report. The Contractor shall present the Integrated Technical Management Reports (DRD 03) and discuss costs, cost variances, technical status, and schedules during status meetings with the CO, COTR, and S&MA management.

Performance Standard - Cost and Schedule:

1. Customer Satisfaction –Technical Management Reports provide timely and necessary insight regarding Contractor activities, progress, accomplishments, and any documented contract performance problems with their corresponding resolutions and corrective actions.

3.3 JSC Program Safety and Mission Assurance (S&MA) Panels

a. The JSC Program S&MA Panels, chaired by civil servants, are responsible for ensuring that all applicable S&MA-related requirements are incorporated into JSC Projects and Programs. The Contractor shall perform tasks that assist the Panel Chairs in the execution of their responsibilities. Contractor participation shall be required prior to and during the S&MA Panels in order to effectively accomplish the tasks identified below. Note that individual S&MA Panels require different suites of tasks in order to sustain their function and scope depending on agreements between the JSC S&MA Directorate and the Programs.

b. Primary objectives of tasks performed by the Contractor are to assist the Panel Chair to verify that the interpretation and implementation of safety-related requirements are consistent with NASA issuance, and assure that safety-critical subsystems, payloads, and operations are appropriately verified. In order to accomplish these objectives, the Contractor shall recommend requirement implementations, evaluate implementation documents and waiver requests, negotiate resolution of safety issues, assist the Programs and Projects with interpretation, and assist with the integration of safety processes across Programs, Projects, contractors, and International Partners.

c. The anticipated JSC Program S&MA Panels that the JSC S&MA Directorate will support are:
   - ISS Flight Safety Review Panel (SRP)
     SRP Workload Estimates:
     - Number of in-board meetings per year: 87
     - Number of items reviewed: 572
     - Number of panel members: 13 *

- JSC Safety Engineer Review Panel (JSERP)
- Integration Safety Engineering Review Panel (ISERP)
  JSERP and ISERP Combined Workload Estimates:
  - Number of in-board meetings per year: 61
  - Number of items reviewed: 684
  - Number of panel members: 8 each *
- SSP/ISS Payload Safety Review Panel (PSRP)
  PSRP Workload Estimates:
  - Number of in-board meetings per year: 166
  - Number of items reviewed: 1350
  - Number of panel members: 11 *
- Government-Furnished Equipment (GFE) Safety and Mission Assurance Review Team (SMART)
  GFE SMART Workload Estimates:
  - Number of in-board meetings per year: 235
  - Number of items reviewed: 424
  - Number of panel members: 16 *
- ISS Quality & Product Assurance Panel (QPAP)
  QPAP Workload Estimates:
  - Number of in-board meetings per year: 24
  - Number of items reviewed: 120
  - Number of panel members: 18 *
- ISS Reliability and Maintainability (R&M) Panel
  R&M Panel Workload Estimates:
  - Number of in-board meetings per year: 30
  - Number of items reviewed: 150
  - Number of panel members: 11 *

*This number identifies membership as defined in each Panel's charter and does not include S&MA SSC contractor personnel.

Combined S&MA Panel Workload Estimates:
- Number of in-board meetings per year: 603
- Number of items reviewed: 3300

3.3.1 Administrative Tasks

The Contractor shall perform the following tasks to coordinate and document Panel activities:

a. Schedule S&MA Panel meetings and reserve meeting facilities.

b. Develop and post S&MA Panel meeting agendas.

c. Develop and post S&MA Panel meeting minutes.

d. Develop and maintain S&MA Panel distribution lists.

e. Develop and maintain processes to track and provide current status of S&MA Panel actions and issues.

f. Develop and maintain S&MA Panel databases to ensure availability, completeness, accuracy, and security of the data.

g. Develop and maintain S&MA Panel websites to provide NASA access to meeting documentation.

h. Develop and maintain data management processes for S&MA data [e.g., Safety Data Packages (SDPs), Hazard Reports (HRs), Failure Modes and Effects Analysis / Critical Items Lists (FMEA/CILs), Non-Conformance Reports (NCRs)] to ensure that the data is received, distributed, filed, archived, and made available to the panel and reviewers.

i. Develop and maintain a process to ensure that export control regulations (reference NPD 2190.1, NASA Export Control Program Policy) are applied to data handled by the S&MA Panels and that appropriate restrictions are applied to applicable NASA data and/or information distributions.

j. Upload or input safety data into non-S&MA databases [e.g., Vehicle Master Database (VMDB)] that are maintained by the Programs to provide single data source for related system information required by the Programs.

Performance Standards - S&MA Panel Administrative Tasks:

1. Customer Satisfaction – Administrative support receives an overall minimum rating of "good."

2. Adequate meeting minutes prepared and ready for Chair signature within two working days of the formal meeting.

3.3.2 Technical Tasks

The Contractor shall perform the following tasks:

a. Provide technical interpretation of safety requirements and implementation strategies based on technical merit for acceptability and recommendations on S&MA Panel review and acceptance.

b. Develop narratives and presentation products for all items and topics submitted to S&MA Panels.

c. Provide written technical recommendations for safety products (e.g., SDPs, HRs, FMEA/CILs, NCRs) that are submitted to the S&MA Panels for approval or resolution.

d. Perform launch vehicle manifest assessments to identify unresolved safety and certification issues and provide recommendations on resolution.

e. Perform integration analyses for HRs, SDPs, and FMEA/CILs to verify that all hazards identified have been analyzed, tested, or controlled.

f. Perform assessments of verification data [e.g., Verification Closure Notices / Verification Tracking Logs (VCN/VTLs)] for evidence of requirements compliance (e.g., verification mapping to HRs).

g. Perform and document reassessments of safety requirements/certifications to ensure the validity of the requirements/certifications for the next mission and planned flight.

h. Evaluate modifications to systems and payloads that affect critical systems or create a potential hazard and provide results to the appropriate panels.

i. Develop Safety of Flight Certification Letters for S&MA Panel approval.

j. Maintain cognizance of flight safety status to identify and address safety issues in various technical and safety forums.

k. Provide technical coordination with other NASA Centers, Contractors, Programs, Projects, and International Partners / Participants (IP/P) S&MA organizations to facilitate a clear and consistent understanding of topics, issues, and actions.

l. Provide technical expertise to the various S&MA Panel working groups (e.g., Joint American-Russian Safety Working Group (JARSWG), Safety Working Group (SWG), and Quality Working Group (QWG)) for investigation, analysis, and proposed resolutions to issues/actions.

Performance Standard – S&MA Panels Technical Tasks:

1. Customer Satisfaction – Content and thoroughness of technical assessments effectiveness of pre-board meetings and Board/Panel receives an overall minimum rating of "good."

3.4 Quality Management System

3.4.1 The Contractor shall establish and maintain an internal Quality Management System (QMS) for services and tasks performed

under this SOW. The Contractor's QMS shall comply with the ANSI/ISO/ASQ Q9001-2000, Quality Management System Requirements, and JPD 5335.1, JSC Policy Directive - Quality Policy. The Contractor's QMS will be audited by NASA or a NASA-provided third party to confirm compliance. The Contractor shall comply with the JSC QMS for the products and services provided to the Government under this contract. The Contractor shall provide a Quality Manual per DRD 06, Quality Manual, and supporting metrics per DRD 07, Contractor Quality Metrics, including the assessment and implementation of internal continuous improvement initiatives in order to provide better products and services to S&MA customers.

3.4.2 Should the Contractor be or become International Standards Organization (ISO) Certified, copies of the certification audit report and correspondence confirming certification shall be supplied to the CO.

3.4.3 The Contractor shall provide technical and engineering products to S&MA Directorate QMS activities that include:

a. Conducting assessments and assisting in S&MA QMS continuous improvements efforts.

b. Preparing system level procedures and detailed work instructions of S&MA processes for JSC approval.

c. Training for S&MA personnel (both Government and Contractor).

d. Generation, periodic review, and maintenance of all S&MA work instructions.

Performance Standards - Quality Management System:

1. No major findings during Center ISO audits.

2. Effective ongoing demonstration by the Contractor of quality performance and defect prevention.

3. Quality Metrics – Positive trending on metrics that indicate Contractor's QMS is effective.

4. Customer Satisfaction – Contractor support to S&MA Directorate QMS activities receive an overall minimum rating of "good."

3.5 Property Management

The Contractor shall develop and implement a Property Management Plan in accordance with DRD 08, Property Management Plan. The Contractor shall perform on-site property management and administration of all

property acquired by or in possession of the Contractor and subcontractors associated with the execution of this contract in accordance with contract terms and conditions.

Performance Standards - Property Management:

1. 100% of Property Reports submitted on time.

2. Minimum of 98% of accountable property accounted for.

3.6 Safety and Health

The Contractor shall ensure the protection of personnel, property, equipment, and the environment by complying with NASA policies and requirements (see Section J, Applicable Documents, Safety and Environment Health subsection) and federal, state, and local regulations for safety, health, environmental protection, and fire protection. The Contractor shall develop and implement a Safety and Health Plan in accordance with DRD 09, Safety and Health Plan. Health and safety reporting requirements shall include an annual Safety and Health Program Self-Evaluation, and Monthly Safety and Health Metrics Report in accordance with DRD 10, Safety and Health Program Self Evaluation and DRD 11, Monthly Safety and Health Metrics.

Performance Standards - Safety and Health:

1. 100% of required reports and metrics delivered on schedule.

2. Injury/illness rates below industry average.

3. Participation in or accomplishment of at least two Safety Leadership / Safety Risk Mitigation activities per Award Fee Period.

3.7 Information Technology (IT)

3.7.1 The Contractor shall provide Information Technology (IT) products and services to the JSC S&MA Directorate in accordance with JPD 2800.1, JSC IT Program, and JPD 2800.4, JSC IT Program Management. These products and services consist of tools, data systems, and web-sites that support S&MA activities.

3.7.2 The Contractor shall establish and maintain an IT Plan in accordance with DRD 12, Information Technology Plan.

3.7.3 The Contractor shall implement and maintain configuration control of hardware, software, and existing data systems per the approved IT Plan.

3.7.4 The Contractor shall establish and implement Data Management Plan per DRD 13, Data Management Plan. The Data Management Plan shall describe the management, preparation, control, and dissemination of data and documentation required and produced under this contract in order to provide NASA with direct, on-going access to all data and documentation required to accomplish S&MA responsibilities. The plan shall include an assessment of existing S&MA data and documents, methods for identifying and acquiring Safety, Reliability, and Quality Assurance (SR&QA) data and documents, requirements for storage, equipment and methods of accessing data and documents, and data management philosophy. All documents and data produced in performance of this contract shall be organized, controlled, and stored on NASA IT equipment.

3.7.5 The Contractor shall prepare and provide user instructions and training to S&MA personnel on the use of hardware, software, and data systems used by the organization to accomplish its responsibilities, tasks, and activities.

3.7.6 The Contractor shall acquire and maintain analytical tools and databases to augment or accomplish work defined in this SOW and the accomplishment of the S&MA Directorate mission. The Contractor shall maintain existing tools, databases, and websites as well as those developed in performance of this contract utilizing software and applications recognized as JSC standards. Proprietary or non-JSC-standard applications, protocols, or IT systems shall not be utilized without prior NASA contractual authorization.

3.7.7 The Contractor shall administer the S&MA laptop computer loan pool and maintain information on the use of the laptops which includes a tracking log (user and due date). The Contractor shall check out current copies of software available for home use as provided by the Information Resources Directorate (IRD). The Contractor shall maintain and assure the accuracy of the Customer Service System (CSS) database. The Contractor shall receive all requirements for new IT or telephone equipment and for moves of existing equipment. The Contractor shall write all Service Requests (SRs) required to obtain or move the IT or telephone equipment. The Contractor shall also write or assist in writing all SRs within the S&MA Directorate.

3.7.8 The Contractor shall participate in the JSC IRD led Information Technology Steering Council (ITSC) and Customer Forum meetings for the purpose of coordinating planned IT activities that affect JSC systems, and sharing information on current IT topics that affect S&MA systems. The ITSC, established under the authority of JPD 2800.4, JSC IT Program Management, acts as the Center IT

Program control board. For planning purposes, the ITSC meets twice monthly and the Customer Forum meets approximately monthly. The Contractor shall provide technical expertise at IRD boards and meetings, such as the Network Access Control Board (NACP) which typically meets once each week for one to three hours.

Performance Standards - Information Technology:

1. 100% of data and documentation required to support S&MA tasks and activities is posted in a timely manner and the completeness, accuracy, and security of the data and documentation is maintained in accordance with the Data Management Plan.

2. Customer Satisfaction – Data system development and modification receive an overall minimum rating of "good."

3. 100% of ITSC and IRD Customer Forum scheduled meetings are supported in accordance with SOW requirements.

4.0 S&MA PERSONNEL QUALIFICATION PROGRAM (Completion Form)

4.1 The S&MA Contractor shall develop, implement, and maintain a comprehensive S&MA Personnel Qualification Program, in accordance with DRD 14, S&MA Personnel Qualification Program Plan, to include management of an existing training database. This Program shall provide training to qualify S&MA personnel for the positions they are assigned. The Contractor shall develop and maintain a plan for the administrative tasks that support this Program.

4.2 The specific skills of Certified Welding Inspector (CWI), all levels of Non-Destructive Evaluation (NDE), Pressure Systems, and ISO Quality Systems Auditor require formal certification. The S&MA Contractor shall arrange for the required 3rd party (Accredited Organizations or Educational Institutions) certification training and develop courses and curriculum as needed for the Personnel Qualification Program.

Other skills such as listed below will be exempt from the certification requirement. But, it will be the responsibility of the contractor to provide sufficient information that the individual has the training, education and the background to effectively perform in these skills.

- Mechanical Inspector
- Calibration Technician
- Safety Engineer
- Reliability Engineer
- Quality Auditor
- Quality Technician
- Quality Engineer
- Quality Manager
- Software Quality Engineer

Performance Standards - S&MA Personnel Qualification Program:

1. 100% of periodic reports submitted on schedule.

2. 100% employees with up to date training plans.

3. Customer Satisfaction – Course attendees opinion surveys indicate satisfaction with course content and level of detail.

5.0 PROGRAM SUPPORT

a. The Contractor shall provide services and products for Program S&MA engineering tasks. Services and products consist of assisting in the development of Program requirements, performing analyses, assessments, audits, reviews, and evaluations; preparing and presenting reports and briefings; and participating in meetings and review boards and panels. The Contractor shall verify that Program design and operations meet S&MA requirements and identify issues and non-conformances. The Contractor shall evaluate the design, manufacturing, testing, and refurbishment of spaceflight hardware and software to ensure delivery of products in accordance with functional, performance, and design requirements. The Contractor shall perform S&MA activities throughout the Program life-cycle as described in this section in order to assure systems meet requirements. Life-cycle phases may overlap and tasks may be worked or revisited in more than one phase.

b. The Contractor shall provide engineering assessments for software intensive ground systems residing at JSC that support the design, development, and test of flight systems. The Contractor shall also provide engineering assessments for JSC facility software.

c. The Contractor shall identify and assess risks to Programs consistent with Program risk management plans. This includes the identification and evaluation of risks, reporting of risks, tracking the resolution of identified risks, and the development and evaluation of proposed risk mitigation strategies throughout the Program life-cycle.

d. The Contractor shall develop and review human factors considerations for each phase of the Programs' life-cycle. The Contractor shall assess the effectiveness of mitigations for human factors related hazards.

e. The Contractor shall integrate and coordinate S&MA products and services across Programs that are relevant to multiple Programs or Projects.

5.1 Concepts and Requirements Phase

This phase includes Program feasibility assessments, Program definition and approval, and requirements definition and approval. The Contractor shall develop and review Program requirements documents to ensure that S&MA requirements are included. The task includes assisting in the development of top-level Program policies and requirements, research to define and develop workmanship standards and specifications, the development of software assurance guides and standards, and the development of implementation plans, processes and work instructions. The Contractor shall assess software and hardware assurance plans, quality plans, safety plans, procedures, processes, and reports for compliance with NASA and JSC policies, procedures and standards.

5.1.1 Safety, Reliability, and Maintainability Goals and Requirements

The Contractor shall assist in developing and refining safety goals and requirements such as overall probability of a catastrophic event, probability of a catastrophic event during launch/boost phase requiring separation/abort, probability of a catastrophic event during other mission phases (e.g., on-orbit, Extravehicular Activity (EVA), rendezvous and docking, reentry and landing), or probability of a specific catastrophic event (e.g., fire, loss of a specific system or sub-system). These requirements shall meet or exceed the standards set forth in the NASA-STD-8729.1, Planning, Developing, and Maintaining an Effective Reliability and Maintainability (R&M) Program. The Contractor shall also assist in developing and refining reliability goals and requirements, such as availability, maintainability, and Mean-Time Between Failure (MTBF). Once developed, these goals and requirements will be used to establish Program safety requirements such as redundancy, fault tolerance, Micro-Meteoroid and Orbital Debris (MMOD) protection, and launch abort capabilities.

5.1.2 Quality Assurance Goals and Requirements

The Contractor shall assist in developing and refining quality assurance goals and requirements. The Contractor shall participate in the preparation, review, and assurance of proper implementation of procedures, processes, inspection planning, and quality assurance requirements.

5.1.3 Requirements Reviews

The Contractor shall support formal Program Requirements Reviews to ensure that S&MA principles and practices are incorporated into Program policies and requirements. The Contractor shall coordinate and document all proposed inputs on formal documents such as Review Item Discrepancies (RIDs), and track and ensure proper closure of RIDs that impact S&MA.

5.1.4 Trade Studies

The Contractor shall perform and support trade studies to assist JSC S&MA in assuring that risk-based decision making processes are used to select among competing design and operational concepts, in order to minimize technical and Program risk, and meet S&MA goals and requirements.

5.1.5 Feasibility Assessments

The Contractor shall participate in feasibility assessments to ensure that Program design and operational concepts are achievable and meet S&MA requirements.

5.1.6 Technical Assessments

The Contractor shall perform qualitative and quantitative assessments. The technical subjects are determined real-time and require the Contractor to develop or perform analyses such as, reliability, Probabilistic Risk Assessment (PRA), fault-tree analysis, trend analysis, statistical analysis, or engineering analysis.

5.2 Design and Development Phase

This phase includes preliminary and detailed design, and system design validation. Design validation is generally accomplished through a combination of test, analysis, and inspection of a flight-like unit to prove the design meets the requirements.

5.2.1 Program Design Milestone Reviews

5.2.1.1 The Contractor shall perform S&MA evaluations of proposed designs to ensure compliance with Program S&MA requirements, to identify areas where design modifications could reduce or eliminate risk, and to identify areas of non-compliance. The Contractor shall also ensure that S&MA products (such as safety assessment reports, failure modes and effects analyses, and critical items lists) required to be delivered in support of each milestone have been provided. The Contractor shall document any findings, comments, or recommendations, and shall track the closure of all items that impact S&MA.

5.2.1.2 The Contractor shall develop S&MA design criteria and requirements; tasks and activities to be performed; and verification and assessment methods. The Contractor shall assess these items when developed by other entities. The Contractor shall provide input in establishing the verification method success criteria for each requirement in the verification plans.

5.2.2 Integrated Teams

Programs form teams to assure that all relevant organizations (such as Engineering, Mission Operations, Space Life Sciences, and S&MA) are properly represented and have an opportunity to interactively discuss Program concepts and requirements. The Contractor shall participate on such teams to ensure that S&MA requirements are met and that S&MA concerns are properly addressed.

5.2.3 Requirements and Design Changes

The Contractor shall assess all change requests for compliance to S&MA requirements and identify areas of risks, non-compliances, and impacts of accepting non-compliances. The Contractor shall continue this support throughout the Program life-cycle.

5.2.4 Safety

5.2.4.1 The Contractor shall ensure the application of a process for the systematic identification and control of hazards during the design phase. The Contractor shall identify the risk inherent in a system's design and operation by quantifying both the likelihood of various possible risk sequences and their consequences, using various tools such as fault trees, event trees, and reliability block diagrams.

5.2.4.2 In performing Safety Analyses, the Contractor shall:

a. Evaluate Safety Assessment Reports (SARs) and Hazard Reports (HRs) per NSTS 22254, Methodology for Conduct of Space Shuttle Program Hazard Analyses, and SSP 30309, Safety Analysis and Risk Assessment Requirements Document, to ensure the design meets safety requirements.

b. Evaluate SARs and HRs and all supporting data to identify areas of non-compliance with technical and data submittal requirements.

c. Perform hazard analyses as required to ensure that the developer has adequately identified hazards and hazard controls.

d. Assess Hazardous Command Lists (HCLs), Restricted Command Lists (RCLs) and Critical Command Lists (CCLs) to ensure that commands are correctly classified as defined by the ISS Computer Safety Working Group (CSWG).

e. Ensure that all applicable safety requirements have been identified and met. If requirements have not been met, make recommendations regarding possible corrective actions that should be taken; alternatively, identifying impacts to accepting a noncompliance.

f. Document and coordinate all comments and recommendations with NASA S&MA personnel, safety panels, the developer, and other NASA technical organizations (e.g., Engineering, Mission Operations, Space Life Sciences).

The Contractor shall assess all change requests for compliance to S&MA requirements and identify areas of risks, non-compliances, and impacts of accepting non-compliances. The Contractor shall continue this support throughout the Program life-cycle.

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e. Ensure that all applicable safety requirements have been identified and met. If requirements have not been met, make recommendations regarding possible corrective actions that should be taken; alternatively, identifying impacts to accepting a noncompliance.

f. Document and coordinate all comments and recommendations with NASA S&MA personnel, safety panels, the developer, and other NASA technical organizations (e.g., Engineering, Mission Operations, Space Life Sciences).

g. Track the closure and resolution of all comments and recommendations.

5.2.4.3 As the evaluator of HRs, associated Non-Compliance Reports (NCRs), or Accepted Risk (AR) Hazard Reports, the Contractor shall:

a. Evaluate all NCR or AR Hazard Report data to ensure completeness. Ensure that all applicable safety requirements have been properly identified.

b. Determine whether rationale is sufficient to recommend approval of the NCR or AR Hazard Report. Perform risk trades to determine whether more risk is accepted by approving or denying the NCR or AR Hazard Report.

c. Evaluate associated S&MA data, such as Critical Items Lists (CILs) and problem reports.

d. Assess that the NCR or AR Hazard Report will not add unacceptable risk to a system or procedure.

e. Make a formal recommendation to the Program regarding the acceptance of the NCR or AR Hazard Report. Define alternative approaches to risk mitigation.

f. Verify the appropriate disposition of all NCRs or AR Hazard Reports.

5.2.5 Reliability and Maintainability

a. The Contractor shall predict system or function reliability, maintainability, and availability characteristics (e.g., failure rates and probabilities or availability rates) based on available design, analysis, or data. The predictions shall be provided to the Programs for logistical planning.

b. The Contractor shall make use of reliability modeling and simulation tools to evaluate system design. The results of this evaluation along with recommendations associated with the system design shall be provided to NASA.

c. In evaluating the Failure Modes and Effects Analysis (FMEA) and Critical Items List (CIL), the Contractor shall:

1. Evaluate FMEA/CIL and all supporting data per SSP 30234, Instructions for Preparation of Failure Modes and Effects Analysis (FMEA) and Critical Items List (CIL) for

Space Station, and NSTS 22206, Instructions for Preparation of Failure Modes and Effects Analysis and Critical Items List, to identify areas of noncompliance with technical and data submittal requirements.

2. Document and coordinate all comments and recommendations with NASA S&MA personnel, Reliability and Maintainability (R&M) panel, the developer, and other NASA technical organizations (e.g., Engineering, Mission Operations, Space Life Sciences). Track the acceptable closure and resolution of all comments and recommendations.

3. Brief panel chairmen before reviews on the evaluation results. Identify areas of concern and issues raised during the review. Identify FMEA/CILs that may be dispositioned by the chairman before the meeting, and identify FMEA/CILs requiring the support of particular specialists, or that require separate meetings. Identify actions that will be required and propose an agenda for the review.

4. Support the panel as they conduct their review.

d. The Contractor shall analyze system and component failure modes identifying 'scheduled' or 'on-condition' tasks, as well as maintenance frequency required at assigned maintenance levels.

e. The Contractor shall review maintenance and repair plans to verify:

1. Proposed procedures meet safety requirements.

2. Proper priority has been assigned to maintenance activities.

3. Maintenance intervals support the availability of safety-critical equipment.

4. Hardware taken out of service for maintenance will not compromise system safety.

5. Consistency with sound maintenance and repair practices

f. The Contractor shall analyze the functions of Mechanical and Electrical, Electronic, and Electromechanical (EEE) Parts for consistency with intended design rules to ensure reliable operation under expected environments. The Contractor shall recommend parts that operate in the most effective, reliable, and cost-efficient manner for the planned application.

g. The Contractor shall assist in the development of certification plans, including the definition of all usage environments.

h. The Contractor shall analyze items designated as having a limited useful life. The analysis shall include shelf life, operating life, and life expended during testing.

5.2.6 Quality Assurance

The Contractor shall assist in defining and reviewing quality management systems and quality assurance plans and processes. The Contractor shall verify that designs meet quality requirements.

a. The Contractor shall perform Procurement Quality Assurance (PQA) by conducting Program supplier evaluations, conducting quality management system audits at Program prime contractor facilities, drafting Letters of Delegation (LODs) for Government approval, and defining quality requirements for Program contractor and subcontractor purchases in accordance with NPR 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts.

b. The Contractor shall provide facility assessments which include product and process surveillance and software assurance support for ground simulators, mission control centers, development integration laboratories, and integrated training facilities. Current facilities supported are the Shuttle Avionics and Integration Laboratory (SAIL), Sonny Carter Training Facility (SCTF), JSC Avionics Engineering Laboratory (JAEL), Instrumentation Systems Laboratory (ISL). Other facilities shall be included as they are established by new Programs.

c. The Contractor shall provide JSC with facility integration software safety analysis technologies and methodologies expertise. This includes the development of software tools to aid in software safety analyses. Software safety analysis tools shall be in accordance with NASA-STD-8719.13, NASA Software Safety Standard.

5.3 Manufacturing, Test, Acceptance, and Delivery Phase

5.3.1 Quality Assurance

The Contractor shall perform inspection and surveillance activities during production, testing, and operations to reduce the overall risk to cost, schedule, and mission success. The Contractor shall provide inspectors that are trained in quality assurance and engineering methods for assembly, testing, inspection, and surveillance.

5.3.2 Non-Conformance Reports (NCRs) and Waivers

The Contractor shall analyze non-conformances and waivers per NSTS 08126, Space Shuttle Problem Reporting and Corrective Action (PRACA) System Requirements, SSP 30223, Problem Reporting and Corrective Action for the Space Station, and SSP 30524, PRACA Data System Requirements Definition Document. The Contractor shall participate in Problem Resolution Teams (PRTs) to analyze non-conformances, determine root cause and recommend corrective actions to prevent recurrence. The Contractor shall communicate across Programs and Projects to assure that S&MA has an integrated and coordinated position.

5.3.3 Software Verification and Validation

The Contractor shall support software code walkthroughs, review test plans, procedures, and test results to verify that the software meets safety and quality requirements. The Contractor shall ensure adequate testing coverage based on the changes made to the software code.

5.3.4 Certification

The Contractor shall verify the as-built system meets all applicable certification requirements. The Contractor shall verify that the hardware will function properly in all applicable use environments. The Contractor shall document the certification and maintain certification records as required.

5.3.5 Test Support

The Contractor shall support Test Readiness Reviews (TRRs) and observe testing conducted on Program flight hardware, software, and equipment to ensure that Program S&MA requirements for the flight items are being appropriately tested and documented. The Contractor shall ensure that test procedures are complete and meet Program system requirements. The Contractor shall ensure that test plans support test objectives. The Contractor shall review test articles and assess readiness to perform testing. The Contractor shall review system test results to ensure that test objectives have been demonstrated and meet system certification requirements.

5.3.6 Inspection Requirements

The Contractor shall identify characteristics requiring independent verification, establish sampling plans, identify special process inspection needs [e.g., Non-Destructive Evaluation (NDE)], and verify implementation of FMEA screens and hazard control verifications.

5.3.7 Manufacturing and Fabrication Plans and Processes

The Contractor shall ensure work authorizing documents, drawings, and engineering changes have pass/fail criteria and appropriate tolerances. The Contractor shall ensure documentation is complete and accurate.

5.3.8 Surveillance and Audits

5.3.8.1 The Contractor shall conduct product and process surveillances. The Contractor shall also conduct technical and quality audits. The Contractor shall support the development of audit plans and maintain the Master Audit Schedule for the Programs. Surveillance and audit activities shall be conducted in accordance with NPR 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts.

5.3.8.2 The Contractor shall perform special process verification audits identifying areas needing corrective or preventive action (examples include quality management systems, contamination control, welding, brazing, soldering, and conformal coating).

5.3.9 Procurement Quality Assurance (PQA)

5.3.9.1 The Contractor shall assist the Government in assessing quality plans for production controls and in conducting contract surveillance throughout the procurement process in accordance with NPR 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts. This includes the review of purchase orders and contracts to:

a. Verify proper inclusion of quality requirements and supplier qualifications.

b. Determine if Government source inspection is required.

c. Determine and recommend quality instructions to be included in the LODs.

5.3.9.2 The Contractor shall assist the Government in performing PQA functions at remote site facilities in support of Program development activities in the following areas:

a. Assessment of and participation in supplier qualification audits for flight hardware.

b. Inclusion of necessary quality requirements flow down to suppliers through purchase order and contract review.

c. Development of Defense Contract Management Association (DCMA) LODs, development of DCMA site-specific Risk Assessment Management Plan (RAMPs), and monitoring of subcontractor performance.

d. Material review disposition and approval requiring NASA participation.

e. Manufacturing, assembly, and test operations assessments.

f. Review of quality requirements at Technical Interchange Meetings (TIMs), Preliminary Design Reviews (PDRs), and Critical Design Reviews (CDRs).

5.4 Operations and Maintenance Phase

The Contractor shall review flight products such as flight rules and crew procedures to identify safety issues, to ensure that operational hazard controls are properly implemented, and to ensure the safety of pre-defined responses to contingency situations.

5.4.1 Mission Planning

5.4.1.1 The Contractor shall provide technical expertise in operational meetings such as Flight Techniques Working Groups, Mission Integration and Operations Control Boards, Joint Operations Panels, Flight Operations Reviews, Increment Operations Reviews, and Mission Management Team meetings to ensure that flight products meet safety requirements. Participation includes technical evaluation of items to be presented prior to the meetings.

5.4.1.2 The Contractor shall participate in PRTs to analyze non-conformances, determine root cause and corrective actions to prevent recurrence. The Contractor shall communicate across Programs and Projects to ensure that S&MA has an integrated and coordinated position.

5.4.1.3 The Contractor shall support mission planning activities to ensure that operational planning does not conflict with safety requirements. Activities include the review of flight objectives, plans, manifests, equipment transfer priorities, and crew activity plans for compliance with requirements.

5.4.1.4 The Contractor shall review proposed manifests to ensure the safe continued operation of the on-orbit vehicle, planned maintenance activities, and that transfer priorities support safety requirements. The Contractor shall ensure planned crew activities are properly coordinated and safety related objectives are accomplished in a timely manner.

5.4.1.5 The Contractor shall perform mission readiness assessments and prepare briefings per DRD 15, S&MA Prelaunch Assessment Presentations, to support Prelaunch Assessment Reviews (PARs), S&MA Readiness Reviews (SMARRs), Software Readiness Reviews (SRR), EVA Readiness Reviews, Stage Operations Readiness Reviews (SORRs), and Flight Readiness Reviews (FRRs). The Contractor shall provide pre and post-flight assessments and briefings. Readiness review activities shall include review and reporting of:

a. Status of S&MA products such as hazard reports, non-compliances, FMEA/CILs, and problem reports.

b. Open work, including schedules for completion.

c. S&MA issues and risks, flight constraints, or exceptions to flight readiness.

d. Status of readiness to provide S&MA operational support, including training and certification of personnel and availability of required supporting data.

e. Status of the on-orbit vehicle.

f. Status of previously identified anomalies and their resolution.

5.4.2 Mission Support

5.4.2.1 The Contractor shall provide real-time S&MA support to the Mission Management Team (MMT) and shall staff the Mission Evaluation Room (MER) to:

a. Review requirements changes and waivers.

b. Serve as the repository of S&MA data such as hazard reports, noncompliances, FMEA/CILs, Problem Reports, and retrieving such data in support of the evaluation and resolution of in-flight anomalies.

c. Provide responses to in-flight hardware and software anomalies to identify any changes in risk resulting from

associated hardware changes or software patches or workarounds.

d. Resolve questions and providing engineering assessments regarding on-orbit S&MA issues.

e. Evaluate and provide technical expertise in the resolution of In-Flight Anomalies (IFAs), Mission Action Requests, Flight Rules and Crew Procedure changes.

f. Provide S&MA representation on Flight Investigation Teams (FITs), and Anomaly Resolution Teams (ARTs) to identify risk impacts.

g. Develop and assess Fault Trees and Root Cause analyses of anomalies.

h. Ensure integration of International Partners / Participants (IP/P), Government-Furnished Equipment (GFE), Contractor-Furnished Equipment (CFE), Software, Payload and Visiting Vehicle assessments for MER responses.

5.4.2.2 The Contractor shall support MMT meetings by providing problem investigation support consisting of administrative and technical personnel. As scheduled, technical personnel for Shuttle support shall be on duty 24 hours, 7 days a week (24/7) at the MER Safety Console beginning at tanking and continuing through landing. The administrative personnel shall support 24/7 beginning at launch and continuing through landing. As scheduled, , technical personnel for ISS support shall be on duty 24/7 at the MER Safety Console during high activity periods (e.g. launch, docking, EVA, assembly operations). On weekends and periods of low activity technical personnel shall be on call 24/7. All personnel shall support mission simulations and shall demonstrate knowledge of mission, vehicle, and payload hazard controls and an ability to cope with high stress situations prior to supporting a mission.

5.4.2.3 The MMT support shall ensure that:

a. S&MA MMT representatives are properly briefed on ongoing investigations, issues, anomalies, and operations.

b. S&MA positions on Mission Action Requests, IFAs and other in-flight issues are clearly defined and communicated to Program management.

c. S&MA data are provided in support of MMT

discussions and activities.

5.4.2.4 The Contractor shall develop and review Contingency Action Plans (CAPs) to assist in the development of predefined responses to accidents, incidents and mishaps. The Contractor shall assist in developing notification trees, obtaining contact information, defining data to be locked down, and defining how investigation boards will be established and operated, in accordance with SSP 50190, ISS Contingency Action Plan, and NSTS 07700 Volume VIII, Operations, Appendix R.

5.4.2.5 The Contractor shall support accident, incident, and mishap investigations in accordance with NPR 8621.1, NASA Procedural Requirements for Mishap Reporting, Investigation, and Recordkeeping. The Contractor shall retrieve and supply relevant S&MA data to investigatory boards. Contractor personnel shall perform analyses, such as the development of fault trees in support of accident investigation activities. The Contractor shall review relevant S&MA data to identify contributing and root causes of the accident, and the Contractor shall assist in the development of preventive and corrective actions to prevent recurrence.

5.4.2.6 The Contractor shall maintain the Safety Observation and Variance Assessment Report (SOVAR) database to ensure that real-time changes made to vehicle design and operation which conflict with baselined HRs are identified, reviewed by the appropriate safety panel, and resolved.

5.4.2.7 The Contractor shall maintain the S&MA Operations Console Handbook.

6.0 JOHNSON SPACE CENTER (JSC) PROJECTS SUPPORT

a. This section describes the requirements for S&MA support to hardware and software development Projects managed by JSC in support of major NASA Programs and initiatives. Projects include new, modifications or redesigns of existing items. The Contractor shall provide technical services related to Government-Furnished Equipment (GFE), Payloads, and other hardware, software, and firmware processed on site. The Contractor shall manage and provide NASA access to information on work being performed, products produced, and documentation tracked for other organizations.

b. The Contractor shall perform S&MA support throughout the Project life-cycle as described in this section in order to ensure systems meet requirements. Life-cycle phases may overlap and tasks may be worked or revisited in more than one phase. Support includes engineering services and the use of technical experts in the areas of design, development, fabrication, test and integration, and performance and evaluation of S&MA analyses.

c. Specific requirements for life-cycle support, project management processes and products for the definition, planning and implementation of GFE Flight Development Projects are defined in EA-WI-023, Project Management for GFE Flight Projects.

d. The Contractor shall develop or assess documentation including but not limited to:

1. Program plans
2. system hazard analyses
3. safety trade studies
4. design drawings
5. interface control drawings and documents
6. failure modes and effects analyses and critical items lists
7. system qualification and certification plans
8. EEE parts usage
9. manufacturing plans and processes
10. configuration control plans and procedures
11. software development folders
12. test plans and procedures

13. inspection requirements

14. work authorizing documentation

e. The following outlines the life-cycle roles of personnel. Specific skills and proven capabilities are required for each role.

1. Safety and Reliability personnel assist the Government in determining the S&MA requirements for the project

2. Quality Engineering personnel assist the Government in establishing the design and workmanship requirements

3. PQA personnel assist in ensuring that S&MA requirements are included in contracts

4. Quality Assurance personnel witness and verify inspections and tests

5. Safety and Quality personnel provide products to aid in the certification of the equipment for flight.

6. Safety and Reliability personnel verify controls are in place for operations

7. Safety, Quality, and Test Engineers investigate anomalies, quality escapes, and perform failure analysis

8. Data Management personnel provide proper configuration management of records

f. The Contractor shall document activities and rationales for decisions to provide traceability, and shall prepare and present status of actions and activities in periodic meetings such as weekly staff and monthly status per DRD 16, Activity Reports and quarterly technical reviews with the Programs.

g. The Contractor shall provide engineering and technical expertise to process improvement, incident review, mishap investigation teams, and boards where S&MA related topics are addressed. Activities include evaluation of flight readiness, certification record generation and management, and participation in forums including design reviews and Program Boards and Panels.

6.1 Software Assurance

The Contractor shall provide quality engineering services for software intensive ground systems residing at JSC that support the design, development, and test of flight systems. The Contractor shall provide quality engineering services for JSC facility software. This effort requires expertise in both hardware and software engineering as well as expertise in

the assurance disciplines of safety, reliability, maintainability and quality. The Contractor shall:

a. Provide software assurance support for the SAIL, SCTF, JAEL, ISL, ground simulators, mission control centers, and integrated training facilities.

b. Assess software assurance plans, quality plans, safety plans, procedures, processes, and reports for compliance to NASA and JSC policies and standards (Section J, Applicable Documents, Software Requirements and Policies subsection).

c. Support the preparation, review, and assurance of proper implementation of procedures, processes, inspection planning, and quality assurance requirements for JSC ground software.

d. Provide JSC with facility software safety analysis technologies and methodologies expertise.

e. Develop software tools, methodologies and techniques to support facility software safety analyses.

6.2 Concept and Requirements

This phase includes Project feasibility assessment, Project requirements definition and approval.

6.2.1 Feasibility Assessments

The Contractor shall assist with feasibility assessments by providing input in areas such as constraints, technical validity, facility capability, schedule and other associated risks.

6.2.2 Procurement Quality Assurance (PQA)

6.2.2.1 The Contractor shall assist in the review of proposed quality provisions and clauses to ensure project procurements are consistent with the Federal Acquisition Regulation (FAR), NASA FAR Supplements (NFS), and JSC Procurement Instruction. The Contractor shall recommend Government Source Inspection (GSI) in accordance with the requirements of FAR 46.402, applicable NASA and the JSC Procurement Instruction, draft Letters of Delegation (LOD), and NPR 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts. The Contractor shall submit the GSI recommendations and draft LODs to NASA S&MA for concurrence prior to obtaining Contracting Officer approval.

6.2.2.2 The Contractor shall perform safety, reliability, and quality assurance surveillance on selected JSC and contractors' processes to monitor contractor performance to safety, product, and technical requirements. The Contractor shall assist in defining surveillance programs that assure method, manpower, material, equipment, and environment satisfy contract requirements.

6.2.2.3 The Contractor shall perform quality assessment audits on vendors and suppliers to determine their manufacturing and testing capability. Audits include process audits to verify specified levels of control by the vendor or supplier on their internal processes, determination of problems or potential problems, identification of corrective and preventive actions, and verification of corrective and preventive action implementation and effectiveness. The Contractor shall perform inspections and monitor clean room laboratory services on-site at JSC and at other local or remote locations to ensure compliance with JPR 5322.1, Contamination Control Requirements Manual. Audits and inspections shall be performed during the development and manufacturing phases.

6.2.2.4 In order to ensure that safety, reliability, and quality assurance surveillances, audits, and inspection activities are performed in accordance with safety, product and technical requirements, the Contractor shall provide qualified Quality Assurance Specialists (QAS). The QAS shall be pre-qualified with a minimum of 2 years of experience in the quality assurance disciplines with skills encompassing problem solving, analyzing, facilitating, researching, coordinating, articulating, negotiating, communicating, and evaluating issues, concerns and actions relative to meeting S&MA requirements.

6.2.2.5 On-The-Job Training of Contractor personnel shall be restricted to acquiring the necessary experience of working within the JSC and S&MA systems and processes and shall not be used to qualify a QAS in the quality assurance disciplines.

6.2.3 S&MA Requirements

6.2.3.1 The Contractor shall assist in defining hardware and software S&MA requirements for NASA Projects.

6.2.3.2 The Contractor shall support project requirements reviews and ensure appropriate requirements for intended use, planned environments, and established criticality based on operational use are included in the project requirements documents and Project Management Plans. The

Contractor shall ensure traceability between the system level requirements and the project requirements.

6.3 Design and Development

a. This phase includes preliminary and detailed design, and system design, verification, and validation. Design validation is generally accomplished through a combination of test, analysis and inspection of a flight-like unit to prove the design meets the requirements. For JSC Projects, primary design reviews during this phase are the Preliminary Design Review (PDR) and the Critical Design Review (CDR) though other reviews may be identified that are specific to the needs of the Project. For payload reliability and maintainability, development phase reviews are held by responsible JSC organizations.

b. The Contractor shall provide support to all Project design activities, development activities, verification, and validation activities, and technical working groups. This includes the development of milestone schedules, milestone reviews and a list of hardware and software deliverables. The Contractor shall perform in-depth analysis of data and documentation to identify and document problems. Quality engineering and technical services includes preparation of documentation, review of prepared documentation, recommendations for approval of design documentation, EEE parts analysis, approval of drawings for release, verification that software development folders are maintained, attendance and participation in formal reviews, and follow-up activities including responding to actions and review of changes to documentation resulting from review discussions and actions.

c. The Contractor shall ensure appropriate closure criteria of all issues are identified and verify that action closures have been accomplished. The Contractor shall verify that documentation is maintained under Project established configuration control processes. For software development support activities, the Contractor shall use applicable quality assurance tools such as requirements traceability tools, code map coverage and software complexity studies as part of their evaluations.

6.3.1 Projects

6.3.1.1 The Contractor shall perform and evaluate assessments of the design and identify areas of risk. Examples of products utilized for assessment and analysis are:

1. FMEAs and CILs developed to the requirements of NSTS 22206, Instructions for Preparation of Failure Modes and Effects Analysis and Critical Items Lists, and SSP 30234, Instructions for Preparation of Failure Modes and Effects Analysis (FMEA) and Critical Items List (CIL) for Space Station.

2. HRs developed and processed to the requirements of NSTS 22254, Methodology for Conduct of Space Shuttle Program Hazard Analyses, SSP 50021, Safety Requirements Document, SSP 30309, Safety Analysis and Risk Assessment Requirements Document, SSP 50146 (Attachment D), NASA/RSA Bilateral S&MA Processes, JSC 17773, Instruction for Preparation of Hazard Analysis for JSC Ground Operations, KHB 1700.7, Space Shuttle Payload Ground Safety Handbook, and KHB 1710.2, KSC Safety Practices Handbook, to identify hazards associated with the ground processing and operational use of the hardware and software, define controls for those hazards, and verify implementation of the hazard controls.

3. Fault Tree Analyses to identify critical hardware, software, and procedural failure paths.

4. Statistical or probabilistic analyses to support reliability assessments.

5. Sneak circuit analyses to identify latent circuit conditions, design concerns, and drawing errors.

6. Test and analysis of high risk candidate EEE and mechanical parts.

6.3.1.2 Other products or analysis techniques shall be utilized or developed by the Contractor as necessary to meet specific requirements and to assess functions/complexity of the hardware and software items.

6.3.1.3 The Contractor shall review technical documents, changes to technical documents, and deviations and waivers to ensure inclusion of quality assurance requirements and adequacy of design criteria necessary for procurement, fabrication, inspection, and test operations. The Contractor shall identify areas of noncompliance with technical and data submittal requirements. The Contractor shall ensure hazards are identified and controlled, and verify implementation of the hazard controls. Hazards may be associated with ground processing and operational use of the hardware and software during all phases of flight (installation, launch, on-orbit usage, stowing and destowing, landing, post-landing removal and post-mission processing). The Contactor shall ensure the development of inspection and test processes and techniques in accordance with JSC policies and procedures.

6.3.1.4 Milestone design reviews such as PDR and CDR are conducted to review and approve documentation

associated with the design phase and provide formal control of the design and development process.

6.3.1.5 For PDR, the Contractor shall evaluate the design based on the following considerations:

a. Compliance with statement of work, end item specifications, specific design criteria, and other applicable documents.

b. Compatibility with interface and operational requirements.

c. Feasibility of proposed schedule.

d. Consideration of induced and natural environmental criteria.

e. Requirements for transporting, storing, handling.

f. Requirements for support equipment.

g. Inclusion of S&MA requirements.

h. Adequacy of design to satisfy S&MA-related requirements in the areas of thermal, electrical, materials, mechanical, stress, software, performance, and interface.

i. Inspectability and testability including traceability to requirements.

j. Completeness of verification matrix, adequacy of verification methods selected, and appropriateness of success criteria.

6.3.1.6 For CDR the Contractor shall evaluate the design and documentation for:

a. Detailed environmental, thermal, electrical, and mechanical analyses.

b. Development test data.

c. Design decisions and trade-offs.

d. Requirements which have been added or changed since the PDR.

e. Parts and materials selections including participation in establishment of parts reliability requirements, parts

specifications and applications, as well as requirements for selection, screening, qualification, derating, handling, destructive physical analysis, failure trending and potential NASA Advisories and Government-Industry Data Exchange Program (GIDEP) / Acute Launch Emergency Reliability Tip (ALERT) impacts, and review of non-standard parts approval requests.

f. Hardware manufacturing and software development test plans and procedures, which shall include provisions for inspections and tests.

g. Traceability in accordance with Program/Project requirements.

h. Completeness of verification matrix, adequacy of verification methods selected, and appropriateness of success criteria.

i. Closure of actions generated at the PDR.

6.3.1.7 For design validation the Contractor shall verify that the hardware and software design and implementation meets the Project requirement for life, environments, interfaces, and performance and that the method of verification (test, analysis, or inspection) is appropriate, adequate and documented in applicable Work Authorization Documents. The Contractor shall review all design validation documentation and participate in organizational and formal certification reviews.

6.3.2 Payloads

The Contractor shall provide evaluation of the implementation of JSC and NASA payload reliability and maintainability requirements. The Contractor shall participate in working group meetings and formal and informational reviews of payload documentation and data as described in NSTS 13830, Payload Safety Review and Data Submittal Requirements, NSTS 1700.7, Safety Policy and Requirements for Payloads Using the Space Transportation System (STS), and NSTS 1700.7, ISS Addendum, Safety Policy and Requirements for Payloads Using the International Space Station, to assess payload hardware and software compliance with applicable payload requirements. The Contractor shall identify problems, deficiencies, or concerns and present their findings along with recommendations for corrective and preventive actions to the responsible organization.

6.4 Manufacturing, Test, Acceptance, and Delivery

This phase includes materials procurements and receiving, fabrication and manufacturing, subassembly testing and assembly acceptance testing, formal acceptance by NASA, software code development, software verification testing, shipment, and physical delivery of the finished products and requires engineering, inspection, and recordkeeping functions. The Contractor shall audit manufacturing processes, inspect manufactured items, support testing, and provide inspection and processing services for storage, handling, shipping, and receiving. The manufacturing processes include metallurgical, chemical, metal-joining, bonding, plating and coating, surface-treating, EEE, welding, machining, and plastics-working processes, and designing and implementing manufacturing inspection attribute sampling plans.

6.4.1 Readiness Reviews

The Contractor shall conduct documentation and drawing reviews, coordinate work requests, and participate in formal reviews such as Manufacturing Readiness Reviews (MRRs) and Test Readiness Reviews (TRRs). The Contractor shall participate in Acceptance Reviews (ARs) to assess the readiness of hardware and software for acceptance by NASA.

6.4.2 Manufacturing and Test Assurance

6.4.2.1 The Contractor shall provide in-line technical assessments by use of inspection, verification, and the witnessing of work and processes used in the development and manufacturing of space flight hardware, software, and associated ground support equipment. Technical assessments are performed to verify work is accomplished according to applicable requirements. Inspection and verification tasks are associated with receiving, handling, storage, packaging, preservation, fabrication, assembly, test, processing, and shipping of hardware and software. The Contractor shall maintain all the Contractor-provided and Government-provided precision measurement mechanical and electronic tools and equipment required for performance of manufacturing and test assessment responsibilities contained in this SOW. The Contractor shall provide surveillance of hardware and software processes and hardware fabrication where in-line inspection is being accomplished by other than this Contractor's provided inspectors.

6.4.2.2 The Contractor shall support simulation or integrated ground system testing both pre- and post-acceptance to assess compliance of planned simulations or integrated system testing with NASA approved plans, procedures and applicable standards for the simulator or facility involved.

6.4.2.3 The Contractor shall provide engineering and technical services for the development, testing, acceptance, and delivery of software and associated tools. The Contractor shall perform software code walkthroughs to evaluate testability. The Contractor shall analyze test plans, procedures and results to ensure that the software meets S&MA requirements.

6.4.3 Non-Conformances

6.4.3.1 The Contractor shall document problems and anomalies by using a Non-Conformance Report (NCR) or Discrepancy Report (DR). The Contractor shall be responsible for trend coding of all NCRs and DRs and the preparation of trend reports and analyses based on trend coding data. This task includes conducting investigation and corrective action activities, documenting problems and anomalies, tagging and segregating discrepant hardware or software during investigation. The Contractor shall ensure that acceptable problem resolutions or explanations are documented and implemented.

6.4.3.2 The Contractor shall review failures and discrepancies that occur in JSC facilities supported by S&MA. The Contractor shall analyze the failure and discrepancy information and provide trend reports per DRD 17, Trend Analysis (JSC Systems) Report.

6.4.3.3 The Contractor shall maintain a system for reporting and tracking of Problem Reporting and Corrective Action (PRACA) items. The Contractor shall input problem data received from other contractors into the system, use and analyze the data for reporting and supporting other problem discussion activities, and output data from the system into Program systems that collect both Program and Project problem data. The Contractor shall participate in PRTs and similar investigation teams to ensure proper classification and disposition of problems, and support Project and Program level boards to provide status, closure, and disposition information. The PRACA process tracks problems that occur during manufacturing, assembly, test, maintenance, and operations. The PRACA process is described in NSTS 08126, Space Shuttle Problem Reporting and Corrective Action (PRACA) System Requirements, for the Shuttle Program, and in JSC 28035, JSC Government Furnished Equipment (GFE) Problem Reporting and Corrective Action (PRACA) Requirements, for GFE Projects, and SSP 30524, PRACA Data System Requirements Definition Document, and SSP 30223, Problem Reporting and Corrective Action for the

International Space Station, for the Space Station Program.

6.4.4 Documentation Tracking and Retention

The Contractor shall provide tracking, control, maintenance and indices of documents and the actual or controlled electronic versions of documentation produced during this phase. Documentation includes but is not limited to Task Performance Sheets (TPSs), Virtual Work Authorization Records (VWARs), Work Order Packages, Interim DRs, DRs, MRRs, shipping documents, Acceptance Data Packages (ADPs), documentation on inactive hardware and equipment, and vendor data submittals.

6.4.5 Acceptance

The Contractor shall verify system requirements and specifications for safety, reliability and performance are met. The Contractor shall participate in Software Acceptance Reviews, System Acceptance Reviews, Functional Configuration Audits (FCAs), and Physical Configuration Audits (PCAs) to present and discuss their findings and recommendations. The Contractor shall ensure the completeness and accuracy of ADPs per SSP 30695, Acceptance Data Package Requirements Specification, and SN-D-0007, Acceptance Data Package Requirements.

6.5 Operations

This phase includes system certification or recertification to new or revised operational usage requirements, assessment of readiness for shipment, evaluation of readiness for operational use, and support to operations that include ground handling and flight.

6.5.1 Certification

The Contractor shall establish and maintain a process for the certification or recertification of hardware and software for flight that includes obtaining, producing, and reviewing objective evidence that design, production, safety and acceptance processes provide products that meet or exceed the minimum requirements identified for the hardware or software. The certification process for hardware includes tracking manifested items and assessing certification status, assembling, summarizing, and presenting certification data packages to a NASA Certifying Official, and logging, storing and controlling the signed certification documentation. The certification process includes the processing of the Government Certification Acceptance Record (GCAR).

6.5.2 Shipment of Flight Equipment

The Contractor shall ensure flight equipment being shipped for flight is ready for shipment and follow-on flight processing and integration. The Contractor shall verify that the equipment is certified for the mission, open issues have been resolved, pre and post flight ground processing open work has been scheduled, and there is sufficient life usage remaining to support the identified mission. The Contractor shall present their assessment of readiness for shipment to NASA.

6.5.3 Prelaunch Assessments

6.5.3.1 The Contractor shall perform evaluations of flight worthiness and readiness, and generate flight assessment documentation to support discussions and Flight Readiness Reviews (FRRs).

6.5.3.2 The Contractor shall prepare and present S&MA prelaunch assessment presentations for each flight per DRD 15, S&MA Prelaunch Assessment Presentations. The overall Program-level requirements for this activity are contained in NSTS 08117, Requirements and Procedures for Certification of Flight Readiness.

6.5.3.3 The Contractor shall support EVA mission crew training and verify EVA Assessment Team (EVAAT) crew training. EVA payloads and hardware reviews shall be supported by the Contractor to verify compliance with S&MA and EVA requirements. EVA related Integrated hazard reports shall also be reviewed to verify compliance to EVA requirements. The Contractor shall perform, document, baseline and maintain EVA operations risk assessments for Space Shuttle and ISS EVAs. The Space Shuttle Program-level requirement for this task is identified in NSTS 22254, Methodology for Conduct of Space Shuttle Program Hazard Analyses, and more specific requirements for operational and hazard assessments are contained in JSC 17481, Safety Requirements Document for JSC Space Shuttle Flight Equipment. The ISS Program-level requirement for this task is in SSP 30309, Safety Analysis and Risk Assessment Requirements Document.

6.5.3.4 The Contractor shall prepare S&MA Certification of Flight Readiness (CoFR) and Certification of EVA Readiness presentations for both S&MA internal and Program flight readiness reviews for each flight in accordance with the requirements of SSP 50108, Certification of Flight Readiness Process Document, ISS Program, Space Shuttle Program Directive 52, for the ISS Program, NSTS 08117, Requirements and Procedures for Certification of Flight Readiness, for the Shuttle Program, and JSC 28222, EVA Project Certification of Flight Readiness

Requirements and Implementation Plan, for EVA-related items.

6.5.4 Flight Planning and Real-Time Flight Support

6.5.4.1 The Contractor shall provide real-time flight support to monitor system use and performance and serve as the flight support data resource for S&MA data as well as Project specific data and documentation.

6.5.4.2 The Contractor shall participate in flight planning, mission simulation training and operations to identify potential safety issues to ground support systems, payloads, or mission operations and provide an independent assessment including recommendations for resolution, for discussion, or presentation to the responsible JSC forums or organizations.

6.5.4.3 In addition, the Contractor shall participate in investigations of in-flight anomalies and failures, and in the implementation of resolutions and preventive or corrective actions.

6.6 Sustaining Engineering and Maintenance

This phase includes engineering activities supporting the continuing usage of Project hardware and software. The Contractor shall support flight operations planning and assessments, performance and problem trending, hardware life assessments and maintenance requirements tracking, and engineering and inspection support to required maintenance and repair activities.

7.0 INDEPENDENT ASSESSMENT AND ASSURANCE ACTIVITIES

7.1 Independent Assessment (IA)

7.1.1 The Contractor shall provide Programmatic, technical, and process expertise within each S&MA discipline for conducting Independent Assessments (IAs) to enhance the success of Programs and Projects and the effectiveness of S&MA processes implemented in Programs and Projects. Assessments and evaluations shall be proposed by the Contractor. The Contractor shall report the results of assessments and evaluations per DRD 18, Evaluation Reports and DRD 19, Assessment Plans and Reports.

7.1.2 The Contractor shall:

a. Identify status, issues, and concerns regarding safety and mission assurance and communicate this information to the JSC Independent Assessment Office (IAO) via informational reports (verbal or written) regarding meetings attended, Program and Project activities, and internal IA planning activities.

b. Provide technical and administrative services to the JSC IAO to facilitate the Prelaunch Assessment Review (PAR) process of the JSC S&MA Directorate for unmanned International Partner (IP) launches to the ISS.

c. Provide technical and administrative support to the NASA Headquarters Office of Safety and Mission Assurance (OSMA) SMARR process for Shuttle and Russian Soyuz launches.

d. Provide expertise on audit teams to:

1. Research and compile documentation needed in the audit

2. Verify requirements traceability

3. Identify requirements gaps

4. Assess areas such as processes, staffing, skill mix, software tools, and funding

5. Document findings and supporting objective evidence

e. Maintain and administer the JSC IA website for use by IA personnel.

f. Provide the JSC IAO Quarterly Activity Report in a mutually agreed format for redistribution to other IA locations and NASA management per DRD 16, Activity Reports.

7.2 Integrated Supplier Assurance Management Program (ISAMP)

7.2.1 NASA has implemented a program for evaluating, gathering, and disseminating information on Government suppliers' performance under the authority of the NPR 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts.

7.2.2 The Contractor shall participate in the implementation of NASA quality assurance of Government suppliers. The assurance activities include consideration of hardware complexity, supplier experience, state of hardware development, unit cost, and hardware use. The Contractor shall also participate in Supplier Assurance Studies, Working Groups, and Headquarters Support. This support includes the preparation of meeting minutes and assistance in the development of Agency quality related procedures.

7.2.3 The Contractor shall provide project administration of the Integrated Supplier Assurance Management Program (ISAMP), which includes cost tracking and cost and Project reporting. The services shall also include services to and coordination with Headquarters and NASA Centers, Projects, and Programs.

7.2.4 In support of the Supplier Assessment System (SAS), the Contractor shall:

a. Maintain, enhance and train personnel in the use of the SAS data repository for the agency. The SAS provides the user with:

1. a complete listing with supporting information of suppliers used by NASA with emphasis on performance and risk;

2. Agency-wide supplier metrics, providing performance insight and targets of opportunity for supplier base improvements;

3. detailed schedule information of audits;

4. detailed repository of audit history information;

5. provision of standardized tools (e.g. audit checklists, flow down audit formats for incorporation into DCMA LOD);

6. resource links throughout the Agency for access to product data and best practices.

b. Coordinate activities with the Naval Sea Systems Command (NAVSEA), and the Missile Defense Agency, and Army Material Command as directed.

7.3 Software Continuous Process Improvement

7.3.1 The Contractor shall manage and provide services to the development and implementation of all NASA software continuous improvement initiatives in accordance with NPR 7150.2, Software Engineering Requirements. The primary goal is the release of safe and high quality software products and processes. Specifically, the Contractor shall perform the following:

a. Establish comprehensive company goals for continuous improvement in the area of software development and assurance.
b. Provide metrics which quantify the effectiveness of continuous improvement goals.

c. Maintain a record of continuous improvement activities and associated results.

7.3.2 The Contractor shall provide technical and engineering services to the S&MA Software Assurance Technology Team (SWATT) in developing and maintaining continuous process improvement in the area of software development and assurance. This includes the periodic review and recommended revision to Agency and Center software policies, procedures and standards.

7.3.3 The Contractor shall maintain and ensure uniformity in the implementation of software quality and safety requirements for JSC Programs and Projects. This includes developing and implementing JSC approved procedures and controls that are consistent with software process and product continuous improvement models. The Contractor shall assist S&MA to ensure that JSC procedures and controls are compliant with the Capability Maturity Model Integrated (CMMI).

8.0 ADVANCED PROGRAMS, ASSURANCE METHODOLOGIES, AND SPECIAL PROCESSES

The Contractor shall ensure that S&MA disciplines are included in advanced programs and projects. Emphasis shall be placed on early involvement, responsiveness, and providing added value. This includes new, modified, and exploration-related programs and projects. Services shall also be provided to advance the state of the art in assurance practices and to maintaining cognizance of advanced technologies and their implications to the assurance function.

8.1 Advanced Programs and Projects

The Contractor shall provide early involvement to assigned advanced programs and projects to increase the likelihood of mission success, reduce the risk of injury to personnel, and improve the overall system safety, reliability, and mission assurance.

8.1.1 Risk Analyses

8.1.1.1 The Contractor shall perform qualitative and quantitative assessments of risk. The Contractor shall assist in the identification, assessment, reporting, tracking, and mitigation of risks throughout the program life-cycle. Examples of risk assessments include hazards analyses, FMEA, PRAs, reliability, maintainability, supportability and availability analyses.

8.1.1.2 The Contractor shall participate in requirements development and design trade studies to determine the most effective means of achieving safe and reliable space systems. The Contractor shall also utilize lessons learned, as well as research and analyze other data and methodologies to provide and defend recommendations.

8.1.2 Requirements Development

8.1.2.1 The Contractor shall assist the Government with the development and assessment of top-level S&MA requirements for proposed space flight programs and their associated support systems. This includes the development and evaluation of rationale and traceability for recommended requirements.

8.1.2.2 The Contractor shall assist with the development and assessment of Project- and subsystem-level S&MA requirements derived from higher level requirements. This includes the development and evaluation of rationale and traceability for recommended requirements.

8.1.3 Vehicle S&MA Engineering

8.1.3.1 The Contractor shall evaluate design concepts proposed by NASA and contractors against S&MA requirements and provide feedback to design processes with supporting data for recommendations.

8.1.3.2 The Contractor shall perform integrated system-level S&MA assessments of designs, specifications, and other Program documentation such as hazards analyses, safety plans, and reliability analyses and provide inputs to milestone reviews with supporting data for any findings.

8.1.3.3 The Contractor shall perform detailed evaluations of spacecraft subsystems through the review of subsystems specifications, design documents, operations plans, and the use of safety and reliability analysis tools. The Contractor shall also develop or evaluate subsystem safety and reliability analyses such as preliminary hazard analyses, hazard analyses, FMEAs, fault trees, and reliability block diagrams. The Contractor shall provide inputs to subsystem design specifications and operations documents at milestone reviews or as needed and present and defend these inputs. The Contractor shall assess planned flight operations concepts to ensure S&MA requirements are met and provide input to NASA.

8.1.3.4 The Contractor shall determine applicability of human rating requirements to space flight systems and incorporate such requirements in appropriate Program documents. The Contractor shall also generate and evaluate human rating plans and requirements and evaluate Program and Project compliance to human rating requirements and provide recommendations to correct deficiencies.

8.1.4 Procurement Quality Assurance (PQA)

8.1.4.1 The Contractor shall assist the Government in the development of procurement documentation in order to describe S&MA processes and products delivered by the spaceflight systems contractors.

8.1.4.2 The Contractor shall assist the Government in determining quality requirements to be incorporated into spaceflight systems contracts and assist in instituting processes to ensure that delivered products meet NASA requirements. The Contractor shall assist the Government in drafting LODs for government approval, to authorize DCMA or other Government agencies to accept spaceflight hardware and software deliverables.

8.2 Assurance Methodologies and Technologies

8.2.1 Assurance Methodologies

The Contractor shall participate in activities to advance state of the art assurance methodologies in support of NASA initiatives such as Research Technology Objectives and Plans (RTOPs) NASA Electronic Parts Packaging (NEPP) Program. The Contractor shall conduct or participate in research efforts in new technologies for the purpose of identifying assurance techniques required upon deployment of advanced technologies. The Contractor shall also propose RTOPs and plans for innovative methodologies and technologies for conducting risk assessments and providing product assurance. The Contractor shall support the NEPP by identifying and suggesting approaches for EEE parts database management, identifying and collecting data sources for EEE parts obsolescence, and identifying and comparing tools and techniques for predicting obsolescence.

8.2.2 Assurance Technologies

The Contractor shall carry out activities to advance S&MA capabilities in performing assurance functions. These activities include evolving or improving existing assurance and analysis techniques, and proposing and developing new assurance concepts.

The Contractor shall:

a. Research and develop techniques to quantitatively assess the risks of software failures.

b. Assess and develop new assurance tools in multiple areas such as: reliability, maintainability, and supportability analyses; probabilistic risk assessment; nondestructive evaluation and other inspection techniques; and risk management.

c. Research advanced technologies with emphasis on assurance. Examples of such technologies are Micro-Electromechanical Systems (MEMS), nano-technology, advanced materials, and advanced computing and processing systems.

d. Facilitate technology transfer through demonstrations to JSC Programs and Projects.

8.3 Special Processes

8.3.1 The Contractor shall provide expertise to assess new and emerging technologies and apply to programs and projects. Current designated areas are metals, welding, soldering, brazing, nonmetallic materials (composites and adhesives), Surface Mount Technology (SMT), lubrication, seals, contamination, fasteners, contamination-related environmental technology, fluids, NDE, and Statistical Process Control (SPC).

8.3.2 The Contractor shall:

a. Evaluate data provided by hardware contractors and subcontractors on equipment to verify compliance with contract requirements and appropriate specifications.

b. Provide materials and process engineering expertise for review of flight and flight-related system problems and recommend corrective actions to prevent problem reoccurrence.

c. Support special problem investigations as required, review process-oriented hardware failure analyses and investigations, and provide findings and recommendations.

d. Review Government and contractor drawings and specifications as directed. Present findings on adequacy and compliance, with emphasis on process technology.

e. Review process specifications and procedures for fabrication, assembly, and testing; and prepare comments and findings.

f. Review nondestructive test procedures and NDE of pressure vessels and fracture control of structural components. Provide findings on adequacy and compliance.

g. Provide expertise in the development and maintenance of workmanship standards for manufacturing and process technologies at the Center and Agency levels.

h. Recommend requirements for the JSC procurement of clean rooms, tools, related equipment, and services. The Contractor shall review JSC clean room facilities and operations and provide comments and findings.

i. Provide expertise for the preparation and maintenance of cleanliness specifications and procedures for Program hardware testing, preflight checkout, and functional operations.

j. Review JSC contamination control activities and provide recommendations concerning compliance to requirements.

k. Establish and evaluate process technologies for ground-based and on-orbit applications.

8.4 Electrical, Electronic, Electromechanical (EEE) Parts

8.4.1 The Contractor shall provide services to JSC organizations that are responsible for internal or contracted efforts involving EEE parts in space flight hardware and mission-essential or critical ground support equipment for new designs, Programs, and Projects.

8.4.2 The Contractor shall:

a. Provide verification during requirements definition phase to ensure that the parts screening, qualification and vendor selection process is compliant with requirements.

b. Participate in audits of existing and proposed suppliers to verify compliance to NASA standards.

c. Perform verification of the data submittal during hardware development for parts qualification, screening, EEE parts problem resolution and corrective action, risk assessment, and recurrence control.

d. Assist in preparation, analysis and distribution of NASA Advisories and GIDEP ALERTS. Verify as-built configuration parts are not included in the GIDEP database and coordinate with JSC Engineering to resolve any nonconformances.

e. Provide technical expertise to the Receiving Inspection and Test Facility (RITF) for EEE part failure analysis and screening.

f. Evaluate electrical stress derating analysis and MTBF reliability analysis for flight hardware in conjunction with S&MA flight hardware certification process.

g. Provide reliability analysis tools and manpower to perform MTBF analyses. The analysis shall be performed in two phases. In the early design phase, the analysis shall ensure the design is consistent with the hardware failure rate goal. The final design phase shall use the appropriate stress analysis model to verify the MTBF for the delivered hardware.

h. Compare "as-built" configuration to the "as-designed" EEE parts lists and identify risk implications for any non-compliances to the Program and Project managers.

i. Support JSC Engineering by verifying the test facilities meet Program requirements.

8.5 NASA Advisories and Government-Industry Data Exchange Program (GIDEP)/Acute Launch Emergency Reliability Tip (ALERT) System

8.5.1 The Contractor shall use the GIDEP/ALERT system to exchange information both internal and external to NASA.

8.5.2 The Contractor shall maintain the GIDEP/ALERT files and related information, and the ALERT distribution list. The Contractor shall review ALERTs for applicability to JSC contracts, distribute ALERTs, and determine adequacy of responses.

8.5.3 The Contractor shall provide a controlled method to evaluate, initiate, investigate, distribute and respond to ALERTs which apply to JSC and other NASA Centers per the process and requirements of NPR 8735.1, Procedure for Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government Industry Data Exchange.

9.0 INSTITUTIONAL SAFETY AND QUALITY

9.1 Pressure Systems

9.1.1 The Contractor shall provide engineering and technical expertise for the JSC pressure systems certification Program as outlined in JPR 1710.13, Design, Inspection, and Certification of Pressure Vessels and Pressurized Systems. The Contractor shall:

a. Review and certify compliance of Pressure Vessel System (PV/S) designs.

b. Review and certify compliance of PV/S certification inspection and testing procedures.

c. Perform pressure vessel inspections per JPR 1710.13.

d. Track and record inspections and assessments per DRD 20, Facilities System Certification Report.

e. Monitor PV/S tests for conformance to test requirements.

f. Maintain a computerized inventory and recall system to document, track, and schedule all PV/S tests and inspections.

9.1.2 Inspection personnel shall possess a commission from the National Board of Boiler and Pressure Vessels. Inspectors shall be certified by the American Welding Society to perform weld inspections. The Contractor shall maintain copies of certifications and commissions and shall provide copies to the COTR.

9.2 White Sands Test Facility (WSTF)

9.2.1 The Contractor shall provide the White Sands Test Facility (WSTF) S&MA offices with support in the establishing and implementing policies and Program requirements, engineering and technical expertise in materials and process engineering, system safety, engineering and technical expertise for the JSC pressure systems certification program, inspection support to flight and flight-related systems to ensure that quality assurance requirements are satisfied, and performance of activities related to institutional safety and health.

9.2.2 The Contractor shall provide products and services to the WSTF S&MA in the following areas:

a. Process submitted Corrective/Preventive Action Requests (CPAR), including tracking CPAR resolution and maintaining the WSTF CPAR database.

b. Work with WSTF design groups, technical offices, and S&MA to make and implement quality improvements and changes.

c. Provide field quality assessments and surveillance of WSTF test activities.

d. Provide acceptance test verification.

e. Support cross-functional management system and system safety audits.

f. Generate discrepancy records for observed non-conformances and perform trend analysis.

g. Support the processes required to perform re-certification and modification of existing ground-based pressure systems and certification of new ground-based pressure systems in accordance with facility policies and procedures, applicable industry codes and specifications, and governing NASA standards.

h. Provide expertise to the processes required for the qualification of welding and brazing personnel and review and authorize welding and brazing processes and documentation in accordance with facility policies and procedures, applicable industry codes and specifications, and governing NASA standards.

i. Review WSTF management system documents for sufficiency in addressing and conformity to meeting requirements.

j. Perform vendor surveys and maintain Survey Vendor List (SVL).

k. Develop training Programs for S&MA disciplines for use at WSTF.

l. Train WSTF S&MA personnel and integrate with the JSC S&MA Personnel Qualification Program.

m. Provide record maintenance, data entry, and management system documentation maintenance.

n. Implement and maintain WSTF Hazard Management System. Assess applicable agency requirements implementation. Coordinate NASA customer inputs and communicate system needs to NASA.

o. Plan and execute annual Performance Evaluation Profile (PEP) surveys and coordinate improvement activities performed by NASA and WSTF team contractor personnel.

p. Facilitate contribution to and application of the Lessons Learned Information System (LLIS) per DRD 02, Lessons Learned, for WSTF personnel. Provide monthly assessment of WSTF information for candidate LLIS contributions. Coordinate application of LLIS with WSTF Management Representatives.

q. Assess GIDEP/ALERTS and coordinate applicable information with affected WSTF representatives.

10.0 RECEIVING INSPECTION TEST FACILITY (RITF) (Completion Form)

a. The effort described by this SOW Section provides the JSC S&MA Directorate with the expertise and ability to provide mechanical and electrical part testing, failure analysis and evaluations, and specialized training in NASA workmanship standards in support of NASA programs and projects. The RITF is located at JSC and provides services to contractors and subcontractors, JSC and other NASA Centers, as well as other Government agencies.

b. The Contractor shall provide the engineering and technical services necessary to operate the RITF facility and accomplish the testing, evaluation, and training services.

c. The Contractor shall ensure the existing American Association for Laboratory Accreditation (A2LA) and ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories, accreditation is maintained for all lab disciplines.

10.1 Mechanical and Electrical Testing and Analysis

10.1.1 The Contractor shall perform the following mechanical and electrical testing and analyses within the RITF:

a. Destructive and nondestructive physical, chemical, and metallurgical testing and analyses of raw materials, fasteners, and mechanical hardware and components. Testing includes ultimate load, hardness, and quantitative chemical analysis of fasteners (e.g., bolts and rivets). Fastener testing shall be conducted in accordance with the requirements of JSC 23642, JSC Fastener Integrity Testing Program.

b. Failure analysis of electronic and mechanical components.

c. Burn-in of electronics components.

d. Application research and testing on electronic parts proposed for use in environments not specified by the manufacturer (e.g., vacuum, extremely high or low temperatures, plasma inducing pressure levels).

e. Incoming inspection of electrical assemblies used in critical and life-support hardware.

f. Incoming screening of wire and cable to be used for flight Projects at JSC per the requirements of JSCM 8080 E-24, Manned Spacecraft Criteria and Standards.

10.1.2 In performing RITF services, the Contractor shall establish test and analysis requirements, perform inspections, screen and test, evaluate test and screening results, and prepare documentation to

be returned to the customer. In the case of a failure analysis, the Contractor shall also include determination of failure cause, and process or manufacturing corrective action recommendations.

10.1.3 The Contractor shall perform testing and analyses of manufacturing techniques, processes, and procedures pertaining to welding, soldering, electrical wire certification, surface mount technology and printed wiring boards/circuits, heat treating, EEE and mechanical parts, interconnecting wiring, fiber optics, electrostatic discharge control, conformal coating and encapsulation, staking, bonding, and contamination control.

Performance Standards – RITF Mechanical and Electrical Testing and Analysis:

1. Minimum of 90% of lab services completed on schedule.

2. Customer Satisfaction – Services including testing, analysis, and documentation, receive an overall minimum rating of "good."

10.2 Training

10.2.1 The Contractor shall maintain training courses for the following processes: through hole soldering and inspection; surface mount soldering and inspection, cable and harness crimping and inspection; wire-wrap; lithium battery handling; conformal coating fabrication and inspection; fiber optic termination; electrostatic discharge (ESD) control; and other related courses as identified in the future to support changing and new NASA program and project workmanship standards. This training ensures compliance to NASA and industry standards and demonstrates proficiency to perform the necessary tasks.

10.2.2 The Contractor shall provide a comprehensive training and cross-training program for all RITF personnel that includes both formal and on-the-job training and RITF equipment proficiency training. Training requirements and fulfillment are to be documented in the S&MA Training data system in accordance with DRD 14, S&MA Personal Qualification Program Plan.

10.2.3 The Contractor shall record all training conducted and employees trained. The Contractor shall track certifications resulting from process certification courses conducted and notify the training coordinator or designee when certifications require renewal.

Performance Standards – RITF Training:

1. 100% of periodic reports submitted on schedule

2. 100% employees with up to date training plans.

3. Customer Satisfaction – Course attendees opinion surveys indicate satisfaction with course content and level of detail.

10.3 Quality

10.3.1 The Contractor shall maintain a Quality Management System (QMS) in the RITF compliant with ANSI ASQ Q9001-2000, Quality Management Systems Requirements in accordance with DRD 06, Quality Manual.

10.3.2 The Contractor shall maintain the RITF's procedures, equipment, management, and personnel in compliance with ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories.

10.3.3 Upon receipt, the Contractor shall submit a copy of audit reports generated by internal or external auditors of the RITF to NASA RITF management. The Contractor shall provide written statuses per DRD 16, Activity Reports, of any open work remaining after an audit (such as auditor findings and observations) until the open work is completed and approved by the auditing organization.

Performance Standards – RITF Quality:

1. Maintained compliance to ANSI ASQ Q9001-2000 as verified by NASA-authorized audits and inspections.

2. Maintained certification to ISO/IEC 17025 as verified by NASA-authorized audits and inspections.

10.4 Laboratory Equipment and Facilities

The equipment provided by the Government for performance of RITF activities is listed in Section J. Property shall be managed by the Contractor per the approved Property Management Plan (DRD 08).

Performance Standards – RITF Laboratory Equipment and Facilities:

1. 100% of Property Reports submitted on time.

2. Minimum of 98% of accountable property accounted for.

10.5 Maintenance

The Contractor shall be responsible for the maintenance of RITF equipment. The Contractor shall plan, coordinate, and manage the resources to perform RITF services. The Contractor shall maintain a

prioritized life-cycle replacement and acquisition list of equipment needs that ensures continuity of RITF services and expansion of capacity to accommodate approved Program and Project requirements.

Performance Standards – RITF Maintenance:

1. 100% of equipment maintenance (scheduled maintenance and calibration) completed on schedule.

2. Life-cycle replacement and acquisition list updated and NASA-approved for input to NASA yearly budget planning activity on schedule.

10.6 Shipping and Receiving

The Contractor shall ship and receive all equipment and materials leaving or entering the RITF through the shipping and receiving area. The Contractor shall record and maintain information necessary for tracking incoming and outgoing shipments. For items being shipped or received by commercial package delivery or by the U.S. Postal Service, the Contractor shall coordinate with the JSC shipping and receiving departments.

Performance Standard – RITF Shipping and Receiving:

1. Less than one working day processing time for shipping and receiving processing.

10.7 Laboratory Information Management System (LIMS)

The Contractor shall maintain a Laboratory Information Management System (LIMS) provided by NASA. This system shall be used by the Contractor to track information and costs for all jobs performed by the RITF. The LIMS system shall be accessible by both Contractor and NASA personnel. Maintenance of the LIMS system hardware and software shall be in accordance with DRD 12, Information Technology Plan.

Performance Standards – RITF LIMS:

1. 100% data and system availability during weekdays from 8 a.m. to 6 p.m. and 24/7 during Shuttle flights (launch to landing).

2. Customer Satisfaction – Data system development and modification receive an overall minimum rating of "good."

RITF Workload Estimates:

- Jobs per year – 1411
  - Test samples per year* – 2683
  - Failure analysis or application analysis - 60
- Number of student seats per year – 1120

- Certifications being tracked – 1221

*Multiple test samples maybe combined to be considered as one job

SECTION D – PACKAGING AND MARKING

D.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

None included by reference.

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

None included by reference.

D.2 PACKAGING, HANDLING, AND TRANSPORTATION (NFS 1852.211-70) (SEPT 2005)

(a) The Contractor shall comply with NASA Procedural Requirements (NPR) 6000.1, "Requirements for Packaging, Handling, and Transportation for Aeronautical and Space Systems, Equipment, and Associated Components", as may be supplemented by the statement of work or specifications of this contract, for all items designated as Class I, II, or III.

(b) The Contractor's packaging, handling, and transportation procedures may be used, in whole or in part, subject to the written approval of the Contracting Officer, provided (1) the Contractor's procedures are not in conflict with any requirements of this contract, and (2) the requirements of this contract shall take precedence in the event of any conflict with the Contractor's procedures.

(c) The Contractor must place the requirements of this clause in all subcontracts for items that will become components of deliverable Class I, II, or III items.

(End of clause)

[END OF SECTION]

SECTION E - INSPECTION AND ACCEPTANCE

E.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-5	APR 1984	INSPECTION OF SERVICES - COST-REIMBURSEMENT

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

None included by reference

E.2 INSPECTION AND ACCEPTANCE (JSC 52.246-90) (JUN 1991)

Final inspection and acceptance shall be accomplished by the contracting officer or his/her duly authorized representative at NASA Lyndon B. Johnson Space Center or at other locations covered by the Statement of Work.

(End of clause)

[END OF SECTION]

SECTION F - DELIVERIES OR PERFORMANCE

F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.242-15	AUG 1989	STOP-WORK ORDER (ALTERNATE I) (APR 1984)

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

None included by reference.

F.2 COMPLETION OF WORK AND PERIOD OF PERFORMANCE

(a) All work required under Sections 3.0, 4.0, and 10 of the Statement of Work of this contract, including submission of all reports, shall be completed on or before April 30, 2009.

(b) The period of performance for Sections 5.0 through 9.0 of the Statement of Work of this contract shall be from May 1, 2006 through April 30, 2009.

(End of Clause)

F.3 ADVANCE NOTICE OF SHIPMENT (NFS 1852.247-72) (OCT 1988)

Ten work days prior to shipping item(s), for all items other then items listed in Attachment J.1, Data Requirements List (DRL) and Data Requirements Description (DRD), the Contractor shall furnish the anticipated shipment date, bill of lading number (if applicable), and carrier identity to Contracting Officer Technical Representative and to the Contracting Officer.

(End of Clause)

F.4 BILLS OF LADING (NFS 1852.247-73) (JUN 2002)

The purpose of this clause is to define when a commercial bill of lading or a government bill of lading is to be used when shipments of deliverable items under this contract are f.o.b. origin.

(a) **Commercial Bills of Lading.** All domestic shipments shall be made via commercial bills of lading (CBLs). The Contractor shall prepay domestic transportation charges. The Government shall reimburse the Contractor for these charges if they are added to the invoice as a separate line item supported by the paid freight receipts. If paid receipts in support of the invoice are not obtainable, a statement as described below must be completed, signed by an authorized company representative, and attached to the invoice.

"I certify that the shipments identified below have been made, transportation charges have been paid by (company name), and paid freight or comparable receipts are not obtainable.
Contract or Order Number: _____
Destination:_____."

(b) **Government Bills of Lading.**

(1) International (export) and domestic overseas shipments of items deliverable under this contract shall be made by Government bills of lading (GBLs). As used in this clause, "domestic overseas" means non-continental United States, i.e. Hawaii, Commonwealth of Puerto Rico, and possessions of the United States.

(2) At least 15 days before shipment, the Contractor shall request in writing GBLs from: Cindy Fuller, Contract Transporation, 2101 NASA Parkway, Mail Code JB7, Houston, TX 77058 . If time is limited, requests may be by telephone: 281-483-3208. Requests for GBLs shall include the following information.

(i) Item identification/ description.

(ii) Origin and destination.

(iii) Individual and total weights.

(iv) Dimensional Weight.

(v) Dimensions and total cubic footage.

(vi) Total number of pieces.

(vii) Total dollar value.

(viii) Other pertinent data.

(End of Clause)

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

The Government may require the contractor to continue to perform services under this contract. The contracting officer may exercise this option by issuance of a unilateral contract modification 30 days or more before the completion date set forth in Section F.2. Should the option(s) be exercised, the resultant contract will include all terms and conditions of the basic contract as it exists immediately prior to the exercise of the option, except for the following changes:

Option 1:

1. B.2, entitled "ESTIMATED COST AND AWARD FEE" will be modified to reflect the addition of $51,535,680 to the estimated cost and $4,042,110 to the maximum available award fee.

   The additional estimated cost and award fee for Option 1 is broken out as follows:

Option 1	Estimated Cost	Available Award Fee	Total Cost
Completion-Form	$10,765,174	$845,066	$11,610,240
Level-of-Effort	$40,726,678	$3,197,044	$43,923,722
New Mexico Gross Receipts Tax	$43,828	$0	$43,828
OPTION 1 TOTAL	$51,535,680	$4,042,110	$55,577,790

2. F.2 (a), entitled "COMPLETION OF WORK AND PERIOD OF PERFORMANCE" will be modified to state:

   "(a) All work required under Sections 3.0, 4.0, and 10 of the Statement of Work of this contract, including submission of all reports, shall be completed on or before April 30, 2010.

   (b) The period of performance for Sections 5.0 through 9.0 of the Statement of Work of this contract shall be from May 1, 2006 through April 30, 2010."

3. F.6, entitled "FLEX OPTIONS – LEVEL OF EFFORT (LOE)" will be modified to add the following:

   (ii) The Government may increase the number of direct labor hours required to be furnished during the option period by an amount ranging from 1 to 174,940.

   (a) For options exercised during contract year 4 (Option 1), the estimated cost and maximum award fee will be increased by $58.66 and $4.40 respectively, for every direct labor hour ordered by the exercise of an option.

4. B.4 (a), entitled "LEVEL-OF-EFFORT" shall be modified by increasing the total direct labor hours by 666,438 hours.

5. I.3, entitled "PAYMENT FOR OVERTIME PREMIUMS" shall be modified to $0.00.

Option 2:

1. B.2, entitled "ESTIMATED COST AND AWARD FEE" will be modified to reflect the addition of $53,196,722 to the estimated cost and $4,172,381 to the maximum available award fee.

   The additional estimated cost and award fee for Option 2 is broken out as follows:

Option 2	Estimated Cost	Available Award Fee	Total Cost
Completion-Form	$11,113,048	$872,374	$11,985,423
Level-of-Effort	$42,038,308	$3,300,007	$45,338,316
New Mexico Gross Receipts Tax	$45,365	$0	$45,365
OPTION 2 TOTAL	$53,196,722	$4,172,381	$57,369,103

2. F.2 (a), entitled "COMPLETION OF WORK AND PERIOD OF PERFORMANCE" will be modified to state:

   "(a) All work required under Sections 3.0, 4.0, and 10 of the Statement of Work of this contract, including submission of all reports, shall be completed on or before April 30, 2011.

   (b) The period of performance for Sections 5.0 through 9.0 of the Statement of Work of this contract shall be from May 1, 2006 through April 30, 2011."

3. F.6, entitled "FLEX OPTIONS – LEVEL OF EFFORT (LOE)" will be modified to add the following:

   (iii) The Government may increase the number of direct labor hours required to be furnished during the option period by an amount ranging from 1 to 174,940.

   (a) For options exercised during contract year 5 (Option 2), the estimated cost and maximum award fee will be increased by $60.60 and $4.55 respectively, for every direct labor hour ordered by the exercise of an option.

4. B.4 (a), entitled "LEVEL-OF-EFFORT" shall be modified by increasing the total direct labor hours by 666,438 hours.

5. I.3, entitled "PAYMENT FOR OVERTIME PREMIUMS" shall be modified to $0.00.

The total duration of this contract, including the exercise of any option under this clause shall not exceed 5 years.

(End of Clause)

F.6 FLEX OPTIONS – LEVEL OF EFFORT (LOE)

The Government may increase the number of LOE direct labor hours required to be furnished during the period of performance by an amount ranging from 1 to (see b below) hours. If the Government elects to exercise its option, referred throughout this clause as a flex option, to increase the number of direct labor hours to be furnished, the Contractor will be so notified with a unilateral modification to the contract executed by the Contracting Officer. The terms and conditions relating to the Government's rights as provided herein are as follows:

(a) The Government may increase the amount of LOE direct labor hours to be furnished (as listed in B.4 (a), entitled "LEVEL-OF-EFFORT") up to the amounts specified below by the exercise of one flex option, or by the exercise of multiple flex options, during the period of performance.

(b) If the Government exercises one or more flex options pursuant to this clause, the administration of such action(s) shall be as follows:

(i) The Government may increase the number of direct labor hours listed in clause B.4 (a), entitled "LEVEL-OF-EFFORT," during the base period by an amount ranging from 1 to 524,820 hours.

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(a) For options exercised during contract year 1, the estimated cost and maximum award fee will be increased by $53.48 and $4.01 respectively, for every direct labor hour ordered by the exercise of an option.

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(b) For options exercised during contract year 2, the estimated cost and maximum award fee will be increased by $55.19 and $4.14 respectively, for every direct labor hour ordered by the exercise of an option.

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(c) For options exercised during contract year 3, the estimated cost and maximum award fee will be increased by $56.97 and $4.27 respectively, for every direct labor hour ordered by the exercise of an option.

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(End of Clause)

F.7 SHIPPING INSTRUCTIONS (JSC 52.247-94) (APR 1997)

All documentation shall be shipped to the addresses cited in Attachment J.1, DRL and DRD. Shipment of all other items shall be as follows:

Parcel Post Shipments and Freight Shipments

Ship to:	Transportation Officer, Building 421 NASA Johnson Space Center 2101 NASA Parkway Houston, TX 77058-3696
Mark for:	Accountable Property Officer Mark with: Purchase Request No. TBD Contract Number: TBD
For reissue to:	Contracting Officer's Technical Representative (COTR) Mail Code: NA

(End of Clause)

F.8 FLIGHT ITEM (JSC 52.247-95) (SEPT 1989)

Block 16 of each Department of Defense Form 250 prepared for hardware or equipment to be shipped under this contract must be annotated as follows in 1/4-inch letters or larger by hand printing or rubber stamp:

"THIS IS A FLIGHT ITEM": OR "THIS IS MISSION ESSENTIAL GROUND SUPPORT EQUIPMENT," as applicable.

(End of Clause)

[END OF SECTION]

SECTION G – CONTRACT ADMINISTRATION DATA

G.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

None included by reference.

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

CLAUSE NUMBER	DATE	TITLE
1852.216-89	JULY 1997	ASSIGNMENT AND RELEASE FORMS
1852.227-70	MAY 2002	NEW TECHNOLOGY
1852.227-86	DEC 1987	COMMERCIAL COMPUTER SOFTWARE - LICENSING
1852.242-71	DEC 1988	TRAVEL OUTSIDE OF THE UNITED STATES
1852.242-73	NOV 2004	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING
1852.245-70	JULY 1997	CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

G.2 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (FAR 52.204-9) (JAN 2006)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have physical access to a federally-controlled facility or access to a Federal information system.

(End of clause)

G.3 AWARD FEE FOR SERVICE CONTRACTS (NFS 1852.216-76) (JUN 2000)

(a) The contractor can earn award fee from a minimum of zero dollars to the maximum stated in NASA FAR Supplement clause 1852.216-85, "Estimated Cost and Award Fee" in this contract.

(b) Beginning 6 months after the effective date of this contract, the Government shall evaluate the Contractor's performance every 6 months to determine the amount of award fee earned by the contractor during the period. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations will be considered by the Government in its evaluation. The Government's Fee Determination Official (FDO) will determine the award fee amounts based on the Contractor's performance in accordance with the Award Fee Plan (Section J, Attachment J-1). The plan may be revised unilaterally by the Government prior to the beginning of any rating period to redirect emphasis.

(c) The Government will advise the Contractor in writing of the evaluation results. The Financial Management Office will make payment based on the issuance of a unilateral modification by the contracting officer.

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

(e) The amount of award fee which can be awarded in each evaluation period is limited to the amounts set forth at Section J, Attachment J.5. Award fee which is not earned in an evaluation period cannot be reallocated to future evaluation periods.

(f)

(1) Provisional award fee payments will be made under this contract pending the determination of the amount of fee earned for an evaluation period. If applicable, provisional award fee payments will be made to the Contractor on a monthly basis. The total amount of award fee available in an evaluation period that will be provisionally paid is 75 percent of the prior period's evaluation score.

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

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

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

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

(End of clause)

G.4 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:

LF231/Accounts Payable Group
NASA Johnson Space Center
2101 NASA Parkway
Houston, TX 77058-3696

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

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

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

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

Defense Contract Audit Agency
Houston Branch Office
8876 Gulf Freeway, Suite 500
Houston, Texas 77017

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

(i) Copy 1 NASA Contracting Officer
(ii) Copy 2 Auditor
(iii) Copy 3 Contractor

(iv) Copy 4 Contract administration office; and
(v) Copy 5 Project management office.

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

(d) Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to the same address as b(1) above.
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.5 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NFS 1852.227-72) (JUL 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights--Retention by the Contractor (Short Form)," whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

Title	Office Code	Address (including zip code)
New Technology Representative	AT NASA/JSC	Johnson Space Center AT/Technology Transfer and Commercialization Office Houston, TX 77058
Patent Representative	AL NASA/JSC	Johnson Space Center AL/Legal Office Houston, TX 77058

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights--Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

(End of clause)

G.6 TECHNICAL DIRECTION (NFS 1852.242-70) (SEPT 1993) (Applicable to LOE Sections of the SOW)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 1842.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

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

(1) Constitutes an assignment of additional work outside the statement of work;

(2) Constitutes a change as defined in the changes clause;

(3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;

(4) Changes any of the expressed terms, conditions, or specifications of the contract; or

(5) Interferes with the contractor's rights to perform the terms and conditions of the contract.

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

(d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph (b) of this clause, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is—

(1) Rescinded in its entirety; or

(2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract, and that the Contractor should proceed promptly with its performance.

(e) A failure of the contractor and contracting officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.

(f) Any action(s) taken by the contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of clause)

G.7 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (NFS 1852.245-73) (OCT 2003)

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.

(b)

(1) Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(2) The Contractor shall mail the original signed NF 1018 directly to the cognizant NASA Center Deputy Chief Financial Officer, Finance, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address: LF631/Property Accounting and to JB3/Property Administrator, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c)

(1) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 15. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 15. Some activity may be estimated for the month of September, if necessary, to ensure the NF 1018 is received

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

(2) The Contracting Officer may, in NASA's interest, withhold payment until a reserve not
exceeding $25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports in accordance with 1845.505-14 and any supplemental instructions for the current reporting period issued by NASA. Such reserve shall be withheld until the Contracting Officer has determined that NASA has received the required reports. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) through (3) of this clause.

(End of clause)

G.8 LIST OF GOVERNMENT-FURNISHED PROPERTY (NFS 1852.245-76) (OCT 1988)

For performance of work under this contract, the Government will make available Government property identified below or in Attachment J.7A, of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at JSC, Sonny Carter and Ellington Field and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245-5 Government property clause of this contract, the Contractor is accountable for the identified property.

(End of clause)

G.9 SECURITY/BADGING REQUIREMENTS FOR FOREIGN NATIONAL VISITORS AND EMPLOYEES/REPRESENTATIVES OF FOREIGN CONTRACTORS (JSC 52.204-91) (MAR 2002)

(a) An employee of a domestic Johnson Space Center (JSC) contractor or its subcontractor who is not a U.S. citizen (foreign national) may not be admitted to the JSC site for purposes of performing work without special arrangements. In addition, all employees or representatives of a foreign JSC contractor/subcontractor may not be admitted to the JSC site without special arrangements. For employees as described above, advance notice must be given to the Security Office of the host installation [JSC or White Sands Test Facility (WSTF)] at least three weeks prior to the scheduled need for access to the site so that instructions on obtaining access may be provided.

(b) All visit/badge requests for persons described in (a) above must be entered in the NASA Request for Request (RFR) and Foreign National Management System (NFNMS) for acceptance, review, concurrence, and approval purposes. When an authorized company official requests a JSC or WSTF badge for site access, he/she is certifying that steps have been taken to ensure that its contractor or subcontractor employees, visitors, or representatives will not be given access to export-controlled or classified information for which they are not authorized. These individuals shall serve as the contractor's representative(s) in certifying that all visit/badge request forms are processed in accordance with JSC and WSTF security and export control procedures. No foreign national, representative, or resident alien contractor/subcontractor employee shall be granted access into JSC or WSTF until a completed RFR has been approved and processed through the NFNMS. Unescorted access will not be granted unless a favorable National Agency Check (NAC) has been completed by the JSC Security Office.

(c) The contractor agrees that it will not employ for the performance of work onsite at JSC or WSTF any individuals who are not legally authorized to work in the United States. If the JSC or WSTF Industrial Security Specialist or the contracting officer has reason to believe that any employee of the contractor may not be legally authorized to work in the United States and/or on the contract, the contractor may be required to furnish copies of Form I-9 (Employment Eligibility Verification), U.S. Department of Labor Application for Alien Employment Certification, and any other type of employment authorization document.

The contractor agrees to provide the information requested by JSC or WSTF Security Office in order to comply with NASA policy directives and guidelines related to foreign visits to NASA facilities so that (1) the visitor/employee/ representative may be allowed access to JSC or other NASA centers for performance of this contract, (2) required investigations can be conducted, and (3) required annual or revalidation reports can be submitted to NASA Headquarters. All requested information must be submitted in a timely

manner in accordance with instructions provided by JSC or any other center to be visited.

(End of clause)

G.10 USE OF JSC CALIBRATION LABORATORY (JSC 52.204-92) (OCT 1997)

The contractor shall utilize the services of the JSC Calibration Laboratory to the maximum extent practicable for calibration of all instruments (Government property or contractor property) utilized under this contract, the total cost for maintenance of which would otherwise be a direct charge to the Government. The procedures for obtaining calibration of instruments are described in JSC Procedures and Guidelines 5151.2 – "JSC Support Contractor Procedures and Guidelines."

(End of clause)

G.11 JSC HAZARDOUS MATERIALS USE (JSC 52.223-92) (DEC 1999)

(a) This clause is JSC-unique, and the requirements are in addition to any U.S. Environmental Protection Agency, U.S. Occupational Safety and Health Administration, or other state or Federal regulation or statute. Therefore, the following requirements do NOT supercede any statutory or regulatory requirements for any entity subject to this clause.

(b) "Hazardous materials," for the purposes of this clause, consist of the following:

(1) Those materials defined as "highly hazardous chemicals" in Occupational Safety and Health Administration Process Safety Management Regulation, 29 Code of Federal Regulation 1010.119, without regard for quantity.

(2) Those "extremely hazardous substances" subject to the emergency planning requirements in the Environmental Protection Agency Emergency Planning and Community Right-to-Know Regulation, 40 Code of Federal Regulation 355, Part 355, without regard for quantity.

(3) Those "hazardous substances" subject to the release notification requirements under Environmental Protection Agency's Emergency Planning and Community Right-to-Know Regulation, 40 Code of Federal Regulation 302.4, without regard for quantity.

(4) Any radioisotope material or device that produces ionizing radiation.

(5) Any Class II, III, or IV laser as defined by the American National Standards Institute No. Z136.1 (1986)

(6) Any explosive or any pyrotechnics.

(7) Any pesticide.

(c) The contractor shall develop and maintain an inventory listing the identity and quantity of hazardous materials stored or used onsite at JSC for the performance of the contract.

(d) The contractor shall ensure that the proper training of its employees in the use and inherent hazards of these materials is accomplished prior to use.

(e) The contractor shall notify the JSC Occupational Health and Test Support Office (SD13) prior to any initial use or different application of these materials.

(f) The contractor shall use all hazardous materials properly and take all necessary precautions to ensure no harm is done to humans or the environment.

(g) The contractor shall insert the substance of this clause, including this Paragraph F with appropriate changes of designations of the parties, in subcontracts under which hazardous materials will be utilized, or may reasonably be expected to be utilized, onsite at JSC.

(h) In the event the contractor fails or refuses to comply with any aspect of this clause, such failure or refusal may be considered a material breach of this contract.

(End of clause)

G.12 UNDERSTANDING WITH RESPECT TO COST VARIATIONS (JSC 52.232-93) (MAR 1989)

The estimated cost of this contract is based on cost estimates for a number of cost elements (e.g., direct labor, overhead, materials, travel). One or more of these estimates was made by the Government and provided to the contractor in the solicitation leading to this contract*. The parties recognize that the contractor's obligation to perform tasks within the scope of the Statement of Work could result in actual contractor expenditures which are greater or less than the Government's estimates provided to the contractor for the related cost element. Should such be the case, the parties agree that there will be no adjustment to the fee provided for in this contract, nor to any other terms and conditions hereof, except the contract estimated cost, should that become necessary. Any such adjustment in estimated cost will be subject to the terms of the "Limitation of Cost" or "Limitation of Funds" clause hereof, whichever is applicable.

*These Government estimates include Travel and Material with "Materials/Subcontracts" excluded from the Material cost element. These Government estimates are given below for the base period of performance and both options periods:

G.13 IDENTIFICATION OF EMPLOYEES (JSC 52.242-92) (MAR 2002)

At all times while on Government property, the contractor, subcontractors, their employees, and agents shall wear badges which will be issued by the NASA Badging & Visitor Control Office, located in Building 110 at the Johnson Space Center (JSC), or at the Main Gate at the White Sands Test Facility (WSTF). JSC employee badges will be issued only between the hours of 7:30 a.m. to 4 p.m., Monday through Thursday, and 7:30 am to 12:00 pm on Friday. JSC visitor badges will be issued between the hours of 6 a.m. to 10 p.m., 7 days a week. WSTF employee badges will be issued only between the hours of 8 a.m. to 2 p.m., Monday through Friday. WSTF visitor badges will be issued on a 7-day-a-week, 24-hour-a-day basis. Resident aliens and foreign nationals/representatives shall be issued green foreign national badges.

Each individual who wears a badge shall be required to declare citizenship and personally sign for the badge. The contractor shall be held accountable for issued badges and all other related items and must assure that they are returned to the NASA Badging & Visitor Control Offices upon completion of work under the contract in accordance with Security Management Directive (SMD) 500-15, "Security Termination Procedures." Failure to comply with the NASA contractor termination procedures upon completion of the work (e.g., return of badges, decals, keys, Controlled Access Area cards, clearance terminations, JSC Public Key Infrastructure (PKI)/special program deletions, etc.) may result in final payment being delayed.

(End of clause)

G.14 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (NFS 1852.245 -71) (NOV 2004) (JSC Version NOV 2004)

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

Property Custodian Responsibilities: Reference NPR 4200.2

Chapter 2: Responsibilities

Section 2.3. Property Custodians

Section 2.4 Full Time Property Custodians

Paragraphs 2.4.1 and 2.4.2

Chapter 4: Operational Procedures
Section 4.2 Identification of Equipment

Paragraphs 4.2.8, 4.2.9, 4.2.10,

Section 4.3. Standard NEMS Reports for Property Custodians.

Paragraphs 4.3.1 through 4.3.4.5

Section 4.4. Inventory Procedures.

Paragraphs 4.4.1 through 4.4.5

Chapter 5. (Entire Content)

User Responsibilities: Reference Document (NPR 4200.2)

Chapter 2.

2.7. Responsibility of the Individual. The contractor shall ensure that each of its employees are responsible for Government property as follows: An employee has a duty to protect and conserve Government property and shall not use such property, or allow its use, for other than authorized purposes. Additional responsibilities include the following:

2.7.1. Reporting any missing or un-tagged (meeting the criteria for control) equipment, transfer, location change, or user change of equipment to the property custodian immediately.

2.7.2. Notifying the property custodian, supervisor, and the Center security officer immediately if theft of Government property is suspected.

2.7.3. Ensuring that equipment is used only in pursuit of approved NASA programs and projects.

2.7.4. Notifying the property custodian of equipment not actively being used for determination of proper disposition.

2.7.5. Ensuring that equipment is returned through the property custodian when no longer needed. Under no circumstances will an employee throw away Government equipment.

2.7.6. Assigned users retain all responsibilities including notifying property custodians of all activity associated with the user's assigned equipment.

2.8. The contractor must ensure that all on-site contractor employees notify the contracting officer, property custodian, and SEMO upon termination of employment.

Chapter 4.

4.2.11. The user will assist the custodian in completing NF 1618 and sign in the designated block.

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

(b)

(1) The official accountable 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 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.15 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NFS 1852.245-77) (JUL 1997) (JSC Version APR 2003)

In accordance with the clause 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.

(1) Equipment to be made available is listed in Attachment J.7B. The Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property, regardless of its authorized location.

(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's prior written approval.

(c) Publications and blank forms stocked by the installation.

(d) Safety and fire protection for Contractor personnel and facilities.

(e) Installation service facilities:

1. Audiovisual: Presentation services, sound services, Release Print Film Library, Film Repository, and loan of audiovisual equipment.

2. Automatic Data Processing (ADP) Services (onsite only): Generally, this includes access to large general-purpose computer systems, workstations, and the accessing media; i.e., terminals, printers, data communications, and consultation and training in the use of said systems. Unless otherwise specified in the contract, this does not include providing computer systems or ADP services for the Contractor business management, accounting, and administrative functions.

3. Transportation: Shuttle bus service for Contractor employees within the parameters provided for Government employees.

4. Disposal Services: Disposal services for excess onsite and offsite Contractor-held/Government-owned property.

5. Fabrication Services: Fabrication services such as machining, sheet metal and welding, electronics, metal finishing, model and plastics, and precision cleaning.

6. Photography, Processing, and Closed-Circuit Television: For technical and scientific photography, photographic processing, photographic sciences, and closed-circuit television.

7. Pickup and Delivery of Official Mail: Within the Center and to and from the Albert Thomas Post Office, provided the mail is properly sealed and stamped. Such mail will be picked up or dropped from only one point as designated by JSC or, if preferred, JSC will provide a box in the central mailroom for the Contractor to pick up and deposit its mail.

(f) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

(g) Cafeteria privileges for Contractor employees during normal operating hours.

(h) Building maintenance for facilities occupied by Contractor personnel.

(i) 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.

(j) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

(End of Clause)

G.16 REPAIR OF GOVERNMENT PROPERTY (JSC 52.245-91) (JUN 1986)

When removal of Government-owned property from its place of use for repair is necessary, the Contractor must prepare a JSC Form 1318 prior to removing the

equipment. The form and instructions regarding its use are available from the Property and Equipment branch, Building 419, Room 162, phone number 483-6524. The repaired Government property is to be returned to the location from which it was removed unless otherwise directed by the Government

(End of Clause)

[END OF SECTION]

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

None included by reference.

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

CLAUSE NUMBER	DATE	TITLE
1852.208-81	NOV 2004	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.225-70	FEB 2000	EXPORT LICENSES (ALT I)
1852.228-72	SEPT 1993	CROSS-WAIVER OF LIABILITY FOR SPACE SHUTTLE SERVICES
1852.228-76	DEC 1994	CROSS-WAIVER OF LIABILITY FOR SPACE STATION ACTIVITIES
1852.242-72	AUG 1992	OBSERVANCE OF LEGAL HOLIDAYS

H.2 TASK ORDERING PROCEDURE

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

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

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

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

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

(c) Within 10 calendar days after receipt of the Contracting Officer's request, the Contractor shall submit a task plan conforming to the request.

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

(1) Date of the order.

(2) Contract number and order number.

(3) Description of Work.

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

(5) Maximum dollar amount and maximum number of contract labor authorized.

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

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

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

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

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

(g) Each task order shall require the Contractor to acknowledge receipt and acceptance of the task order within ***2 working days*** after receipt. If the Contractor cannot comply with a task order requirement, the Contractor shall indicate in his acknowledgment, the changes required prior to his acceptance. Any differences must be resolved between the parties and the order modified to reflect the agreement.

(End of Clause)

H.3 FEDERAL AUTOMOTIVE STATISTICAL TOOL REPORTING (NFS 1852.223-76) (JUL 2003)

If authorized to operate Government-owned or –leased vehicles, including interagency fleet management system (IFMS) vehicles or related services in performance of this contract, the Contractor shall report the data describing vehicle usage required by the Federal Automotive Statistical Tool (FAST) by October 15 of each year. FAST is accessed through http://fastweb.inel.gov/.

(End of Clause)

H.4 KEY PERSONNEL AND FACILITIES (NFS 1852.235-71) (MAR 1989)

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

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

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

The personnel and/or facilities considered essential to this contract include:

(d) The majority of the S&MA personnel are housed at contractor's facility located at 2450 NASA Parkway, Houston, TX 77058.

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(End of Clause)

H.5 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS (JSC 52.209-90) (SEPT 1988)

This contract incorporates Section K, Representations, Certifications, and Other Statements of Offerors, as set forth in the contractor's proposal in response to **RFP NNJ05106317R** dated _____ by reference, with the same force and effect as if it were given in full text.

(End of Clause)

H.6 SMALL BUSINESS SUBCONTRACTING GOALS (JSC 52.219-90) (JAN 2003)

For purposes of this clause, the terms, "HUBZone Small Business Concern," "Small Disadvantaged Business Concern," "Veteran-Owned Small Business Concern," "Service-Disabled, Veteran-Owned Small Business Concern," "Women-Owned Small Business Concern," and "Historically Black College or University (HBCU)" are defined in paragraph 2.101 of the Federal Acquisition Regulation.

The total small business goal, expressed, as a percent of total contract value, is 25 percent, including options. The small business percentage goal, (25 percent), includes the following goals expressed as a percent of total contract value:

Small Disadvantaged Business (SDB) Concerns	10.0%
Women Owned Small Business (WOSB) Concerns	5.0%
HUBZone Business Small Business Concerns	2.0%
Veteran-Owned Small Business (VOSB) Concerns	1.0%
Service-Disabled, Veteran-Owned Small Business Concerns	1.0%
Historically Black College or University/Minority Institutions	1.0%

(End of Clause)

H.7 (LIMITED) RELEASE OF CONTRACTOR CONFIDENTIAL BUSINESS INFORMATION (CBI) (JSC 52.227-91) (MAY 2002)

(a) NASA may find it necessary to release information submitted by the contractor pursuant to the provisions of this contract, to individuals not employed by NASA. Business information that would ordinarily be entitled to confidential treatment may be included in the information released to these individuals. Accordingly, by signature on this contract, the contractor hereby consents to a limited release of its confidential business information (CBI).

(b) Possible circumstances where the Agency may release the contractor's CBI include the following:

(1) To other Agency contractors and subcontractors, and their employees tasked with assisting the Agency in handling and processing information and documents in the administration of Agency contracts, such as providing post-award audit support and specialized technical support to NASA.

(2) To NASA contractors and subcontractors, and their employees engaged in information systems analysis, development, operation, and maintenance, including performing data processing and management functions for the Agency.

(c) NASA recognizes its obligation to protect the contractor from competitive harm that could result from the release of such information to a competitor. Except where otherwise provided by law, NASA will permit the limited release of CBI under subparagraphs (1) or (2) only pursuant to non-disclosure agreements signed by the assisting contractor or subcontractor, and their individual employees who may require access to the CBI to perform the assisting contract.

(d) NASA's responsibilities under the Freedom of Information Act are not affected by this clause.

(e) The contractor agrees to include this clause, including this paragraph (e), in all subcontracts at all levels awarded pursuant to this contract that require the furnishing of CBI by the subcontractor.

(End of Clause)

H.8 PROVIDING FACILITY ITEMS (JSC 52.245-97) (FEB 2003)

The purpose of this clause is to set forth the parties' intent regarding their respective responsibilities for providing facility items under this contract. The parties accordingly agree as follows:

(a) "Provide," as used in this clause, has the same meaning as set forth in NASA FAR Supplement 1845.301. "Facilities," as used in this clause, has the same meaning as set forth in FAR 45.301.

(b) The Government shall provide to the contractor the facilities identified in Attachment J.7B to his contract for use in performance of this contract.

(c) The contractor shall replace any of the existing facilities identified in (b) above that reach the end of their useful life during the contract period or which are beyond economical maintenance or repair, if the facilities are still needed for contract performance. Such replacements shall be made with contractor-owned facilities and shall not be a direct charge to the contract.

(d) The contractor shall not acquire facility items for the Government, unless specifically authorized by the contract or consent has been obtained in writing from the contracting officer pursuant to FAR 45.302-1(a). The contractor

agrees to provide all facilities necessary for performance of this contract except as provided in (b) above.

(End of Clause)

H.9 CONTRACT ADJUSTMENT (Applicable to Completion Form Sections of the SOW as indicated)

(a) The parties agree that, notwithstanding the provisions of the "Changes" clause, no change made pursuant to such clause shall give rise to an equitable adjustment in the estimated cost or fee when said changes cause an increase or decrease of $100,000 or less in the estimated cost of this contract. Each change shall be controlling making this determination, and such change shall not, for purposes of determining the applicability of this clause, be added to any other change(s). The parties recognize that several changes may be grouped together in a bilateral contract modification for definitization; however, the dollar value of each individual change will be controlling in determining whether or not an equitable adjustment is in order.

(b) The elements of the completion form work described in Sections 3.0 and 10.0 of the SOW are in some instances accompanied by workload estimates (e.g., numbers of meetings per year, numbers of test samples per year). These data represent the Government's estimates of the level of services required, and are only intended to reflect the amount of activity anticipated for those elements of work. Workload estimates do not constitute a limitation on the contractor's obligation to perform work in the areas to which they relate. The fact that the contractor has performed work that equals the workload estimate(s) shall not relieve the contractor of its obligation to continue to perform such work to the extent it is required by the Government.

(End of Clause)

H.10 POTENTIAL CONFLICT OF INTEREST

(a) In performing work under this contract, the Contractor may be required to inspect, evaluate, assess, critique, review or perform other similar services with respect to products or services provided by the Contractor under other NASA contracts. The occurrence of situations of this kind could possibly cause the Contractor's judgment to be influenced favorably toward such products or services in performing S&MA tasks under this contract. In addition, the Contractor may be required to perform tasks, which will affect the quantum or nature of work to be performed by the Contractor under other Government contracts. In order to eliminate or adequately mitigate any conflict of interest which may arise from either of these situations, the prime contractor agrees that it will: (a) provide the Contracting Officer immediate notice in any case where the Contractor learns that it or its subcontractors will either be (i) performing inspection, evaluation, or similar work concerning products and services which Contractor provides to NASA under other NASA contracts, or (ii) developing requirements for the products or services which

Contractor may provide under another contract; (b) within 7 calendar days after providing such notice to the Government, submit to the Contracting Officer for approval a proposed plan of action for eliminating or adequately mitigating the conflict identified (and subsequently submit any modifications to such plan as may be requested by the Contracting Officer); and (c) implement the plan of action as approved by the Contracting Officer. The Contractor shall not undertake the performance of work for which notice has been given until the prime Contractor's plan has been approved, unless the Contracting Officer authorized the prime Contractor to proceed with the work pending approval. Where the term "Contractor" is used in this clause, it shall be deemed to mean the prime contractor, and any subcontractor, except in the instance where the term "prime contractor" is specifically used.

(b) Notwithstanding any other provision of this clause, if the Contractor develops complete specifications or statements of work under this contract for nondevelopmental items, and such specifications or statements of work are incorporated into a subsequent NASA solicitation, the Contractor shall be ineligible to furnish the items described in such solicitation. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the prime Contractor (or determined by the Contracting Officer in the event the parties are unable to agree), sufficient to avoid unfair competitive advantage or potential bias. The Contractor shall not be eligible in any case to compete for the initial contract, including any options, for nondevelopmental items for which Contractor has prepared complete specifications or statements of work. NASA shall not unilaterally require the prime Contractor to prepare such specifications or statements or work under this contract.

(c) In addition to any data which the Contractor may be given or have access to that is marked and subject to subparagraph (d)(2) of the "Rights in Data—General" clause of this contract, it is also anticipated that in the performance of this contract, the Contractor may generate, have access to, or be provided for review for the performance of the contract tasks, data which is intended to be used, or may reasonably be expected to be used, in a future NASA procurement. Such data may include, by way of illustration but not limitation, statement of requirements, draft statements of work, draft specifications or data relating to breadboards or engineering models. The Contractor agrees that it will not use, copy or disclose such data, or any other data of the same general kind, except to the extent necessary to perform the work under this contract, and will not make any other use or disclosure of such data without specific written permission of the Contracting Officer.

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

(e) The Contractor agrees to include the substantive provisions of this clause in any subcontracts, appropriately modified to reflect a prime-subcontract relationship.

(End of Clause)

H.11 NO COST DELIVERABLES

The contractor shall deliver, at no cost to this contract or any other Government contract, the items listed below as part of the contract deliverables.

Best Value No Cost Item	Description	Delivery Schedule	Documentation
Industry Safety Advisory Panel	SAIC will establish an Industry Safety Advisory Panel, headed by a Senior Safety Specialist	The Safety Panel will devote 1,000 hours plus travel costs over the term of the contract	Costs will be captured in one unallowable/unbillable job cost account and reported quarterly
Project Management Professional Certification	SAIC will provide PMP certification for its management staff	PMP training will be completed for the Key Personnel and Competency Managers during contract year one	Costs will be captured in one unallowable/ unbillable job cost account and reported quarterly
Dedicated Phase-In Team	SAIC will provide a dedicated phase-in team to manage the daily phase-in activities and will conduct preparatory activities	Preparatory activities will commence prior to contract award. Phase-In actions will be completed during the 45 day phase-in period	Costs will be captured in one unallowable/unbillable job cost account and reported at the completion of phase-in

(End of Clause)

[END OF SECTION]

PART II – CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

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

FAR: http://www.arnet.gov/far

NASA FAR: http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm

JSC PI: http://officeofprocurement.jsc.nasa.gov/jpiprod/jpi_doc.htm

(End of Clause)

I.2 LISTING OF CLAUSES INCORPORATED BY REFERENCE

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	JUL 2004	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	SEPT 2005	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-2	AUG 1996	SECURITY REQUIREMENTS
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLED-SIDED ON RECYCLED PAPER

52.204-7	OCT 2003	CENTRAL CONTRACTOR REGISTRATION
52.209-6	JAN 2005	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.211-15	SEP 1990	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.215-2	JUN 1999	AUDIT AND RECORDS – NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE – UNIFORM CONTRACT FORMAT
52.215-11	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - MODIFICATIONS
52.215-13	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS
52.215-15	OCT 2004	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-17	OCT 1997	WAIVER OF FACILITIES COST OF MONEY
52.215-18	JUL 2005	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA-MODIFICATIONS (ALTERNATE II) (OCT 1997)
52.216-7	DEC 2002	ALLOWABLE COST AND PAYMENT
52.217-8	NOV 1999	OPTION TO EXTEND SERVICES (NOTICE TO EXTEND MUST BE AT LEAST 30 DAYS PRIOR CONTRACT COMPLETION).
52.219-4	JUL 2005	NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS
52.219-8	MAY 2004	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-9	JUL 2005	SMALL BUSINESS SUBCONTRACTING PLAN (ALT II) (OCT 2001)
52.219-16	JAN 1999	LIQUIDATED DAMAGES – SUBCONTRACTING PLAN
52.219-23	SEPT 2005	NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS

		CONCERNS (**10%**)
52.219-25	OCT 1999	SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM – DISADVANTAGED STATUS AND REPORTING
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-3	JUN 2003	CONVICT LABOR
52.222-4	JUL 2005	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT —OVERTIME COMPENSATION
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	APR 2002	EQUAL OPPORTUNITY
52.222-35	DEC 2001	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	DEC 2001	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-39	DEC 2004	NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES
52.222-41	JUL 2005	SERVICE CONTRACT ACT OF 1965, AS AMENDED
52.223-5	AUG 2003	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (ALTERNATE I) (AUG 2003) (ALTERNATE II) (AUG 2003)
52.223-10	AUG 2000	WASTE REDUCTION PROGRAM
52.223-14	AUG 2003	TOXIC CHEMICAL RELEASE REPORTING
52.224-1	APR 1984	PRIVACY ACT NOTIFICATION
52.224-2	APR 1984	PRIVACY ACT
52.225-13	MAR 2005	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.227-1	JUL 1995	AUTHORIZATION AND CONSENT
52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT ANC COPYRIGHT INFRINGEMENT
52.227-16	JUN 1987	ADDITIONAL DATA REQUIREMENTS

52.228-7	MAR 1996	INSURANCE – LIABILITY TO THIRD PERSONS
52.229-10	APR 2003	STATE OF NEW MEXICO GROSS RECEIPTS AND COMPENSATING TAX
52.230-2	APR 1998	COST ACCOUNTING STANDARDS
52.230-6	APR 2005	ADMINISTRATION OF COST ACCOUNTING STANDARDS
52.232-9	APR 1984	LIMITATION ON WITHHOLDING OF PAYMENTS
52.232-17	JUN 1996	INTEREST
52.232-18	APR 1984	AVAILABILITY OF FUNDS
52.232-20	APR 1984	LIMITATION OF COST
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	OCT 2003	PROMPT PAYMENT (ALTERNATE I) (FEB 02)
52.232-34	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER – OTHER THAN CENTRAL CONTRACTOR REGISTRATION
52.233-1	JUL 2002	DISPUTES (ALTERNATE I) (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.233-4	OCT 2004	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION
52.237-3	JAN 1991	CONTINUITY OF SERVICES
52.239-1	AUG 1996	PRIVACY OR SECURITY SAFEGUARDS
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-3	MAY 2001	PENALTIES FOR UNALLOWABLE COSTS
52.242-4	JAN 1997	CERTIFICATION OF FINAL INDIRECT COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.243-2	AUG 1987	CHANGES – COST-REIMBURSEMENT (ALTERNATE II) (APR 1984)
52.244-2	AUG 1998	SUBCONTRACTS (ALTERNATE I) (MAR 2005)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	DEC 2004	SUBCONTRACTS FOR COMMERCIAL ITEMS

52.245-5	MAY 2004	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS) (DEVIATION) (AS MODIFIED BY NASA PIC 99-15)
52.245-19	APR 1984	GOVERNMENT PROPERTY FURNISHED "AS IS"
52.246-25	FEB 1997	LIMITATION OF LIABILITY – SERVICES
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.247-63	JUN 2003	PREFERENCE FOR U.S. –FLAG AIR CARRIERS
52.248-1	FEB 2000	VALUE ENGINEERING
52.249-6	MAY 2004	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES
52.251-2	JAN 1991	INTERAGENCY FLEET MANAGEMENT SYSTEMS VEHICLES AND RELATED SERVICES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

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

CLAUSE NUMBER	DATE	TITLE
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEPT 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-75	MAY 1999	SMALL BUSINESS SUBCONTRACTING REPORTING
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.223-74	MAR 1996	DRUG-AND ALCOHOL-FREE WORKFORCE
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.242-78	APR 2001	EMERGENCY MEDICAL SERVICES AND EVACUATION
1852.243-71	MAR 1997	SHARED SAVINGS
1852.245-70	JUL 1997	CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

(End of Clause)

I.3 APPROVAL OF CONTRACT (FAR 52.204-1) (DEC 1989)

This contract is subject to the written approval of the Johnson Space Center Procurement Officer and shall not be binding until so approved.

(End of Clause)

I.4 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium does not exceed **zero dollars ($0)** or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall --

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.

(End of Clause)

I.5 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only: It is not a Wage Determination

Employee Class	Monetary Wage-Fringe Benefits

SEE ATTACHMENT J.6, WAGE DETERMINATION

(End of Clause)

I.6 DRUG-FREE WORKPLACE (FAR 52.223-6) (MAY 2001)

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

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 -- 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is

defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall -- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration --

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about --

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will --

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to

any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) though (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract or default, and suspension or debarment.

(End of Clause)

I.7 Rights in Data -- General (FAR 52.227-14) (Jun 1987) (ALT V) (Jun 1987) (as modified by NFS 1852.227-14)

(a) *Definitions.*

"Computer software," as used in this clause, means computer programs, computer data bases, and documentation thereof.

"Data," as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

"Form, fit, and function data," as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

"Limited rights," as used in this clause, means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of subparagraph (g)(2) if included in this clause.

"Limited rights data," as used in this clause, means data (other than computer software) that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications thereof.

"Restricted computer software," as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of such computer software.

"Restricted rights," as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of subparagraph (g)(3) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

"Technical data," as used in this clause, means data (other than computer software) which are of a scientific or technical nature.

"Unlimited rights," as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of rights.*

(1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in --

(i) Data first produced in the performance of this contract;

(ii) Form, fit, and function data delivered under this contract;

(iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and

(iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to --

(i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;

(ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause;

(iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

(iv) Establish claim to copyright subsisting in data first produced in the performance of this contract to the extent provided in subparagraph (c)(1) of this clause.

(c) *Copyright* --

(1) *Data first produced in the performance of this contract.* Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

(2) *Data not first produced in the performance of this contract.* The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contains the copyright notice of 17 U.S.C. 401 or 402, unless

the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause; *provided*, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) of this clause if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.

(3) *Removal of copyright notices.* The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) *Release, publication and use of data.*

(1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.

(2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(3)

(i) The Contractor agrees not to establish claim to copyright, publish or release to others any computer software first produced in the performance of this contract without the Contracting Officer's prior written permission.

(ii) If the Government desires to obtain copyright in computer software first produced in the performance of this contract and permission has not been granted as set forth in paragraph (d)(3)(i) of this clause, the Contracting Officer may direct the contractor to assert, or authorize the assertion of, claim to copyright in such data and to assign, or obtain the assignment of, such copyright to the Government or its designated assignee.

(iii) Whenever the word "establish" is used in this clause, with reference to a claim to copyright, it shall be construed to mean "assert".

(e) *Unauthorized marking of data.*

(1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in subparagraph (g)(2) or (g)(3) of

this clause and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the Contractor affording the Contractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be canceled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Contractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) This paragraph (e) does not apply if this contract is for a major system or for support of a major system by a civilian agency other than NASA

and the U.S. Coast Guard agency subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

(4) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by this paragraph (e) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this contract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) *Omitted or incorrect markings.*

(1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) of this clause, or the copyright notice required by paragraph (c) of this clause, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Contractor's expense, and the Contracting Officer may agree to do so if the Contractor --

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;
(iii) Establishes that the use of the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also

(i) permit correction at the Contractor's expense of incorrect notices if the Contractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or

(ii) correct any incorrect notices.

(g) *Protection of limited rights data and restricted computer software.*

(1) When data other than that listed in subdivisions (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this contract and qualify as either limited rights data or restricted computer software, if

the Contractor desires to continue protection of such data, the Contractor shall withhold such data and not furnish them to the Government under this contract. As a condition to this withholding, the Contractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer data base for delivery to the Government are to be treated as limited rights data and not restricted computer software.

(2) -- (3) [Reserved]

(h) *Subcontracting.* The Contractor has the responsibility to obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government such rights, the Contractor shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subcontract award without further authorization.

(i) *Relationship to patents.* Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(j) The Contractor agrees, except as may be otherwise specified in this contract for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to three years after acceptance of all items to be delivered under this contract, inspect at the Contractor's facility any data withheld pursuant to paragraph (g)(1) of this clause, for purposes of verifying the Contractor's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Contractor whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the Contracting Officer shall designate an alternate inspector.

(End of Clause)

I.8 SUBCONTRACTS FOR COMMERCIAL ITEMS (FAR 52.244-6) (Dec 2004)

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

"Commercial item" has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

"Subcontract" includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)

(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $500,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Dec 2001) (38 U.S.C. 4212(a));

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39).

(vi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Apr 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

I.9 SUBMISSION OF COMMERCIAL TRANSPORTATION BILLS TO THE GENERAL SERVICES ADMINISTRATION FOR AUDIT (FAR 52.247-67) (JUN 1997)

(a)

(1) In accordance with paragraph (a)(2) of this clause, the Contractor shall submit to the General Services Administration (GSA) for audit, legible copies of all paid freight bills/invoices, commercial bills of lading (CBL's), passenger coupons, and other supporting documents

for transportation services on which the United States will assume freight charges that were paid --

(i) By the Contractor under a cost-reimbursement contract; and

(ii) By a first-tier subcontractor under a cost-reimbursement subcontract thereunder.

(2) Cost-reimbursement Contractors shall only submit for audit those CBL's with freight shipment charges exceeding $50.00. Bills under $50.00 shall be retained on-site by the Contractor and made available for GSA on-site audits. This exception only applies to freight shipment bills and is not intended to apply to bills and invoices for any other transportation services.

(b) The Contractor shall forward copies of paid freight bills/invoices, CBL's, passenger coupons, and supporting documents as soon as possible following the end of the month, in one package to the:

General Services Administration
Attn: FWA
1800 F Street, NW
Washington, DC 20405.

The Contractor shall include the paid freight bills/invoices, CBL's, passenger coupons, and supporting documents for first-tier subcontractors under a cost-reimbursement contract. If the inclusion of the paid freight bills/invoices, CBL's, passenger coupons, and supporting documents for any subcontractor in the shipment is not practicable, the documents may be forwarded to GSA in a separate package.

(c) Any original transportation bills or other documents requested by GSA shall be forwarded promptly by the Contractor to GSA. The Contractor shall ensure that the name of the contracting agency is stamped or written on the face of the bill before sending it to GSA.

(d) A statement prepared in duplicate by the Contractor shall accompany each shipment of transportation documents. GSA will acknowledge receipt of the shipment by signing and returning the copy of the statement. The statement shall show --

(1) The name and address of the Contractor;

(2) The contract number including any alpha-numeric prefix identifying the contracting office;

(3) The name and address of the contracting office;

(4) The total number of bills submitted with the statement; and

(5) A listing of the respective amounts paid or, in lieu of such listing, an adding machine tape of the amounts paid showing the Contractor's voucher or check numbers.

(End of Clause)

I.10 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (NFS 1852.204-76) (NOV 2004)

(a) The Contractor shall be responsible for Information Technology security for all systems connected to a NASA network or operated by the Contractor for NASA, regardless of location. This clause is applicable to all or any part of the contract that includes information technology resources or services in which the Contractor must have physical or electronic access to NASA's sensitive information contained in unclassified systems that directly support the mission of the Agency. This includes information technology, hardware, software, and the management, operation, maintenance, programming, and system administration of computer systems, networks, and telecommunications systems. Examples of tasks that require security provisions include:

(1) Computer control of spacecraft, satellites, or aircraft or their payloads;

(2) Acquisition, transmission or analysis of data owned by NASA with significant replacement cost should the contractor's copy be corrupted; and

(3) Access to NASA networks or computers at a level beyond that granted the general public, e.g. bypassing a firewall.

(b) The Contractor shall provide, implement, and maintain an IT Security Plan. This plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this contract. The plan shall describe those parts of the contract to which this clause applies. The Contractor's IT Security Plan shall be compliant with Federal laws that include, but are not limited to, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.) and the Government Information Security Reform Act of 2000. The plan shall meet IT security requirements in accordance with Federal and NASA policies and procedures that include, but are not limited to:

(1) OMB Circular A-130, Management of Federal Information Resources, Appendix III, Security of Federal Automated Information Resources;

(2) NASA Procedures and Guidelines (NPR) 2810.1, Security of Information Technology; and

(3) Chapter 3 of NPR 1620.1, NASA Security Procedural Requirements.

(c) Within **30** days after **contract start**, the contractor shall submit for NASA approval an IT Security Plan. This plan must be consistent with and further detail the approach contained in the offeror's proposal or sealed bid that resulted in the award of this contract and in compliance with the requirements stated in this clause. The plan, as approved by the Contracting Officer, shall be incorporated into the contract as a compliance document.

(d)

(1) Contractor personnel requiring privileged access or limited privileged access to systems operated by the Contractor for NASA or interconnected to a NASA network shall be screened at an appropriate level in accordance with NPR 2810.1, Section 4.5; NPR 1620.1, Chapter 3; and paragraph (d)(2) of this clause. Those Contractor personnel with non-privileged access do not require personnel screening. NASA shall provide screening using standard personnel screening National Agency Check (NAC) forms listed in paragraph (d)(3) of this clause, unless contractor screening in accordance with paragraph (d)(4) is approved. 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 the government, interim access may be granted pending completion of the NAC.

(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" data 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 data 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 follows:

(i) IT-1: Fingerprint Card (FC) 258 and Standard Form (SF) 85P, Questionnaire for Public Trust Positions;

(ii) IT-2: FC 258 and SF 85, Questionnaire for Non-Sensitive Positions; and

(iii) IT-3: NASA Form 531, Name Check, and FC 258.

(4) The Contracting Officer may allow the Contractor to conduct its own screening of individuals requiring privileged access or limited privileged access provided the Contractor can demonstrate that the procedures used by the Contractor are equivalent to NASA's personnel screening procedures. As used here, equivalent includes a check for criminal history, as would be conducted by NASA, and completion of a questionnaire covering the same information as would be required by NASA.

(5) Screening of contractor personnel may be waived by the Contracting Officer for those individuals who have proof of --

(i) Current or recent national security clearances (within last three years);

(ii) Screening conducted by NASA within last three years; or

(iii) Screening conducted by the Contractor, within last three years, that is equivalent to the NASA personnel screening procedures as approved by the Contracting Officer under paragraph (d)(4) of this clause.

(e) 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 2810.1, Section 4.3 requirements. The contractor may use web-based training available from NASA to meet this requirement.

(f) The Contractor shall afford NASA, including the 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 a program of IT inspection, investigation and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime.

(g) The Contractor shall incorporate the substance of this clause in all subcontracts that meet the conditions in paragraph (a) of this clause.

(End of clause)

I.11 PRICE ADJUSTMENT FOR "MAKE-OR-BUY" CHANGES (NFS 1852.215-79) (DEC 1988)

The following make-or-buy items are subject to the provisions of paragraph (d) of the clause at FAR 52.215-21, Change or Additions to Make-or-Buy Program, of this contract:

ITEM DESCRIPTION	MAKE-OR-BUY DETERMINATION

(End of Clause)

I.12 OMBUDSMAN (NFS 1852.215-84) (OCT 2003) (ALTERNATE I) (JUN 2000)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman:

Randy K. Gish, Associate Director (Management)
2101 NASA Parkway
Houston, TX 77058
Phone: 281-483-0490
Fax: 281-483-2200
E-mail: randy.k.gish@nasa.gov

Concerns, issues, disagreements, and recommendations that 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)

ALTERNATE I

(c) If this is a task or delivery order contract, the ombudsman shall review complaints from contractors and ensure they are afforded a fair opportunity to be considered, consistent with the procedures of the contract.

(End of clause)

[END OF SECTION]

J.1 DATA REQUIREMENTS LIST AND DATA REQUIREMENTS DESCRIPTION

JSC DATA REQUIREMENTS LIST (DRL)

(See reverse for instructions)
Based on JSC-STD-123

a. Title of Contract, Project, SOW, etc.	b. Contract/RFP No.	c. DRL Date/Mod Date
Safety and Mission Assurance Support Contract		July 21, 2005

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. Date	7. Copies
01	Management Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		w/Proposal	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
1st submission with Proposal. The following Distribution List becomes effective after contract start. BJ4/C. Burridge LI/C. Unger NA/COTR NA/Business Manager	Initial submission with Proposal. Copies: Electronic file (.doc or .pdf)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. Date	7. Copies
02	Lessons Learned	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR			a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
BJ4/C. Burridge NA/COTR NS/S. Nakamura	Copies: Electronic file (web-ready format such as .html or .jpg)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. Date	7. Copies
03	Integrated Technical Management Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	(Remarks)		a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*		9. Remarks
BJ4/C. Burridge	NC/D. Thelen	As-of-date: Reports shall cover contractor accounting calendar months. Submission shall be within 15 working days of end of accounting month.
LI/C. Unger	NE/M. Fodroci	
NA/COTR	NS/S. Nakamura	

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
04	Work Breakdown Structure	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		w/Proposal	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
1st submission with Proposal. The following Distribution List becomes effective after contract start. BJ4/C. Burridge LI/C. Unger NA/COTR NA/Business Manager NC/D. Thelen NE/M. Fodroci NS/S. Nakamura NT/D. Petri NX/J. Williams	Copies: May be printed copies or electronic file (.doc or .pdf)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
05	Contractor Financial Management Report (NASA Form 533M & 533Q)	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	(See DRD)	(See DRD)	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
BJ4/C. Burridge LI/C Unger (Printed copy plus Electronic) NA/COTR NA/Business Manager	Copies: Printed Copies plus Electronic (.xls) to LI/C. Unger

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
06	Quality Manual	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		w/Proposal	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
1st submission with Proposal. The following Distribution List becomes effective after contract start. BJ4/C. Burridge NA/COTR NT/R. Hill	Copies: May be printed copies or electronic file (.doc or .pdf)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
07	Contractor Quality Metrics	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	QU		(Remarks)	a. Type b. Number Other

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
08	Property Management Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		(Remarks)	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
BJ4/C. Burridge NA/COTR JB3/J. Guy	1st Submission: 60 days after contract start. Copies: May be printed copies or electronic file (.doc or .pdf)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
09	Safety and Health Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT	(See DRD)	w/Proposal	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
1st submission with Proposal. The following Distribution List becomes effective after contract start. BJ4/C. Burridge JA131/Environmental Services NA/COTR NA/S. Nakamura SD13/Occupational Health Officer	Copies: May be printed copies or electronic file (.doc or .pdf)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
10	Safety and Health Program Self-Evaluation	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AN	(See DRD)	9/30/06	a. Type b. Number Other

8. Distribution *(Continue on a blank sheet if needed)*	9. Remarks
BJ4/C. Burridge JA131/Environmental Services NA/COTR NA/S. Nakamura SD13/Occupational Health Officer	Copies: May be printed copies or electronic file (.doc or .pdf)

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
11	Monthly Safety and Health Metrics	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO	(Remarks)		a. Type b. Number Other

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
12	Information Technology (IT) Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		(Remarks)	a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* BJ4/C. Burridge NA/COTR NA/Business Manager		9. Remarks IT Plan, Part 3, IT Security – First draft of Part 3. Submission shall be within 30 days of contract start. IT Plan, Parts 1, 2, & 3 – Final draft of integrated IT Plan (Parts 1, 2, & 3) shall be submitted within 90 days of contract start. Copies: Electronic file (.doc or .pdf)			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
13	Data Management Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		11/01/06	a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* BJ4/C. Burridge NA/COTR NA/Business Manager		9. Remarks Copies: Electronic file (.doc or .pdf)			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
14	S&MA Personnel Qualification Program Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		(Remarks)	a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* BJ4/C. Burridge NA/COTR NA/Business Manager		9. Remarks 1st submission date: 6 months after contract start Copies: Electronic file (.doc or .pdf)			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
15	S&MA Prelaunch Assessment Presentations	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AD	AD	AD	a. Type b. Number Other

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
16	Activity Reports	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	AD	AD	AD	a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* As directed		9. Remarks Frequency, as-of-date, and submission dates will be determined based on type and scope of individual reports.			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
17	Trend Analysis (JSC Systems) Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	MO			a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* NA/COTR NT/D. Petri		9. Remarks Electronic file (.ppt)			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
18	Evaluation Reports	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AD			a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* NA121/M. Himel		9. Remarks Copies: Electronic submission as directed (e-mail or electronic file)			
1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
19	Assessment Plans and Reports	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	AR			a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* NA121/M. Himel		9. Remarks Copies: Direct Contractor input to the established IA web site			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
20	Facilities System Certification Report	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	WK			a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* NS/S. Nakamura NT/D. Petri		9. Remarks Copies: Electronic file (.doc or .pdf)			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
21	Wage/Salary and Fringe Benefit Data	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	(Remarks)		(Remarks)	a. Type b. Number Print
	8. Distribution *(Continue on a blank sheet if needed)* BJ4/C. Burridge BA2/Contract Labor Relations Officer		9. Remarks Submit annually, 90 days prior to the anniversary date of the contract. Changes shall be incorporated as required by change page or complete reissue.			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
22	Reprocurement Data Package	☐ (1) Written approval ☒ (2) Mandatory Submittal ☐ (3) Submitted upon request	UR		UR	a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* BJ4/C. Burridge NA/COTR		9. Remarks Copies: Electronic file (.doc or .pdf)			

1. Line item no.	2. DRD Title	3. Data type:	4. Frequency	5. As-of-date	6. 1st subm. date	7. Copies
23	Contract Phase-In Plan	☒ (1) Written approval ☐ (2) Mandatory Submittal ☐ (3) Submitted upon request	RT		w/Proposal	a. Type b. Number Other
	8. Distribution *(Continue on a blank sheet if needed)* 1st submission with Proposal		9. Remarks Copies: Electronic file (.doc or .pdf)			

Short Form Instructions for Completing JSC Form 2323 & 2323A

For more detailed instruction, see JSC-STD-123.

DRL IDENTIFICATION

a. Title - Enter nomenclature descriptive of activity to which the DRL pertains, such as project, contract, statement of work, or request for proposal.
b. Contract/RFP Number - Enter contract number or RFP number, if applicable.
c. Date - Enter DRL preparation date as follows: Month-Day-Year. Subsequent modification dates may also be entered in this block.

LINE ITEM IDENTIFICATION

1. Line Item No. - Number line items sequentially, 1 through 999. Items 1, 2, 3, 4 are preprinted on JSC Form 2323. JSC Form 2323A is numbered 5 and following.

2. DRD Title - Enter DRD title from block 1 of JSC Form 2341.

3. Data Type - Check the appropriate data type. Additional detail needed to clarify types or define subtypes may be added in block 9, REMARKS.

(1) Written Approval - Data requiring written approval by the NASA OPR before implementation into procurement or development program.
(2) Mandatory Submittal - Data submitted to NASA for coordination, information, review, and/or management control.
(3) Submittal upon Request - Data prepared and retained by respondent to be made available to requiring organization upon request.

4. Frequency - Enter frequency of submittal code as follows:

Code	Description	Code	Description	Code	Description
AD	As Directed	DA	Daily	RD	As Released
AN	Annually	DD	Deferred Delivery	RT	One Time and Revisions
AR	As Required	MO	Monthly	SA	SemiAnnually
BE	Biennually (Every other yr.)	OT	One Time	TY	Three Per Year
BM	Bimonthly (Every other mo.)	PV	Per Vehicle	UR	Upon Request
BW	Biweekly (Every other week)	QU	Quarterly	WK	Weekly

5. As-Of Date - If reports are of a recurring nature, give as-of date (cutoff date and due date: e.g., 15/1 indicated input cutoff date of 15th and due date of 1st). Amplify in Remarks, Item 9, if necessary.

6. First Submittal - Enter Month/Day/Year of initial submittal. If calendar date is not scheduled, enter number of days preceding or following event to which data requirement is related (e.g., 90 days prior to launch). Amplify in Remarks, Item 9, if necessary.

7. Copies - Complete 7a and 7b as specified below.
a. Type - Enter code as follows:

Code	Definition	Code	Definition
PRINT	Printed Copies	MICRO	Microfilm Aperture Cards
REPRO	Reproducible Copy	OTHER	Explain Remarks, Item 9

b. Number - Enter number of copies required opposite each type of copy furnished.

8. **DISTRIBUTION** - List current codes or addresses and names of organizations which are to receive copies of documents generated under the DRD. If more than one copy is required, so indicate in parenthesis by recipient's name. Continue on a blank sheet if necessary.

9. **REMARKS** - Enter in this space.
a. Reference to specific work statement paragraph as applicable to explain relationship of data to task.
b. Additional submittal information, if necessary.
c. Comments which explain an entry made in any block of the DRL.
d. OPR for a specific DRD, if different from contract COTR.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Management Plan	**05/03/05**	**01**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

This document describes the Contractor's overall management systems for the implementation and accomplishment of the contract Statement of Work (SOW).

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-3.1.3, Program Management NPD 2190.1, NASA Export Control Program Policy NPR 8000.4, Risk Management Clause H.10, Potential Conflict of Interest Clause H.1, NFS 1852.225-70, Alternate 1, Export Licenses	DRD 02 Lessons Learned DRD 03 Integrated Technical Management Report DRD 06 Quality Manual DRD 07 Contractor Quality Metrics DRD 08 Property Management Plan DRD 09 Safety and Health Plan DRD 12 Information Technology Plan

8. Preparation Information (Include complete instructions for document preparation)

This document shall be the master plan which describes the overall Contractor approach for the conduct and implementation of the SOW. Plan contents can be summary in nature but shall provide sufficient information to define the concepts and techniques to be employed in the Contractor's approach to program management of this contract.

1. The Plan shall consist of an index of the Contractor's internal operation plans, directives, and procedures for each of the following areas with a brief discussion as to how they will be utilized in managing the effort and fulfilling the requirements:

Program and Performance Management (e.g. cost, resources, customer satisfaction)
Risk Management and Mitigation
Export Control
Configuration Management
Information and Data Management
Quality Assurance, Reliability, and Safety Management
Engineering Management
Organizational Conflict of Interest (OCI) Mitigation

When completing the above listed sections, include the following elements for the designated section.

The Program and Performance Management section shall include:

a. A description of how the overall approach creates an efficient and effective interface to the Government in the management and communication of SOW tasks and priorities.
b. A description of the processes for communicating and obtaining Government concurrence with changing priorities and workforce adjustments.
c. A description of the policies, processes, procedures, and techniques proposed to measure the effectiveness of products and services provided.
d. Your proposed approach to measuring, reporting and continuously improving how well customer expectations are met.
e. Your proposed approach to developing and maintaining customer relationships. Describe the steps you will take to ensure that customer interactions are effective.

The Risk Management and Mitigation section shall include:

a. A description of your proposed risk management approach and how it relates to potential areas of risk to performance including the probability of the risk occurring, the impact and severity of the risk.
b. An overview of your proposed risk management process, including identification, analysis, planning, tracking, control, communication, and documentation of risk.

The Export Control section shall include:

a. Description of Contractor's export control program, including details of its licensing and personnel training.
b. Discussion of the overall approach to ensure compliance with export control laws, regulations, and contract requirements.
c. Identification of Export Control licenses, including Technical Assistance Agreements (TAAs), that the Contractor will pursue to satisfy its responsibilities under NFS 1852.225-70. Include the schedule for submitting license applications for processing and approval to the Department of State (DoS).

Potential Conflict of Interest:

OCI is discussed in Contract Clause H.10, Potential Conflict of Interest. The Contractor shall provide detailed information in this Management Plan on how they will avoid or mitigate any conflicts of interest which currently exist and potential conflicts of interest that may arise during contract performance. In performing work under the S&MA SSC, the Contractor may be required to inspect, evaluate, assess, critique, review, or perform other similar services with respect to products and services furnished by the Contractor under another NASA contract. The OCI portion of the Plan shall address all areas of Clause H.10.

In addition, the OCI section shall also include:

a. A description of potential conflicts of "team" members if a "team" arrangement is being proposed.
b. A description of the approach that will be implemented to manage the resources of the vendor or team for conflict situations that may arise during the period covered by the contract.

In addition to the subjects listed above, the Contractor may add subjects as deemed appropriate and necessary in order to convey the total program plan.

2. The Plan shall include a current organization chart for the organization responsible for conducting the effort. The chart shall show lines of authority and how this contract fits within the corporate organization structure. Supporting documentation shall be furnished to document the roles and responsibilities, task assignments, products, amount of effort, and management relationships for each organizational unit responsible for this effort. The Contractor shall identify by name the key personnel in all functional areas. The Contractor shall provide anticipated/projected hiring dates for vacant positions. The Plan shall provide notification of any significant changes to the Contractor's organization, method of operation, or to the management network. In addition, the Plan shall:

a. Discuss how your proposed organizational structure is flexible and can adapt to multiple and changing Program and Project needs.
b. Describe the communication channels, lines of authority (including the line of succession if Program Manager is unavailable), reporting relationships, and responsibilities of all organizational elements.
c. Discuss how these channels will be effective in managing communication and how they will be used to enhance the safety culture within the S&MA organization and extend into communication with Programs and Projects.
d. Describe the relationship and the reporting responsibilities of the Contractor's Program Manager to corporate management as well as the management of any proposed subcontractors, team members, or joint venture partners.
e. Describe the proposed organizational elements within the overall organization you believe are most critical to satisfactory accomplishment of all performance requirements and provide rationale as to why these are judged most critical within the framework of the overall organization.
f. Provide supporting rationale that demonstrates the proposed organizational approach will ensure success in each of the critical areas identified.

3. The Plan shall identify key subcontractors and describe the Contractor's system for control over all subcontractors and vendors. Subcontractors shall provide notification of any significant changes to their organizations (e.g., personnel changes, accounting system) or method of operation. In addition, the Plan shall:

a. Discuss the details of formal arrangements with any proposed subcontractors, team

members, or joint venture partners.

b. Discuss the rationale for selection of proposed subcontractors, team members, or joint venture partners, both large and small businesses.
c. Discuss the level of expertise and the necessary capabilities of the proposed subcontractors, team members, or joint venture partners.

4. All employees must maintain the education and experience levels for the respective Standard Labor Categories as accepted by the Government in the proposal.

Upon NASA approval, the Plan shall form the basis for the Contractor's overall program management system and shall be updated and submitted to NASA for approval as revisions are required.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Lessons Learned	**02/14/05**	**02**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

Obtains Lessons learned from Contractor for possible publication in NASA Lessons Learned Information System (LLIS).

5. DRD Category: *(check one)* [X] Technical [X] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-3.1.3 Program Management Section C-9.2.2.p White Sands Test Facility	DRD 01 Management Plan

8. Preparation Information (Include complete instructions for document preparation)

Criteria for Selecting Lessons Learned: Insight arising from any event or observation that will benefit from sharing with a larger community of interested parties. Lessons learned are intended to prevent recurrence of undesirable events and to allow NASA and its team members to capitalize to the greatest extent practical on unique successes.

Frequency of submission: 30 days after triggering event or 30 days after mishap investigation or hazard analysis and evaluation is completed.

Distribution:
NS/Safety and Test Operations Division (1 electronic copy including photographs, drawings, etc., in web-ready format such as .html or .JPG)
NA/Contracting Officer's Technical Representative (COTR) (1 copy)

Content:

1. Subject - one line subject of the lesson.
2. Lesson Learned - usually one sentence that describes insight gained
3. Description of Event - narrative of what happened.
4. Recommendations - may be an action plan, suggestion, etc., that was adopted at event source.
5. Supporting documentation - as needed to give clear picture of lesson (photographs, illustrations, drawings, etc.)
6. Contact name and e-mail address (for follow up by Government prior to publication of lesson)
7. Definitions. Refer to NASA LLIS at http://llis.gsfc.nasa.gov/ for definitions of terms used.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Integrated Technical Management Report	**02/14/05**	**03**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To provide timely, integrated performance visibility to enhance effective cost, schedule, and technical management, and to provide consolidated documentation on contract activities. Used by the Contractor and NASA for monitoring activity, progress, and accomplishments, and documenting problems, solutions, and corrective actions associated with contract performance.

5. DRD Category: *(check one)* [X] Technical [X] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
NPD 7120.4C, Program/Project Management NPD 9501.3A, Earned Value Management Section C-3.1.4 Program Management Section C-3.2 Cost and Schedule	DRD 01 Management Plan DRD 04 Work Breakdown Structure (WBS) DRD 05 Contractor Financial Management Report (NF533) DRD 16 Activity Reports DRD 18 Evaluation Reports DRD 19 Assessment Plan and Reports

8. Preparation Information (Include complete instructions for document preparation)

The Contractor shall submit monthly performance reports of all work planned and accomplished during each month of contract performance. The report shall include NASA Form 533M (and/or NASA Form 533Q for quarterly reports), along with a combination of quantitative, metric, narrative, cost, earned value, and schedule information that relates costs to work performed and explains variances between the baselined plan and the actuals submitted on the NF533s.

Reporting shall be by the levels detailed in DRD 04 line items and below as necessary to:
- track activity and progress.
- communicate to NASA where and why variances are occurring.
- analyze variances.
- assess impacts to technical and schedule performance and discuss recovery plans.
- establish the value of work performed against the originally estimated/planned end value of tasks.

The report shall include issues or problems (contractual, funding, cost, technical, schedule, prioritization, skills, workload, etc.) along with recommended solutions.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Work Breakdown Structure (WBS)	**02/24/05**	**04**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To establish a framework for reporting cost, schedule, and technical performance. To provide a basis for uniform planning, reporting status, program visibility, and assignment of responsibilities.

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
NPD 7120.4B, Program/Project Management NPR 7120.5C, Program and Project Management Processes and Requirements Section C-3.2 Cost and Schedule	DRD 03 Integrated Technical Management Report DRD 05 Contractor Financial Management Reporting (NF533)

8. Preparation Information (Include complete instructions for document preparation)

The WBS shall be used as a framework to define requirements, plan effort, assign responsibilities, allocate and control costs and resources, and report progress, expenditures, technical, and schedule performance.

The WBS shall consist of an indentured list of element titles, scope/summary of each element (WBS Dictionary), and a diagram to clearly indicate element relationships. The following represents the current basic structure based on organizational fund sources.

Level I	Level II	Level III	Level IV	WBS Dictionary
Contract Summary				Roll-up of all WBS Level II elements
	Program Service Pool		- RITF/RITF Materials - Precision Materials (PM) - PM Calibration - PQA/PQA Admin - Pressure Systems - Facility Software Engineering - NASA Advisories and Alerts - EEE Parts Assurance - Special Processes - Risk Management and	Service pools are infrastructure capabilities that support multiple projects at a center. These costs are allocated based on usage/consumption. Here, the Service Pool provides S&MA oversight to Program activities

			Analysis - ISO Custodian	
		Program Support		Tasks not specific to any program within S&MA but benefit all programs
		Station S&MA		Tasks that directly support ISS
		Shuttle S&MA	- Government-Furnished Equipment (GFE) - Non-GFE (Shuttle Support S&MA)	Tasks that directly support SSP
		Station S&MA Safety Panel	- Station Review Panel (SRP) - Reliability and Maintainability (R&M) Panel	Direct Administrative and Technical support to ISS Safety Panels
		Shuttle S&MA Safety Panel	- Space Shuttle Review Panel (SSRP) - Payload Safety Review Panel (PSRP)	Direct Administrative and Technical support to ISS Safety Panels
	Facility Service Pool			Service Pool that provides for S&MA support to WSTF test facilities
	Shuttle (Direct)			Activities directly funded by the Shuttle Program that are outside of services provided under the Program Service Pool
	Station (Direct)			Activities directly funded by the Station Program that are outside of services provided under the Program Service Pool
	EVA (XA-Station)			Activities directly funded by the Station Program through the EVA office for specific EVA S&MA services not provided under the Program Service Pool
	Center G&A			Center functions that benefit all projects. Content is standard across the Agency.
	Corporate G&A		- Independent Assessment (IA) - Research Technology Operations Programs (RTOPs)	Operations of NASA Headquarters; also includes Agency-level functions benefiting all projects but managed at a Center or performed at a Center.
	Exploration (Direct)			Activities directly funded by the Office of Space Exploration for specific

				advanced program S&MA services not provided under the Program Service Pool

Level II elements may be added or phased out based on NASA financial reporting requirements, changes to fund sources, and the addition or deletion of Programs and Projects.

Level III elements may be added or phased out based on issuance of Task/Delivery Orders that require separate cost tracking or based on tracking requirements changes from the fund sources.

Level IV elements have been identified by NASA as definable areas for management of performance and cost.

The Contractor may utilize additional levels to further subdivide activities in order to permit adequate control and visibility. It is not necessary to extend the WBS to the same level for each activity.

Cost accounting at the lowest WBS levels implemented by the Contractor, shall accrue costs by the elements required for NF533 reporting (i.e., Hours, Direct Labor Cost, Fringe/Overhead, Facilities, Subcontractor Costs, Materials, Travel, Training, Overtime Premium, Overhead, etc.) in order to roll-up costs to the NF533s and to provide detail backup information, if requested by NASA, to support review of NF533s.

Interrelationship with NF533s:
Level I and II require submission of NF533s. Level III elements require detail cost report sheets that list WBS Level III elements, with element-associated costs, and roll-up to Level II NF533s. WBS Level IV elements require detail cost report sheets that list WBS Level IV elements, with element-associates costs, and roll-up to Level III detail sheets.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Contractor Financial Management Report (NASA Form 533M & 533Q)	**03/30/05**	**05**	

4. Use (Define need for, intended use of, and/or anticipated results of data)
To be used for NASA cost accounting and program control activities. Provides a basis for evaluating cost and expenditures on the contract.

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-3.2 Cost and Schedule NPR 9501.2D (or current issue), NASA Contractor Financial Management Reporting	DRD 03 Integrated Technical Management Report DRD 04 Work Breakdown Structure

8. Preparation Information (Include complete instructions for document preparation)

Scope:
The Contractor shall submit financial data in accordance with NPR 9501.2 as amended or revised.
The Data contained in the reports must be auditable using Generally Accepted Accounting Principles (GAAP). Supplemental cost reports submitted in addition to the NF533 must be reconcilable to the NF533. As part of the NF533, the Contractor shall submit a summary report of the NF533 to the NASA Resource Analyst assigned to the contract. The Contractor is required to coordinate with the NASA Resource Analyst to establish and maintain the Reporting Categories the Contractor shall use for both the NF533 and the summary report, and also to determine the format for the summary report.

Monthly Financial Reporting:
Individual NF533Ms shall be prepared and submitted for each reportable Work Breakdown Structure (WBS) level and element (*see* DRD 03) within the NASA WBS structure. Minimum requirements for the monthly reports are:
1. Contract Summary Level NF533 (WBS Level I) – roll-up of all WBS Level II elements
2. Fund Source Top-Level NF533 (WBS Level II) – roll-up of all WBS Level III elements
3. Detail sheets that list WBS Level III elements, with element-associated costs, that roll-up to Level II NF533s
4. Detail sheets that list WBS Level IV elements, with element-associated costs, that roll-up to Level III detail sheets

WBS elements may change year-to-year based on changes to fund sources or needs of NASA management to gain cost insight into specific task areas.

Variance:

Variance explanations between baselined plan and actual costs submitted on the NF533 shall be included in the Integrated Technical Management Report (DRD 03).

Reporting Categories:
Reporting categories shall be established and costs accrued against them so that actuals can be compared to negotiated costs at the cost element level. Reporting categories and elements will be agreed-to by the Contractor and the Government during contract negotiation and shall maximize the Contractor's accounting system and capabilities to the extent possible and maintain NASA reporting and accounting requirements. Anticipated reporting categories include the following:

Reporting Categories		**Description**
Contractor Labor		
Direct Labor Hours	Hrs	Direct labor can be directly identified to a particular subdivision of work (project, system, or task). It is reported as hours are incurred, with accruals for direct labor to the end of the contractors' accounting period.
Indirect Labor Hours	Hrs	Indirect labor hours are hours incurred for common objectives, such as payroll, maintenance, or computer support which cannot be charged to any single direct effort.
Contractor Labor $'s	$'s	
Subcontractor Labor		Actual and estimated costs reported by prime contractors shall include subcontractors' incurred cost for the same accounting period.
Labor Hours	Hrs	
Subcontractor Labor $'s	$'s	
Total Labor Dollars	$'s	Sum of all labor dollars reported on NF533.
OT Premium	$'s	
Travel	$'s	Travel is reported as costs are incurred, generally using the dates of travel to determine the period in which the cost will be reported.
Training	$'s	
Materials	$'s	Commercial, off-the-shelf items that are purchased for contract work are to be reported to NASA when accepted by the contractor. Material will not be reported as an element of cost under a subdivision of work until it is used on, consumed by, or applied to that subdivision of work.
Equipment	$'s	Costs for manufactured equipment, *i.e.*, equipment produced to specific requirements that make it useless to anyone else without rework shall be reported as the equipment is manufactured. The straight-line method for estimating accrued costs or the use of supplemental information obtained

		from the vendor are acceptable to calculate the incurred cost.
Facilities	$'s	Leases.
Overhead	$'s	Overhead is an accumulation of costs into various "pools", normally subdivided further by functional or departmental associations, such as engineering overhead, manufacturing overhead, and materials handling overhead. These costs are normally distributed on the basis of direct labor dollars (or hours) or material dollars.
G&A	$'s	G&A is an accumulation of indirect costs applicable to the direction and control of the contractors' activities as a whole. This category would not include costs classified as overhead. Commonly included under G&A are costs for officers' salaries, general and corporate offices, legal and auditing staffs, office supplies, insurance, and taxes. Total cost incurred, exclusive of G&A expenses, is usually used as the basis of distribution to the various cost objectives.
Subtotal Dollars	$'s	
Fees	$'s	Award fee is an amount that a contractor may earn in whole or in part based upon evaluations of performance during the contract period. The amount of award fee is negotiated and included in the contract. There are six award fee categories which may be used for NF533 reporting: Base Fee, Fee Earned, Interim Fee, Provisional Fee, Potential Additional Fee, and Total Fee. Award fee should be reported in the appropriate categories under the general heading "Award Fee" following the "Total Cost" line.
Total Dollars	$'s	

GENERAL GUIDANCE:

The NASA Form 533 (NF533) reports provide data necessary for the following:
1. Projecting costs and hours to ensure that dollar and labor resources realistically support Project and Program schedules.
2. Evaluating Contractor's actual cost and fee data in relation to negotiated contract value, estimated costs, and budget forecast data.
3. Planning, monitoring, and controlling Project and Program resources.
4. Accruing cost in NASA's accounting system, providing program and functional management information, and resulting in liabilities reflected on the financial statements.

Cost is a financial measurement of resources used in accomplishing a specified purpose, such as

performing a service, carrying out an activity, acquiring an asset, or completing a unit of work or Project. NASA Procedural Requirements (NPR) 9501.2D, NASA Contractor Financial Management Reporting, identifies the cost reporting requirements for a contract.

NASA is required by law to maintain accrual accounting, which requires cost to be reported in the period in which benefits are received, without regard to time of payment. Examples of accrual accounting for common cost elements reported on the NF533 follow:

Cost Element	**Definitions**
Labor	Reported to NASA as hours are incurred.
Equipment & Materials (commercial off the shelf)	Generally reported to NASA when received and accepted by the Contractor.
Manufactured Equipment	Defined as any equipment that is produced to specific requirements that make it useless to anyone else without rework. Cost should be reported to NASA as the equipment is being manufactured. The straight-line method for estimating accrued costs or the use of supplemental information obtained from the vendor are acceptable methods used to calculate the cost accrual amount.
Leases	Reported to NASA using a proration over the life of the lease.
Travel	Reported to NASA as costs are incurred.
Subcontracts	Actual and estimated costs reported by Prime Contractors shall include subcontractor's incurred costs for the same accounting period. Where subcontract costs are material, they should be separately identified on NF533 reports. The Prime Contractor shall include in the total cost of each subdivision of work the accrued cost (including fee, if any) of related subcontractor effort. Subcontractors should, therefore, be required to report cost to the Prime Contractor, using the accrual method of accounting. If the G&A and fee reported by a subcontractor are at the total subcontractor level, these costs must be allocated to specific subdivisions of work. Data submitted by the subcontractor should be structured similar to the Prime Contractor's NF533 to enable the Prime Contractor to properly report to NASA. For Firm Fixed Price subcontracts with a contract value greater than $500,000, the Prime Contractor is required to document the methodology used to generate the subcontractor costs reported and provide this information to the Contracting Officer and Center Deputy Chief Financial Officer (Finance).
Unfilled Orders	Reported as the difference between the cumulative cost incurred to date and amounts obligated to suppliers and subcontractors.
Fee	Should be accrued as earned using a consistent and auditable method to determine the amount. For example: an acceptable method would be to use historical data to determine the amount to accrue each month. Fee should be reported on the NF533 following the "Total Cost" line. Award fee must be reported by the following categories: Base Fee, Fee Earned, Interim Fee, Provisional Fee, Potential Additional Fee, and Total Fee. If any of the above fee categories do not pertain, they should not be included in the NF533.

Prompt Payment Discounts	Cumulative cost reported to NASA should be full incurred cost. The prompt payment discount amount taken should be reported as a separate line item on the NF533 below the cumulative cost amounts for the contract.

The NF533 reports are the official cost documents used at NASA for cost type, price redetermination, and fixed price incentive contracts. The data contained in the reports must be auditable using Generally Accepted Accounting Principles (GAAP). Supplemental cost reports submitted in additional to the NF533 must be reconcilable to the NF533.

The due dates for the NF533M and NF533Q reports are outlined in Chapter 3 of NPR 9501.2D. The following is a summary of the NF533 due date requirements.

NF533 Report	**Due Date**
NF533M	Due not later than 10 working days following the close of the Contractor's monthly accounting period or no later than the 15th calendar day of each calendar month. Proposed monthly delivery dates for NF533Ms shall be coordinated with the NASA Program Analyst and shall be delivered with sufficient time for NASA review and input into the NASA accounting system to support NASA financial reporting requirements.
NF533Q	Due not later than the 15th day of the month preceding the quarter being reported.

The due dates reflect the date the NF533 reports are received by personnel on the distribution list, not the date the reports are generated or mailed by the Contractor. It is critical that the NF533 reports are submitted in a timely manner to ensure adequate time for NASA to analyze and record the cost into the NASA accounting system.

Uncompensated overtime hours worked should be reported on NF533 reports as a separate line item or in the footnotes.

An initial NF533 report is required in the NF533Q format to be used as a baseline for the life of the contract. The initial (baseline) NF533Q report shall be submitted by the Contractor within 30 days after authorization to proceed has been granted. The initial report shall reflect the original contract value detailed by negotiated reporting categories and shall be the original contract baseline plan. In addition to the initial (baseline) report, monthly NF533 reporting shall begin no later than 30 days after the incurrence of cost.

Column 7b (planned cost incurred/hours worked for the month) and 7d (cumulative planned cost incurred/hours worked) of the NF533M represent the negotiated baseline plan for the contract. There may not be a relationship between the estimates provided in columns 8 of the NF533M to columns 7b and 7d. Columns 7b and 7d represent the legally binding contract negotiated baseline plan plus all authorized changes.

Short and long-term cost estimates, which include all data entered in columns 8 and 9a on the ND533M and NF533Q reports, shall be based on the most current and reliable information

available.

Prior period cost adjustments should be reported in column 7a and 7c of NF533M and column 7a of the NF533Q with a footnote discussing the reasons for and amounts of the adjustments.

Monthly NF533 reporting is no longer required once the contract is physically complete, provided the final cost report includes actual cost only (no estimates or forecasts). The Contractor must continue to submit monthly NF533 reports as long as estimates for the following period are included. If the final cost of a contract changes after the submission of the "final" Contractor cost report, the Contractor must submit a revised NF533 report in the month the cost change is recognized.

Electronic NF533 Requirement
In addition to submitting the NF533M or NF533Q in hardcopy format, the Contractor, upon request, shall submit the NF533 electronically by the same due date as the hardcopy. The data shall be submitted via email using the Government prescribed flat file format (see attached Agency Defined File Format for specific layout details) and shall include the following header information from the hardcopy.

Data Element	**Description**
Contract Number	NASA-assigned contract number
Modification Number	Latest definitive Modification Number
Accrual Date	Date the data was generated for
Report Period End Date	Period ending date of the NF533
Operating Days	Number of operating days for the current NF533
Date Received/Submitted	Date the report is submitted
CCR Format	Monthly (NF533M) or Quarterly (NF533Q)
Cost Unit of Measure	Unit of measure used to report cost on the NF533 report
HR/WYE Unit of Measure	Unit of measure used to report Hours/Work Year Equivalents (WYEs) on the NF533 Report
Authorized Contractor Representative	Name of Contractor Approving Officer
Authorized Contractor Representative Date Signed	Date the NF533 is approved and signed by the authorized Contractor Representative
Monthly Grand Total Cost Incurred (7a)	Grand Total Actual monthly cost for the prior month (Column 7a on the NF533)
Monthly Grand Total HR/WYE (7a)	Grand Total Actual monthly hours/WYEs for the prior month (Column 7a on the NF533)
Monthly Grand Total Cost Planned (7b)	Prior month planned cost (column 7b on the NF533)
Grand Total Cost Incurred ITD (7c)	Grand total contract cost from Inception to Date (ITD) (Column 7c on the NF533)
Grand Total Estimated Cost (8a)	Grand total current month cost estimate (Column 8a on the NF533)
Grand Total Planned Cost (7d)	Grand total planned contract cost (column 7d on the NF533)
Grand Total Estimated	Grand total current month estimate (Column 8a on the NF533)

HR/WYE (8a)	
Grand Total Estimated HR/WYE (8a)	Grand total current month HR/WYE estimate (column 8a on the NF533)
Grand Total Next Month Estimated Cost (8b)	Grand total next month cost estimate (column 8b on the NF533)
Grand Total Balance of Contract (8c)	Contract Balance for the remaining estimate to complete (column 8c on the NF533)
Grand Total Contractor Estimate (9a)	Contractor estimate to complete entire scope of contract (column 9a on the NF533)
Grand Total Contract Value (9b)	Contractor distribution of contract value by the reporting categories (column 9b on the NF533)
Grand Total Unfilled Orders Outstanding (10)	Unfilled order outstanding at the end of the reporting period (column 10 on the NF533)

The flat file will also contain detailed information for each Reporting Category (RC). A Reporting Category correlates to a task order, delivery order, or Work Breakdown Structure (WBS) and is the level at which cost is reported. Each RC can have Sub-Reporting Category line items (detailed cost elements) that add up to an RC. The Contractor is required to coordinate with the NASA Resource Analyst assigned to the contract in order to establish and maintain the Reporting Categories the Contractor shall use to comply with this data requirement. The chart below describes the data elements to be included in this section of the flat file (see attached Agency Defined File Format for specific layout details).

Data Element	**Description**
Reporting Category (RC)	Task, Delivery Order, WBS
Cost Incurred for the Month (7a)	Prior month actual cost incurred for each RC (Column 7a on the NF533)
HR/WYE Incurred for the Month (7a)	Prior month actual HR/WYE incurred for each RC (Column 7a on the NF533)
Contract prior month planned cost (7b)	Planned cost for prior month for each RC (column 8b on NF533)
Contract ITD Cost (7c)	Contract ITD cost for each RC (Column 7c on the NF533)
Contract Planned ITD Cost (7d)	Contract planned ITD cost for each RC (column 7d on NF533)
Current Month Estimated Cost (8a)	Cost estimate for the current month for each RC (Column 8a on the NF533)
Current Month Estimated HR/WYE (8a)	HR/WYE estimate for the current month for each RC (Column 8a on the NF533)
Next month estimated cost (8b)	Estimated cost for next month for each RC (column 8b on NF533)
Balance of Contract (8c)	Balance of contract for the remaining estimate to complete for each RC (column 8c on NF533)
Contractor Estimate (9a)	Contractor estimate for the total estimate to complete entire scope of contract for each RC (column 9a on NF533)
Contract Value (9b)	Contract value based upon contract modifications for each RC (column 9b of NF533)

Unfilled Orders Outstanding (10)	Unfilled orders outstanding at the end of the reporting period for each RC (column 10 on NF533)
Reporting Category Level	Used by NASA's accounting system to determine the RC level
Reporting Category Identifier	Identifies if the RC is an actual Reporting Category or a Sub-Reporting Category

The flat file shall be saved as a text file with no extension (do not include .txt after the file name) and named in strict accordance with the specific formate described in the attached Agency Defined File Format document.

File names must be provided in a specifc format. Each file name will begin with the SAP 2 Character center abbreviation listed below. The contract number and date will be included in the file name as well. Below is a sample file name.

MACFPS001_NAS00-0001_yyyy_mm_dd

SAP 2 Charter Center Abbreviations	
Headquarters	HQ
Marshall	MA
Ames	AM
Glenn	GL
Langley	LA
Dryden	DR
Goddard	GO
Stennis	ST
Johnson	JO
Kennedy	KE

Example File Format

Header (Non-Repeating Segment)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	EndPos	Len	Formt
HEADER:									
Record Type	Used by eGate to determine record type	'HD' for Header	Required	Required	RECORD_TYPE	1	2	2	CHAR
Contract Number	Contract Number (1b)	Header field—submitted with CONTRACTOR data or defaulted by interface or extension	Required	Required	CONTRACT_NUMBER	3	12	10	CHAR
	Latest definitive Modification Number(CR8197)				MOD_NUMBER	13	18	6	CHAR
Accrual Date	Date the data was generated for. Used by SAP as part of Oracle table key	Accrual Date. MM01YYYY, where MM is the Accrual Month and YYYY is the fiscal year	Required	Required	ACCRUAL_DATE	19	26	8	DATE MM01YYYY
Report Period End Date	Report Period End Date is a date(2)	Header field—submitted with CONTRACTOR data or defaulted by interface or extension	Required	Required	REP_END_DATE	27	34	8	DATE
Operating Days	Operating days(2).	Header field—submitted with CONTRACTOR data	Required	Optional unless Required by contract	OPER_DAYS	35	40	6	NUMERIC
Date Received	Date Received (1d)	System Date upon which the	Required	Required	DATE_REC	41	48	8	DATE

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	EndPos	Len	Formt
	(SIR2047)	data							
HR/WYE Unit of Measure	Hour/Work-Year-Equivalent Unit of Measure (SIR2047)	Submitted with CONTRACTOR data	Required	Required	HR_WYE_UOM	52	53	2	CHAR
	Authorized Contractor Representative – Name of Contractor Approving Officer (CR 8197)				AUTH_SIGNATURE	54	78	25	CHAR
	Authorized Contractor Representative Date Signed – Date CCR is approved/signed by authorized contractor representative(CR 8197)				AUTH_SIGNATURE_DATE	79	86	8	DATE MMDDYYYY
Grand Total Cost Incurred Month (7a)	The Grand Total Contract Prior Month Actual Dollars Column 7a reports actual costs for the prior month.	Submitted with CONTRACTOR data	Required.	Optional. Only required if lower detailed line item data is submitted in monthly batch file.	GT_COST_INCUR_MONTH	87	99	13	CURRENCY(2)
Grand Total	The Grand Total	Submitted with	Required if	Required if	GT_HRWYE_PRIOR_MONTH	100	109	10	NUMERIC(1)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	EndPos	Len	Formt
	Dollars Column (7b) reports planned costs for the prior month. (CR8197)								
Grand Total Cost Incurred ITD (7c)	The Grand Total Contract Cost Dollars Column 7c which represents Contract Cost Inception to Date	Submitted with CONTRACTOR data	Required. Does not require detailed line item data if provided from Cost Incurred Month (7a)	Required if detailed line item data is provided for this column	GT_ITD_COST	123	135	13	CURRENCY (2)
	Grand Total Cotract Planned Cost Dollars Column (7d) which represents Planned Contract Cost Inception to Date(CR 8197)				GT_COST_PLANNED_ITD	136	148	13	CURRENCY (2)
Grand Total Estimated Cost (8a)	The Grand Total Contract Estimated Cost for first upcoming month, or Current Month Estimate for cost.	Submitted with CONTRACTOR data	Required	Required if detailed line item data is provided for this column	GT_EST_COST	149	161	13	CURRENCY (2)
Grand Total HR/WYE (8a)	The Grand Total Contract Estimated Hours for first upcoming month. or Current	Submitted with CONTRACTOR data	Required if detailed line item data is provided	Required if detailed line item data is provided	GT_HRWYE_FIRST_MONTH	162	171	10	NUMERIC (1)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	EndPos	Len	Formt
	Grand Total Balance of Contract for the remaining estimate to complete (CR 8197)				GT_BALANCE_CONTRACT	185	197	13	CURRENCY (2)
	Grand Total Contractor Estimate for the total estimate to complete entire scope of contract (CR 8197)				GT_BALANCE_CONTRACTOR_ESTIMATE	198	210	13	CURRENCY (2)
	Grand Total Contract Value based upon Contract Modifications (CR 8197)				GT_CONTRACT_VALUE	211	223	13	CURRENCY (2)
	Grand Total Unfilled Orders Outstanding at end of reporting period (CR 8197)				ST_UNFILLED ORDERS	224	236	13	CURRENCY (2)

Example File Format

Detail (Repeating Segment)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Format
CCR DETAIL LINE ITEMS:									
Record Type	'DM' for Monthly column 7a Detail; 'DQ' for ITD Column 7c Detail	"RD" for Detail	Required	Required	RECORD_TYPE	1	2	2	CHAR
Reporting Category	Reporting Category (6)	Line item field—submitted with CONTRACTOR data	Required	Required	SERV_ORD_CAT	3	26	24	CHAR
Cost Incurred Month (7a)	Prior Month incurred costs (ACTUALS) for given category.	Line item field—submitted with CONTRACTOR data	Required if detailed line item data is not provided from Cost Incurred Month (7c)	Determined by contract requirement-data from Column 7a, 7c or 8a	COST_INCUR_MONTH	27	39	13	CURRENCY (2)
HR/WYE Incurred Month (7a)	Prior month incurred hours worked [Actuals] for given category..	Line item field—submitted with CONTRACTOR data	Optional unless Required by contract for WYE calculation	Optional unless Required by contract for WYE calculation	HRWYE_INCUR_MONTH	40	49	10	NUMERIC (1)
	Contract Prior Month Planned Dollars Column (7b) reports planned costs for the prior month (CR 8197)				COST_PLANNED_MONTH	50	62	13	CURRENCY (2)
	Contract Cost Dollars Column (7c) which represents Contract Cost Inception to Date (CR 8197)				CUR_COST_INCUR_ITD	63	75	13	CURRENCY (2)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	St Pos	End Pos	Len	Format
				8a					
HR/WYE Current Month Estimate (8a)	Estimated hours for first upcoming month for given category. Will only be needed if labor hours are required to be submitted electronically per contract.	Line item field—submitted with CONTRACTOR data	Optional unless Required by contract for WYE calculation	Optional unless Required by contract for WYE calculation	HRWYE_CUR_MONTH_EST	102	111	10	NUMERIC (1)
Next Month Estimated Cost (8b)	Estimated costs for second upcoming month for given category.	Line item field—submitted with CONTRACTOR data	Required unless not part of Contract scope	Required unless not part of Contract scope	NEXT_MONTH_EC	112	124	13	CURRENCY (2)
	Balance of Contract for the remaining estimate to complete (8c) (CR 8197)				BALANCE_CONTRACT	125	137	13	CURRENCY (2)
	Contractor Estimate for the total estimate to complete entire scope of contract (9a) (CR 8197)				CONTRACTOR_ESTIMATE	138	150	13	CURRENCY (2)
	Contract Value based upon Contract Modifications (CR 8197)				CONTRACT_VALUE	151	163	13	CURRENCY (2)
	Unfilled Orders Outstanding at end of reporting period (CR 8197)				UNFILLED ORDERS	164	176	13	CURRENCY (2)
	Used by SAP to determine Reporting Category Level (1.1.2.2.1) (CR 8197)				REPORTING_LEVEL	177	206	30	CHAR
	Fill in an "X" if record is a Reporting Category. Otherwise, leave blank for Sub-Reporting Category Line Items and Element of Cost detail records. This field is used by SAP to determine if the record is a Reporting				REPORTING_CAT_INDICATOR	207	207	1	CHAR

Example File Format

Sub-Reporting Category Line Items – Repeating Segment

Field Name	Start Pos	End Pos	Length	Format	Variable Repetition (?,*,+,n-n)	Description
SUB_RECORD_TYPE	1	2	2	CHAR		'SM' for Monthly column 7a Detail; 'SQ' for ITD column Detail
SUB_REP_CAT	3	26	24	CHAR		Reporting Category
SUB_COST_INCUR_MONTH	27	39	13	CURRENCY (2)		Prior month incurred costs (Actuals) for given category.
SUB_HRWYE_INCUR_MONTH	40	49	10	NUMERIC (1)		Prior month incurred hours worked (Actuals) for given category.
SUB_COST_PLANNED_MONTH	50	62	13	CURRENCY (2)		Contract Prior Month Planned Dollars Column **(7b)** reports planned costs for the prior month.
SUB_CUR_COST_INCUR_ITD	63	75	13	CURRENCY (2)		Contract Cost Dollars Column **(7c)** which represents Contract Cost Inception to Date.
SUB_COST_PLANNED_ITD	76	88	13	CURRENCY (2)		Contract Planned Cost Dollars Column **(7d)** which represents Planned Contract Cost Inception to Date.
SUB_CUR_MONTH_EC	89	101	13	CURRENCY (2)		Estimated costs for first upcoming month for given category **(8a)**.
SUB_HRWYE_CUR_MONTH_EST	102	111	10	NUMERIC (1)		Estimated hours for first upcoming month for given category. Will only be needed if labor hours are required to be submitted electronically per contract **(8a)**.
SUB_NEXT_MONTH_EC	112	124	13	CURRENCY (2)		Estimated costs for second upcoming month for given category **(8b)**.
SUB_BALANCE_CONTRACT	125	137	13	CURRENCY (2)		Balance of Contract for the remaining estimate to complete **(8c)**.
SUB_CONTRACTOR_ESTIMATE	138	150	13	CURRENCY (2)		Contractor Estimate for the total estimate to complete entire scope of contract **(9a)**.
SUB_CONTRACT_VALUE	151	163	13	CURRENCY (2)		Contract Value based upon Contract Modifications **(9b)**.
SUB_UNFILLED_ORDERS	164	176	13	CURRENCY (2)		Unfilled Orders Outstanding at end of reporting period.
REPORTING_LEVEL	177	206	30	CHAR		Used by SAP to determine Reporting Category Level (1.1.2.2.1) **(CR 8197)**.
REPORTING_CAT_INDICATOR	207	207	1	CHAR		Fill in an "X" if record is a Reporting Category. Otherwise, leave Blank for Sub-Reporting Category Line Items and Element of Cost detail records.

Example File Format

533 Agency FILE RECORD LAYOUT (*Element of Cost Detail – Repeating Segment (CR8197)*)

Field Name	Start Pos	End Pos	Length	Format	Variable Repetition (?,*,+,n-n)	Description
RECORD_TYPE	1	2	2	CHAR		'EM' for Monthly column 7a Detail; 'EQ' for ITD column Detail
EOC_REP_CAT	3	26	24	CHAR		Reporting Category
EOC _COST_INCUR_MONTH	27	39	13	CURRENCY (2)		Prior month incurred costs (Actuals) for given category.
EOC _HRWYE_INCUR_MONTH	40	49	10	NUMERIC (1)		Prior month incurred hours worked (Actuals) for given category.
EOC _COST_PLANNED_MONTH	50	62	13	CURRENCY (2)		Contract Prior Month Planned Dollars Column **(7b)** reports planned costs for the prior month.
EOC _CUR_COST_INCUR_ITD	63	75	13	CURRENCY (2)		Contract Cost Dollars Column **(7c)** which represents Contract Cost Inception to Date.
EOC _COST_PLANNED_ITD	76	88	13	CURRENCY (2)		Contract Planned Cost Dollars Column **(7d)** which represents Planned Contract Cost Inception to Date.
EOC _CUR_MONTH_EC	89	101	13	CURRENCY (2)		Estimated costs for first upcoming month for given category **(8a)**.
EOC _HRWYE_CUR_MONTH_EST	102	111	10	NUMERIC (1)		Estimated hours for first upcoming month for given category. Will only be needed if labor hours are required to be submitted electronically per contract **(8a)**.
EOC _NEXT_MONTH_EC	112	124	13	CURRENCY (2)		Estimated costs for second upcoming month for given category **(8b)**.
EOC _BALANCE_CONTRACT	125	137	13	CURRENCY (2)		Balance of Contract for the remaining estimate to complete **(8c)**.
EOC _CONTRACTOR_ESTIMATE	138	150	13	CURRENCY (2)		Contractor Estimate for the total estimate to complete entire scope of contract **(9a)**.
EOC _CONTRACT_VALUE	151	163	13	CURRENCY (2)		Contract Value based upon Contract Modifications **(9b)**.
EOC _UNFILLED_ORDERS	164	176	13	CURRENCY (2)		Unfilled Orders Outstanding at end of reporting period.
REPORTING_LEVEL	177	206	30	CHAR		Used by SAP to determine Reporting Category Level (1.1.2.2.1) **(CR 8197)**.
REPORTING_CAT_INDICATOR	207	207	1	CHAR		Fill in an "X" if record is a Reporting Category. Otherwise, leave Blank for Sub-Reporting Category Line Items and Element of Cost detail records.

Example File Format

Trailer (provides the number of header & detail records sent from the contractor/vendor/center in order to verify the receipt of complete data after transmission)

CCR Extension Data Element	Description	Contractor Initial Data Mapping	NF 533 Required/ Optional	OTHER CCR Required/ Optional	Field Name	Start Pos	End Pos	Length	Format
TRAILER:									
Record Type	Used by eGate to determine record type	"TL" for Trailer	Required	Required	RECORD_TYPE	1	2	2	CHAR
Record Count	Count of the number of Detail records sent to process (Detail Only)	Trailer field submitted with CONTRACTOR data	Required	Requried	RECORD_COUNT	3	9	7	NUMERIC
	Value of spaces				FILLER	10	207	198	CHAR

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

2. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement completes)
Quality Manual	**04/05/05**	**06**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

The Quality Manual is used to document the specific details of the Contractor's Quality Management System (QMS) including management commitment to quality, system elements, policy, and practice. The Manual is used to assess the proposed QMS for compliance with ANSI/ISO/ASQ Q9001-2000.

5. DRD Category: *(check one)* [ ] Technical [ ] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
JPD 5335.1, Quality Policy ANSI/ISO/ASQ Q9001-2000, Quality Management Systems Requirements Section C-3.4.1 Quality Management System Section C-10.3.1, Quality	DRD 01 Management Plan DRD 07 Contractor Quality Metrics

8. Preparation Information (Include complete instructions for document preparation)

Scope:
The Quality Manual shall be in accordance with the requirements of ANSI/ISO/ASQ Q9001-2000, Quality Management System Requirements, and JPD 5335.1, Quality Policy. The Contractor's QMS shall describe the Contractor's approach to accomplishing tasks in accordance with JPD 5335.1 rather than the actual performance of specific work elements/tasks.

Contents:
Each element of the contractually imposed QMS requirements shall be addressed in narrative form, and in sufficient detail to describe the philosophy and approach for implementation.

1. List policies and procedures that will be used to meet each QMS requirement. Existing policies and procedures may be utilized where these can meet contractual requirements. The Manual shall include traceability from the quality elements of ANSI/ISO/ASQ Q9001-2000 to the specific Contractor processes which support those elements.

2. Explain your process for determining appropriate quality indices and measurements and reporting those in accordance with DRD 07, Contractor Quality Metrics.

3. Explain your methods for measuring the achievement of your quality objectives.

4. Explain how you verify that all personnel performing work affecting product quality are competent as a result of appropriate education, training, skills, and experience. In addition

explain the system you will use to monitor and maintain this level of personnel competency required during the duration of the contract.

5. Explain how you will monitor, measure, and control the quality of products you produce as well as those produced by subcontractors. Explain how you will ensure that products, which do not conform to product requirements, are identified and controlled to prevent their unintended use or delivery.

6. Describe your responsibilities and requirements for planning and conducting audits (internal and external), and for reporting results and maintaining records.

7. Explain the processes you will implement to report problems, corrective actions, and resolution verification to the designated NASA Quality Organization.

Format:
Contractor's format in native format and compatible with standard JSC office software loads.

Maintenance:
Update as required to be consistent and up-to-date with process changes. All changes and updates to the Quality Manual shall be approved by NASA.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

3. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Contractor Quality Metrics	**02/14/05**	**07**	

4. Use (Define need for, intended use of, and/or anticipated results of data)
To provide NASA management with a summary of Contractor's quality performance based on strategic goals and objectives.

5. DRD Category: *(check one)* [ ] Technical [ ] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-3.4.1 Quality Management System	DRD 01 Management Plan DRD 06 Quality Manual

8. Preparation Information (Include complete instructions for document preparation)

Scope:
The report shall provide a summary and analysis of quality performance data showing the Contractor's progress toward meeting predefined goals and objectives.

The reports shall include a measure of the extent to which planned activities are realized and planned results are achieved and a relationship between results achieved and resources used.

Maintenance:
Contractor quality performance metrics data shall be submitted as specified in the Data Requirements List (Quarterly).

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Property Management Plan	**02/14/05**	**08**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To describe the Contractor's method of managing, tracking, and administering Government personal property.

5. DRD Category: *(check one)* [ ] Technical [X] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-3.5 Property Management Section C-10.4 Laboratory Equipment and Facilities Section G.13 Installation-Accountable Government Property NPR 4200.2, Equipment Management Manual for Property Management	DRD 01 Management Plan

8. Preparation Information (Include complete instructions for document preparation)

Scope:
The Property Management Plan defines the Contractor's use, maintenance, repair, protection, and preservation of Government-furnished property. It shall describe the Contractor's approach to receiving, handing, stocking, maintaining, protecting, and issuing Government property. The plan should include interaction and Department/Office responsibilities.

Contents:
This Plan shall reference those procedures, which constitute the Contractor's Property Management Manual and shall include at a minimum the following categories:

Property Management
Acquisition
Receiving
Identification
Records
Movement
Storage
Physical Inventories
Reports
Consumption
Utilization
Maintenance
Subcontractor Responsibilities
Control Disposition
Contractor Closeout

The Plan shall also include information on how the Contractor will reconcile Contractor records with financial records and Center-unique considerations.

Property Reporting:
The Contractor shall provide property reporting per Clause 52.245-5.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Safety and Health Plan	**02/14/05**	**09**	

4. Use (Define need for, intended use of, and/or anticipated results of data)
Establishes Safety, Health, and Environmental Compliance Plan for contractors providing support to JSC organizations.

5. DRD Category: *(check one)* [ ] Technical [ ] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
OSHA TED 8.4, Voluntary Protection Plan (VPP) Policies and Procedures Manual JSC 17773, Instructions for Preparation of Hazard Analysis for JSC Ground Operations JPR 1700.1 JSC Safety and Health Handbook Section C-3.6, Safety and Environmental Health	DRD 01 Management Plan DRD 10 Safety and Health Program Self-Evaluation DRD 11 Monthly Safety and Health Metrics

8. Preparation Information (Include complete instructions for document preparation)

NOTE: UPON NASA APPROVAL, THE CONTRACTOR'S SAFETY, HEALTH, and ENVIRONMENTAL COMPLIANCE PLAN ("The Plan") BECOMES A CONTRACTUAL REQUIREMENT.

Frequency of submission: One time only (with the proposal).

Distribution: After the plan is approved by NASA, the Contracting Officer will retain the plan in the contract file. The contractor will send additional copies to each of the following:
NS/Safety and Test Operations Division (2 copies)
SD13/Occupational Health Officer (1 copy)
JA131 / Environmental Services (1 copy)
Contracting Officer's Technical Representative (1 copy)

Subsequent revisions to the plan: The Contractor may revise the plan at any time or at the direction of the Government. Revisions are subject to Government review and approval. Distributions of approved revisions will be as described above.

Other deliverables: The requirements for this plan as detailed in the instructions on plan content below include instructions for specific reports and data to be submitted to the Government. These instructions are to be included in the plan and represent contractual commitments by the contractor to provide this information.

Format:

1. Cover page - to include as a minimum the signatures of Contractor's project manager and designated safety official (if different); NASA COTR; JSC Occupational Safety Branch; and the NASA Contracting Officer. Other signatures may be required at the discretion of the Government.

2. Table of Contents. See content below.

3. Body of plan - as required. Contractor's format is acceptable but should be traceable to the elements of the content below.

4. When preparing its plan, the offeror/contractor is expected to review all the items below and tailor its plan accordingly. Certain requirements set forth in this DRD may be specific for contractor operations performed at JSC, Ellington Field, Sonny Carter Training Facility, or White Sands Test Facility (WSTF); tailoring of the plan to the requirements of specific establishments is acceptable. 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.

Authority: FAR 52.223-1 through -5, -10; NFS 18-23.70, 18-52.223-70, 18-52.223-73.

Content:

1. MANAGEMENT LEADERSHIP AND EMPLOYEE PARTICIPATION.

1.1. Policy. Provide the contractor's safety, health, and environmental compliance policy statement with the plan. Compare the contractor's policy statement with those of NASA and OSHA and discuss any differences.

1.2. Goals and Objectives.

1.2.1 Describe specific safety and health goals and objectives to be met. Discuss status of safety program using the "Performance Evaluation Profile" as safety performance criteria. Describe the contractor's approach to continuous improvement (including milestone schedule) using level 5 of the Performance Evaluation Profile as a guideline.

1.2.2. Describe Environmental Goals & Objectives to be met for the following:

a. Pollution Prevention and Source Reduction of:
(1) Hazardous and Industrial Solid Wastes
(2) Solid Wastes (trash, refuse)
(3) Wastewater Discharges (sanitary sewerage)
(4) Air Emissions
(5) Medical & Radiological Discharges

b. Affirmative Procurement (Purchase of Environmentally Preferable Materials IAW Executive Order)

c. Hazardous Materials Handling/Purchasing/Reduction/Replacement

d. Elimination from Specifications and Standards requirements for the use of Hazardous/Toxic Substances & Materials

e. Use of an Environmental Planning Checklist to review & document Impacts of New and Modified Programs, Projects, Activities and Operations.

f. Life cycle analysis and costing

g. Incorporating Environmental Requirements in Subcontracts

h. Participation in JSC Recycling

i. Outreach programs

1.3. Management Leadership. Describe management's procedures for implementing its commitment to safety, health, and environmental compliance through visible management activities and initiatives including a commitment to exercise management prerogatives to ensure workplace safety and health. Describe processes and procedures to making this visible in all contract and subcontract activities and products. Include a statement from the project manager or designated safety official indicating that the plan will be implemented as approved and that the project manager will take personal responsibility for its implementation.

1.4. Employee Involvement. Describe procedures to promote and implement employee (e.g., non-supervisory) involvement in safety, health, and environmental compliance program development, implementation and decision-making. Describe the scope and breadth of employee participation to be achieved so that approximate safety and health risk areas of the contract are equitably represented.

1.5. Assignment of Responsibility. Describe line and staff responsibilities for safety and health program implementation. Identify any other personnel or organization that provides safety services or exercises any form of control or assurance in these areas. State the means of communication and interface concerning related issues used by line, staff, and others (such as documentation, concurrence requirements, committee structure, sharing of the work site with NASA and other contractors, or other special responsibilities and support.) As a minimum, the contractor will identify the following:

1.5.1. Safety Representative - identify by title the individual who will be trained and certified in accordance with JPR 1700.1 to be responsive to Center-wide safety, health, environmental, and fire protection concerns and goals, and who will participate in meetings and other activities related to the JSC Safety and Health program.

1.5.2. Company Physician/Occupational Injury/illness case manager - identify a point of contact who is responsible for the transfer or receipt of company medical data and who will be the primary contact for the company in the event any employee suffers a work related injury or illness (such as the company physician) by name, address, and telephone number to the JSC Clinic, mail code SD22. This will facilitate communication of medical data to contractor management. Prompt notification to the JSC Occupational Health/ Clinic shall be given of any changes that occur in the identity of the point of contact. A letter to the JSC Occupational Health Office can accomplish initial identification of point of contact and subsequent updates with a copy sent to the Contracting Officer. The initial letter is to be received by the Government prior to contract start.

1.5.3. Building Fire Wardens - provide a roster of fire wardens (their names, phone numbers and pagers, and mail codes). Contractor fire wardens are needed to facilitate the JSC fire safety program, including coordination of related issues with NASA facility managers and emergency planning and response officials and their representatives. Fire wardens will be trained in accordance with JPR 1700.1. The roster shall be maintained by letter to JSC Occupational Safety, mail code NS2, with copies to the Contracting Officer and Contracting Officer's Technical Representative. The initial letter shall be received by the Government not later than 15 days after contract start.

1.5.4. Designated Safety Official - identify by title the official(s) responsible for implementation of this plan and all formal contacts with regulatory agencies and with NASA.

1.6. Provision of Authority. Describe consistency of the plan for compliance with applicable NASA and JSC requirements and contractual direction as well as applicable Federal, state, and local regulations and how compliance will be maintained throughout the life of the contract.

1.7. Accountability. Describe procedures for ensuring that management and employees will be held accountable for implementing their tasks in a safe and healthful and environmentally compliant manner. The use of traditional and/or innovative personnel management methods (including discipline, motivational techniques, or any other technique that ensures accountability) will be referenced as a minimum and described as appropriate.

1.8. Program Evaluation. The program evaluation consists of:

1.8.1. Participation in a Performance Evaluation Profile (PEP) survey at the request of the Government. The PEP survey normally will be scheduled and administered at the discretion of the Government. If the Government chooses not to do the PEP in a given year, the contractor may at its option initiate its own PEP by contacting JSC Occupational Safety, code NS2, for assistance. The contractor will not be required to take two or more PEP surveys in any contract year.

1.8.2. [Reserved.]

1.8.3. A written self-evaluation report to be delivered by Sept 30 of each year. The self-evaluation shall follow the VPP program evaluation report format found in OSHA TED 8.4, Voluntary Protection Programs (VPP) Policies and Procedures Manual, Appendix D, "Annual Submissions", as mandated by the cognizant OSHA regional office. Contractors who have submitted a written self-evaluation as a VPP site may submit their original report to OSHA in lieu of writing a new self -evaluation provided that all action plans and status are updated. The self evaluation shall as a minimum cover the elements of the approved safety and health plan.

1.8.4. Miscellaneous Reports. The contractor will acknowledge the following as standing requests of the Government and to be handled as described below.

a. Roster of Terminated Employees. Identify personnel terminated by contractor. Send to the JSC Occupational Health Officer, mail code SD13, no later than 30 days after the end of each contract year or at the end of the contract, whichever is applicable. At the contractor's discretion, the report may be submitted for personnel changes during the previous year or cumulated for all years. Information required:

(1) Date of report, contractor identity and contract number.

(2) For each person listed, provide name, social security number, and date of termination.

(3) Name, address, and telephone number of contractor representative to be contacted for questions or other information.

b. Material Safety Data. The contractor shall prepare and/or deliver Material Safety Data for hazardous materials brought onto Government property or included in products delivered to the Government. This data is required by the Occupational Safety and Health Administration (OSHA) regulation, 29 CFR 1910.1200, "Hazard Communication", EPA "Emergency Planning and Community Right-to-Know (EPCRA, ref. 40 CFR 302, 311, 312); and the Texas Department of Health (TDH, ref. Chapters 505-507 of the Health and Safety Code), and Federal Standard 313 (or FED-STD-313), "Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities", as revised. 1 copy of each MSDS will be sent upon receipt of the material for use on NASA property to the JSC Central Repository, Occupational Health and Test Support, Mail Code

SD13, along with information on new or changed locations and/or quantities normally stored or used. If the MSDS arrives with the material and is needed for immediate use, the MSDS shall be delivered to the Central Repository by close of business of the next working day after it enters the site.

c. Hazardous Materials Inventory. The contractor shall compile an inventory report of all hazardous materials it has located on Government property not less than annually, and which is within the scope of 29 CFR 1910.1200, "Hazard Communication"; and Federal Standard 313 (or FED-STD-313), "Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities", as revised. The call for this annual inventory and instructions for delivery will be issued by the JSC Occupational Health and Test Support Office, mail code SD13. This information shall use the format used by JSC for chemical inventory compilation to provide the following:

(1) the identity of the material;
(2) the location of the material by building and room;
(3) the quantity of each material normally kept at each location
(4) peak quantity stored
(5) actual or estimated rate of annual usage of each chemical

1.9. Government Access to Safety and Health Program Documentation. The contractor shall recognize in its plan that it will be expected to make all safety, health, and environmental documentation (including relevant personnel records) available for inspection or audit at the Government's request. Electronic access by the Government to this data is preferred as long as Privacy Act requirements are met and Government safety and health professionals and their representatives have full and unimpeded access for review and audit purposes. For contractor activities conducted on NASA property, the contractor will identify what records it will make available to the Government in accordance with the Voluntary Protection Program criteria of OSHA as implemented in JPR 1700.1, "JSC Safety and Health Handbook", as revised. For the purpose of this plan, safety, health, and environmental compliance 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, environmental protection, or emergency preparedness.

1.10. The contractor may be requested to participate in the review and modification of safety requirements that are to be implemented by the Government including any referenced documents therein. This review activity will be implemented at the direction of the NASA Contracting Officer's Technical Representative in accordance with established NASA directives and procedures.

1.11. Procurement. Identify procedures used to assure that procurements are reviewed for safety, health and environmental compliance considerations and that specifications contain appropriate safety criteria and instructions. Set forth authority and responsibility to assure that safety tasks are clearly stated in subcontracts.

1.12. Certified Professional Resources. Discuss your access to certified professional resources for safety, health, and environmental protection. Discuss their roles in motivation/awareness, worksite analysis, hazard prevention and control, and training.

2. WORKSITE ANALYSIS. Hazards shall be systematically identified through a combination of surveys, analyses, and inspections of the workplace, investigations of mishaps and close calls, and the collection and trend analysis of safety and health data such as: records of occupational injuries and illnesses; findings and observations from preventive maintenance activities; reports on hazardous substance spills and inadvertent releases to the environment; facilities related incidents related to partial or full loss of systems functions; etc. Hazards identified by any of the techniques identified below shall be ranked and processed in accordance with JPR 1700.1. All hazards on NASA property, which are immediately dangerous to life or health, shall be reported immediately to the Occupational Safety Office.

All safety engineering products that address operations, equipment, etc., on NASA property will be subject to JSC S&MA review and concurrence unless otherwise waived by the JSC Occupational Safety Office.

2.1. Industrial Hygiene. Describe your industrial hygiene program and how it will be coordinated with the JSC government provided resources for industrial hygiene. In the event corporate resources are used to determine workplace exposures, copies of all monitoring data shall be provided to JSC Occupational Health within 15 days of receipt of results.

2.2. Hazard Identification. Describe the procedures and techniques to be taken to compile an inventory of hazards associated with the work to be performed on this contract. This inventory of hazards shall address the work specified in this contract as well as operations and work environments in the vicinity or in close proximity to contract operations. The results will be reported to the Government in a manner suitable for inclusion in facilities baseline documentation as a permanent record of the facility. Specific techniques to be considered include:

2.2.1. Comprehensive Survey – A "wall to wall" engineering assessment of the work site including facilities, equipment, processes, and materials (including wastes – (TNRCC/EPA solid & hazardous, radioactive, explosives, medical-infectious-biological)). The comprehensive survey will establish a baseline of hazards that may put contract assets at risk as early as is feasible, preferably at contract start.

2.2.2. Change (Pre-use) Analysis – Typically addresses modifications in facilities, equipment, processes, and materials (including waste); and related procedures for operations and maintenance. Change analyses periodically will be driven by new or modified regulatory and NASA requirements.

2.2.3. Hazard Analysis – may address facilities, systems/subsystems, operations, processes, materials (including waste), and specific tasks or jobs. Analyses and report formats will be in accordance with JSC 17773, "Instructions for Preparation of Hazard Analyses for JSC Ground Operations."

2.3. Inspections.

2.3.1. Routine Inspections. Includes assignments, procedures, and frequency for regular inspection and evaluation of work areas for hazards and accountability for implementation of corrective measures. The contractor will describe administrative requirements and procedures for control of and regularly scheduled inspections for fire and explosion hazards. The contractor has the option, in lieu of this detail, to identify policies and procedures with the stipulation that the results (including findings) of inspections conducted on NASA property or involving Government furnished property will be documented in safety program evaluations or the monthly Accident/Incident Summary reports. Inspections will identify

a. Discrepancies between observed conditions and current requirements, and
b. New (not previously identified) or modified hazards.

2.3.2. Protective Equipment. Set forth procedures for obtaining, inspecting, and maintaining all appropriate protective equipment, as required, or reference written procedure pertaining to this subject. Set forth methods for keeping records of such inspections and maintenance programs.

2.4. Employee Reports of Hazards – identification of methods to encourage employee reports of hazardous conditions (e.g., close calls) and analyze/abate hazards. The contractor will describe steps it will take to create reprisal-free employee reporting with emphasis on management support for employees and describe methods to be used to incorporate employee insights into hazard abatement and motivation / awareness activities.

2.5. Accident and Record Analysis.

2.5.1. Mishap Investigation – identification of methods to assure the reporting and investigation of mishaps including corrective actions implemented to prevent recurrence. The contractor will describe the methods to be used to report and investigate mishaps on NASA property and on contractor or third party property. The contractor will describe its procedures for implementing use of NASA forms as specified in JPR 1700.1 and alternate forms used by contractor with emphasis on timely notification of NASA; investigation procedures; exercise of jurisdiction over a mishap investigation involving NASA and other contractor personnel; follow up of corrective actions; communication of lessons learned to NASA; and solutions to minimize duplications in reporting and documentation including use of alternate forms, etc. The contractor will discuss its procedures for immediate notification requirements for fires, hazardous materials releases, and other emergencies. The contractor will include appropriate details to address the use of NASA Form 1627, "Mishap Report" (or equivalent), including 24-hour and ten-day mishap reports to JSC Occupational Safety, mail code NS2. Note: the NASA Form 1627 is not attached since it is a three part carbonless form not conducive to reproduction. This form can be obtained from JSC's Printing Services.

2.5.2. Trend Analysis – describe approach to performing trend analysis of data (occupational injuries and illnesses; facilities, systems, and equipment performance; maintenance findings; etc.) Discuss methods to identify and abate common causes indicated by trend analysis. In support of site-wide trend analysis to be performed by the Government, the contractor will discuss method of providing data as follows:

a. Accident/Incident Summary Report. The contractor shall prepare and deliver Accident/Incident Summary Reports as specified on JSC Form 288, "Accident / Incident Statistics" (attached), as revised. All new and open mishaps, including vehicle accidents, incidents, injuries, fires, and close calls shall be described in summary form along with current status. Negative reports are also required monthly. Report frequency is monthly; Date due is the 10th day of the month following each month reported. Report to be delivered to the JSC S&MA Directorate through the Safety and Test Operations Division , mail code NS2, by fax to 281-244-0426 or by attaching to an e-mail and transmitting to mishaps@ems.jsc.nasa.gov.

b. Log of Occupational Injuries and Illnesses. For each establishment on and off NASA property that performs work on this Contract, the Contractor shall deliver to the Government a copy of its annual summary of occupational injuries and illnesses (or equivalent) as described in Title 29, Code of Federal Regulations, Subpart 1904.5. Copy of all summaries as required above under Contractor's cover letter. If contractor is exempt by regulation from maintaining and publishing such logs, equivalent data in contractor's format is acceptable (such as loss runs from insurance carrier) which contains the data required by JSC Form 288. Data shall be compiled and reported by calendar year and provided to the Government within 45 days after the end of the year to be reported (e.g. not later than February 15 of the year following.)

3. HAZARD PREVENTION AND CONTROL. Identified hazards must be eliminated or controlled. In the multiple employer environment of the center, it is required that hazards including discrepancies and corrective actions be collected in a center wide information system (Hazard Abatement Tracking System (HATS) for risk management purposes. Describe your approach to implementing this requirement.

3.1. Appropriate Controls. Discuss approach to consideration and selection of controls. Discuss use of hazard reduction precedence sequence (see JPR 1700.1). Discuss approach to identifying and accepting any residual risk. Discuss implementation of controls including verifying effectiveness. Discuss scope of coverage (hazardous chemicals, equipment, discharges, waste, energies, etc.). Discuss proposed method for coordination with safety, health, environmental services, and emergency authorities at NASA.

3.2. Hazardous Operations and Processes. Establish methods for notification of personnel when hazardous operations and processes are to be performed in their facilities or when hazardous conditions are found to exist during the course of this contract. JPR 1700.1 will serve as a guide for defining, classifying, and prioritizing hazardous operations; 29 CFR 1910.119 will be the guide for hazardous processes. Develop and maintain a list of hazardous operations and processes to be performed during the life of this contract. The list of hazardous operations and processes will be provided to JSC as part of the plan for review and approval. JSC and the Contractor will decide jointly which operations and processes are to be considered hazardous, with JSC as the final authority. Before hazardous operations or processes commence, the Contractor will develop a schedule to develop written procedures with particular emphasis on identifying the job safety steps required. NASA will have access on request to any contractor data necessary to verify implementation. For all identified operations or processes that may have safety or health implications outside contract operations, the contractor shall identify such circumstances to the JSC Safety and Test Operations Division and Occupational Health and Test Support Office who will provide additional instructions for further NASA management review and approval.

3.3. Written Procedures. Identification of methods to assure that the relevant hazardous situations and proper controls are identified in documentation such as inspection procedures, test procedures, etc., and other related information. Describe methods to assure that written procedures are developed for all hazardous operations, including testing, maintenance, repairs, and handling of hazardous materials and hazardous waste. Procedures will be developed in a format suitable for use as safety documentation (such as a safety manual) and be readily available to personnel as required to correctly perform their duties.

3.4. Hazardous Operations Permits. Identify facilities, operations and/or tasks where hazardous operations permits will be required as specified in JPR 1700.1 such as confined space entry, hot work, etc.) Set forth guidance to adhere to established NASA JSC procedures. Clearly state the role of the safety group or function to control such permits.

3.5. Operations Involving Potential Asbestos Exposures. Set forth method by which compliance is assured with JSC Asbestos Control Program as established in JPG 1700.1, as revised.

3.6. Operations Involving Exposures to Toxic or Unhealthful materials. Such operations must be evaluated by the JSC Occupational Health Office and must be properly controlled as advised by same. JSC Occupational Health Office must be notified prior to initiation of any new or modified operation potentially hazardous to health.

3.7. Environmental Operations & Activities

3.7.1. Operations Involving Hazardous Waste. Identify procedures used to manage hazardous waste from point of generation through disposal. Clearly identify divisions of responsibility between contractor and NASA for hazardous waste generated throughout the life of the contract. Operations that occur on site at JSC, WSTF, SCTF, or Ellington Field must be evaluated by the JSC Environmental Services Office and must be properly controlled as advised by same. JSC Environmental Services Office must be notified prior to initiation of any new or modified operations, equipment, systems, or activities generating new hazardous wastes or where the chemicals change or there are volume increases of 25% or more on site at JSC, SCTF, or Ellington Field.

3.7.2. Operations Involving New or Modified Emissions/Discharges to the Environment. Set forth methods for identifying new or modified emissions/discharges and coordinating results with the Environmental Services Office, mail code JA131. Set forth a plan of procedures to conduct pollution prevention, waste minimization or source reduction/elimination of environmental pollution. Address

management and continuous improvement for the reduction of hazardous materials; substitution of non-hazardous or less hazardous materials for hazardous materials; proper segregation of hazardous wastes from non-hazardous wastes; and other methods described by NASA , EPA, GSA, and Executive Order for recycled content / affirmative procurement purchases . The JA131/Environmental Office is the single point of contact for coordinating all JSC environmental permits Emphasis shall be placed on providing for sufficient lead time for processing permits through the appropriate state agency and/or the Environmental Protection Agency.

3.8. Discuss your responsibilities for maintaining facilities baseline documentation in accordance with JSC requirements. The contractor will implement any facilities baseline documentation tasks (including safety engineering) as provided in the contractor's plan approved by NASA or as required by Government direction.

3.9. Preventive Maintenance. Discuss approach to preventive maintenance. Describe scope, frequency, and supporting rationale for your preventive maintenance program including facilities and /or equipment to be emphasized or de-emphasized. Discuss methods to promote awareness in the NASA community (such as alerts, safety flashes, etc.) when preventive maintenance reveals design or operational concerns in facilities and equipment (and related processes where applicable).

3.10. Medical (Occupational Healthcare) Program. Discuss your medical surveillance program and injury /illness case management to evaluate personnel and workplace conditions to identify specific health issues and prevent degradation of personnel health as a result of occupational exposures. Discuss approach to Cardiopulmonary Resuscitation (CPR), first aid, and , return to work policies and the use of government provided medical and emergency facilities for the initial treatment of occupational injuries/illnesses.

3.11. Hazard Correction and Tracking. Discuss your system for correcting and tracking safety, health, and environmental hazards with particular emphasis on integration with JSC's Hazard Abatement Process (found online at http://wwwsrqa.jsc.nasa.gov/HATS/). (The scope is restricted to establishments at JSC, Sonny Carter Training Facility, and Ellington Field.) This includes the following:

3.11.1. Personnel awareness of hazards. Discuss your approach to communicate unsafe conditions and approved countermeasures to your employees. Discuss your approach to communicating such conditions to the Government and other contractors whose personnel may be exposed to such unsafe conditions. Discuss communications with facility managers. Discuss use of the NASA Lessons Learned Information System for both obtaining lessons from other sources and as a repository for lessons learned during performance of the contract.

3.11.2. Interim and Final Abatement Plans. Describe how you will approach interim and final abatement of hazards. Describe how you will provide data to the JSC Hazard Abatement Tracking System for all hazards that are not finally abated (all interim and final abatement actions completed) within 30 days of discovery. Discuss your approach to posting such plans using JSC Form 1240, "JSC Notice of Safety or Health Hazard and Action Plan", or equivalent. Discuss compatibility of your system with JSC's system and the role of facility managers in abatement planning, implementation, and verification.

3.12. Disciplinary System. Describe your system for ensuring safety and health discipline in your personnel (including subcontractors). Describe your approach to modifying personnel behaviors when personnel are exhibiting discrepant safety and health performance.

3.13. Emergency Preparedness. Discuss approach to emergency preparedness and contingency planning which addresses fire, explosion, inclement weather, environmental spill /releases, etc. Discuss

compliance with 29 CFR 1910.120 (HAZWOPER) and role in JSC Incident Command System (see JPR 1700.1 for details). Discuss methods to be used for notification of JSC emergency forces including emergency dispatcher, safety hotline, director's safety hotline, etc. Discuss establishment of pre-planning strategies through procedures, training, drills, etc. Discuss methods to verify emergency readiness.

4. SAFETY AND HEALTH TRAINING. Describe the contractor's training program including identification of responsibility for training employees to assure understanding of safe work practices, hazard recognition, and appropriate responses for protective and/or emergency countermeasures, including training to meet federal, state, and local regulatory requirements. In doing so, the contractor will factor parallel requirements found in other mandates such as environmental protection [example: 29 CFR 1910.38 for emergency action plans and fire prevention plans versus EPA Resource Conservation & Recovery Act (RCRA) for Emergency Planning and Community Right-to-know (EPCRA).] Describe approach to identifying training needs including traceability to exercises such as job safety analyses, performance evaluation profiles, hazard analyses, mishap investigations, trend analyses, etc. Describe approach to training personnel in the proper use and care of protective equipment (PPE). Discuss tailoring of training towards specific audiences (management, supervisors, and employees) and topics (safety orientation for new hires, specific training for certain tasks or operations). Discuss approach to ensure that training is retained and practiced. Discuss personnel certification programs. Certifications should include documentation that training requirements and physical conditions have been satisfied (examples include physical examination, testing, and on-the-job performance). Address utilization of JSC safety and health training resources (such as asbestos worker training/certification, hazard communication, confined space entry, lockout/tagout, etc.) as appropriate with particular emphasis on programs designed for the multiple employer work environment on NASA property. All training materials and training records will be provided to NASA, and other federal, State, and local agencies for their review upon request. If the contractor wishes to train their personnel in any regulatory mandated training, an agreement will be secured with JSC Occupational Safety Branch and Occupational Health and Test Support office prior to beginning training. The agreement will ensure that safety and health training resources available from NASA are utilized where appropriate and to ensure that contractor-supplied training is in agreement with JSC safety and health processes.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Safety and Health Program Self - Evaluation	**02/14/05**	**10**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To provide timely, integrated performance visibility to enhance effective cost, schedule, and technical management, and to provide consolidated documentation on contract activities.

5. DRD Category: *(check one)* [X] Technical [X] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Federal Register Notice 65:45649-45663 Section C-3.6 Safety and Environmental Health	DRD 01 Management Plan DRD 09 Safety and Health Plan DRD 11 Monthly Safety and Health Metrics

8. Preparation Information (Include complete instructions for document preparation)

1. The Contractor must conduct an annual self-evaluation of its safety and health program as required by its safety and health plan.

2. Information Required:

a. The internal assessment of safety and health program effectiveness during the report period (i.e., the previous year) indicating the status of goals or objectives previously established and areas of strength and weakness in Contractor safety program performance.
b. Safety and health concerns and resolutions relating to JSC operations which may have been identified during the report period.
c. Unresolved safety and health concerns relating to JSC operations which the Contractor feels merit attention of JSC safety and health management.
d. The goals and objectives of the Contractor safety and health program for the next report period.
e. An analysis of the Contractor's performance at JSC-administered establishments in each of the 32 VPP sub-elements found in the Federal Register Notice 65:45649-45663, July 24, 2000.
f. Action plans for identified problem areas. Action plans must include schedule for periodic progress reports to the Government on a frequency agreed to by the Government and the Contractor for each problem area.

1. Format to be as required by the cognizant OSHA regional office. Contractors who have submitted a written self-evaluation as a VPP site may submit their original report to JSC in lieu of writing a new self-evaluation provided that all action plans and status are updated.

Report due September 30 of each year of contract period of performance.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Monthly Safety and Health Metrics	**02/14/05**	**11**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

Tracks effectiveness of Contractor Safety and Health Program activities.

5. DRD Category: *(check one)* [X] Technical [X] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
JPR 1700.1, JSC Safety and Health Handbook Section C-3.6 Safety and Environmental Health	DRD 01 Management Plan DRD 09 Safety and Health Plan DRD 10 Safety and Health Program Self-Evaluation

8. Preparation Information (Include complete instructions for document preparation)

Frequency of submission: Monthly by 10th of month following month being reported.

Distribution:
NS2/Occupational Safety Branch (2 copies)
SD13/Occupational Health Officer (1 copy)
NA/Contracting Officer's Technical Representative (COTR) (1 copy)

Format: electronic to NS2, SD13; hard copy to COTR. Send as Excel spreadsheet or in tables compatible with MS Word.

Definitions: Refer to JPR 1700.1 and OSHA requirements for definitions of terms below.

Scope. The scope of the information required is limited to the JSC-administered establishments of Houston Texas at NASA Parkway; Sonny Carter Training Facility; Ellington Field; and White Sands Test Facility.

Content:

I. Management Commitment and Employee Involvement.

Date of Management Safety Committee Meeting		Type/Title of Meeting	No. of Managers Attending		No. of Supervisors Attending		No. of Non-Supervisory Attending	
This Month	Year to Date		This Month	Year to Date	This Month	Year to Date	This Month	Year to Date

Include electronic copies of minutes or representative information.

No. of Employee Safety Meeting		Type/Title of Meeting	No. of Employees Attending		No. of Managers / Supervisors Attending	
This month	Year to date		This month	Year to date	This month	Year to date

Include electronic copies of minutes or representative information

II. Worksite Analysis. Refer to JPG 1700.1 for definitions of terms.

Division	No. of Hazard Analyses				No. of Job Safety Analyses				No. of Routine Inspections			
	Required		Performed		Required		Performed		Required		Performed	
	This month	Year to date	This month	Year to date	This month	Year to date	This month	Year to date	This month	Year to date	This month	Year to date
Total												

III. Hazard Prevention and Control - hazards below were found during routine and special inspections, close calls, mishap investigations, etc., and require correction.

No. of Hazards Found			No. of Hazards Closed <30 days			No. of Hazards Open <30 days	No. of Hazards Open >30 days			No. of Hazards Closed >30 days			No. of JF1240s in place
Prior to month	This month	Year to date	Prior to month	This month	Year to date		Prior to month	This month	Year to date	Prior to month	This month	Year to date	

Attach copies (electronic ok if sent by e-mail) of JF 1240's (or equivalent) including monthly updates. Mark JF 1240's where abatement has been completed as closed.

IV. Safety and Health Training - List courses specific to loss control initiatives (such as slips/trips falls, material handling; etc.) Report other training as "Generic safety training not otherwise specified" (examples include Hazard Communication, Confined Space entry, HAZWOPER, system safety, job safety analysis, etc.) Do not include job proficiency course work where safety is an issue (such as radiography, welding, painting, etc.)

Course Title	No. to be Trained	No. Trained	On Schedule

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Information Technology (IT) Plan	**02/14/05**	**12**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To document the Contractor's approaches for IT implementation and management.

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
JPD 2800.1, JSC IT Program JPD 2800.4, JSC IT Program Management JPR 2810.1C, JSC IT Security Handbook NPD 2810.1C, NASA Information Security Policy NPR 2810.1, Security of IT Section C-3.7.3, Information Technology Section C-10.7, LIMS Contract Clause I.10, NFS 1852.204-76, Security Requirements for Unclassified Information Technology Resources	DRD 01 Management Plan DRD 13 Data Management Plan

8. Preparation Information (Include complete instructions for document preparation)

Scope:

The Plan shall define the policies, processes, requirements, and standards that the Contractor will use to govern the planning, acquisition, development, management, security, and utilization of IT resources. The Plan shall detail the Contractor's approaches, policies, and procedures to be applied to the following areas. Details shall be in compliance with the requirements of JPD 2800.4.

Content:

1. **Standard Operating Procedures**
   a. Configuration Management
   b. Data System and Website Development and Maintenance
   c. IT planning processes for determining and providing to NASA for approval, annual IT purchasing plans that support continuing S&MA IT requirements
   d. Methods for establishing goals for continuing IT process and system improvements, and the identification and incorporation of efficiencies

2. **IT Strategic Planning**

a. Methods of identifying and prioritizing IT activities.
b. Identification of current and planned IT development activities that includes scope, justification, completion dates, and impacts to current systems, data handling procedures, identification of JSC IT Standards used or requests for approval of non-JSC Standard IT, compliance with applicable NASA and Federal requirements for system operation and function (such as compliance with Section 508 of the Rehabilitation Act), and analysis of impacts or risks to IT security.
c. Hardware and software acquisitions necessary to support SOW requirements. Acquisitions shall be prioritized and submitted to NASA for approval as part of the yearly budget cycle planning and review process.
d. Identification of IT personnel who perform system administration and status of IRD required System Administrator Security Certification (Reference PIC 04-03).
e. Details of ODIN-supplied seat and seat augmentation requirements with justifications.

3. IT Security Plan

The IT Security Plan shall describe the Contractor's approach for meeting and maintaining security integrity of data, systems, and facilities, and shall be in accordance with contract clause NFS 1852.204-76. Contents of the Plan include

a. Processes and procedures that will be followed to ensure appropriate security of IT resources that are acquired, developed, or used under this contract.
b. Government/Contractor relationships and responsibilities for all physical, personnel, and IT security required for the activity specified in the SOW.
c. Processes and procedures that will be used to ensure security of data and data systems.
d. Methodology used to ensure separation of duties of IT security and operational elements.
e. Approach for integrating security requirements into functions as described in the SOW, including interfacing with subcontractors.
f. Facility security capabilities, processes, and procedures used to maintain the security integrity for the facility.
g. Description of type of facility and information processed in the facility as defined in JPR 2801.1C.

4. Emergency Preparedness and Disaster Recover Plan

a. Processes and procedures that will be followed in the case of an emergency or disaster in order to secure and recover IT equipment, data, and data systems.
b. Contact information for personnel (and back-ups) responsible for emergency preparedness and disaster recovery.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Data Management Plan	**02/14/05**	**13**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To document the Contractor's approaches for data acquisition, control, storage, and dissemination.

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
JPD 2800.1, JSC IT Program JPD 2800.4, JSC IT Program Management Section C-3.7.4, Information Technology	DRD 01 Management Plan DRD 12 Information Technology Plan

8. Preparation Information (Include complete instructions for document preparation)

Scope:

The Plan shall describe the management, preparation, control, and dissemination of data and documentation required and produced under this contract in order to provide NASA with direct, on-going access to all data and documentation required to accomplish S&MA responsibilities. The plan shall include methods for identifying and acquiring SR&QA data and documents, requirements for storage, equipment and or methods of accessing data and documents, and data management philosophy.

Content:

1. Methods and controls for the management of all data and documentation generated by S&MA

a. Identification of data and document types including specifications, procedures, reports, presentations, and correspondence
b. Methods for control of data and documentation (storage, security, access, export control)
c. Methods for assuring data integrity

2. Consolidation of existing and required data and document resources:

a. Assessment of data and documents required for the accomplishment of S&MA responsibilities.
b. Assessment of data types and documents currently available within S&MA on web-sites, in databases, and in hardcopy.
c. Comparison of requirements versus available data and identification of gaps.
d. Plan and schedule to consolidate existing data and document repositories and addition of data identified in "c" that will support S&MA personnel in the accomplishment of day-to-day activities.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
S&MA Personnel Qualification Program Plan	**02/14/05**	**14**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To establish a plan for the development and implementation of an S&MA Personnel Qualification Program.

5. DRD Category: *(check one)* [X] Technical [X] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-4.1 S&MA Personnel Qualification Program Section 10.2.2 Training	DRD 01 Management Plan

8. Preparation Information (Include complete instructions for document preparation)

The Contractor shall prepare an S&MA Personnel Qualification Program Plan that describes the following aspects of the Qualification Program development and implementation:

1. The Contractor shall produce and maintain a 5 year Training Program Plan. The plan shall consist of the following:

- Details for developing Training Guides (scope and sequence documents for training core competencies, products and services, and processes.)
- Needs and gap assessments based on projected program requirements. The needs and gap assessments will also include:
- A Breakdown of core competencies, products and services, and processes into trainable units (essential skills).
- Evaluation of the efficacy of training.
- Training acquisition plan.
- Schedule for providing various training deliverables (e.g. Training Acquisition Plan, Needs and Gap assessments).
- Plan for measuring workforce proficiency levels.
- Schedules for achieving workforce proficiency levels.
- Address training of management/supervision in utilizing training as a tool to develop human capital.
- Approach for benchmarking relevant processes to continuously improve the training program.

2. The contractor shall produce and maintain a plan for the administrative tasks that support the Training Program. The plan shall consist of the following:

- A feedback mechanism for training metrics and an evaluation reporting system for training coordinated and facilitated by S&MA.

- Plan to ensure individual training plans are kept current and are tied to the strategic training program plan.
- A process to provide the S&MA Directorate an annual assessment of skill/training gaps. The process shall ensure the success of S&MA Strategic Training Program plan. (To include administrative, leadership and technical job categories).
- Details for the development and maintenance of the S&MA training web site.
- It will include ensuring clear mapping of the training, a path for each job category and level, and shall define courses and mechanisms for delivering the training.
- Details to maintain an electronic training management system that includes courses and records of training accomplished by the employee.

3. The Contractor shall deliver an implementation plan as a logical outgrowth of the Training Program Plan. The implementation plan shall address:
- All elements in the Training Plan.
- Development, coordination, and delivery of technical S&MA discipline training.
- Notification when new courses are added.
- Find course(s), if not currently available through JSC and S&MA resources, from other NASA or external resources.
- Coordinate communication of the contents of JSC Training department's quarterly training offerings packages with S&MA training coordinators (call notices to employees, managers and responses to JSC Human Resources).
- Provide support to S&MA contractor management to ensure certification requirements are maintained if and when they are identified. Work with Civil Servant Division Management to identify certification requirements that may need to be tracked if and when they are identified. Track training requirements and training accomplished/completed as identified in employee training plans for S&MA employees (Contractor and Civil Service) in a single electronic system.
- The S&MA functional training (and certification if required) provided by the contractor shall be for civil servant and contractor S&MA personnel.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
S&MA Prelaunch Assessment Presentations	**02/14/05**	**15**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To provide NASA S&MA management with insight into status and issues associated with flight readiness.

5. DRD Category: *(check one)* [X] Technical [ ] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
NSTS 08117 SSP 50108 SSP 50231 Sections C-5.4.1.5 Mission Planning Section C-6.5.3.2 Prelaunch Assessments	

8. Preparation Information (Include complete instructions for document preparation)

The Contractor shall prepare and present S&MA Prelaunch Assessment presentations for each flight covering both IVA and EVA activities that include:

- Mission summary
- Noncompliance Report (NCR) summary and status for items associated with the flight
- Open problems, planned resolutions, and resolution completion dates
- Risk summary that includes hazards and controls
- Issues associated with planned flight operations
- An S&MA Contractor recommendation regarding readiness to support the flight and any exceptions
- Special topics addressing individual mission goals and objects (as necessary for each flight)
- Back-up charts with more detail as needed to provide additional information on risk and issue areas

Emphasis shall be placed on the safety assessment of the flight and flight activities. The assessment shall include those risks that could cause injury or loss of vehicle or crew.

The presentations will be presented at the following reviews:

- S&MA Requirements Review (SMARR) – A NASA Headquarters managed S&MA review held for manned launches prior to the ISS Program SORR. The SMARR is chaired by the Headquarters S&MA officer.
- Prelaunch Assessment Review (PAR) – A JSC managed S&MA review held for unmanned launches prior to the ISS Program SORR. The PAR is chaired by the JSC S&MA Director.
- Stage Operations Readiness Review (SORR) – The SORR is the single ISS Program CoFR review, for both manned and unmanned launches, and precedes the FRR for manned launches.

The SORR provides certification of ISS Program readiness for launch, flight, and on-orbit activities. The requirements for the ISS Program CoFR process are documented in SSP 50108. In addition, each organization with requirements that support the ISS CoFR process has an organizational CoFR Implementation Plan. SSP 50231 is the Safety and Mission Assurance / Program Risk CoFR Implementation Plan.

- Center Director's Flight Readiness Review (CD FRR) – A JSC review prepared by each of the involved JSC Directorates (including JSC S&MA) for the JSC Center Director prior to participation in the FRR.
- Flight Readiness Review (FRR) – A NASA Headquarters review held approximately 2 weeks prior to launch. The FRR is chaired by the Associate Administrator, Office of Space Flight, and has a broad membership including the Center Directors from JSC, MSFC, KSC, and Stennis Space Center (SSC).
- Software Readiness Review (SRR) – A review conducted approximately 4 weeks prior to flight and is presented to the Manager, Avionics and Software Office. A status of all flight software products applicable to the flight is presented. This information is provided to NASA Headquarters at the FRR.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Activity Reports	**02/14/05**	**16**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

To provide insight into status of all activities under contract with special emphasis on significant issues and items on the critical path for flight support.

5. DRD Category: *(check one)* [X] Technical [X] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-6.0.f JSC Projects Support Section C-7.1.2.f Independent Assessment Section C-10.3.3 Quality	DRD 03 Integrated Technical Management Report DRD 18 Evaluation Reports DRD 19 Assessment Plan and Report

8. Preparation Information (Include complete instructions for document preparation)

Minimum Data Requirements:
The Offeror's status reports shall be in a brief, informal, narrative format, which describes the progress of activities against planned work with reasons for differences and includes significant activities planned for the next reporting period.

Report items that are proceeding without issue and on schedule are to be provided for information. Report items, which include significant issues (technical, cost, or schedule) or are on the critical path for flight support will be discussed during weekly status reviews with NASA. Responsible Contractor personnel shall be available to present their statuses, respond to questions, and provide additional detail if requested.

Monthly summaries prepared from these reports will be used as technical inputs to the monthly Integrated Technical Management Reports.

Activity Reports prepared for specific Offices, Divisions, Customers, etc, shall include information specific to those organizations and be prepared to the specific requirements and frequency of that entity.

Format:
Format will vary but shall be prepared in MSWord, MSPowerPoint, or approved equal with a mutually agreed-to format for the audience or to the requirements of the entity receiving the report.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Trend Analysis (JSC Systems) Report	**02/14/05**	**17**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

Provide monthly report of failure and discrepancy trends in JSC facilities supported by S&MA.

5. DRD Category: *(check one)* [X] Technical [ ] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-6.4.3.2 Non-Conformances	

8. Preparation Information (Include complete instructions for document preparation)

Scope:
Utilize existing JSC failure/discrepancy report data to develop trend data for each facility supported by S&MA. Provide trend charts which can be used to isolate problem areas, locate equipments with poor reliability, etc.

Content:
a. Present trend data (failures/discrepancies) normalized to a common standard.
b. Where possible, trend data shall cover a 12-month period.
c. Data should be presented by facility and system (i.e., electrical, mechanical, fluid, test, test systems, etc.)

Submittal Requirements:
Monthly

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Evaluation Reports	**02/14/05**	**18**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

Reports the results of an Independent Assessment Office (IAO) Action to perform a high level evaluation of the need for a more in depth assessment of an issue or concern discovered during Contractor Program/Project awareness activities.

5. DRD Category: *(check one)* [X] Technical [ ] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-7.1 Independent Assessment NPD 8700.1B NASA Policy for Safety and Mission Success	DRD 03 Integrated Technical Management Report DRD 16 Activity Reports DRD 19 Assessment Plans and Reports

8. Preparation Information (Include complete instructions for document preparation)

Format:
The contractor shall report results from assigned actions for evaluation to the IAO, and others when directed. The response shall be in Word document format, unless an alternate format (e.g., PowerPoint slide) is directed in the assigned action.

Content:
The report shall include the Purpose, Background, Observations, Findings, Recommendations, and Conclusions, as appropriate.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Assessment Plan and Reports	**02/14/05**	**19**	

4. Use (Define need for, intended use of, and/or anticipated results of data)
Document the plan for conducting an assessment and, upon completion, report the results of the assessment work.

5. DRD Category: *(check one)* [X] Technical [ ] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-7.1.1 Independent Assessment NPD 8700.1B NASA Policy for Safety and Mission Success	DRD 03 Integrated Technical Management Report DRD 16 Activity Reports DRD 18 Evaluation Reports

8. Preparation Information (Include complete instructions for document preparation)

Format:
The IA website database shall be utilized for inputting plans and posting final assessment reports (plus interim reports when required).

Planning and reporting represents an integrated process. Assessment plans shall be prepared and submitted by the Contractor for approval by the NASA Independent Assessment Office (IAO) Manager.

Final assessment reports (plus interim when required) shall be posted in the IA website database in conjunction with the associated assessment plan after approval by the IAO Manager.

Content:
Plan content shall be as follows: (a) assessment number and title; (b) Program or Project, including point-of-contact; (c) purpose; (d) scope; (e) ground rules and assumptions; (f) other criteria; (g) approach, including required resources and schedule. Plan content shall be coordinated with the IAO and Program Point of Contract prior to approval by the IAO.

Report content shall include discussion of the Plan content cited above. In addition, Observations, Findings, Recommendations, and Conclusions shall be included as appropriate.

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Facilities System Certification Report	**02/14/05**	**20**	

4. Use (Define need for, intended use of, and/or anticipated results of data)
Provides a record of inspections and periodic assessments of inspected systems.

5. DRD Category: *(check one)* [X] Technical [X] Administrative [X] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section C-9.1.1.d Pressure Systems JPR 1710.13 Design, Inspection and Certification of Pressure Vessels and Pressurized Systems	

8. Preparation Information (Include complete instructions for document preparation)

Scope:
The Pressure Systems Engineer(s) will perform the duties necessary to support a program of inspection, testing, and certification of those fired and unfired steam, cryogenic, and unfired liquid and gaseous ground-based pressure systems under the responsibility of the NASA Johnson Space Center, Houston, Texas.

Content:
A weekly report will be prepared identifying the number of pressure systems inspections which have been performed during this time period at the direction of the JSC Pressure Systems Manager. The report shall include the following data as applicable:
a. Number of facility and laboratory pressure system inspections
b. Types of pressure system inspections
c. Deficiencies noted
d. Corrective action taken/recommended

Submittal Requirements:
Weekly

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Wage/Salary and Fringe Benefit Data	**02/24/05**	**21**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

The Wage/Salary and Fringe Benefit Data will be used by the NASA Contracting Officer and the Contract Labor Relations Office to provide the necessary data for submittal of Standard Form (SF) 98, Notice of Intention to Make a Service Contract and Response to Notice, to the Department of Labor, and to assist in the monitoring of Service Contract Act compliance.

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Clause I.2, FAR 52.222-41, Service Contract Act of 1965	

8. Preparation Information (Include complete instructions for document preparation)

Distribution:
BJ4/Contracting Officer
BA2/Contract Labor Relations Officer

Initial Submission:
30 days after contract start

Submission Frequency:
Annually, 90 days prior to the anniversary of the contract

Scope:
The Wage/Salary and Fringe Benefit Data must be submitted by the Contractor, and any subcontractors which are subject to the provisions of the Service Contract Act, to the Contracting Federal Agency. In accordance with FAR regulations 22.1007 and 22.1008, the Contracting Officer is required to submit an SF 98 to the Department of Labor, Wage and Hour Division.

Contents:
The Wage/Salary and Fringe Benefit Data should contain the data included in the enclosed DRD forms:
- Wage/Salary Rate Information
- Fringe Benefit for Service Employees
- Fringe Benefits per Collective Bargaining Agreement

The Wage/Salary Rate information shall contain a listing of all exempt and nonexempt labor

classifications working on the contract. Separate forms should be utilized for classifications working in different geographic areas and for each subcontractor. Wage determination numbers, appropriation labor organization names, and subcontractor names, must be reflected. All nonexempt labor classifications must be matched to wage determination classes or to Collective Bargaining Agreement(CBA) classifications for represented classes. Annotate exempt or nonexempt and union or nonunion. The current hourly rates should reflect the actual lowest and highest paid employees, along with a computed average rate. State the number of employees working in each category. Separate Fringe Benefit forms should be completed for nonrepresented classifications and for each separate CBA. A separate form must be completed for the prime and each subcontractor. Three hardcopies and one electronic copy of each CBA are required if organized labor is represented on your contract.

Format:
The Wage/Salary and Fringe Benefit Data should be in a format substantially the same as enclosed with the DRD (Forms 2, 3, and 3A).

Form 2

WORK SHEET FOR SF-98 DATA
WAGE RATE INFORMATION

CONTRACTORS LABOR CLASSIFICATION	WAGE DETERMINATION CLASSIFICATION	EXEMPT OF NONEXEMPT	UNION OR NONUNION	CURRENT HOURLY RATE	MYE NO OF EMPLOYEES
Illustration of required data:					
Project Manager	Not Required	E	N	$40.00	1
Supervisor	Not Required	E	N	$32.00	1
Electrical Engineer	Not Required	E	N	$26.50 - 30.00	3
Engineering Tech, Jr	Engineering Tech, I	N	N	$14.00 - 17.00	12
Electrical Technician	Electronics Tech Maint II	N	U	$19.02 - $21.50	4
Secretary	Secretary I	N	N	$14.52 - $15.50	2
File Clerk	General Clerk II	N	N	$9.86	1
Clerical Data Entry	Word Processor I	N	N	$11.45 - $12.90	3

Submit data in the above illustrated format for all labor classifications used, or planned to be used, on this contract.
All contractor labor classifications must be matched to wage determination classes listed in CBA's represented classes or classes shown in WD 94-2516 for nonrepresented classes.

CONTRACTORS LABOR	WAGE DETERMINATION	EXEMPT OF	UNION OR	CURRENT HOURLY	MYE NO OF

FORM 3

FRINGE BENEFITS PER COLLECTIVE BARGAINING AGREEMENT

For period from _____ to _____

Contractor:

Contract Number:

Number of employees in bargaining unit _____

Total number of employees on contract _____

1. Shift Differential: (Describe any pay over and above base rates for 2nd, 3rd, weekend, or other shifts.)

2. Health and Welfare Items and Other Fringe Items: (Indicate whether or not coverage is provided to employees and state current average hourly cost per employee covered by a Collective Bargaining Agreement.)

Item	**Coverage Provided (Yes or No)**	**Average Hourly Cost**
a. Life Insurance		
b. Accidental Death		
c. Disability		
d. Medical and Hospital		
e. Dental		
f. Retirement Plan		
g. Savings/Thrift Plan		
h. Sick Leave		
i. Tuition		
j. Other (Describe)		

FORM 3 (continued)

3. Paid Absences:

	Service Requirement	Days per Year
a. Vacation		
b. Holiday		
c. Sick Leave		
d. Jury Leave		
e. Funeral Leave		
f. Military Leave		
g. Other (Describe)		

4. Severence Pay: (Briefly describe terms and amounts.)

5. Other Fringe Benefits: (Describe any other fringe benefits not included above, and show average hourly cost.)

6. Premium Pay: (Discuss all premium pay provisions not previously shown on this form.)

_____ _____

Signature of Company Representative Date

FORM 3A

FRINGE BENEFITS FOR SERVICE EMPLOYEES

For Period from _____ to _____

Contractor:

Number of nonexempt employees on contract: _____

Total number of employees on contract: _____

1. Health and Welfare Items and Other Fringe Items:
(Indicate whether or not coverage is provided to employees and state current average hourly cost per service employee.)

Item	Coverage Provided	Average Hourly Cost
a. Life Insurance		
b. Accidental Death		
c. Disability		
d. Medical & Hospital		
e. Dental		
f. Retirement Plan		
g. Savings/Thrift Plan		
h. Sick Leave		
i. Tuition Reimbursement		
j. Other (Describe)		

2. Paid Absences

	Service Requirement	Days per Year
a. Vacation		
b. Holidays		
c. Sick Leave		
d. Jury Leave		
e. Funeral Leave		
f. Military Leave		
g. Other (Describe)		

_____ _____
Signature of Company Representative Date

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Reprocurement Data Package	**05/02/05**	**22**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

Provides requirements for delivery to NASA of information on specific items and supporting documentation related to analytical models, tools, data systems, web-sites, equipment, and data items acquired, produced, or maintained during the performance of this contract, and resource/cost information to be used for reprocurement activities.

5. DRD Category: *(check one)* [X] Technical [ ] Administrative [ ] SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section I.7 Rights to Data	

8. Preparation Information (Include complete instructions for document preparation)

CONTENTS:

Catalog of Items

1. A catalog of all models, tools, data systems, web-sites, equipment, and data items acquired, produced, or maintained during the performance of this contract shall be developed which contains the following information:

- Unique name of item
- Version number, revision number, or release date as appropriate
- Brief description and purpose or use of item
- Location of electronic or physical item

2. Supporting documentation shall be submitted for the use of each item. The documentation shall include, at a minimum, the following information:

- Inputs required
- Governing assumptions or constraints, including definition of the configuration if pertinent to the model definition or its use
- Acceptance or certification history, including description of validation methods used
- Association or interrelationship with other items listed
- Application or operating system requirements
- Hardware/platform requirements

Resource/Cost Information

A data package shall be submitted containing the following resource/cost information:

1. Labor Resources

- List of all direct labor skills by labor category, segregated by current work breakdown structure (WBS)
- Estimate of the number of indirect labor skills such as business or computer support normally charged through an indirect expense pool or through a service center expense
- Current annual average straight time labor rates for all skills by labor category mapped by standard labor categories of the original RFP or the standard labor categories defined in the follow-on RFP if they differ from the original RFP and when these wages were last adjusted for escalation. Also indicate whether any adjustments are projected to be made prior to contract expiration
- Number of Full Time Equivalents (FTEs) and the estimated number of productive hours for each labor category currently on contract mapped by standard labor category of the original RFP or the standard labor categories defined in the follow-on RFP if they differ from the original RFP, segregated by current WBS.
- Seniority level of all skills on the current contract

2. Non-Labor Resources

- List of all materials, equipment, travel, supplies, etc., and the incurred annual cost by WBS.
- Provide a discussion associated with the major items identified above, such as the materials estimate includes a prompt payment discount of TBD% due to large volume discounts you have negotiated with your vendors.

3. Liability Cost

- The projected liability cost associated with unused accrued paid leave associated with non-exempt personnel.
- Provide a copy of any Collective Bargaining Agreements in place and a current status of any upcoming negotiations with a union.

4. Contractor-Owned Equipment

- List of all Contractor-owned equipment (at the time of delivery of this DRD) being used in the performance of the contract.
- The list of equipment shall include:
- Description of the equipment (include make and model #)
- Location of the equipment (address, building, and room #)
- Date purchased
- Purchase price of the equipment
- Current depreciated value of the equipment

FORMAT:

Electronic format of all submissions shall be compatible with JSC desktop standard applications. Organizational format of the supporting documentation shall be the Contractor's format.

OFFICE OF PRIMARY RESPONSIBILITY:

COTR

SUBMISSION REQUIREMENTS:

First Submission Date: At the CO's direction.

Frequency of Submission: No periodic submissions required per this DRD (this does not relieve the requirement for periodic or incremental deliveries per other DRDs).

Additional Submissions: End of period of performance – submission of current version of catalog, supporting documentation, and resource/cost information which have been updated since first submission.

MAINTENANCE:

All items, documentation, and data shall be maintained electronically. All documentation developed to support the use of each item shall also be maintained electronically. Both the items and supporting documentation shall be updated as necessary to perform the functions for which they were developed.

COPIES/DISTRIBUTION:

Per the DRL

JSC DATA REQUIREMENTS DESCRIPTION (DRD)

(Based on JSC-STD-123)

1. DRD Title	2. Current Version Date	3. DRL Line Item No.	RFP/Contract No. (Procurement
Contract Phase-In Plan	**04/19/05**	**23**	

4. Use (Define need for, intended use of, and/or anticipated results of data)

This document establishes how the Offeror proposes to assume responsibilities 45 days prior to contract start date.

5. DRD Category: *(check one)* ☐ Technical ☒ Administrative ☐ SR&QA

6. References *(Optional)*	7. Interrelationships *(e.g., with other DRDs) (Optional)*
Section L.2.3.1(f)	

8. Preparation Information (Include complete instructions for document preparation)

Each offeror shall provide the information requested in the following paragraphs plus any other items it considers relevant to its proposed phase-in plan.

The Offeror shall develop and submit a Phase-In Plan that describes in detail the plans for affecting a smooth phase-in in order to maintain efficient operations and ensure no break in support.

Phase-In will cover the period of March 16, 2006 through April 30, 2006. The start of the contract period of performance is May 1, 2006.

In the plan, the Offeror shall:

1. Describe in detail the plan for effecting a smooth phase-in without compromising effective and efficient safety and quality operations/activities of the current JSC Projects and Programs. Provide the management milestones, and all associated schedules that you believe are required from start of phase-in to the full assumption of contract responsibilities.

2. Describe the steps you will take, including any you have taken to date, to assure that the contract will be fully staffed at the effective date of the contract. Include a time-phased staffing plan and table of personnel sources sorted by the third level SOW functional areas, noting the percentage of the total workforce you intend to recruit from the following sources:

a. Offeror's own resources
b. Other divisions of the company
c. Incumbent contractor's workforce

d. Outside recruitment

3. Describe in detail your plans for certifying and training your personnel for assuming operational responsibility, including key and critical personnel functions.

4. Discuss in detail your specific plans for successfully completing each phase-in performance milestone described below in paragraphs a. through f. For each milestone, offerors are requested to: (1) provide a detailed plan inclusive of responsible personnel, (2) provide all relevant interim and final schedule dates to be met, and (3) propose objective criteria that can be used to determine if the milestone has been achieved.

a. **Milestone 1– Key Personnel:** The successful offeror has hired all personnel it proposed as key personnel and all of these personnel are performing phase-in work at the level proposed. This milestone shall be fully achieved no later than April 7, 2006.

b. **Milestone 2 – Staffing:** At least 90% of all personnel proposed to perform all contract requirements have provided written acceptance of firm job offers. This milestone shall be fully achieved no later than April 20, 2006.

c. **Milestone 3 – Property Management:** The successful offeror has implemented an appropriate system to account for all Government Furnished Property. Furthermore, the successful offeror is prepared to perform an inventory of that property and is prepared to sign for accountability of the property upon completion of the inventory. This milestone shall be accomplished no later than April 22, 2006.

d. **Milestone 4 – Staffing:** The successful offeror has completed JSC's clearance and badging as well as training requirements for all personnel necessary to perform the full scope of contract requirements. This milestone shall be full achieved no later than May 1, 2006.

e. **Milestone 5 – Accounting System:** The successful offeror has implemented an accounting system fully capable of accurately accounting for actual completion of SOW tasks down to the 4th level of the Work Breakdown Structure (WBS). This milestone shall be fully achieved no later than April 22, 2006.

f. **Milestone 6 – Union Negotiations:** The successful offeror has successfully completed all negotiations with any unions representing workers to be used in performance of this contract and has provided the Government with signed copies of all collective bargaining agreements (CBA's). This milestone shall be fully achieved no later than April 20, 2006.

g. **Milestone 7 – Subcontracts:** The successful offeror has all subcontracts in place and ready to perform contract requirements. This milestone shall be fully achieved no later than April 18, 2006.

J.2 APPLICABLE DOCUMENTS LIST

Document Number	Revision Level	Date	Title	SOW Reference
Agency Policy and Requirements				
NASA-STD-8729.1	Baseline	December 1, 1998	Planning, Developing, and Maintaining an Effective Reliability and Maintainability (R&M) Program	C-5.1.1
NPD 2190.1	Baseline	May 24, 2001	NASA Export Control Program Policy	C-3.3.1.j
NPD 2810.1C	Revision C	April 7, 2004	NASA Information Technology Security Policy	DRD 12
NPD 7120.4C	Revision C	December 6, 2004	Program/Project Management	DRD 03 DRD 04
NPD 9501.3A	Revision A	Augist 3, 2002	Earned Value Management	DRD 03
NPR 2810.1	Baseline	August 12, 2004	Security of Information Technology	I.10, DRD-01 DRD 12
NPR 4200.2B	Revision B	July 11, 1998	Equipment Management Manual for Property Custodians	G.13, DRD 08
NPR 6000.1G	Revision G	March 28, 2005	Requirements for Packaging, Handling, and Transportation for Aeronautical Space Systems, Equipment, and Associated Components	D.2(a)
NPR 7120.5C	Revision C	March 22, 2005	NASA Program and Project Management Processes and Requirements	DRD 04
NPR 8621.1A	Revision A	February 11, 2004	NASA Procedural Requirements for Mishap Reporting, Investigation, and Recordkeeping	C-5.4.2.5
NPR 9501.2D	Current Issue	(Rev D, 4/23/01)	NASA Contractor Financial Management Reporting	DRD 05
NPR 8000.4	Baseline with Change 1	13-Apr-04	Risk Management	DRD 01

Agency and Program S&MA Requirements

NPD 8700.1B	Revision B	October 18, 2002	NASA Policy for Safety and Mission Success	DRD 18, DRD 19
NPR 8735.1A	Revision A	August 22, 2002	Procedure for Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government Industry Data Exchange	C-8.5.3
NPR 8735.2 (w/Change 1)	Basic	March 30, 2004	Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts	C-5.2.6.a, C-5.3.8.1, C-5.3.9.1, C-6.2.2.1, C-7.2.1

Safety and Environmental Health

NPD 8710.2D	Revision D	April 24, 2002	NASA Safety and Health Program Policy	C-3.6
NPR 8715.1 (w/Change 2)	Basic	March 30, 2004	NASA Safety and Health Handbook Occupational Safety and Health Programs	C-3.6
NPR 8715.3 (w/Change 2)	Basic	March 29, 2004	NASA Safety Manual	C-3.6
JPR 8550.1	Basic	November 2004	Environmental Compliance Procedural Requirements	C-3.6

Software Requirements and Policies

NASA-STD-8719.13B	B with Change 1	July 8, 2004	NASA Software Safety Standard	C-5.2.6.c, C-6.1.b
NASA-STD-8739.8	Initial	July 28, 2004	NASA Software Assurance Standard	C-6.1.b
NPD 2820.1A	Revision A	May 29, 1998	NASA Software Policies	C-6.1.b
NPR 7150.2	Initial	September 27, 2004	Software Engineering Requirements	C-6.1.b, C-7.3.1

JSC Policy and Directives

JPD 2800.1A	Revision A	May 18, 2001	JSC IT Program	C-3.7.1, DRD 12, DRD 13

JPD 2800.4	Basic	March 15, 2001	JSC IT Program Management	C-3.7.1, C-3.7.8 DRD 12, DRD 13
JPD 5335.1E	Revision E	January 23, 2003	JSC Policy Directive - Quality Policy	C-3.4.1, DRD 06
JPR 1700.1I	Revision I	July 2002	JSC Safety and Health Handbook	DRD 09, DRD 11
JPR 2810.1C	Revision C	October 2004	JSC Information Technology Handbook	DRD 12
JPR 5322.1F	Revision F	February 2005	Contamination Control Requirements Manual	C-6.2.2.3

Program and Center Requirements Documents

EA-WI-023	Revision C	January 2002	Project Management of GFE Flight Projects	C-6.0.c
JPG 1710.13C	Revision C	August 2002	Design, Inspection, and Certification of Pressure Vessels and Pressurized Systems	C-9.1.1, C-9.1.1.c, DRD 20
JSC 17481	Revision B	February 2003	Safety Requirements Document for JSC Space Shuttle Flight Equipment	C-6.5.3.3
JSC 17773	Revision C	December 2001	Instruction for Preparation of Hazard Analysis for JSC Ground Operations	C-6.3.1.1.2, DRD 09
JSC 23642	Revision E	October 22, 2001	JSC Fastener Integrity Testing Program	C-10.1.1.a
JSC 28035	Revision A	May 19, 2001	JSC Government Furnished Equipment (GFE) Problem Reporting and Corrective Action (PRACA) Requirements	C-6.4.3.3
JSC 28222	Revision E	February 6, 2004	EVA Project Certification of Flight Readiness Requirements and Implementation Plan	C-6.5.3.4
JSCM 8080.5 E-24	Revision .5	April 1, 1991	JSC Design and Procedural Standards Manual	C-10.1.1.f
KHB 1700.7	Revision C	August 19, 1999	Space Shuttle Payload Ground Safety Handbook	C-6.3.1.1.2

KHB 1710.2	Revision E	April 2002	KSC Safety Practices Handbook	C-6.3.1.1.2
NSTS 07700, Volume VIII, Appendix R	Revision D	February 24, 1999	Operations	C-5.4.2.4
NSTS 08117	Revision M	February 23, 2004	Requirements and Procedures for Certification of Flight Readiness	C-6.5.3.2, C-6.5.3.4, DRD 15
NSTS 08126	Revision J	August 27, 2004	Space Shuttle Problem Reporting and Corrective Action (PRACA) System Requirements	C-5.3.2, C-6.4.3.3
NSTS 1700.7	Revision B	January 1989	Safety Policy and Requirements for Payloads Using the STS	C-6.3.2
NSTS 1700.7, ISS Addendum	Revision B	December 1995	Safety Policy and Requirements for Payloads Using the International Space Station	C-6.3.2
NSTS 13830	Revision C	July 1998	Payload Safety Review and Data Submittal Requirements	C-6.3.2
NSTS 22206	Revision D	December 10, 1993	Instructions for Preparation of Failure Modes and Effects Analysis and Critical Items Lists	C-5.2.5.c.1, C-6.3.1.1.1
NSTS 22254	Revision B	December 30, 1993	Methodology for Conduct of Space Shuttle Program Hazard Analyses	C-5.2.4.2.a, C-6.3.1.1.2, C-6.5.3.3
SN-D-0007	Revision B	April 9, 1998	Acceptance Data Package Requirements	C-6.4.5
SSP 30223	Revision K (Draft B)	May 2004	Problem Reporting and Corrective Action for the Space Station Program	C-5.3.2, C-6.4.3.3
SSP 30234	Revision F	July 2002	Instructions for Preparation of Failure Modes and Effects Analysis and Critical Items List (CIL) for Space Station	C-5.2.5.c.1, C-6.3.1.1.1
SSP 30309	Revision E	October 28, 1994	Safety Analysis and Risk Assessment Requirements Document	C-5.2.4.2.a, C-6.3.1.1.2, C-6.5.3.3
SSP 30524	Revision E	July 6, 1998	PRACA Data System Requirements Definition Document	C-5.3.2, C-6.4.3.3
SSP 30695	Revision A	October 26, 1994	Acceptance Data Package Requirements Specification	C-6.4.5

SSP 50021	Basic	December 12, 1995	Safety Requirements Document	C-6.3.1.1.2
SSP 50108	Revision B (Draft)	April 2003	Certification of Flight Readiness Process Document, ISS Program, Space Shuttle Program Directive 52	C-6.5.3.4, DRD 15
SSP 50146 (Attachment D)	Revision A	October 1, 1998	NASA/RSA Bilateral S&MA Processes	C-6.3.1.1.2
SSP 50190	Revision A	May 12, 1999	ISS Contingency Action Plan	C-5.4.2.4
SSP 50231	Revision A	October 1, 2002	Safety and Mission Assurance Certificate of Flight Readiness Implementation Plan	DRD 15

Industry Standards

ANSI ASQ Q9001-2000	N/A	N/A	Quality Management System Requirements	C-3.4.1, C-10.3.1 C-10.3.PS1, DRD 06
ISO/IEC-17025	Base	December 15, 1999	General Requirements for the Competence of Testing and Calibration Laboratories	C-10.0.c, C-10.3.2, C-10.3.PS2

J.3 DEFINITION OF TERMS

Term	Description
Acceptance Data Package (ADP)	Provides a complete and verified status of hardware or software at the point of delivery and enables the continuation of required activities by the using organization. The ADP is prepared as part of the hardware or software acceptance / delivery criteria and is maintained throughout the hardware or software life-cycle after Government acceptance, including integrated testing, ground processing, launch site processing, on-orbit, post-landing, and maintenance/modification/refurbishment activities.
Certification Data Package (CDP)	The CDP contains, by inclusion or reference, all information needed to provide objective evidence that the design meets the requirements. The CDP contains information pertaining to the acceptance and qualification activity for the qualification unit.
Critical Items List (CIL)	Documentation of failure modes derived from the FMEA that are deemed critical by the Programs. CIL's are used to identify high-risk items and the associated rationale for managerial decision-making purposes.
Failure Modes Effects Analysis (FMEA)	A "what if" analysis that addresses the potential effects resulting from postulating a possible failure mode for a given hardware item. FMEA's are used as a tool to analyze a design for compliance with Program fail-operational and fail-safe reliability requirements.
Government Mandatory Inspection Points (GMIP's)	Specific points during a process when an inspection by a Government Representative (i.e., S&MA support contractor, Defense Contract Management Agency) is required before the process can proceed. GMIP's are identified by the Government representatives to mitigate safety, mission, cost, or schedule risk to the Government by assuring contractor compliance to requirements or verifying that specific actions have occurred. They are not a substitute for contractor inspections and should not be used in place of needed corrective action.
Safety & Mission Assurance (S&MA)	Includes the disciplines/functions of safety, reliability, quality, availability, maintainability, supportability, assurance, software engineering, quality engineering, software quality assurance, and procurement quality assurance.
S&MA Personnel	Applies to all Directorate supporting personnel (both Government and Contractor).

J.4 ACRONYMS

A2LA	American Association for Laboratory Accreditation
ADP	Acceptance Data Package
ALERT	Acute Launch Emergency Reliability Tip
ANSI	American National Standards Institute
AR	Acceptance Review
ART	Anomaly Resolution Team
ASQ	American Quality Standard
CAP	Contingency Action Plan
CCL	Critical Command List
CD FRR	Center Director's Flight Readiness Review
CDR	Critical Design Review
CFE	Contractor Furnished Equipment
CFR	Code of Federal Regulations
CIL	Critical Items List
CMMI	Capability Maturity Model Integrated
CO	Contracting Officer
CoFR	Certification of Flight Readiness
COTR	Contracting Officer's Technical Representative
CPAR	Corrective/Preventive Action Requests
CPR	Cardiopulmonary Resuscitation
CSS	Customer Service System
CSWG	Computer Safety Working Group
CWI	Certified Welding Inspector
DCMA	Defense Contract Management Association
DR	Discrepancy Report
DRD	Data Requirements Description
DRL	Data Requirements List
EEE	Electrical, Electronic, and Electromechanical
EPCRA	Emergency Planning and Community Right-to-Know

ESD	Electrostatic Discharge
EVA	Extravehicular Activity
EVAAT	EVA Assessment Team
FAR	Federal Acquisition Regulations
FCA	Functional Configuration Audit
FIT	Flight Investigation Team
FMEA	Failure Modes and Effects Analysis
FRR	Flight Readiness Review
GAAP	Generally Accepted Accounting Principles
GCAR	Government Certification Acceptance Record
GFE	Government Furnished Equipment
GIDEP	Government-Industry Data Exchange Program
GMIP	Government Mandatory Inspection Point
GSA	General Services Administration
GSI	Government Source Inspection
HATS	Hazard Abatement Tracking System
HAZWOPER	Hazardous Waste Operations and Emergency Response
HCL	Hazardous Command List
HR	Hazard Report
IA	Independent Assessment
IAO	Independent Assessment Office
IFA	In-Flight Anomaly
IP	International Partner
IP/P	International Partners/Participants
IRD	Information Resources Directorate
ISAMP	Integrated Supplier Assurance Management Program
ISERP	Integration Safety Engineering Review Panel
ISL	Instrumentation Systems Laboratory
ISO	International Standards Organization
ISS	International Space Station

IT	Information Technology
ITSC	Information Technology Steering Council
JAEL	JSC Avionics Engineering Laboratory
JARSWG	Joint American Russian Safety Working Group
JSC	Johnson Space Center
JSERP	JSC Safety Engineer Review Panel
KSC	Kennedy Space Center
LIMS	Laboratory Information Management System
LLIS	Lessons Learned Information System
LOD	Letter of Delegation
LOE	Level of Effort
MEMS	Micro-Electromechanical Systems
MER	Mission Evaluation Room
MMOD	Micro-Meteoroid and Orbital Debris
MMT	Mission Management Team
MRR	Manufacturing Readiness Review
MRR	Material Review Record
MSDS	Material Safety Data Sheet
MTBF	Mean-Time Between Failure
NACP	Network Access Control Board
NASA	National Aeronautics and Space Administration
NAVSEA	Naval Sea Systems Command
NCR	Non-Compliance Report
NCR	Non-Conformance Report
NDE	Non-Destructive Evaluation
NEPP	NASA Electronic Parts Packaging Program
NFS	NASA FAR Supplement
NSTS	National Space Transportation System
OSHA	Occupational Safety and Health Association
OSMA	Office of Safety and Mission Assurance

PAR	Prelaunch Assessment Review
PCA	Physical Configuration Audit
PDR	Preliminary Design Review
PEP	Performance Evaluation Profile
PPE	Personal Protective Equipment
PQA	Procurement Quality Assurance
PRA	Probabilistic Risk Assessment
PRACA	Problem Reporting and Corrective Action
PRT	Problem Resolution Team
PSRP	Payload Safety Review Panel
PV/S	Pressure Vessel Systems
QAS	Quality Assurance Specialist
QMS	Quality Management System
QPAP	Quality & Product Assurance Panel
QWG	Quality Working Group
R&M	Reliability and Maintainability
RAMP	Risk Assessment Management Plan
RCL	Restricted Command List
RCRA	Resource Conservation and Recovery Act
RID	Review Item Discrepancy
RITF	Receiving Inspection and Test Facility
RSA	Russian Space Agency
RTOP	Research Technology Objectives and Plans
S&MA	Safety and Mission Assurance
SAIL	Shuttle Avionics Integration Laboratory
SAR	Safety Assessment Report
SAR	System Acceptance Review
SAS	Supplier Assessment System
SCTF	Sonny Carter Training Facility
SDP	Safety Data Package

SMARR	S&MA Readiness Review
SMART	Safety and Mission Assurance Review Team
SMT	Surface Mount Technology
SORR	Stage Operations Readiness Review
SOVAR	Safety Observation and Variance Assessment Report
SOW	Statement of Work
SPC	Statistical Process Control
SR	Service Request
SR&QA	Safety, Reliability and Quality Assurance
SRP	Safety Review Panel
SRR	Software Readiness Review
SSP	Space Shuttle Program
SSRP	System Safety Review Panel
STS	Space Transportation System
SVL	Survey Vendor List
SWATT	Software Assurance Technology Team
SWG	Safety Working Group
TDH	Texas Department of Health
TED	Technical Education Document
TIM	Technical Interchange Meeting
TNRCC	Texas National Resource Conservation Commission
TPS	Task Performance Sheet
TRR	Test Readiness Review
VBDB	Vehicle Master Database
VCN	Verification Closure Notice
VPP	Voluntary Protection Program
VTL	Verification Tracking Log
VWAR	Virtual Work Authorization Record
WBS	Work Breakdown Structure
WSTF	White Sands Test Facility

J.5 AWARD FEE PLAN

Contract Number _____

Contractor _____

Table of Contents:

Attachments:

APPROVED BY:

Name Title Date

I. Introduction

In accordance with the provisions of Federal Acquisition Regulation 16.405-2 and NASA FAR Supplement (NFS) 1816.405-2, an award fee evaluation procedure is hereby established for determination of award fee(s) payable under this contract. The fee arrangement outlined in this plan has been established to motivate the Contractor to strive for excellence in the quality and timeliness of technical, management, and cost performance. The payment of any award fee is contingent upon compliance with contract requirements and performance to the degree specified in Attachment A.

The Contractor's performance with be evaluated by the Government, in accordance with the procedures set forth below, at the expiration of each evaluation period specified in Attachment B. The evaluation to be performed by the Government will be based on the Government's assessment of the Contractor's accomplishment of the various areas of work covered by the Statement of Work, in accordance with the criteria, weightings, procedures, and other provisions set forth below.

This plan may be revised unilaterally by the Government at the beginning of an evaluation period by timely notice to the Contractor in writing.

II. Organizational Structure for Award Fee Administration

The following organizational structure is established for administering the award fee provisions of the contract.

A. **Fee Determination Official (FDO)**

The FDO, a senior NASA official, will determine the Contractor's performance score in accordance with the procedures set forth below. After considering available and pertinent information and recommendations, the FDO will make a performance determination for each period. The FDO will appoint the PEB Chairperson and members.

B. **Performance Evaluation Board (PEB)**

A PEB, comprised of selected NASA technical and administrative personnel, will evaluate the Contractor's performance after each evaluation period to determine whether and to what extent the Contractor's performance during the evaluation period is deserving of the payment of award fee. The PEB chair will be an S&MA Directorate Manager. The PEB, at the end of each evaluation period, will prepare a summary of the evaluations for review by the Fee Determination Official (FDO). This summary will include a recommendation to the FDO for the adjectival rating and numerical score to be assigned for the Contractor's performance in the preceding evaluation period.

C. **Performance Monitors**

NASA Performance Monitors shall monitor, evaluate, and assess the Contractor's performance in assigned areas and discuss the evaluation results with Contractor counterparts as appropriate. They will periodically prepare reports for the PEB. The monitor assignments may

change at any time without advance notice to the Contractor. The Contracting Officer (CO) will notify the Contractor of all Performance Monitor assignments and changes.

III. Evaluation Requirements

The applicable evaluation requirements are attached as indicated below.

Requirement	Attachment
Grading Table	A
Evaluation Periods and Maximum Award Fee for Each Award Fee Period (AFP)	B
Performance Evaluation Factors and Evaluation Criteria	C
Performance Score Conversion Chart	D

IV. Method for Determining Award Fee

A determination of the award fee earned for each evaluation period will be made by the FDO within 45 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 fee earned or paid, is described below.

A. Areas of Emphasis will be established by the Government for each performance period. No later than 45 days prior to the start of each evaluation period, the Contractor may submit to the CO, recommended areas of emphasis for the ensuing evaluation period. Consideration will be given to the Contractor's recommendations; however, it is the Government's responsibility to establish the specific areas of emphasis for each evaluation period.

B. The Contractor will be notified by the CO of the selected areas of emphasis no later than 10 days prior to the start of each new 6-month evaluation period. Emphasis will be directed at particular areas under the contract which appear to the Government to be desiring of special attention. Contractor's performance in these areas will be used in judging the Contractor's performance. These areas of emphasis will not necessarily cover the entire spectrum of performance that will be evaluated in determining award fee dollars earned. Other pertinent factors included under the contract and general factors bearing upon overall performance will be considered as the facts and circumstances of each period may require.

C. The Contractor will be apprised of a general assessment of performance at the mid-point of each evaluation period at the weekly COTR meetings. The purpose of these meetings will be to discuss any specific areas where the Contractor has excelled, and where future Contractor emphasis may be necessary. If during the performance assessment, a Corrective Action Plan is determined to be required, the Performance Monitor will provide written notice to the Contractor. The Contractor will submit the plan to the Technical Monitor within 15 calendar days of the notice.

D. Promptly after the end of each evaluation period, the PEB will meet to consider all the performance information it has obtained from the performance monitors and others involved in observing Contractor performance. At the meeting, the PEB will summarize its preliminary findings and recommendations in the Performance Evaluation Board Report (PEBR).

E. After the preliminary PEBR is completed, the PEB, or designated representative, may meet with the Contractor to discuss the Board's preliminary findings and recommendations. As requested by the PEB Chair, Monitors and other personnel involved in performance evaluation will attend the meeting and participate in discussions. At this meeting, the Contractor may provide a self-evaluation presentation (a copy of which is provided to the PEB) not to exceed 30 minutes in length. After meeting with the Contactor, the PEB will consider matters presented by the Contractor and finalize its findings and recommendations for the PEBR.

F. The Contractor may furnish a separate self-evaluation report within 5 calendar days following the end of each evaluation period. These self-evaluation reports shall not exceed 20 pages in length per each evaluation period. The PEB will not submit its recommendation to the Fee Determination Official (FDO) until (1) the Contractor's self-evaluation report has been received and considered, or (2) the Contractor has provided written notification that a self-evaluation report will not be submitted, or (3) the deadline for its submission has expired.

G. The PEB Chair will prepare the final PEBR for the period and submit it to the FDO for use in determining the award fee earned. The report will include an adjectival rating and a recommended performance score with supporting documentation. The Contractor will be notified of the PEB evaluation and recommended rating and score. The Contractor may provide additional information for consideration by the FDO. Such information will be delivered in writing to the Contracting Officer within 5 calendar days of notification to the Contractor of the recommended rating and score. When submitting the report, the Chair will inform the FDO of any additional information from the Contractor.

H. The FDO will consider the recommendations of the PEB, the PEBR, any information provided by the Contractor, and any other pertinent information in determining performance scores. The FDO's determination of the performance scores and the basis for this determination will be stated in the Award Fee Determination Report (AFDR).

I. The Award Fee Determination will be provided to the Contractor by the Contracting Officer.

V. Performance Evaluation and Criteria

Contractor performance will be evaluated at the contract level, not at the individual task or order level.

A. In evaluating the performance of the Contractor, the Government will evaluate major elements of Contractor performance including Technical, Management, and Cost Performance. The major performance areas will be considered independently to determine the degree of success the Contractor has demonstrated in arriving at a well-balanced contract performance.

B. The factors, criteria, and weighting for evaluation of Contractor performance for determination of award fee is defined in Attachment C.

C. Notwithstanding any of the above, a major breach of safety or security, as defined by clause 1852.223-75 of this contract, may result in an award fee score of zero for the affected evaluation period.

D. In order to earn any award fee, the Contractor must receive a numerical score of 61 or greater. Attachment A provides the performance level definition adjectival ratings and corresponding numerical scores that will be used in evaluating performance. The numerical grade ranges corresponding to these adjectival ratings and their conversion to total award fee earned are set forth in Attachment D. Attachment B provides the distribution of the available maximum award fee for each evaluation period.

Attachment – A Grading Table

Adjectival Rating	Performance Points Range	Description
Excellent	(100-91)	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	(90-81)	Very effective performance, fully responsive to contract requirements; contract requirements accomplished in a timely, efficient and economical manner for the most part; only minor deficiencies.
Good	(80-71)	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.
Satisfactory	(70-61)	Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance.
Poor/ Unsatisfactory	(less than 61)	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely affect overall performance.

Attachment – B Evaluation Periods and Maximum Available Award Fee for Each Award Fee Period (AFP)

AF Period	Start Date	End Date	Max Available
1	1-May-06	31-Oct-06	$1,845,256
2	1-Nov-06	30-Apr-07	$1,873,562
3	1-May-07	31-Oct-07	$1,932,267
4	1-Nov-07	30-Apr-08	$1,889,254
5	1-May-08	31-Oct-08	$1,991,731
6	1-Nov-08	30-Apr-09	$1,947,209
7	1-May-09	31-Oct-09	$2,044,113
8	1-Nov-09	30-Apr-10	$1,997,993
9	1-May-10	31-Oct-10	$2,110,064
10	1-Nov-10	30-Apr-11	$2,062,313
			$19,693,758

Award fee dollars available for each evaluation period not earned will not roll forward to subsequent award fee periods. Unearned fee will be removed from the maximum award fee available on the contract by unilateral contract modification.

In calculating AFP-01 through AFP-06, the Total Available Award Fee under clause B.2, ESTIMATED COST AND AWARD FEE, will be divided by six in determining the amount for these periods. In calculating AFP-07 and AFP-08, the Total Available Award Fee under clause F.5, OPTION TO EXTEND COMPLETION DATE (Option 1), will be divided by two in determining the amount for each of these periods. In calculating AFP-09 and AFP-10, the Total Available Award Fee under clause F.5, OPTION TO EXTEND COMPLETION DATE (Option 2), will be divided by two in determining the amount for each of these periods.

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Attachment – C Performance Evaluation Factors and Evaluation Criteria

Factor	Identification	Weight
1.0	**Technical**	**40%**
	Safety and Health	**10%**
2.0	**Management (includes small business participation)**	**10%**
	Small Business Goal achievement	**15%**
3.0	**Cost**	**25%**
TOTAL		**100%**

Evaluation Criteria

1. Technical Performance and Compliance with Safety and Health Requirements

The Technical Evaluation Factor covers the performance of the Contractor in accomplishing the tasks within the Statement of Work. Performance criterion includes all aspects of quality and schedule for both technical, and safety and health performance.

The evaluation criteria include:

- Timeliness and effectiveness of performance in any technical areas of emphasis identified for an evaluation period.
- Initiatives proposed or implemented by the Contractor that improves products or support, consolidates activities, or improves efficiencies.
- Management and employee involvement in safety and health leadership and preventative activities.
- Providing a safe work environment; conducting annual inspections of all worksites and facilities managed; maintaining accident/incident files; timely reporting of mishaps; providing safety training for all personnel.
- Effectiveness in meeting or surpassing completion form standards as detailed in the SOW.

2. Management and Small Business Performance

The Management Evaluation Factor covers those activities performed by the Contractor for overall management and administration of all contract activity. This also includes the evaluation of the Contractor's success in achieving or surpassing the small business goals specified in the contract.

The evaluation criteria include:

- Timeliness and effectiveness of performance in any management areas of emphasis identified for an evaluation period

- Initiatives proposed or implemented by the Contractor that improves overall contract management.
- Effective use of resources; planning, organizing, and managing all contract activity; response to emergencies and other unexpected situations.
- Timely and accurate reporting in accordance with DRL/DRD requirements.
- Effectiveness in meeting all small business goals specified in the contract.
- Effectiveness in meeting or surpassing completion form standards as detailed in the SOW.

3. Cost Performance

The Cost Evaluation Factor covers the Contractor's actual cost performance relative to the negotiated contract cost, including variance analyses.

Attachment D – Performance Score Conversion Chart

Weighed Performance Score		Percentage of Available Award Fee
100		100%
99		99
98		98
97		97
96	Excellent	96
95		95
94		94
93		93
92		92
91		91
90		90
89		89
88		88
87		87
86	Very Good	86
85		85
84		84
83		83
82		82
81		81
80		80
79		79
78		78
77		77
76	Good	76
75		75
74		74
73		73
72		72
71		71
70		70
69		69
68		68
67		67
66	Satisfactory	66
65		65
64		64
63		63
62		62
61		61
60 and below		0

J.6 WAGE DETERMINATION

Standard Form 98E
Notice of Intention to Make a Service Contract and Response to Notice

Standard Form 98A
Notice of Intention to Make a Service Contract and Response to Notice (Attachment A)

Register of Wage Determinations Under the Service Contract Act
Wage Determination No: 1994-2516
Revision No.: 26
Date of Revision: 05/23/2005
State: Texas

Register of Wage Determinations Under the Service Contract Act
Wage Determination No: 1994-2512
Revision No.: 23
Date of Revision: 06/14/2005
State: New Mexico, Texas

STANDARD FORM 98

January 1996

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION

NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE

(See Instructions on Reverse)

1. NOTICE NO.
NASA
32776

MAIL TO:

Administrator
Wage and Hour Division
U.S. Department of Labor
Washington, DC 20210

2. Estimated solicitation date *(use numerals)*

Month	Day	Year
08	12	05

3. Estimated date bids or proposals to be opened or negotiations begun *(use numerals)*

Month	Day	Year
09	29	05

4. Date contract performance to begin *(use numerals)*

Month	Day	Year
04	01	06

5. PLACE(S) OF PERFORMANCE

Harris County, TX
Dona Ana County, NM

6. SERVICES TO BE PERFORMED *(describe)*

II: Safety and Mission Assurance Support Services
Contract Period: 04/01/06 to 03/31/07

7. INFORMATION ABOUT PERFORMANCE

A. [X] Services now performed by a contractor
B. [ ] Services now performed by Federal employees
C. [ ] Services not presently being performed

8. IF BOX A IN ITEM 7 IS MARKED, COMPLETE ITEM 8 AS APPLICABLE

a. Name and address of incumbent contractor

Science Applications International Corp
2200 Space Park Dr., Suite 200
Houston, TX 77058

b. Number(s) of any wage determination(s) in incumbent's contract

WD 94-2516, and WD 94-2512

c. Name(s) of union(s) if services are being performed under collective bargaining agreement(s). ***Important:*** Attach copies of current applicable collective bargaining agreements

None

9. OFFICIAL SUBMITTING NOTICE

SIGNED:	DATE
Original signed by	08/08/05
TYPE OR PRINT NAME Connie R. Pritchard Contract Labor Relations Officer	TELEPHONE NO. 281-483-4121

10. TYPE OR PRINT NAME AND TITLE OF PERSON TO WHOM RESPONSE IS TO BE SENT AND NAME AND ADDRESS OF DEPARTMENT OR AGENCY, BUREAU, DIVISION, ETC.

RESPONSE TO NOTICE
(by Department of Labor)

A. [X] The attached wage determination(s) listed below apply to procurement.
WD 94-2516, Rev 26
WD 94-2512, Rev 23

B. [ ] As of this date, no wage determination applicable to the specified locality and classes of employees is in effect.

C. [ ] From information supplied, the Service Contract Act does not apply *(see attached explanation)*.

D. [ ] Notice returned for additional information

STANDARD FORM 98a February 1973 U.S. DEPARTMENT OF LABOR Employment Standards Administration	NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE (Attachment A)	11. Notice No. NASA 32776
12. CLASSES OF SERVICE EMPLOYEES TO BE EMPLOYED ON CONTRACT Harris County, TX; 94-2516, Occupations included in "SCA Directory of Occupations"	13. NUMBER OF EMPLOYEES IN EACH CLASS	14. HOURLY WAGE RATE THAT WOULD BE PAID IF FEDERALLY EMPLOYED
Engineering Technician, I	4	GS-3 $11.75
Engineering Technician, II	26.25	GS-4 $13.19
Engineering Technician, III	23	GS-5 $14.75
Engineering Technician, IV	8	GS-7 $18.27
Travel Clerk, II	1	GS-6 $16.44
Word Processor, I	5	GS-3 $11.75
Word Processor, II	2	GS-4 $13.19
Accounting Clerk, II	1.25	GS-3 $11.75
General Clerk, I	7	GS-1 $9.57
General Clerk, II	5	GS-2 $10.77
General Clerk, III	4	GS-3 $11.75
General Clerk, IV	2	GS-4 $13.19
Secretary, I	7	GS-4 $13.19
Secretary, II	2.75	GS-5 $14.75
Secretary, III	1	GS-6 $16.44
Secretary, IV	1	GS-7 $18.27
Messenger (Courier)	2	GS-5 $14.75
Nonexempt: Dona Ana County, NM, WSTF: WD 94-2512		
Engineering Technician, I	1	GS-3 $10.52
Engineering Technician, II	1	GS-4 $11.81
Engineering Technician, III	2	GS-5 $13.21
Word Processor, I	1	GS-3 $10.52

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 Director
Division of Wage Determinations

Wage Determination No.: 1994-2516
Revision No.: 26
Date of Revision: 05/23/2005

State: Texas

Area: Texas Counties of Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Grimes, Harris, Houston, Jackson, Lavaca, Liberty, Madison, Matagorda, Montgomery, San Jacinto, Trinity, Walker, Waller, Washington, Wharton

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	11.45
01012 - Accounting Clerk II	12.35
01013 - Accounting Clerk III	13.86
01014 - Accounting Clerk IV	15.29
01030 - Court Reporter	17.73
01050 - Dispatcher, Motor Vehicle	15.40
01060 - Document Preparation Clerk	12.07
01070 - Messenger (Courier)	9.87
01090 - Duplicating Machine Operator	12.07
01110 - Film/Tape Librarian	11.50
01115 - General Clerk I	9.63
01116 - General Clerk II	10.80
01117 - General Clerk III	12.97
01118 - General Clerk IV	14.88
01120 - Housing Referral Assistant	19.36
01131 - Key Entry Operator I	11.20
01132 - Key Entry Operator II	14.32
01191 - Order Clerk I	13.36
01192 - Order Clerk II	15.24
01261 - Personnel Assistant (Employment) I	12.28
01262 - Personnel Assistant (Employment) II	13.79
01263 - Personnel Assistant (Employment) III	16.50
01264 - Personnel Assistant (Employment) IV	17.63
01270 - Production Control Clerk	18.50
01290 - Rental Clerk	14.34
01300 - Scheduler, Maintenance	14.67
01311 - Secretary I	14.67

01312 - Secretary II	17.73
01313 - Secretary III	19.36
01314 - Secretary IV	22.76
01315 - Secretary V	25.57
01320 - Service Order Dispatcher	14.63
01341 - Stenographer I	12.72
01342 - Stenographer II	15.12
01400 - Supply Technician	22.76
01420 - Survey Worker (Interviewer)	15.53
01460 - Switchboard Operator-Receptionist	10.88
01510 - Test Examiner	17.73
01520 - Test Proctor	17.73
01531 - Travel Clerk I	11.56
01532 - Travel Clerk II	12.46
01533 - Travel Clerk III	13.33
01611 - Word Processor I	11.45
01612 - Word Processor II	13.79
01613 - Word Processor III	16.27

03000 - Automatic Data Processing Occupations

03010 - Computer Data Librarian	13.45
03041 - Computer Operator I	13.45
03042 - Computer Operator II	15.53
03043 - Computer Operator III	17.54
03044 - Computer Operator IV	24.69
03045 - Computer Operator V	23.90
03071 - Computer Programmer I (1)	21.12
03072 - Computer Programmer II (1)	26.16
03073 - Computer Programmer III (1)	27.62
03074 - Computer Programmer IV (1)	27.62
03101 - Computer Systems Analyst I (1)	27.41
03102 - Computer Systems Analyst II (1)	27.62
03103 - Computer Systems Analyst III (1)	27.62
03160 - Peripheral Equipment Operator	13.45

05000 - Automotive Service Occupations

05005 - Automotive Body Repairer, Fiberglass	21.26
05010 - Automotive Glass Installer	21.68
05040 - Automotive Worker	20.91
05070 - Electrician, Automotive	22.66
05100 - Mobile Equipment Servicer	19.27
05130 - Motor Equipment Metal Mechanic	24.53
05160 - Motor Equipment Metal Worker	20.91
05190 - Motor Vehicle Mechanic	24.53
05220 - Motor Vehicle Mechanic Helper	18.48
05250 - Motor Vehicle Upholstery Worker	19.84
05280 - Motor Vehicle Wrecker	20.91
05310 - Painter, Automotive	22.66
05340 - Radiator Repair Specialist	22.88
05370 - Tire Repairer	14.40
05400 - Transmission Repair Specialist	25.17

07000 - Food Preparation and Service Occupations

(not set) - Food Service Worker	8.01
07010 - Baker	10.04
07041 - Cook I	8.65
07042 - Cook II	9.33
07070 - Dishwasher	8.11
07130 - Meat Cutter	12.36
07250 - Waiter/Waitress	7.75

09000 - Furniture Maintenance and Repair Occupations

09010 - Electrostatic Spray Painter	16.65
09040 - Furniture Handler	11.74
09070 - Furniture Refinisher	16.09
09100 - Furniture Refinisher Helper	13.74
09110 - Furniture Repairer, Minor	15.29
09130 - Upholsterer	16.65

11030 - General Services and Support Occupations

11030 - Cleaner, Vehicles	9.12
11060 - Elevator Operator	7.39
11090 - Gardener	12.14
11121 - House Keeping Aid I	7.27
11122 - House Keeping Aid II	7.68
11150 - Janitor	8.17
11210 - Laborer, Grounds Maintenance	9.75
11240 - Maid or Houseman	7.27
11270 - Pest Controller	12.98
11300 - Refuse Collector	9.12
11330 - Tractor Operator	11.44
11360 - Window Cleaner	8.92

12000 - Health Occupations

12020 - Dental Assistant	14.22
12040 - Emergency Medical Technician (EMT)/Paramedic /Ambulance Driver	12.93
12071 - Licensed Practical Nurse I	14.15
12072 - Licensed Practical Nurse II	15.88
12073 - Licensed Practical Nurse III	17.10
12100 - Medical Assistant	11.91
12130 - Medical Laboratory Technician	13.90
12160 - Medical Record Clerk	13.13
12190 - Medical Record Technician	16.02
12221 - Nursing Assistant I	7.08
12222 - Nursing Assistant II	9.82
12223 - Nursing Assistant III	10.62
12224 - Nursing Assistant IV	12.40
12250 - Pharmacy Technician	13.10
12280 - Phlebotomist	13.30
12311 - Registered Nurse I	24.51
12312 - Registered Nurse II	30.20
12313 - Registered Nurse II, Specialist	32.08

12314 - Registered Nurse III	37.96
12315 - Registered Nurse III, Anesthetist	37.96
12316 - Registered Nurse IV	43.48
13000 - Information and Arts Occupations	
13002 - Audiovisual Librarian	18.40
13011 - Exhibits Specialist I	19.30
13012 - Exhibits Specialist II	24.74
13013 - Exhibits Specialist III	28.94
13041 - Illustrator I	17.60
13042 - Illustrator II	22.56
13043 - Illustrator III	26.40
13047 - Librarian	23.29
13050 - Library Technician	12.96
13071 - Photographer I	13.93
13072 - Photographer II	17.60
13073 - Photographer III	22.56
13074 - Photographer IV	26.40
13075 - Photographer V	30.06
15000 - Laundry, Dry Cleaning, Pressing and Related Occupations	
15010 - Assembler	7.98
15030 - Counter Attendant	7.98
15040 - Dry Cleaner	10.25
15070 - Finisher, Flatwork, Machine	7.98
15090 - Presser, Hand	7.98
15100 - Presser, Machine, Drycleaning	7.98
15130 - Presser, Machine, Shirts	7.98
15160 - Presser, Machine, Wearing Apparel, Laundry	7.98
15190 - Sewing Machine Operator	10.85
15220 - Tailor	11.67
15250 - Washer, Machine	8.76
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Toolroom)	16.65
19040 - Tool and Die Maker	19.20
21000 - Material Handling and Packing Occupations	
21010 - Fuel Distribution System Operator	16.33
21020 - Material Coordinator	18.50
21030 - Material Expediter	18.50
21040 - Material Handling Laborer	12.26
21050 - Order Filler	10.53
21071 - Forklift Operator	12.84
21080 - Production Line Worker (Food Processing)	12.84
21100 - Shipping/Receiving Clerk	12.43
21130 - Shipping Packer	12.43
21140 - Store Worker I	9.57
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	13.57
21210 - Tools and Parts Attendant	13.58
21400 - Warehouse Specialist	12.84

23000 - Mechanics and Maintenance and Repair Occupations	
23010 - Aircraft Mechanic	23.19
23040 - Aircraft Mechanic Helper	18.07
23050 - Aircraft Quality Control Inspector	24.21
23060 - Aircraft Servicer	20.10
23070 - Aircraft Worker	21.18
23100 - Appliance Mechanic	16.65
23120 - Bicycle Repairer	13.91
23125 - Cable Splicer	20.27
23130 - Carpenter, Maintenance	18.58
23140 - Carpet Layer	15.92
23160 - Electrician, Maintenance	25.19
23181 - Electronics Technician, Maintenance I	15.91
23182 - Electronics Technician, Maintenance II	20.59
23183 - Electronics Technician, Maintenance III	24.17
23260 - Fabric Worker	15.00
23290 - Fire Alarm System Mechanic	17.43
23310 - Fire Extinguisher Repairer	14.40
23340 - Fuel Distribution System Mechanic	19.17
23370 - General Maintenance Worker	15.46
23400 - Heating, Refrigeration and Air Conditioning Mechanic	19.17
23430 - Heavy Equipment Mechanic	17.43
23440 - Heavy Equipment Operator	17.43
23460 - Instrument Mechanic	17.47
23470 - Laborer	10.14
23500 - Locksmith	16.65
23530 - Machinery Maintenance Mechanic	19.81
23550 - Machinist, Maintenance	20.16
23580 - Maintenance Trades Helper	13.58
23640 - Millwright	19.48
23700 - Office Appliance Repairer	16.65
23740 - Painter, Aircraft	18.32
23760 - Painter, Maintenance	16.65
23790 - Pipefitter, Maintenance	19.33
23800 - Plumber, Maintenance	18.87
23820 - Pneudraulic Systems Mechanic	17.47
23850 - Rigger	17.47
23870 - Scale Mechanic	15.92
23890 - Sheet-Metal Worker, Maintenance	17.43
23910 - Small Engine Mechanic	15.92
23930 - Telecommunication Mechanic I	21.33
23931 - Telecommunication Mechanic II	22.28
23950 - Telephone Lineman	21.09
23960 - Welder, Combination, Maintenance	17.43
23965 - Well Driller	17.43
23970 - Woodcraft Worker	17.47
23980 - Woodworker	10.27
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	9.68

24580 - Child Care Center Clerk	12.06
24600 - Chore Aid	6.36
24630 - Homemaker	15.41
25000 - Plant and System Operation Occupations	
25010 - Boiler Tender	21.14
25040 - Sewage Plant Operator	17.00
25070 - Stationary Engineer	21.14
25190 - Ventilation Equipment Tender	14.33
25210 - Water Treatment Plant Operator	16.65
27000 - Protective Service Occupations	
(not set) - Police Officer	21.21
27004 - Alarm Monitor	13.96
27006 - Corrections Officer	18.04
27010 - Court Security Officer	18.04
27040 - Detention Officer	18.04
27070 - Firefighter	17.70
27101 - Guard I	10.14
27102 - Guard II	17.90
28000 - Stevedoring/Longshoremen Occupations	
28010 - Blocker and Bracer	16.16
28020 - Hatch Tender	16.16
28030 - Line Handler	16.16
28040 - Stevedore I	15.12
28050 - Stevedore II	17.21
29000 - Technical Occupations	
21150 - Graphic Artist	23.11
29010 - Air Traffic Control Specialist, Center (2)	35.18
29011 - Air Traffic Control Specialist, Station (2)	24.26
29012 - Air Traffic Control Specialist, Terminal (2)	26.71
29023 - Archeological Technician I	19.34
29024 - Archeological Technician II	21.66
29025 - Archeological Technician III	26.79
29030 - Cartographic Technician	27.31
29035 - Computer Based Training (CBT) Specialist/ Instructor	25.70
29040 - Civil Engineering Technician	24.82
29061 - Drafter I	16.82
29062 - Drafter II	17.44
29063 - Drafter III	21.12
29064 - Drafter IV	26.79
29081 - Engineering Technician I	15.08
29082 - Engineering Technician II	18.74
29083 - Engineering Technician III	21.81
29084 - Engineering Technician IV	27.69
29085 - Engineering Technician V	36.15
29086 - Engineering Technician VI	41.10
29090 - Environmental Technician	24.76
29100 - Flight Simulator/Instructor (Pilot)	32.45

29160 - Instructor	23.47
29210 - Laboratory Technician	19.77
29240 - Mathematical Technician	28.04
29361 - Paralegal/Legal Assistant I	17.80
29362 - Paralegal/Legal Assistant II	21.38
29363 - Paralegal/Legal Assistant III	26.62
29364 - Paralegal/Legal Assistant IV	29.59
29390 - Photooptics Technician	26.79
29480 - Technical Writer	24.02
29491 - Unexploded Ordnance (UXO) Technician I	22.35
29492 - Unexploded Ordnance (UXO) Technician II	27.05
29493 - Unexploded Ordnance (UXO) Technician III	34.42
29494 - Unexploded (UXO) Safety Escort	22.35
29495 - Unexploded (UXO) Sweep Personnel	22.35
29620 - Weather Observer, Senior (3)	21.81
29621 - Weather Observer, Combined Upper Air and Surface Programs (3)	17.99
29622 - Weather Observer, Upper Air	17.99

31000 - Transportation/ Mobile Equipment Operation Occupations

31030 - Bus Driver	15.48
31260 - Parking and Lot Attendant	8.34
31290 - Shuttle Bus Driver	12.67
31300 - Taxi Driver	9.00
31361 - Truckdriver, Light Truck	12.67
31362 - Truckdriver, Medium Truck	14.97
31363 - Truckdriver, Heavy Truck	16.00
31364 - Truckdriver, Tractor-Trailer	16.00

99000 - Miscellaneous Occupations

99020 - Animal Caretaker	8.21
99030 - Cashier	9.10
99041 - Carnival Equipment Operator	9.72
99042 - Carnival Equipment Repairer	10.22
99043 - Carnival Worker	7.50
99050 - Desk Clerk	10.65
99095 - Embalmer	19.59
99300 - Lifeguard	11.75
99310 - Mortician	24.04
99350 - Park Attendant (Aide)	14.75
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	9.48
99500 - Recreation Specialist	14.74
99510 - Recycling Worker	13.45
99610 - Sales Clerk	10.85
99620 - School Crossing Guard (Crosswalk Attendant)	8.29
99630 - Sport Official	11.47
99658 - Survey Party Chief (Chief of Party)	19.92
99659 - Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	17.23
99660 - Surveying Aide	13.64
99690 - Swimming Pool Operator	13.10
99720 - Vending Machine Attendant	10.91

99730 - Vending Machine Repairer	13.10
99740 - Vending Machine Repairer Helper	11.19

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 $2.87 per hour computed on the basis of all hours worked by service employees employed on the contract.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 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 contractors 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 ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, 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 ordance, (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 ordance, 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 ordance, 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.

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
Director

Division of
Wage Determinations

Wage Determination No.: 1994-2512
Revision No.: 23
Date of Last Revision: 06/14/2005

States: New Mexico, Texas

Area: New Mexico Counties of Chaves, Dona Ana, Eddy, Grant, Hidalgo, Lincoln, Luna, Otero, Sierra Texas Counties of Culberson, El Paso, Hudspeth

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	9.21
01012 - Accounting Clerk II	10.14
01013 - Accounting Clerk III	13.49
01014 - Accounting Clerk IV	15.70
01030 - Court Reporter	12.97
01050 - Dispatcher, Motor Vehicle	12.41
01060 - Document Preparation Clerk	10.58
01070 - Messenger (Courier)	7.78
01090 - Duplicating Machine Operator	10.58
01110 - Film/Tape Librarian	11.00
01115 - General Clerk I	8.16
01116 - General Clerk II	9.18
01117 - General Clerk III	10.18
01118 - General Clerk IV	10.97
01120 - Housing Referral Assistant	14.58
01131 - Key Entry Operator I	8.50
01132 - Key Entry Operator II	10.05
01191 - Order Clerk I	9.78
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01261 - Personnel Assistant (Employment) I	10.37
01262 - Personnel Assistant (Employment) II	11.64
01263 - Personnel Assistant (Employment) III	13.33
01264 - Personnel Assistant (Employment) IV	14.51
01270 - Production Control Clerk	13.14
01290 - Rental Clerk	8.85
01300 - Scheduler, Maintenance	10.15
01311 - Secretary I	10.15
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01313 - Secretary III	14.58
01314 - Secretary IV	17.23
01315 - Secretary V	18.34
01320 - Service Order Dispatcher	9.71
01341 - Stenographer I	10.86
01342 - Stenographer II	11.65
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01420 - Survey Worker (Interviewer)	12.88
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01510 - Test Examiner	12.97
01520 - Test Proctor	12.97
01531 - Travel Clerk I	10.63
01532 - Travel Clerk II	11.36
01533 - Travel Clerk III	12.10
01611 - Word Processor I	9.58
01612 - Word Processor II	10.73
01613 - Word Processor III	13.41

03000 - Automatic Data Processing Occupations

03010 - Computer Data Librarian	9.83
03041 - Computer Operator I	10.44
03042 - Computer Operator II	14.05
03043 - Computer Operator III	15.72
03044 - Computer Operator IV	17.47
03045 - Computer Operator V	19.35
03071 - Computer Programmer I (1)	17.76
03072 - Computer Programmer II (1)	23.82
03073 - Computer Programmer III (1)	27.17
03074 - Computer Programmer IV (1)	27.62
03101 - Computer Systems Analyst I (1)	22.14
03102 - Computer Systems Analyst II (1)	26.56
03103 - Computer Systems Analyst III (1)	27.62
03160 - Peripheral Equipment Operator	10.44

05000 - Automotive Service Occupations

05005 - Automotive Body Repairer, Fiberglass	15.63
05010 - Automotive Glass Installer	13.69
05040 - Automotive Worker	13.69
05070 - Electrician, Automotive	14.67
05100 - Mobile Equipment Servicer	11.73
05130 - Motor Equipment Metal Mechanic	15.63
05160 - Motor Equipment Metal Worker	13.69
05190 - Motor Vehicle Mechanic	16.49
05220 - Motor Vehicle Mechanic Helper	10.75
05250 - Motor Vehicle Upholstery Worker	12.70
05280 - Motor Vehicle Wrecker	13.69
05310 - Painter, Automotive	14.67
05340 - Radiator Repair Specialist	13.69
05370 - Tire Repairer	11.33
05400 - Transmission Repair Specialist	15.63

07000 - Food Preparation and Service Occupations

(not set) - Food Service Worker	7.05
07010 - Baker	10.41
07041 - Cook I	9.48
07042 - Cook II	11.06
07070 - Dishwasher	6.37
07130 - Meat Cutter	10.41
07250 - Waiter/Waitress	7.02

09000 - Furniture Maintenance and Repair Occupations

09010 - Electrostatic Spray Painter	14.67
09040 - Furniture Handler	8.80
09070 - Furniture Refinisher	14.67
09100 - Furniture Refinisher Helper	10.75
09110 - Furniture Repairer, Minor	11.95
09130 - Upholsterer	14.67

11030 - General Services and Support Occupations

11030 - Cleaner, Vehicles	6.70
11060 - Elevator Operator	7.06
11090 - Gardener	10.70
11121 - House Keeping Aid I	6.68
11122 - House Keeping Aid II	7.25
11150 - Janitor	7.43
11210 - Laborer, Grounds Maintenance	8.02
11240 - Maid or Houseman	6.60
11270 - Pest Controller	11.99
11300 - Refuse Collector	6.89
11330 - Tractor Operator	9.82
11360 - Window Cleaner	8.35

12000 - Health Occupations

12020 - Dental Assistant	11.54
12040 - Emergency Medical Technician (EMT) /Paramedic/Ambulance Driver	12.30
12071 - Licensed Practical Nurse I	12.74
12072 - Licensed Practical Nurse II	14.30
12073 - Licensed Practical Nurse III	15.99
12100 - Medical Assistant	10.35
12130 - Medical Laboratory Technician	12.57
12160 - Medical Record Clerk	9.77
12190 - Medical Record Technician	13.54
12221 - Nursing Assistant I	7.76
12222 - Nursing Assistant II	8.73
12223 - Nursing Assistant III	9.53
12224 - Nursing Assistant IV	10.69
12250 - Pharmacy Technician	12.19
12280 - Phlebotomist	12.29
12311 - Registered Nurse I	18.20
12312 - Registered Nurse II	22.28
12313 - Registered Nurse II, Specialist	22.28

12314 - Registered Nurse III	26.95
12315 - Registered Nurse III, Anesthetist	26.95
12316 - Registered Nurse IV	32.28
13000 - Information and Arts Occupations	
13002 - Audiovisual Librarian	19.93
13011 - Exhibits Specialist I	19.15
13012 - Exhibits Specialist II	23.08
13013 - Exhibits Specialist III	26.14
13041 - Illustrator I	19.15
13042 - Illustrator II	23.08
13043 - Illustrator III	26.14
13047 - Librarian	22.08
13050 - Library Technician	12.44
13071 - Photographer I	11.95
13072 - Photographer II	15.32
13073 - Photographer III	19.16
13074 - Photographer IV	22.77
13075 - Photographer V	25.97
15000 - Laundry, Dry Cleaning, Pressing and Related Occupations	
15010 - Assembler	6.61
15030 - Counter Attendant	6.61
15040 - Dry Cleaner	8.05
15070 - Finisher, Flatwork, Machine	6.61
15090 - Presser, Hand	6.61
15100 - Presser, Machine, Drycleaning	6.61
15130 - Presser, Machine, Shirts	6.61
15160 - Presser, Machine, Wearing Apparel, Laundry	6.61
15190 - Sewing Machine Operator	8.52
15220 - Tailor	9.37
15250 - Washer, Machine	7.09
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Toolroom)	14.67
19040 - Tool and Die Maker	18.42
21000 - Material Handling and Packing Occupations	
21010 - Fuel Distribution System Operator	13.82
21020 - Material Coordinator	12.32
21030 - Material Expediter	12.32
21040 - Material Handling Laborer	7.84
21050 - Order Filler	10.19
21071 - Forklift Operator	10.39
21080 - Production Line Worker (Food Processing)	10.86
21100 - Shipping/Receiving Clerk	10.02
21130 - Shipping Packer	10.02
21140 - Store Worker I	8.54
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	11.10
21210 - Tools and Parts Attendant	10.86
21400 - Warehouse Specialist	10.86

23000 - Mechanics and Maintenance and Repair Occupations

23010 - Aircraft Mechanic	19.29
23040 - Aircraft Mechanic Helper	13.27
23050 - Aircraft Quality Control Inspector	20.52
23060 - Aircraft Servicer	15.60
23070 - Aircraft Worker	16.82
23100 - Appliance Mechanic	14.67
23120 - Bicycle Repairer	11.33
23125 - Cable Splicer	17.19
23130 - Carpenter, Maintenance	14.67
23140 - Carpet Layer	13.69
23160 - Electrician, Maintenance	17.10
23181 - Electronics Technician, Maintenance I	16.12
23182 - Electronics Technician, Maintenance II	19.80
23183 - Electronics Technician, Maintenance III	21.07
23260 - Fabric Worker	12.70
23290 - Fire Alarm System Mechanic	15.63
23310 - Fire Extinguisher Repairer	11.73
23340 - Fuel Distribution System Mechanic	18.42
23370 - General Maintenance Worker	13.69
23400 - Heating, Refrigeration and Air Conditioning Mechanic	15.63
23430 - Heavy Equipment Mechanic	17.19
23440 - Heavy Equipment Operator	15.63
23460 - Instrument Mechanic	15.63
23470 - Laborer	7.84
23500 - Locksmith	14.67
23530 - Machinery Maintenance Mechanic	16.14
23550 - Machinist, Maintenance	15.98
23580 - Maintenance Trades Helper	10.75
23640 - Millwright	17.46
23700 - Office Appliance Repairer	14.67
23740 - Painter, Aircraft	14.67
23760 - Painter, Maintenance	14.67
23790 - Pipefitter, Maintenance	15.76
23800 - Plumber, Maintenance	14.79
23820 - Pneudraulic Systems Mechanic	15.63
23850 - Rigger	15.63
23870 - Scale Mechanic	13.69
23890 - Sheet-Metal Worker, Maintenance	15.63
23910 - Small Engine Mechanic	13.76
23930 - Telecommunication Mechanic I	18.70
23931 - Telecommunication Mechanic II	19.89
23950 - Telephone Lineman	17.19
23960 - Welder, Combination, Maintenance	15.63
23965 - Well Driller	15.63
23970 - Woodcraft Worker	15.63
23980 - Woodworker	11.73

24000 - Personal Needs Occupations

24570 - Child Care Attendant	8.41

24580 - Child Care Center Clerk	10.49
24600 - Chore Aid	6.23
24630 - Homemaker	12.70
25000 - Plant and System Operation Occupations	
25010 - Boiler Tender	16.75
25040 - Sewage Plant Operator	15.63
25070 - Stationary Engineer	16.75
25190 - Ventilation Equipment Tender	10.98
25210 - Water Treatment Plant Operator	15.63
27000 - Protective Service Occupations	
(not set) - Police Officer	20.13
27004 - Alarm Monitor	12.33
27006 - Corrections Officer	17.48
27010 - Court Security Officer	17.48
27040 - Detention Officer	17.48
27070 - Firefighter	19.83
27101 - Guard I	7.26
27102 - Guard II	11.42
28000 - Stevedoring/Longshoremen Occupations	
28010 - Blocker and Bracer	15.20
28020 - Hatch Tender	15.20
28030 - Line Handler	15.20
28040 - Stevedore I	14.81
28050 - Stevedore II	18.11
29000 - Technical Occupations	
21150 - Graphic Artist	19.52
29010 - Air Traffic Control Specialist, Center (2)	31.49
29011 - Air Traffic Control Specialist, Station (2)	22.04
29012 - Air Traffic Control Specialist, Terminal (2)	23.92
29023 - Archeological Technician I	17.29
29024 - Archeological Technician II	19.33
29025 - Archeological Technician III	23.95
29030 - Cartographic Technician	25.12
29035 - Computer Based Training (CBT) Specialist/ Instructor	23.65
29040 - Civil Engineering Technician	18.93
29061 - Drafter I	13.16
29062 - Drafter II	15.41
29063 - Drafter III	19.99
29064 - Drafter IV	26.25
29081 - Engineering Technician I	11.29
29082 - Engineering Technician II	14.72
29083 - Engineering Technician III	18.43
29084 - Engineering Technician IV	22.69
29085 - Engineering Technician V	26.70
29086 - Engineering Technician VI	30.43
29090 - Environmental Technician	18.11
29100 - Flight Simulator/Instructor (Pilot)	26.56

29160 - Instructor	20.51
29210 - Laboratory Technician	15.08
29240 - Mathematical Technician	24.90
29361 - Paralegal/Legal Assistant I	14.31
29362 - Paralegal/Legal Assistant II	19.00
29363 - Paralegal/Legal Assistant III	21.32
29364 - Paralegal/Legal Assistant IV	28.11
29390 - Photooptics Technician	22.90
29480 - Technical Writer	28.84
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)	18.15
29621 - Weather Observer, Combined Upper Air and Surface Programs (3)	16.08
29622 - Weather Observer, Upper Air (3)	16.08
31000 - Transportation/ Mobile Equipment Operation Occupations	
31030 - Bus Driver	12.42
31260 - Parking and Lot Attendant	6.82
31290 - Shuttle Bus Driver	11.32
31300 - Taxi Driver	9.55
31361 - Truckdriver, Light Truck	11.32
31362 - Truckdriver, Medium Truck	12.96
31363 - Truckdriver, Heavy Truck	13.90
31364 - Truckdriver, Tractor-Trailer	13.90
99000 - Miscellaneous Occupations	
99020 - Animal Caretaker	8.82
99030 - Cashier	7.04
99041 - Carnival Equipment Operator	9.59
99042 - Carnival Equipment Repairer	10.45
99043 - Carnival Worker	6.96
99050 - Desk Clerk	9.41
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)	9.06
99500 - Recreation Specialist	11.65
99510 - Recycling Worker	9.48
99610 - Sales Clerk	8.96
99620 - School Crossing Guard (Crosswalk Attendant)	7.71
99630 - Sport Official	9.97
99658 - Survey Party Chief (Chief of Party)	15.50
99659 - Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	12.67
99660 - Surveying Aide	10.74
99690 - Swimming Pool Operator	11.25
99720 - Vending Machine Attendant	8.85
99730 - Vending Machine Repairer	11.25
99740 - Vending Machine Repairer Helper	8.85

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 $2.87 per hour computed on the basis of all hours worked by service employees employed on the contract.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 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 contractors 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 ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, 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 ordance, (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 ordance, 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 ordance, 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..

J.7 LISTS OF GOVERNMENT-FURNISHED PROPERTY

Safety and Mission Assurance (S&MA) Support Services Contract Contract No. NNJ06JE86C								
Number	ECN	Item Name	Manufacturer	Model No.	Serial No.	Cost	Building	Room
G210375	1913977	PRINTER, ADP	HEWLETT-PACKARD	C3917A	JPKH004434	$1,454	JS-LM3	129
G210376	2081285	SCANNER, ADP	FUJITSU AMERICA INC	M4099D	501336	$14,300	JS-LM3	140B
G210377	1601884	CAMERA SYSTEM, DIGITAL	SONY CORP	MVC-FD88	134498	$700	JS-LM3	317D
G210378	1849611	DISPLAY UNIT	MAGITRONIC	C-SV2000PS	T1580638D0017	$1,124	JS-LM3	431D
G210379	1996144	SCANNER, IMAGE	FUJITSU AMERICA INC	M4099D	612	$15,314	JS-LM3	158
G210380	1617044	CAMERA SYSTEM, DIGITAL	NIKON CORP	COOLPIX885	3204477	$530	JS-LM3	421
G210381	1919998	PRINTER, ADP	HEWLETT-PACKARD	C4121A	USEF167471	$1,461	JS-LM3	146
G210382	1855762	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03473	$1,400	JS-LM3	245
G210383	1914925	SCANNER, ADP	FUJITSU LTD	M3099GX	6	$19,000	JS-LM3	140B
G210384	1929543	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEK090195	$1,487	JS-LM3	325C
G210385	1618057	SWITCH, 50 VPN DEVICE	NETSCREEN TECHNOLOGIES	NS-050-001	1.9112E+14	$5,267	JS-LM3	431E
G310386	-	PRINTER, OFFICEJET PRO	HEWLETT-PACKARD	1175Cxi	SGB83AGKK5	$995	Austin, TX	-
G210387	-	ZIP DRIVE	IOMEGA	Zip 100	PKAV48H5TB	$141	Austin, TX	-
G210388	2143453	COMPUTER, LAPTOP	DELL COMPUTER	PP05L	43307013061	$1,949	Austin, TX	-
G210389	Decal	ISS M MODEL WITH CASE	JOHNSON ENGINEERING	N/A	N/A	$3,028	JS-LM3	407E
G210390	-	TELEPHONE HEADSET	PLANTRONICS	M12	N/A	$99	JS-LM3	345F
G210391	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	351F
G210392	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	149D
G210393	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	251A
G210394	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	349E
G210395	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	305D
G210396	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	357C
G210397	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	149H
G210398	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	349B
G210399	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	219B
G210400	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	352A
G210401	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	349D

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G210402	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	149E
Number	ECN	Item Name	Manufacturer	Model No.	Serial No.	Cost	Building	Room
G210403	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	347D
G210404	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	357B
G210405	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	351C
G210406	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	151C
G210407	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	151A
G210408	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	345E
G210409	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	151H
G210410	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	349C
G210411	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	351A
G210412	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	345C
G210413	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	337B
G210414	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	335B
G210415	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	309A
G210416	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	341B
G210417	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	343D
G210418	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	343F
G210419	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	222B
G210420	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	221D
G210421	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	114B
G210422	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	335A
G210423	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	341C
G210424	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	222C
G210425	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	345B
G210426	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	253E
G210427	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	253B
G210428	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	440B
G210429	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	440B
G210430	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	440B
G210431	-	TELEPHONE HEADSET	PLANTRONICS	S12	N/A	$99	JS-LM3	440B

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ATTACHMENT J.7A LIST OF GOVERNMENT FURNISHED PROPERTY

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ATTACHMENT J.7B LIST OF INSTALLATION PROVIDED PROPERTY

ECN	ITEM_NAME	MANUFACTURER	MODEL	SERIAL_NUM	BLDG	ROOM	COST
1354789	DISPLAY UNIT	VIEWSONICS INC	2082	5442510938	JS-17	2063	$ 1,430
1449770	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	48432	2Q8J25020	JS-45	528	$ 4,300
1455300	COMPUTER, MICRO	ADOSEA	ADSX20	AD1054	JS-36	1003A	$ 1,530
1455307	TAPE DRIVE UNIT	EXABYTE CORP	EXB8500ST	1609770	JS-15	1002B	$ 8,248
1553537	STORAGE UNIT, ADP	COMPAQ COMPUTER CORP	SERIES3092	D625HNM10763	JS-46	300	$ 5,134
1553539	SERVER, ADP	COMPAQ COMPUTER CORP	PROLIANT4500	6539HNV50053	JS-46	300	$ 15,371
1553540	STORAGE UNIT, ADP	COMPAQ COMPUTER CORP	SERIES3092	D625HNM10749	JS-46	300	$ 5,134
1601884	CAMERA SYSTEM, DIGITAL	SONY CORP	MVC-FD88	134498	JS-45	616	$ 700
1846724	DISPLAY UNIT	PANASONIC	EA21	FA6630063	JS-45	454	$ 1,421
1848580	DISPLAY UNIT	VIEWSONICS INC	1782DC	2G70200127	JS-46	300	$ 531
1849611	DISPLAY UNIT	MAGITRONIC	C-SV2000PS	T1580638D0017	JS-17	2070	$ 1,124
1855754	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04063	JS-45	626	$ 1,400
1913977	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	JPKH004434	JS-45	211AB	$ 1,454
1913981	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	USLC002488	JS-15	2000B	$ 1,454
1913984	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	JPKH004426	JS-17	204	$ 1,454
1914118	SERVER, ADP	COMPAQ COMPUTER CORP	SERIES4000	D735HWA10427	JS-46	300	$ 6,648
1929618	COMPUTER, LAPTOP	TOSHIBA HOSHASEN CO LTD	PAS401U	29451619A	JS-45	528	$ 1,299
1984694	DISPLAY UNIT	COMPAQ COMPUTER CORP	630	851GC25KC573	JS-45	528	$ 1,107
1984729	COMPUTER, MICRO	COMPAQ COMPUTER CORP	SP700	D942CMW8K032	JS-45	548	$ 3,964
1986152	PROCESSOR CENTRAL, ADP	COMPAQ COMPUTER CORP	PROLIANT 3000	D029DDL2K049	JS-46	300	$ 15,014

1986210	PROCESSOR CENTRAL, ADP	COMPAQ COMPUTER CORP	PROLIANT3000	D029DDL2K053	JS-46	300	$ 12,160
1986475	SERVER, ADP	COMPAQ COMPUTER CORP	PROLIANT3000A016615	D918CMJ10369	JS-46	300	$ 11,220
1987351	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3A2	JS-15	1002B	$ 1,113
1987356	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3AY	JS-15	1001	$ 1,113
1987357	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3DE	JS-32	143	$ 1,113
1987361	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3C2	JS-15	1001B	$ 1,113
1987362	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3CA	JS-15	1001A	$ 1,113
1987363	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3AX	JS-45	240	$ 1,113
1987365	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3DA	JS-15	1002B	$ 1,113
1987368	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3CE	JS-15	1002B	$ 1,113
1987927	CONTROLLER, INTERFACE	RENISHAW INC	1S1	S96331	JS-10	116A	$ 13,998
1987928	POWER SUPPLY	ARTESIAN INDUSTRIES INC	CL40-7610	ZATN0181	JS-10	116A	$ 13,997
1991051	PROCESSOR CENTRAL, ADP	COMPAQ COMPUTER CORP	161156-001	D046FPR1K042	JS-46	300	$ 12,956
1991305	COMPUTER, MICRO	COMPAQ COMPUTER	PROLIANT ML350	D117FSC1K320	JS-15	1001	$ 4,002
1991327	COMPUTER, MICRO	COMPAQ COMPUTER CORP	PROLIANT-ML530	D113FPR1K018	JS-46	300	$ 2,999
2080086	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PPL	ZFC01	JS-45	548	$ 2,570
2080087	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PPL	ZFCOR	JS-45	548	$ 2,570
2081285	SCANNER, ADP	FUJITSU AMERICA INC	M4099D	501336	JS-45	422C	$ 14,300
2084436	PROCESSOR CENTRAL, ADP	COMPAQ COMPUTER CORP	ML370PROLIANT	D234KF51D078	JS-46	300	$ 3,884
2084437	PROCESSOR CENTRAL, ADP	COMPAQ COMPUTER CORP	ML370PROLIANT	D234KF51D091	JS-46	300	$ 5,589

2143453	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PP05L	43307013061	JS-45	233	$ 1,949
2152028	COMPUTER, LAPTOP	VIEWSONICS INC	VSVPD2297-1M	3.44023E+11	JS-225	116	$ 1,563
2152029	COMPUTER, LAPTOP	VIEWSONICS INC	VSVPD2297-1M	3.44023E+11	JS-225	116	$ 1,563
2152030	COMPUTER, LAPTOP	VIEWSONICS INC	VSVPD2297-1M	3.44023E+11	JS-45	528	$ 1,563
2152031	COMPUTER, LAPTOP	VIEWSONICS INC	VSVPD2297-1M	3.44023E+11	JS-45	528	$ 1,563
2152032	COMPUTER, LAPTOP	VIEWSONICS INC	VSVPD2297-1M	3.44023E+11	JS-45	458	$ 1,563
2152033	COMPUTER, LAPTOP	VIEWSONICS INC	VSVPD2297-1M	3.44023E+11	JS-33	113	$ 1,563
2521659	SERVER, ADP	HEWLETT-PACKARD CO	PROLIANT ML350	EA5KKZRZ3G	JS-45	458	$ 5,122
1008417	PRINTER, ADP	HEWLETT-PACKARD CO	LJ III	3038J71482	JS-HB-17	205	$ 1,790
1354416	PRINTER, ADP	HEWLETT-PACKARD CO	C2009A	USFB378280	JS-HB-17	D210	$ 4,046
1744326	TAPE DRIVE UNIT	QUANTUM CORP	TH3BA-YF	CX70702218	JS-HB-17	D210	$ 2,525
1854517	SERVER, ADP	COMPAQ COMPUTER CORP	SERIES4000	D735HWA10120	JS-HB-17	D210	$ 6,648
1913982	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	JPKH004132	JS-HB-17	2D36	$ 1,454
1914026	SERVER, ADP	COMPAQ COMPUTER CORP	SERIES4000	3734HWA16029	JS-PALMD	150	$ 6,648
1919138	PRINTER, ADP	XEROX CORP F-XEROX DATA SYS	DOCPRINT4517	M3F-021044	JS-HB-17	2C34	$ 1,303
1919139	PRINTER, ADP	XEROX CORP F-XEROX DATA SYS	DOCPRINT4517	M3F-015339	JS-HB-14	1D85	$ 1,303
1987364	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3B7	JS-PALMD	150	$ 1,113
1987410	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PPX	JW8P601	JS-HB-17	2D34	$ 2,638
1987411	COMPUTER, LAPTOP	DELL COMPUTER CORP F-PC'S LTD	PPX	5X8P601	JS-PALMD	150	$ 2,638

2078685	PRINTER, ADP	HEWLETT-PACKARD CO	C4254A	USQB065791	JS-PALMD	150	$ 1,683
2080089	SERVER, ADP	COMPAQ COMPUTER CORP	PROLIANT ML370	D021DKH1K045	JS-HB-17	2D35	$ 5,355
2082026	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	146P031	JS-PLMDL	150	$ 1,416
2082027	PRINTER, ADP	HEWLETT-PACKARD CO	LASERJET 2300N	CNBDD11821	JS-PLMDL	150	$ 976
2086581	PROJECTOR, POWER LITE	EPSON AMERICA INC	730C	EE20380083C	JS-HB-17	2C34	$ 2,428
2086582	SEVER, ADP	DELL COMPUTER CORP F-PC'S LTD	2600	5HLFC31	JS-HB-17	2D34	$ 4,982
2086583	COMPUTER, NOTEBOOK	DELL COMPUTER CORP F-PC'S LTD	C840	4BJHC31	JS-HB-17	2D34	$ 2,500
2086584	COMPUTER, NOTEBOOK	DELL COMPUTER CORP F-PC'S LTD	C840	2BJHC31	JS-HB-17	2D34	$ 2,500
2086700	PRINTER, ADP	HEWLETT-PACKARD CO	C9661A	JPGMD47889	JS-HB-17	2D34	$ 2,464
2139240	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	CGWKV11	JS-HB-14	1D93	$ 1,702
2139241	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	4JWKV11	JS-HB-14	1D82	$ 1,702
2139242	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	6JWKV11	JS-HB-14	1D90	$ 1,702
2139243	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	FGWKV11	JS-PALMD	150	$ 1,702
2139244	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	BHWKV11	JS-HB-14	1D85	$ 1,702
2139245	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	FHWKV11	JS-HB-14	1D113	$ 1,702
2139246	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	5HWKV11	JS-HB-14	1D92	$ 1,702
2139247	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	HGWKV11	JS-HB-17	2D30B	$ 1,702

2139248	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	JGWQKV11	JS-HB-17	2D34	$ 1,702
2139249	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	7HWKV11	JS-PALMD	150	$ 1,702
2139250	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	HHWKV11	JS-PALMD	150	$ 1,702
2139251	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	OPTIPLEX GX260	8GWKV11	JS-HB-14	1D80	$ 1,702
156744	RECORDER, VIDEO CASSETTE	PANASONIC	AG6100	E6TA00356	JS-45	248A	$ 1,098
304473	RECEIVER, TELEVISION	SONY CORP	CVM1271	2006717	JS-17	2062A	$ 562
1033304	PRINTER, COLOR VIDEO	SONY CORP	UP5000	59699	JS-9B	2150A	$ 5,718
1033312	HANDLER, DIGITAL INFO W/KB	SONY CORP	DIH2000	10162	JS-9B	2150A	$ 2,416
1033317	MONITOR, TELEVISION	SONY CORP	PVM1342Q	2012239	JS-9B	2150A	$ 883
1033343	RECORDER/PLAYER STILL VIDEO	SONY CORP	MVR5600	11305	JS-9B	2150A	$ 3,156
1033860	SCANNER, COLOR VIDEO	SONY CORP	UY-T55	10573	JS-9B	2150A	$ 5,100
1456314	READER, CD ROM	SUN MICROSYSTEMS INC	411	137G4348	JS-15	1000	$ 766
1549207	COMPUTER, MICRO	RAYNOR COMPUTER SERVICE INC	B260	304828	JS-9B	2150A	$ 1,838
1554132	RECORDER, VIDEO CASSETTE	HITACHI DENSHI LTD	VT3800A	80908532	JS-9B	2150A	$ 950
1554146	DISPLAY UNIT	NEC TECHNOLOGIES INC FRMLY NEC	JC1404HMA	93M10114S	JS-9B	2150A	$ 908
1554147	COMPUTER, MICRO	COMPAQ COMPUTER CORP	2571	4808AQ280350	JS-9B	2150A	$ 6,383
1554155	PROJECTOR	ELECTROHOME LTD	ECP3000	105370008 A	JS-9B	2150A	$ 10,460
1617044	CAMERA SYSTEM, DIGITAL	NIKON CORP	COOLPIX885	3204477	JS-17	236	$ 530
1653512	CAMERA SYSTEM,	NIKON CORP	COOLPIX885	3204478	JS-45	528	$ 530

	DIGITAL						
1913969	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	JPKH004145	JS-9B	2150	$ 1,454
1914117	SERVER, ADP	COMPAQ COMPUTER CORP	SERIES4000	D735HWA30075	JS-45	240	$ 11,823
1914638	DISPLAY UNIT	VIEWSONIC CORP/ DIV KEYPOINT	VCDTS21360	1J73100191	JS-45	619	$ 979
1914926	DISPLAY UNIT	COMPAQ COMPUTER CORP	620	643CB00HA620	JS-45	240	$ 750
1917663	DISK DRIVE UNIT	IOMEGA	V1000S	W1MU3807AW	JS-45	528	$ 800
1919497	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USNC084476	JS-45	548	$ 1,498
1996144	SCANNER, IMAGE	FUJITSU AMERICA INC	M4099D	612	JS-45	619	$ 5,314
1915270	COMPUTER, LAPTOP	IMPERIAL COMPUTER CORP 318 N B	6200AT	N6SD817401149	JS-45	528	$ 1,890
1917664	DISK DRIVE UNIT	IOMEGA	V1000S	W1MU380TA4	JS-45	528	$ 800
1926920	BONDER, WEDGE-WEDGE	WEST-BOND INC	7600A66A	15132	JS-15	1001	$ 13,215
1996337	INSPECTION PENETRANT, LIQUID	GOULD BASS	UPE101	6027	JS-10	110	$ 18,877
1996338	FILTRATION SYSTEM, NANO	INFO TECH	SPLITTERXD	AA11A	JS-10	110	$ 15,945
2080522	COMPUTER, MICRO	COMPAQ COMPUTER CORP	ML370	3882Q022	JS-46	300	$ 4,912
17645	LOAD CELL	SINTECH DIV OF MTS INC	3397-136	8960	JS-15	1002	$ 10,000
304549	MONITOR, TELEVISION	SONY CORP	CVM1750	11720	JS-15	3001A	$ 826
1336357	COMPUTER, MICRO	SUN MICROSYSTEMS INC	144	328F0610	JS-420	4013	$ 0,547
1446917	MONITOR, TELEVISION	SONY CORP	PVM1354Q	2016042	JS-15	3001A	$ 1,075
1446919	CAMERA-RECORDING, VIDEO	SONY CORP	DXC170A	111369	JS-15	3002	$ 1,190
1446921	ANALYZER, DIELECTRIC	VITREK CORP	944I	11353	JS-15	1001A	$ 5,784

1446925	TEST STATION, AUTOMATED ELECT	INTEGRATED SYSTEMS INC	NONE	330	JS-420	4013	$ 215,750
1447124	CAMERA, DIGITAL VIDEO	SONY CORP	DKC5000	10507	JS-15	1002B	$ 9,220
1447125	CAMERA, DIGITAL VIDEO	SONY CORP	DKC5000	10514	JS-15	1002B	$ 9,220
1447126	MONITOR	SONY CORP	PVM1953MD	2011487	JS-15	1002B	$ 2,011
1447127	CAMERA, DIGITAL MICROSCOPE	POLAROID CORP	DMC1	08701005AJ	JS-15	1002B	$ 5,275
1447129	PRINTER, VIDEO	SONY CORP	UP5500	11069	JS-15	1002B	$ 5,450
1455808	SPLICER, MICRO W/CASE	PREFORMED LINE PRODUCTS CO	MS2	AA1751	JS-15	3001A	$ 6,490
1455815	MONITOR, TELEVISION	SONY CORP	KV2511CR	2000574	JS-15	3002	$ 1,121
1455817	CAMERA-RECORDING, VIDEO	SONY CORP	DXC107A	101134	JS-15	3001A	$ 1,360
1455819	DISPLAY UNIT	SONY CORP	PVM1343MD	2021238	JS-15	3002	$ 1,260
1455850	SPLICER, MICRO W/CASE	PREFORMED LINE PRODUCTS CO	MS2	AA1748	JS-15	3001A	$ 6,490
1456392	COMPUTER, MICRO	M & A TECHNOLOGY INC	MANDA CXP150+	2668	JS-15	1001	$ 1,314
1457027	MICROMANIPULATOR	MICROMANIPULATOR CO INC THE	6000	910178	JS-15	1001	$ 27,227
1457029	CONTROL UNIT, TEMPERATURE	MICROMANIPULATOR CO INC THE	HCSM	907177	JS-15	1001B	$ 8,000
1457037	MICROTESTER	DAGE BACKPLANE SYSTEMS LTD	SERIES22A	91288	JS-15	1001	$ 14,808
1457041	SIMULATOR, ELECTROSTATIC	ELECTRO-TECH SYS INC	910	180	JS-15	1001A	$ 5,494
1457048	OSCILLOSCOPE	TEKTRONIX INC	2467B	B051280	JS-15	1001	$ 12,804
1457051	CYCLING SYSTEM, THERMAL	F T S CORP	TJ80B2	TJ-8-91-52	JS-420	4013	$ 17,875
1457052	TESTER, COMPONENT	ANALOG DEVICES INC	LST2020	122-1108	JS-15	1001A	$ 34,100
1457053	DISPLAY UNIT	QUME CORP	QVT101+	AA010752	JS-15	1001A	$ 792
1457054	OSCILLOSCOPE	HEWLETT-PACKARD CO	54510A	3022A01894	JS-15	1001	$ 9,822
1457056	TEST HEAD, MIX	ANALOG DEVICES	LTS0680	1067670	JS-15	1001	$ 14,000

	SIGNAL	INC					
1457058	TEST HEAD, DIGITAL	ANALOG DEVICES INC	LTS0655	9150450	JS-15	1001	$ 10,995
1457059	COMPONENT TEST SYSTEM	ANALOG DEVICES INC	LTS2410	2190017	JS-15	1001	$ 5,500
1457060	TESTER, COMPONENT	ANALOG DEVICES INC	LTS2600	256098	JS-15	1001A	$ 8,580
1457061	TESTER, COMPONENT	ANALOG DEVICES INC	LTS2510	1158161	JS-15	1001	$ 5,500
1457066	CURVE TRACER	SONY CORP	370A	J302151	JS-15	1001A	$ 20,935
1457071	MULTIMETER	HEWLETT-PACKARD CO	3458A	2823A09365	JS-15	1001	$ 6,914
1457073	METER, PRECISION LCR	HEWLETT-PACKARD CO	4284A	2940J02897	JS-15	1001A	$ 10,728
1457084	SPECTROMETER, ATOMIC	APPLIED RESEARCH LABORATORIES	3460	5359	JS-15	1001A	$ 74,062
1457085	TESTER, WIRE	CLINTON INSTRUMENT CO	30-Jun	NONE	JS-15	1001A	$ 14,600
1457089	CABINET, X-RAY SYSTEM	HEWLETT-PACKARD CO	438558	2317A10279	JS-15	1001A	$ 17,717
1457091	LEAK DETECTOR, MASS SPECTROMTR	VARIAN VACUM PRODUCTS	947	DJAE 1001	JS-15	1001A	$ 30,920
1457095	PINDTESTER	SPECTRAL DYNAMICS	4501A	9131B820 156	JS-15	1001A	$ 10,000
1457107	CIRCULATOR REFRIGERATED BATH	NESLAB INSTRUMENTS INC	RTE100	91HML92780-10	JS-15	1001B	$ 8,475
1457108	ION ETCHER, MICRO REACTIVE	TECHNICS INC	85RIE	NONE	JS-15	1001B	$ 22,000
1457121	SAW, DIAMOND PRECISION	BUEHLER LTD	ISOMET PLUS	443-ISP-0666	JS-15	1001B	$ 6,775
1457150	OVEN	AEHR TEST SYSTEMS	MAX64000	7676	JS-333	20012	$ 76,265
1457151	SHOCK TESTER, THERMAL	GENERAL SIGNAL CORP LINDBERG	WSP109C-MP3	WSP-247	JS-15	HIBAY	$ 26,527
1457152	CHAMBER, TEMP/HUMIDITY	DESPATCH INDUSTRIES INC	16619A	148493	JS-15	HIBAY	$ 18,269
1457167	EDDY CURRENT INSTRUMENT	UNI WEST	51294	39	JS-15	HIBAY	$ 9,750

1457177	TESTER HARDNESS	KRAUTKRAMER BRANSON INC	MIC2	31990-1139	JS-15	HIBAY	$ 7,698
1457180	FUME HOOD	KEWAUNEE SCIENTIFIC EQUIPMENT	501152NWE	R917275	JS-15	1001B	$ 6,730
1457181	FUME HOOD	KEWAUNEE SCIENTIFIC EQUIPMENT	501152NWE	R918085	JS-15	1001B	$ 6,730
1457190	DISPLAY UNIT	TOSHIBA AMERICAN INFO SYSTEMS	TVM901	70559	JS-15	1002	$ 4,805
1457203	COMPARATOR, OPTICAL	STARRETT L S CO WEBBER GAGE DV	HB400	3549	JS-15	1001A	$ 9,939
1457206	SCALE TESTER	NEW AGE INDUSTRIAL CORP INC	NI400C	91846	JS-15	1002	$ 11,875
1457218	PRINTER, ADP	OKIDATA CORP	GE5253A	012C0447611	JS-15	1001A	$ 1,200
1457231	DISPLAY UNIT	SONY CORP	GVM2020	2004433	JS-15	1002B	$ 1,870
1457234	PRINTER, ADP	TEKTRONIX INC	4684	JPR578	JS-15	1002B	$ 8,576
1457240	MICROSCOPE MEASURING	LEICA MICROSYSTEMS INC	301-371.011	561001/141264	JS-15	1002B	$ 29,090
1457241	CAMERA-RECORDING, VIDEO	SONY CORP	DXC151A	101279	JS-15	1001	$ 1,310
1457249	TESTER, MICROHARDNESS	LECO CORP F-LABORATORY EQUIP	M400G1	200681	JS-15	1002B	$ 12,105
1457251	METALLOGRAPH	OLYMPUS AMERICA INC	866-100-400	812004	JS-15	1002B	$ 25,525
1457255	MONITOR, TELEVISION	SONY CORP	PVM1390	5006418	JS-15	1001	$ 500
1550064	COMPUTER, MICRO	RAYNOR COMPUTER SERVICE INC	MT460S	VL000115	JS-15	1001A	$ 2,573
1553791	SPLICER, MICRO FUSION	NOYES FIBER SYSTEMS	MS2	AA1756	JS-15	3001A	$ 5,531
1554170	COMPONENT TEST SYSTEM	ANALOG DEVICES INC	LTS2800	27379	JS-15	1001	$ 7,500
1605799	CAMERA, DIGITAL CCD	PHOTOMETRICS LTD	CH250	NONE	JS-15	1001	$ 27,886
1606360	SCANNER, HRO	UNI WEST	2.887.01-1001	1001	JS-15	HIBAY	$ 5,850
1618239	CAMERA, DIGITAL VIDEO	SONY CORP	DCR-TRV27	401508	JS-15	1002B	$ 970

1618244	CAMERA, DIGITAL SYSTEM	PIXERA	PRO 600ES	NONE	JS-15	1002A	$ 6,944
1619932	HOLDER, WORK DP4721	DAGE BACKPLANE SYSTEMS LTD	DP4721-BT22-MB	2021142	JS-15	1001A	$ 5,635
1620038	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	1801FB	MX0X11064832342B33JL	JS-15	1001	$ 534
1620039	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	1801FB	MX0X11064832342B33CL	JS-15	1000	$ 534
1653049	SCANNER, TEST POINT	CIRRIS SYSTEMS CORP	CH+	30532	JS-15	1001A	$ 5,795
1653050	ANALYZER, DIELECTRIC	VITREK CORP	944I	12278	JS-15	1001A	$ 5,080
1653289	CAMERA SYSTEM, DIGITAL	NIKON INC	D1X	E162072	JS-15	1001	$ 7,782
1653290	CAMERA SYSTEM, DIGITAL	NIKON INC	995 COOL PIX	3001320	JS-15	1002B	$ 899
1653333	MICROSCOPE, STEREO	LEICA MICROSYSTEMS INC	MZ6	NONE	JS-15	3002	$ 5,804
1734953	CURRENT TESTER, BASE UNIT	UNI WEST	US450LT	26	JS-15	HIBAY	$ 7,000
1736973	CHAMBER, BURN-IN AND TEST	MICRO INSTRUMENT CO	2110	8943-001	JS-15	1001	$ 31,756
1736978	DISPLAY UNIT	NEC TECHNOLOGIES INC FRMLY NEC	JC1743UMA	6631637LA	JS-15	1001	$ 1,400
1736979	COMPUTER, MICRO	ZEISS CARL INC	TITAN II EISA	A913111964945	JS-15	1001	$ 33,000
1736980	MICROSCOPE, LASER SCANNING	ZEISS CARL INC	LSM310	NONE	JS-15	1001	$ 170,873
1736981	DISPLAY UNIT	SONY CORP	MICROC1782	6310313	JS-15	1001	$ 1,400
1736984	ENCLOSURE, OPTICAL W/TABLE	TECHNICAL MFG CORP	NONEX	NONE	JS-15	1001	$ 5,050
1825551	MICROSCOPE, STEREO	LEICA MICROSYSTEMS INC	MZ6	NONE	JS-15	1002B	$ 5,735
1825554	MICROSCOPE, STEREO	LEICA MICROSYSTEMS INC	MZ6	NONE	JS-15	3002	$ 5,626
1847577	SPOOLER, HIGH FREQUENCY WIRE	HALL INDUSTRIES	CUSTOM	2179	JS-15	HIBAY	$ 120,900
1847578	PRINTER, ADP	EPSON AMERICA INC	P710A FX870	61P1348349	JS-15	HIBAY	$ 500
1850353	COMPUTER, MICRO	M & A TECHNOLOGY INC	CXP200	75157	JS-15	1001B	$ 944

1855765	COMPUTER, MICRO	M & A TECHNOLOGY INC	P200	76220	JS-15	3002	$ 1,446
1855766	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04007	JS-15	3002	$ 1,400
1918079	CHAMBER, ENVIRONMENTAL	CINCINNATI SUB-ZERO PRODUCTS	WU26-2-2LN2H/AC	97-WU-13025	JS-15	HIBAY	$ 57,185
1922485	SIMULATOR, ELECTROSTATIC	ELECTRO-TECH SYS INC	930C	177	JS-15	1001A	$ 8,190
1927088	CAMERA-RECORDING, VIDEO	SONY CORP	CCDTRV815	1011162	JS-15	1002B	$ 1,000
1927089	SANDER, DISK	WILTON CORP	4406	33682	JS-15	HIBAY	$ 11,063
1928796	CAMERA, DIGITAL STILL	SONY CORP	MVC-FD7	174087	JS-15	1002B	$ 748
1928797	CUTTER, DUAL WAVE LASER	NEW WAVE RESEARCH	LCSII532/355	2760	JS-15	1001	$ 42,140
1928798	POWER SUPPLY	HEWLETT-PACKARD CO	6624A	U537350941	JS-15	HIBAY	$ 5,121
1928799	SAW, CUTOFF	BUEHLER EQUIPMENT CO	95C1800	532-71MSC-2523	JS-15	1001B	$ 6,887
1987359	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	P6450	5J3B1	JS-15	2000A	$ 1,113
1987776	FURANCE, SAMPLE RE-MELT	ZEEBAC INC	900751	KK084674	JS-15	HIBAY	$ 12,600
1995757	OSCILLOSCOPE, INFINIUM	HEWLETT-PACKARD CO	54815A	US40110205	JS-15	1001	$ 14,508
1995758	MAINFRAME, LOAD	HEWLETT-PACKARD CO	6050A	US37141739	JS-15	HIBAY	$ 1,891
1995760	TESTER, NOISE DETECTION	PTI CONTROLS	4501L	0018L820170-597	JS-15	1001A	$ 17,995
1995761	HARNESS TESTER BASE UNIT	CIRRIS SYSTEMS CORP	CH+	23255	JS-15	1001A	$ 6,295
1995765	MOVER, AUTOMATIC SPECIMAN	STRUERS INC	ROTOFORCE4	5251515	JS-15	1001B	$ 6,506
1996159	TESTER, ROCKWELL HARDNESS	INSTRON CORP	2000T	R2000P4697	JS-15	1002	$ 15,040
1996179	X-RAY UNIT, MICROFOCUS	CRYSTAL TECHNOLOGY INC	CRX2000	1S2086.0800	JS-15	1001	$ 128,798
1996180	MONITOR, COLOR VIDEO	SONY CORP	CPD-G500	2729826	JS-15	1001	$ 821

1996181	PRINTER, ADP	MITSUBISHI ELECTRIC CORP	CP7000	100764	JS-15	1001	$ 2,670
1996199	POWER SUPPLY	POWER TEN INC	R83C150100	0045C0038	JS-15	1001	$ 8,100
1996200	DISPLAY UNIT	SONY CORP	PVM14M4U	2018942	JS-15	1002B	$ 1,570
1996201	MICROSCOPE	LEICA MICROSYSTEMS INC	SZ6	NONE	JS-15	1001A	$ 5,418
1996202	COMPUTER, LAPTOP	INTERNATIONAL BUSINESS MACHINE	2629H1U	78-W3377	JS-15	2000	$ 4,112
1996203	MULTIMETER, DIGITAL	AGILENT TECH INC	3458A	2823A26776	JS-15	1001A	$ 7,195
1996204	PRESS, MOUNTING	STRUERS INC	LABOPRESS3	5081471	JS-15	1001B	$ 6,578
1996205	CAMERA, DIGITAL COLOR	FUJI PHOTO FILM CO LTD	HC300Z	01B0020	JS-15	1002B	$ 4,703
2078603	CHAMBER, ENVIRONMENTAL TESTING	DESPATCH INDUSTRIES INC	926E1-4-0-120	168454	JS-15	HIBAY	$ 5,900
2078604	SAW, CUT-OFF ABRASIVE	STRUERS INC	DISCOTOM5	5110531	JS-15	1001B	$ 12,620
2080065	COMPUTER, MICRO	COMPAQ COMPUTER CORP	NONEX	6106 FCJ6 A001	JS-15	1002	$ 1,700
2080327	MONITOR, VIDEO COLOR	SONY CORP	PVM20L5	2000803	JS-15	1002B	$ 2,343
2081144	POWER SUPPLY CONTROL	IVS INC	2000	15	JS-15	HIBAY	$ 5,000
2081145	COMPUTER, MICRO	IVS INC	8100-7000-0210	142	JS-15	HIBAY	$ 16,000
2081146	INTERFACE, DIGITAL	IVS INC	8100-7000-021D	142	JS-15	HIBAY	$ 5,000
2081147	INTERFACE, ANALOG	IVS INC	8100-7000-021A	142	JS-15	HIBAY	$ 5,000
2081148	VACUUM CONTROL SYSTEM	IVS INC	NONE	1-359	JS-15	HIBAY	$ 128,275
2081161	PRINTER, ADP	KODAK CANADA LTD	XLS8660	HG704622	JS-15	1002B	$ 4,130
2082200	OVEN	DESPATCH INDUSTRIES INC	RAD1-42-2E	170607	JS-15	HIBAY	$ 7,180
2082202	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	4600	0U0314-42940-37C00LX	JS-15	1001A	$ 1,538
2082203	SPECTRAL IMAGING SYSTEM	THERMO ELECTRON CORP	C10015	903064	JS-15	1002A	$ 32,600
2082208	MICROSCOPE, ELECTRON	JEOL U S A INC	JSM-6360LV	MP18300062	JS-15	1002A	$ 100,000

2082210	DETECTOR, EDS	THERMO ELECTRON CORP	4637	664F-1SUS-SN	JS-15	1002A	$ 19,900
2082211	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	4600	0U0314-42940-37C00LV	JS-15	1001	$ 1,538
2082212	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	4600	0U0314-42940-37C00LW	JS-15	1001A	$ 1,538
2082214	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	4600	0U0314-42940-37C00LE	JS-15	1001	$ 1,538
2082228	MILLING MACHINE	FADAL ENGINEERING CO INC	EMC	12003095626	JS-15	HIBAY	$ 47,004
2082447	TELEVISION, FLAT PANEL PLASMA	PANASONIC	TH-50PHW3	XB2220388	JS-15	3002	$ 9,999
2082450	COMPUTER, LAPTOP	INTERNATIONAL BUSINESS MACHINE	2653-H4U	78-LV221	JS-15	3002	$ 3,182
2082453	COMPUTER, LAPTOP	INTERNATIONAL BUSINESS MACHINE	A31P4	78-LV267	JS-15	1001	$ 3,182
2082456	PUMP	VARIAN VACUM PRODUCTS	DS302	108101-2002	JS-15	1000	$ 8,450
2082457	LEAK DECTOR	VARIAN VACUM PRODUCTS	959 TURBO	LLH2035	JS-15	1000	$ 12,851
2082459	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	6229-2PU	1S62292PUS8G7026	JS-15	1001	$ 3,406
2082460	DISPLAY UNIT	INTERNATIONAL BUSINESS MACHINE	6657-HG2	BN75-00103A	JS-15	1001	$ 807
2082461	COMPUTER, LAPTOP	INTERNATIONAL BUSINESS MACHINE	2653-H4U	78-LV206	JS-15	3001	$ 3,182
2082463	CAMERA, INFRARED	FLIR SYSTEMS AB	SC500	19320021	JS-15	1001	$ 38,208
2082465	MAINFRAME, LOAD	AGILENT TECH	N3300A	MY41000517	JS-15	1001B	$ 7,050
2082466	DISPLAY UNIT	INTERNATIONAL BUSINESS MACHINE	6657-HG2	55-F9886	JS-15	1001	$ 807
2082467	DISPLAY UNIT	INTERNATIONAL BUSINESS MACHINE	6657-HG2	55-F9894	JS-15	1001	$ 807
2082468	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	6229-2PU	1S6229PU78G7035	JS-15	1001	$ 3,406
2082469	DISPLAY UNIT, COMBO	INTERNATIONAL BUSINESS MACHINE	18U	AM890VF	JS-15	1001	$ 1,947
2083821	POWER SOURCE	HEWLETT-PACKARD CO	6813A	US37290126	JS-15	1001	$ 6,300
2083822	MULTIMETER,	KEITHLEY	2750	NONE	JS-15	1001A	$ 6,235

	SWITCH SYSTEM	INSTRUMENTS INC					
2083823	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	SMM	CNGYG11	JS-15	1001	$ 7,300
2083824	DISPLAY UNIT	DELL COMPUTER CORP F-PC'S LTD	E551	NONE	JS-15	1001	$ 4,400
2083826	TESTER, TENSILE TO	TINIUS OLSEN TESTING MACHINE	SUPER L	NONE	JS-15	1002	$ 111,200
2083827	DISPLAY UNIT, COMBO	INTERNATIONAL BUSINESS MACHINE	18U	AM890YH	JS-15	1002	$ 1,947
2083830	DISPLAY UNIT	INTERNATIONAL BUSINESS MACHINE	6657-HG2	55-F9884	JS-15	3001	$ 807
2083831	SPLICER, FIBEROPTIC FUSION	TRITEK SOLUTIONS INC.	FASEII	200700	JS-15	3001A	$ 8,490
2083947	COMPUTER, MICRO	INTERNATIONAL BUSINESS MACHINE	6229-2PU	78G7071	JS-15	HIBAY	$ 3,406
2086562	SPECTROMETER, OPTICAL EMISSION	THERMO ELECTRON CORP	3460	2704	JS-15	1001A	$ 138,810
2086596	PLASTIC MOLD DECAPSULATION SYS	NSC INTERNATIONAL CORP	PS101	5182	JS-15	1001B	$ 40,222
2086597	MICROSCOPE STEREO W/WORKSTATIO	NIKON CORP	P-FMD	1004923	JS-15	1002B	$ 21,671
2086659	COMPUTER, LAPTOP	INTERNATIONAL BUSINESS MACHINE	A31P	KP-PYHY9	JS-15	1001	$ 2,199
2086661	COMPUTER, LAPTOP	INTERNATIONAL BUSINESS MACHINE	A31P	KP-PYHY5	JS-15	1001B	$ 2,199
2120007	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	WHL	JPRR431	JS-15	1001	$ 4,439
2120008	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	WHL	3QRRH31	JS-15	1000	$ 4,439
2120009	METER, PRECISION LCR	QUADTECH INC	1420 PRECISION LCR	4156030	JS-15	1001A	$ 5,020
2145277	TESTER, MICRO HARDNESS	STRUERS INC	DURAMIN A-300	5640018	JS-15	1002B	$ 58,514
2145278	SYSTEM, THERMOJET TEMP CYCLING	FTS SYSTEMS INC	THJ80120	25082	JS-15	1001	$ 32,825

2145279	TESTER, COMPUTERIZED LOAD FRAM	MTS SYSTEMS CORP	QTEST/50LP	M10167205	JS-15	1002	$ 30,575
75376	PRINTER, ADP	HEWLETT-PACKARD CO	33440A	15741	JS-36	1003A	$ 1,672
1003559	HEIGHT GAGE MICROHITE ELECTRON	BROWN AND SHARPE MFG CO	2J0777506	7.90014	JS-10	116A	$ 14,203
1003668	MICROWATCHER SYSTEM	PHOTOVOLT CORP	VS30H	82MH1161	JS-10	116A	$ 11,500
1003669	PRINTER, VIDEO	MITSUBISHI ELECTRIC CORP	CP10U	100886	JS-10	116A	$ 1,599
1007564	PRINTER, ADP	HEWLETT-PACKARD CO	33449A	3044J77274	JS-10	CAGE	$ 1,420
1007984	MICROWATCHER SYSTEM	PHOTOVOLT CORP	VS30H	82MH0820	JS-10	138	$ 11,500
1118441	PRINTER, ADP	HEWLETT-PACKARD CO	33449A	3104JD3898	JS-222	MODEL	$ 1,696
1119355	PRINTER, ADP	PRINTRONIX INC	P6280L	124599	JS-45	243E	$ 8,454
1168290	PRINTER, ADP	HEWLETT-PACKARD CO	33449A	3221A86120	JS-45	448G	$ 1,385
1168298	PRINTER, ADP	HEWLETT-PACKARD CO	33449A	3221A86021	JS-45	211C	$ 1,385
1235200	PRINTER, ADP	EPSON AMERICA INC	P18MA	0FG0010931	JS-49	2300	$ 739
1293584	DISPLAY UNIT	NEC ELECTRONICS USA INC	JC1404HMA	96K23685M	JS-13	HIBAY	$ 649
1445981	PRINTER, ADP	HEWLETT-PACKARD CO	C3982A	USCB037923	JS-920N	3339	$ 860
1447723	COMPUTER, MICRO	M & A TECHNOLOGY INC	MANDA CXP150+	2887	JS-10	116	$ 1,314
1457163	PARTICLE UNIT	ECONOSPECT CORP	WH2500	912697	JS-10	110	$ 7,650
1457173	FIBERSCOPE, FLEXIBLE	OLYMPUS AMERICA INC	IF8D4-20	NONE	JS-10	138	$ 10,431
1457175	TESTER ULTRASONIC	HITACHI INSTRUMENTS INC	DT2000	286	JS-10	138	$ 8,900
1457176	GAGE, ELECTRONIC THICKNESS	PANAMETRICS INC	26DL	910186505	JS-10	138	$ 6,000
1457244	CAMERA, STILL PICTURE	HITACHI DENSHI LTD	VK-C350	90900759	JS-10	138	$ 2,930

1542940	CAMERA-RECORDING, VIDEO	PANASONIC	GP-KR212	39B17213	JS-45	243	$ 500
1546171	MACHINE COORDINATE MEASURING	BROWN AND SHARPE MFG CO	9129	1094-438	JS-10	116A	$ 153,719
1546172	COMPUTER, MICRO	AST RESEARCH INC.	543W	A05202946	JS-10	CAGE	$ 1,895
1546174	CONTROLLER, RETRO	BROWN AND SHARPE MFG CO	S32CS	177506/25	JS-10	116A	$ 18,600
1549238	COMPUTER, MICRO	RAYNOR COMPUTER SERVICE INC	B260	304838	JS-16A	1012	$ 1,838
1603976	CAMERA, DIGITAL STILL	SONY CORP	MVC-FD7	36252	JS-920N	3339	$ 733
1604063	COMPUTER, ELECTRONIC NOTEBOOK	APPLE COMPUTER INC	H0149	JE72510T9BU	JS-45	211BA	$ 1,071
1604064	COMPUTER, PALMTOP	HEWLETT-PACKARD CO	HP320LX	SG74203143	JS-45	211BA	$ 546
1606340	FIBERSCOPE, INDUSTRIAL	OLYMPUS OPTICAL CO LTD	IF2D5-12	1600172	JS-10	138	$ 8,188
1618057	SWITCH, 50 VPN DEVICE	NETSCREEN TECHNOLOGIES	NS-050-001	1.9112E+14	JS-45	528	$ 5,267
1650596	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	2CXDH31	JS-46	300	$ 6,339
1650741	SERVER, ADP	DELL COMPUTER CORP F-PC'S LTD	SMP01	FCXDH31	JS-46	300	$ 6,339
1653476	CAMERA SYSTEM, DIGITAL	OLYMPUS OPTICAL CO LTD	E10	1080806	JS-10	138	$ 1,800
1735911	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04090	JS-16	277	$ 1,400
1735913	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03368	JS-44	244	$ 1,400
1846726	DISPLAY UNIT	PANASONIC	E21	FA6630167	JS-45	422B	$ 1,421
1846727	DISPLAY UNIT	PANASONIC	E21	FA6630774	JS-17	2070	$ 1,421
1846728	DISPLAY UNIT	PANASONIC	E21	FA6630777	JS-10	116A	$ 1,421
1846729	DISPLAY UNIT	PANASONIC	E21	FA6630779	JS-17	2063A	$ 1,421
1846730	DISPLAY UNIT	PANASONIC	E21	FA6630781	JS-9	143	$ 1,421
1847919	COORDINATE MEAS. MACHINE, PORT	ROMER INC	SYSTEM6 2500	S6-1-533	JS-10	116A	$ 98,200

1847920	COMPUTER, LAPTOP	NEC TECHNOLOGIES INC FRMLY NEC	PC6620-91803	317042666	JS-10	116A	$ 14,500
1850097	COMPUTER, MICRO	M & A TECHNOLOGY INC	CXP200	75123	JS-49	2300	$ 944
1854566	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	91TXM	2AAWEF705E03476	JS-36	2030	$ 1,400
1854567	COMPUTER, MICRO	M & A TECHNOLOGY INC	686	76258	JS-36	3028	$ 1,446
1854945	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705104103	JS-36	2030	$ 1,400
1854949	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705104204	JS-7A	245A	$ 1,400
1854951	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705104097	JS-45	243D	$ 1,400
1855742	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04190	JS-45	442C	$ 1,400
1855744	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03587	JS-10	116A	$ 1,400
1855746	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03336	JS-10	116A	$ 1,400
1855748	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03327	JS-37	1209B	$ 1,400
1855750	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03490	JS-32	109	$ 1,400
1855752	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04176	JS-350	122	$ 1,400
1855760	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04167	JS-45	243E	$ 1,400
1855762	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03473	JS-45	211BA	$ 1,400
1855764	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E03480	JS-36	2030	$ 1,400
1913060	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04092	JS-10	CAGE	$ 1,400
1913066	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04060	JS-33	113	$ 1,400
1913072	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04608	JS-36	2030	$ 1,400
1913074	DISPLAY UNIT	MITSUBISHI	TFW9105SKTKW	705E03464	JS-44	244	$ 1,400

		ELECTRIC CORP					
1913974	PRINTER, ADP	HEWLETT-PACKARD CO	C3917A	USKC294338	JS-16	277	$ 1,454
1914925	SCANNER, ADP	FUJITSU LTD	M3099GX	6	JS-32	143	$ 19,000
1919993	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF167465	JS-15	136	$ 1,461
1919994	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF167464	JS-32	143	$ 1,461
1919995	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF163848	JS-36	1006B	$ 1,461
1919996	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF163483	JS-37	1209	$ 1,461
1919998	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF167471	JS-45	211B	$ 1,461
1919999	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF167466	JS-350	122	$ 1,461
1920000	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF163499	JS-7A	245A	$ 1,461
1920003	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USNC144717	JS-44	244	$ 1,487
1922731	COMPUTER, MICRO	MICRON CORP	SE440BX2P11450CR	1625672-0012	JS-10	CAGE	$ 10,600
1926976	PROJECTOR, CONTOUR	OPTICAL GAGING PRODUCTS INC	QL20	Q1200557	JS-10	116A	$ 38,605
1928741	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04552	JS-45	230	$ 1,400
1929542	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEF192011	JS-17	163A	$ 1,487
1929543	PRINTER, ADP	HEWLETT-PACKARD CO	C4121A	USEK090195	JS-45	249	$ 1,487
1987387	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	TFW9105SKTKW	705E04098	JS-36	2030	$ 1,400
1995587	DETECTOR, ULTRASONIC	KRAUTKRAMER BRANSON INC	USD15X	34793-3846	JS-10	138	$ 11,865
1995723	DISPLAY UNIT	MITSUBISHI ELECTRIC CORP	91TXM	2AAWEF705E03363	JS-49	2300	$ 1,400
1996255	COMPUTER, MICRO	DELL COMPUTER CORP F-PC'S LTD	530	GDFW01	JS-10	116A	$ 7,600
2082206	PROFILOMETER, SURFTEST	MITUTOYO	SJ-400	320171	JS-10	116A	$ 8,650

2082209	MASTERSCAN FLAW DETECTOR	SONATEST	MASTERSCAN 340	3401537C	JS-10	138	$ 7,646
G099396	COMPUTER, MICRO	UNISYS CORP	T3146-00	382326783	JS-13	HIBAY	$ 2,253

ATTACHMENT J.7C LIST OF NASA PROVIDED ANALYSIS TOOLS

Below is a list of the primary analysis tools that S&MA provides. The list included below is not all-inclusive, but is representative of the tools provided by the Government.

SAPHIRE – Systems Analysis Programs for Hands-on Integrated Reliability Evaluations

ECTree – Event Sequence Tree

ASSAP – Galileo/Advanced System Safety Assessment Program

SEaCLIF – Systems Effects and Capability Losses from Inserted Failures

RMAT – Reliability and Maintainability Assessment Tool (RMAT)

RBDA – Reliability Block Diagram Analysis (RBDA)

J.8 RESERVED

J.9 SMALL BUSINESS SUBCONTRACTING PLAN

Science Applications International Corporation
An Employee-Owned Company

Small/Small Disadvantaged/Women-Owned/HUBZone/HBCU/MI/ Veteran-Owned/Service Disabled Veteran-Owned Businesses/JWOD Individual Subcontracting Plan

Including
Approved Master Subcontracting Plan Effective 01 January 2006 through 31 December 2008

SAIC DUNS Number 054781240

Subcontracting Goals For
Prime Contract/Solicitation No.: NNJ05106317R
SAIC Bid and Proposal No.: 06-6321-71-2006-001
Revision 1

Prepared By:

Douglas J. Weiss — Date: 1/27/06
Sr. Subcontracts Administrator

Approved By:

Frank L. Culbertson Jr. — Date: 1-27-06
Business Unit General Manager

Approval Concurrence:

Rochelle Lowe — Date: 1-27-06
Small Business Compliance Manager

Approval Concurrence:

Craig Burridge — Date
NASA Contracting Officer

SPECIFIC SUBCONTRACTING PLAN
BASED ON FAR 52.219-9 REQUIREMENTS

CONTENTS

[ ] References Specifically Identifies FAR 52.219-9 Requirements
** SPECIFICALLY IDENTIFIES DFAR 219.705-4

I. SUBCONTRACTING GOALS

A. Prime Contract/Solicitation Number: NNJ05106317R
SAIC Bid and Proposal Number: 06-6321-71-2006-001
Proposal Title: Safety and Mission Assurance Support Services Contract (SSC)

When Awarded, contract to be reported under:
Group Name: Research, Development, Test, and Evaluation (RDT&E)
Group No: 5 Business Unit No: 32 Division No: 6321
Group Small Business Advocate: Christopher C. Cobb

B. Program Summary: This is a Cost Plus Award Fee type contract that provides for the assurance, engineering, and risk assessment in the disciplines of safety, reliability, maintainability, availability, and quality to the NASA JSC Safety and Mission Assurance (S&MA) Directorate.

C. Individual Subcontract Plan Administrator:
Name: Douglas J. Weiss
Employee No: 54438
Title: Sr. Subcontract Administrator
Address: 2200 Space Park Dr., Suite 200
Houston, TX 77058
Telephone No.: 281-336-3912
Location No.: 0296
Group No.: 32 Division No.: 6321
Group/BU Procurement Manager Name: Christopher C. Cobb
Group/BU Procurement Manager Employee No: 38399

D. Contract Representative:
Name: Tuyet T. Nguyen
Employee No: 80563
Title: Contracts Representative III
Address: 2200 Space Park Dr., Suite 200
Houston, TX 77058
Telephone No.: 281-336-3900
Location No.: 0296
Group No.: 32 Group Manager Name: Frank L. Culbertson Jr.
Division No.: 6321

E. Corporate Small Business Development Programs Small Business Liaison Officer:
Name: Rochelle Lowe
Title: Small Business Compliance Manager
Address: 10260 Campus Pt. Drive
San Diego, CA 92121
Telephone: (858) 826-7406
Fax: (858) 826-2693

F. Subcontracting Goal Summary

	Distribution of Subcontracts	Amount	Percentage of Subcontracted Dollars	Percentage of Total Contract Value
1	Total Contract Value	$256,567,576	N/A	100%
2	Total Dollars to be Subcontracted	$86,754,149	100%	33.8
2a	To Large Business	$15,091,053	17.4%	5.9%
2b(1)	Total Small Business	$71,663,096	82.6%	28.0%
2b(2)	To Small Disadvantaged (5%)	$64,639,683	74.5%	25.2%
2b(3)	To Small Woman-Owned (5%)	$12,891,338	14.9%	5.0%
2b(4)	To HBCU/MI	$2,362,142	2.7%	1.0%
2b(5)	To HUBZone (3%)	$8,366,670	9.6%	3.3%
2b(6)	To Small Veteran-Owned (Best Effort)	$21,444,152	24.7%	8.4%
2b(7)	To Small Service Disabled Veteran-Owned (3%)	$21,444,152	24.7%	8.4%
2b(8)	To JWOD	$0.0	0.0%	0.0%

NOTE: NOTE: If above categories are not utilized to the maximum extent required by law, you must provide an explanation or reason for the non or under utilization of S/SDB/WOB/HUBZone/HBCU/MI/VOB /SDVOB/JWOD businesses here:

The above percentages exceed or represent the goals identified in the RFP. The RFP did not require utilization of JWOD, however, should any additional subcontracting arise, SAIC expects to compete all subcontracting activity to the fullest extent possible while actively promoting the use of JWOD.

SAIC proposes to support this effort by subcontracting a significant portion of the work to small disadvantaged businesses as reflected in the percentage outlined above

Subcontracting Goal - Base Period

	Distribution of Subcontracts	Amount	Percentage of Subcontracted Dollars	Percentage of Total Contract Value
1	Total Contract Value	$148,575,532	N/A	100%
2	Total Dollars to be Subcontracted	$50,231,638	100%	33.8%
2a	To Large Business	$8,741,623	17.4%	5.9%
2b(1)	Total Small Business	$41,490,015	82.6%	28.0%
2b(2)	To Small Disadvantaged (5%)	$37,414,756	74.5%	25.2%
2b(3)	To Small Woman-Owned (5%)	$7,477,081	14.9%	5.0%
2b(4)	To HBCU/MI	$1,375,203	2.7%	1.0%
2b(5)	To HUBZone (3%)	$4,870,951	9.7%	3.3%
2b(6)	To Small Veteran-Owned (Best Effort)	$12,366,860	24.6%	8.3%
2b(7)	To Small Service Disabled Veteran-Owned (3%)	$12,366,860	24.6%	8.3%
2b(8)	To JWOD	$0.0	0.0%	0.0%

Subcontracting Goal – Option 1

	Distribution of Subcontracts	Amount	Percentage of Subcontracted Dollars	Percentage of Total Contract Value
1	Total Contract Value	$53,058,190	N/A	100%
2	Total Dollars to be Subcontracted	$17,933,326	100%	33.6%
2a	To Large Business	$3,120,056	17.4%	5.9%
2b(1)	Total Small Business	$14,813,270	82.6%	28.0%
2b(2)	To Small Disadvantaged (5%)	$13,363,351	74.5%	25.2%
2b(3)	To Small Woman-Owned (5%)	$2,661,971	14.8%	5.0%
2b(4)	To HBCU/MI	$486,177	2.7%	1.0%
2b(5)	To HUBZone (3%)	$1,722,029	9.6%	3.2%
2b(6)	To Small Veteran-Owned (Best Effort)	$4,451,024	24.8%	8.4%
2b(7)	To Small Service Disabled Veteran-Owned (3%)	$4,451,024	24.8%	8.4%
2b(8)	To JWOD	$0.0	0.0%	0.0%

Subcontracting Goal – Option 2

	Distribution of Subcontracts	Amount	Percentage of Subcontracted Dollars	Percentage of Total Contract Value
1	Total Contract Value	$54,933,854	N/A	100%
2	Total Dollars to be Subcontracted	$18,589,185	100%	33.8%
2a	To Large Business	$3,229,374	17.4%	5.9%
2b(1)	Total Small Business	$15,359,811	82.6%	28.0%
2b(2)	To Small Disadvantaged (5%)	$13,861,576	74.6%	25.3%
2b(3)	To Small Woman-Owned (5%)	$2,752,286	14.8%	5.0%
2b(4)	To HBCU/MI	$500,762	2.7%	1.0%
2b(5)	To HUBZone (3%)	$1,773,690	9.5%	3.2%
2b(6)	To Small Veteran-Owned (Best Effort)	$4,626,268	24.9%	8.4%
2b(7)	To Small Service Disabled Veteran-Owned (3%)	$4,626,268	24.9%	8.4%
2b(8)	To JWOD	$0.0	0.0%	0.0%

II. PROPOSED DISTRIBUTION AND DESCRIPTION OF SUBCONTRACT AWARDS

	SB	SDB	WOB	LB
A. Single Source Items - Description:				
		$16,744,144 $7,876,667 $18,798,634 $4,524,668 $2,645,518 $5,653,382	$4,524,668	
	$4,661,271			
		$8,366,670	$8,366,670	
				$15,091,053

Type of Award/Description	HUBZone	VOB	SDVOB	HBCU/MI	JWOD
	$8,366,670	$18,798,634 $2,645,518	$18,798,634 $2,645,518	$2,362,142	

SAIC holds Teaming Agreements with: all of the subcontractors identified within Section II of the subcontracting plan.

Describe the principal supplies and services to be subcontracted and identify what will be subcontracted to S/SDB/WOB/HUBZone/HBCU/MI/VOB/SDVOB/JWOD:

SAIC has put together a team of diversified team members to support the various tasks anticipated. The services that will be provided consist of Systems Engineering, Systems Safety Engineering, Risk Management, RMS Engineering, Quality Assurance, Software Assurance, Analysis/Reliability Software Tools, Space Systems Engineering, and Risk Based Decision Making.

The following provides the specific details by team member, their SB category, and the services they will be providing

Company	SB Category	Supplies/Services
	SDB	Systems Assessments/Engineering and System Safety Engineering
	SDB	Risk Management and Risk Based Decision Making
	SDB, VOSB, SDVOSB	Payloads
	SDB, WOSB	System Engineering and Tools
	SDB, VOSB, SDVOSB	RMS Engineering, Quality Assurance, Space Systems Engineering, and Software Assurance
	SDB	Qualification Program Development, and Spaceflight Operations
	SB	Analysis/Reliability Software Tools
	HBCU	Internship/CO-OP program, Specialty Requirements
	SDB, WOSB HubZone	Quality Records Center, Certification Records
	Large	Pressure Systems, WSTF, and QAS

Science Applications International Corporation is committed to providing opportunities for small businesses to compete for subcontract awards. This commitment has proven effective with actual direct awards of 57.0% to Small Businesses overall with 9.8% going to Small Disadvantaged Businesses and 10.0% going to Women Owned businesses in Government Fiscal Year 2005.

III. EFFORTS TO PROVIDE TECHNICAL ASSISTANCE OR RESTRICT COMPETITION TO SMALL DISADVANTAGED BUSINESS CONCERNS

In accordance with the requirements of DFAR 219.705-4, subcontracting requirements **DO, DO NOT, or XX NOT APPLICABLE,** afford the opportunity to provide technical assistance or restrict competition to SDB concerns (including HBCU/MI).

Provide an explanation of contemplated technical assistance or reason for non-applicability:

IV. METHOD USED TO DEVELOP GOALS

A. Proposed subcontracting goals as identified in Section I, F. Subcontracting Goal Summary was developed by a joint pre-proposal review of the solicitation statement of work and performance requirements. The joint review involved program, technical and procurement personnel including, the Corporate Small Business Liaison Officer, Group or Business Unit Manager, Contract Representative and the identified Individual Subcontracting Plan Administrator.

B. Criteria considered in the review process included:
   1. Review of the solicitation statement of work.
   2. Identification of the requirement for goods and services.
   3. Identification of the potential to subcontract for goods and services.
   4. Make - Buy Analysis.
   5. Identification of potential suppliers.
   6. Categorization of source requirements based on single source, limited competition and open competition as provided by the marketplace or could potentially be developed.

V. INDIRECT AND OVERHEAD CHARGES

Indirect and overhead charges are not included in this subcontracting plan.

VI. METHOD OF IDENTIFICATION /SOLICITATION

The development of goals as described in Section IV resulted in the identification of potential/proposed subcontracting opportunities. The review process identified provided a categorization of items available from single sources, limited competition and full and open competition. Some single source items are available from "only qualified sources" as determined from previous programs of a similar nature.

Items available for limited or open competition provide the opportunity to subcontract to S/SDB/WOB/HUBZone/HBCU/MI/VOB/SDVOB/JWOD. These prospective sources were identified through the mechanisms identified in Section III(c) of the Master Subcontracting Plan.

cc: **Rochelle Lowe**
File

10260 Campus Point Drive
San Diego, California 92121

Memorandum of Agreement Regarding
Master Subcontracting Plan
For the Period
01 January 2006 through 31 December 2008

Approved By:

Jun 3 2006

Arnold Punaro Date
Executive Vice President for Business
Development, Government Affairs,
and Communications

Approved By:

1-11-06

Patrick J. Donnelly Date
Corporate Administrative Contracting Officer
Defense Contract Management
Agency – San Diego

Version – 11/2005

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* REFERENCES SPECIFICALLY IDENTIFY FAR 52.219-9 REQUIREMENTS

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
MASTER SUBCONTRACTING PLAN

I COMPLIANCE STATEMENT

This master plan is in compliance with all laws, rules and regulations of FAR 52.219-9. In particular SAIC understands a full commitment to the spirit of Small Business legislation, including:

PL 95-507	Amendments to the Small Business Act and the Small Business Investment Act
PL 99-661	Contract Goals for Minorities
PL 100-180	Requirement of Substantial Progress on Minority and Small Business Contract Awards
PL 100-656	Business Opportunity Development Reform Act of 1988
PL 103-355	Federal Acquisition Streamlining Act of 1994
PL 105-135	HUBZone Act of 1997/Small Business Reauthorization Act of 1997
PL 106-50	Veterans Entrepreneurship and Small Business Development Act of 1999

During the period of performance of this master subcontracting plan, should any new legislation or regulations be implemented, SAIC will address their applicability in the individual subcontracting plan.

II PROGRAM RESPONSIBILITY/ADMINISTRATION

A. Program Responsibility

George Otchere, Senior Vice President of Corporate Development and Director of Small Business Development Programs, has the responsibility for the development and maintenance of the Small Business Program which includes Small; Small Disadvantaged; Woman-Owned; HUBZone; and Historically Black Colleges and Universities/Minority Institutions, Veteran Owned Business, Service Disabled Veteran Owned Business, and Javits-Wagner-O'Day companies (hereinafter referred to as "SB and related subsets"). In addition, he is responsible for assuring the successful performance and achievement of the Program's objectives.

B. Program Coordination

1. The Corporate Small Business Liaison Officer (SBLO), identified in Individual Subcontracting Plan Section I-E, has been assigned program implementation and coordination responsibility. These responsibilities include:

   (a) Establishing and maintaining internal source lists.
   (b) Acquisition of externally published source lists.
   (c) Distribution of SB and related subset information company-wide.
   (d) Assisting in identifying potential SB and related subset subcontractors and vendors.
   (e) Preparation and submittal of Standard Forms 294 and 295 and their Federal Government electronic equivalent on a timely basis.
   (f) Database maintenance.

(g) Representing the procurement organization with Small Business Administration and DCMA-San Diego Small Business Programs compliance reviews.
(h) Representing the company at SB and related subset seminars and conferences.
(i) Providing staff training relative to Article IX.
(j) Seeking out SB and related subset concerns and arranging Procurement, Program Management, QA, and/or Technical surveys.
(k) Assisting in development and review of subcontracting plans.
(l) Serving as facilitator for SAIC's participation in the DoD Pilot Mentor-Protégé Program.
(m) Leading business development efforts with SB and related subsets on a corporate-wide basis.

C. Subcontracting Plan Administration

An Individual Subcontract Plan Administrator will be appointed and identified in Section I-C of each individual subcontracting plan goal submittal. The Plan Administrator is specifically responsible for subcontracting plan development and implementation. Procurement personnel assigned this responsibility are senior staff members involved at the proposal stage and work in conjunction with program, technical, and contracts staff as defined in Section III A. Subcontracting Plan Administrators are responsible for goal attainment.

III EQUITABLE OPPORTUNITY IMPLEMENTATION METHODS

A. Policy and Organization: It is an established SAIC policy that SB and related subset concerns, have an equitable opportunity to compete for SAIC purchases consistent with the efficient performance of SAIC's business. The Small Business Liaison Officer and the Subcontracting Plan Administrator are chartered to assure compliance with this policy.

SAIC policy and procedures require inclusion of SB and related subset sources on bid lists. An explanation of the absence of SB and related subset sources on any award is required. Specific and periodic review (at or above $100,000) and approval by procurement management assures compliance with this requirement.

B. The following SAIC effort is a description of the efforts which have been and will be made by SAIC to assure that SB and related subset concerns will have an equitable opportunity to compete for subcontracts:

1. SAIC corporate policy is stated in Procurement Policy and Procedures F-12 (S/SDB/WOB/HUBZONE/HBCU/MI/VOB/SDVOB/JWOD Subcontracting Program).

2. It is SAIC's policy to comply with all government regulations including those concerning SB and related subset concerns. This includes PL 95-507, PL 99-661, PL 100-180, PL 100-656, PL 103-355, PL 105-135, and PL 106-50 as well as DFAR 219.705-4. The intent of these regulations is also applied to any company activity that offers procurement/subcontract opportunities.

3. Viable programs have been established to effectively implement the SB and related subset program. Procurement personnel are kept informed and current through department reviews and training programs that are on- going. In addition, Program Managers are kept informed of SB and related subset requirements at the proposal development stage. SB and related subset subcontractors are identified in proposals, and when tasked, utilized in the performance of prime contracts.

4. Buyer incentives for the solicitation and award to SB and related subset concerns are reflected in performance review standards for Subcontracting Plan Administrators and Buyers.

5. SB and related subset source lists are available to all procurement personnel. (See Section III C-2).

6. Procurement, quality assurance, technical and financial staff is available to assist in developing SB and related subsetsconcerns.

7. Special payment terms have been and will be arranged for SB and related subset concerns.

8. A procurement representative is a member of all Make or Buy committees, to ensure SB and related subset representation.

9. For subcontracts involving research, HBCU/MIs will be given an equitable opportunity to compete providing the requisite facilities and skills are available.

10. SAIC does not include indirect costs in establishing subcontracting goals.

C. Implementation Methods

1. Internal Source Identifiers:

SAIC has prepared a comprehensive Small Business database accessible to all SAIC employees. All buyers and subcontract administrators use this database. The database is used in the development of the sources for immediate requirements and at the proposal stage for future requirements.

Additionally, actual awards included in the procurement database utilize the North American Industrial Classification System (NAICS) for each item purchased. This facility enables buyers and subcontract administrators to secure timely information through computer access of suppliers providing various goods and services.

2. External Source Lists

In addition to internally developed source identification mechanisms, SAIC also utilizes source lists made available by Agencies, States, association and trade organizations. These source lists are available to all procurement personnel and include, but are not limited to, the following:

(a) Dynamic Small Business Database (formerly PRO-Net)
(b) Central Contractor registration (CCR)
(c) National Minority Supplier Development Council
(d) Research and Information Division of the Minority Business Development Agency in the Department of Commerce
(e) Veteran Service Organizations
(f) California Minority Business Enterprise Directory, and other states that publish such a directory
(g) Try Us National Minority Business Directory
(h) National Directory of Minority-Owned Business Firms
(i) An Inventory of the Capabilities of HBCU/MI
(j) United Indian Development Association Regional Procurement Directory of American Indian Firms
(k) Small Business Administration profiles
(l) Other local directories available where SAIC has procurement offices
(m) Source directories made available by other government contractors
(n) Various Small Business trade associations
(o) SAIC Small Business Profiles Database
(p) Procurement Technical Assistance Center

IV SUBCONTRACT FLOW-DOWN REQUIREMENTS

A. FAR 52.219-8 Utilization of Small Business Concerns

The clause 52.219-8, Utilization of Small Business Concerns, shall be inserted in solicitations and contracts when the contract amount is expected to be over the simplified acquisition threshold unless:

1. Contracts for services which are personal in nature

2. The contract, together with all its subcontracts, is to be performed entirely outside of any State, territory, or possession of the United States, the District of Columbia, and the Commonwealth of Puerto Rico.

As prescribed in 19.708(a) Utilization of Small Business Concerns:

It is the policy of the United States that small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, small business concerns owned and controlled by women, small business concerns owned and controlled by veterans and service disabled veteran concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, HUBZone small business concerns, small business concerns owned and controlled by

socially and economically disadvantaged individuals, small business concerns owned and controlled by women, and small business concerns owned and controlled by veterans and service disabled veterans.

SAIC hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. SAIC further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of SAIC's compliance with this clause.

Definitions:

1. Concern – Any business entity organized for profit (even if its ownership is in the hands of a nonprofit entity) with a place of business located in the United States and which makes a significant contribution to the U.S. economy through payment of taxes and/or use of American products, material and/or labor, etc. Concern includes, but is not limited to, an individual, partnership, corporation, joint venture, association, or cooperative.

2. Small Business Concern – A concern including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria and size standards in 13 CFR Part 121 (FAR 19.102).

   A concern is not dominant in its field of operation when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged.

3. HUBZone small business concern - means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

4. Small Business concern owned and controlled by socially and economically disadvantaged individuals and small disadvantaged business concern - mean a small business concern that represents, as part of its offer that--

   (i) It has received certification as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B;

   (ii) No material change in disadvantaged ownership and control has occurred since its certification;

   (iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

   (iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

5. Small business concern owned and controlled by women - means a small business concern--

   (i) Which is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

   (ii) Whose management and daily business operations are controlled by one or more women.

6. Small business concern owned and controlled by veteran(s) – means a small business concern—

   (i) That is not less than 51% of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or in the case of any publicly owned business, not less than 51% of the stock of which is owned by one or more vets; and

   (ii) The management and daily business operations of which are controlled by one or more veterans.

7. Small business concern owned and controlled by service-disabled veteran(s) – means a small business concern—

   (i) That is not less than 51% of which is owned by one or more service disabled veterans (as defined at 38 U.S.C. 101(2)) or in the case of any publicly owned business, not less than 51% of the stock of which is owned by one or more service disabled vets; and

   (ii) The management and daily business operations of which are controlled by one or more service disabled veterans, and

   (iii) Has received a rating from the Veteran agency stating the percent of disability.

8. Javits-Wagner-O'Day (JWOD) companies are non-profit agencies that create job and training opportunities for people who are blind or who have severe disabilities.

Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern (must also be certified by SBA), a small disadvantaged business concern (must also be certified by SBA), a woman-owned small business concern, or a JWOD company.

B. FAR 52.219-9 Small Business Subcontracting Plan

The clause 52.219-9, Small Business Subcontracting Plan, will be inserted when contracting by negotiation, in solicitations and contracts that offer subcontracting possibilities that are expected to exceed $500,000 ($1,000,000 for construction of any public facility), and are

required to include the clause at 52.219-8, Utilization of Small Business Concerns, unless the acquisition is set-aside or is to be accomplished under the 8(a) program.

SAIC will require all subcontractors (except small business concerns) that receive subcontracts in excess of $500,000 ($1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause. Subcontractors are further required to submit to SAIC Standard Form 294 and Standard Form 295 in accordance with FAR 52.219-9 as applicable. In turn, SAIC will submit these subcontractor SF 294s along with their own SF 294s to the Contracting Officer.

When contracting by sealed bidding rather than by negotiation, the following paragraph shall be used with the basic clause (Alternate I):

> The apparent low bidder shall submit a subcontracting plan, where applicable, that separately addresses subcontracting with small business, HUBZone small business, small disadvantaged business, woman-owned small business, and veteran owned and service disabled veteran owned small business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business, HUBZone small business, small disadvantaged business, woman-owned small business, and veteran and service disabled veteran owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.

When contracting by negotiation, and subcontracting plans are required with initial proposals as provided for in FAR 19.708(b)(1) the following paragraph shall be used with the basic clause (Alternate II):

> Proposals submitted in response to this solicitation shall include a subcontracting plan that separately addresses subcontracting with small business, HUBZone small business, small disadvantaged business, woman-owned small business, and veteran and service disabled veteran small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, HUBZone small business, small disadvantaged business, woman-owned small business, and veteran and service disabled veteran small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate a subcontracting plan shall make the offeror ineligible for award of a contract.

In order to effectively implement the plan to the extent consistent with efficient contract performance, SAIC shall perform the following function:

Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, HUBZone small, small disadvantaged, woman-owned, veteran, or service disabled veteran small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in SAIC's subcontracting plan.

C. 52.219-16 Liquidated Damages - Subcontracting Plan

The clause 52.219-16, Liquidated Damages--Subcontracting Plan, shall be inserted in solicitations and contracts containing the clause at 52.219-9, Small Business Subcontracting Plan, or the clause with its Alternate I or II.

D. 52.219-25 Small Disadvantaged Business Participation Program - Disadvantaged Status and Reporting

Reporting requirement. If the contract contains SDB participation targets, the Contractor shall report on the participation of SDB concerns at contract completion, or as otherwise provided in this contract. Reporting may be on Optional Form 312, Small Disadvantaged Business Participation Report, or in the SAIC's own format providing the same information. This report is required for each contract containing SDB participation targets. If the contract contains an individual Small, Small Disadvantaged and Woman-Owned Small Business Subcontracting Plan, reports may be submitted with the final Subcontracting Report for Individual Contracts (Standard Form 294 or the Federal Government electronic equivalent) at the completion of the contract.

V REPORTS AND SURVEYS

SAIC will provide periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance with subcontracting plans or SB and related subset requirements in general.

SAIC will submit Standard Form 294 and 295 (or the Federal Government electronic equivalent) as stated in Section XII Report Submittal of this plan. The reports shall provide information on subcontract awards to SB and related subsets. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

SAIC will ensure its subcontractors agree to submit Standard Forms 294 and 295 or the Federal Government electronic equivalent, when applicable.

VI RECORDS

A. On-line database

SAIC has established and maintains a company-wide active database. Information available includes:

1. SB and related subset Profiles

2. Actual awards by Socio-Economic (S/E) Classification of any dollar value.

3. Identification of awards by Socio-Economic classification on a contract by contract or indirect charge basis to provide compliance reporting and general statistical information including the name, address and business size of each subcontractor.

4. The Dynamic Small Business Database/CCR which is maintained by the Small Business Administration and contains current information on over 350,000 small, small disadvantaged, woman-owned, and HUBZone, veteran and service-disabled veteran businesses nationwide.

B. Purchase Award Summary

Every purchase award, greater than $25,000 requires Socio-Economic identification of bidders solicited and a requirement to provide an explanation and justification if SB and related subset concerns were not solicited.

The purchase award summary also identifies:

1. Whether small business concerns were solicited and if not, why not

2. Whether small disadvantaged business concerns were solicited and if not, why not

3. Whether woman-owned business concerns were solicited and if not, why not

4. Whether HUBZone business concerns were solicited and if not, why not

5. Whether service-disabled veteran owned business concerns were solicited and if not, why not

6. Whether veteran -wned business concerns were solicited and if not, why not

7. If applicable, the reason awards were not made to the above identified SB and related subsets. .

C. Additional Activities

SAIC is energetically involved in other activities that are supported by appropriate records in the form of contact reports, outreach reports, trip reports, meeting schedules, and agendas. These activities include, but are not limited to:

1. SB and related subset subcontractor and supplier contacts and surveys

2. Information received from trade association and business development organizations

3. Attendance at SB and related subset conferences and trade fairs

4. Internal and external workshops, seminars, and training programs

5. Performance monitoring used to evaluate compliance with the program's requirements

6. Outreach efforts by all employees

VII POLICY STATEMENTS

Procurement Policy and Procedures F-12, Section 12.3, Requirements defines company-wide policy and procedures and assigns specific responsibility regarding the requirements of the FAR 52.219-9. In addition, written procedures describing the subcontracting plan goal tracking methods are detailed in Procurement Procedures F-12, Section 12.5, Procedure.

VIII INTEREST AND COMMITMENT

Kenneth C. Dahlberg, Chief Executive Officer, has promulgated policy statements expressing company interest and commitment to Small Business Development Programs throughout the company. Performance in this area is continuously monitored, reviewed and expanded by the Executive Vice President and General Manager of the Washington Operations, the Corporate Senior Vice President of Contracts/Procurement, the Senior Vice President for Corporate Development, and the Manager of Small Business Compliance.

Success of the Small Business Development Program is dependent upon total corporate commitment to the fundamental objective of the program. All levels of management must continuously emphasize SAIC's dedication to the program. Increasing SB and related subset participation in procurement programs requires active participation by personnel in all disciplines.

Personnel generating production and non-production requirements evaluate the goods and services provided by SB and related subsets and identify requirements so as not to preclude these businesses from qualifying and being given an equal opportunity to bid.

Groups and Business Unit Small Business Advocates assist Program Managers to assure maximum consideration of SB and related subset sources during proposal development and their inclusion in proposals. Program Managers continue emphasis on utilization of SB and related subset firms during contract performance. SAIC's customers closely monitor company performance in this program, and the degree of success is a consideration in proposal evaluation and, in some cases, fee determination. Quality Assurance, while performing quality surveys, provides counseling and guidance to SB and related subset concerns to achieve a broad base of quality approved sources for manufacturing tasks and processes.

Procurement personnel assigned to specific programs assure early recognition of requirements to facilitate locating or developing sources for inclusion in bid lists for proposal development and buy requirements. Procurement personnel ensure solicitation of SB and related subset sources and assures that these concerns will have an equitable opportunity to compete for subcontracts.

All disciplines provide, when requested by the Subcontracting Plan Administrator, counseling and guidance to actual or potential SB and related subset sources in such areas as technology, management, manufacturing techniques, quality control, financial, and legal.

IX TRAINING AND MOTIVATION

A. Training

SAIC provides on-going training and awareness programs relative to PL 95-507, PL 99-661, PL 100-180, PL 100-656, PL 103-355, PL 105-135, and PL 106-50.

Training is accomplished through regular meetings between Group Small Business Advocates, the Small Business Liaison Officer, procurement personnel, seminars conducted by the Corporate Senior Vice President of Corporate Development, appropriate government and trade representatives, and written correspondence between the Small Business Liaison Officer and procurement, contracts, and program management personnel.

B. Motivation

Records of all awards with SB and related subset concerns are maintained for each buyer. Performance to PL 95-507, PL 99-661, PL 100-180, PL 100-656, PL 103-355, PL 105-135, and PL106-50 objectives and individual subcontracting plans is a key factor in each individual's annual performance review.

X SOLICITATION PLANNING - MAKE/BUY DECISIONS

SAIC is aware of its responsibility to manage solicitation and procurement efforts to provide the maximum participation by SB and related subset concerns. Procurement Procedures F-06 describes the methods used for performing make/buy decisions. The mechanisms utilized to affect fulfillment of solicitation planning have been previously described in Section VIII.

XI ASSISTANCE TO SMALL BUSINESS CONCERNS

Special assistance has been provided to SB and related subset concerns in several ways and additional efforts are being initiated. SAIC has incorporated the requirements of DFAR 219.705-4 regarding efforts to provide technical assistance to SDB concerns and to restrict competition to SDB concerns:

A. SAIC instituted a business development program for SDBs as a result of successful partnerships established in the DoD Mentor-Protégé Program. SAIC's Small Business Development Program Office facilitates strategic partnerships between SAIC Group Business Development Managers and High-Tech SDBs. These relationships result in joint marketing efforts to increase long-term contracting opportunities for SDBs.

B. SAIC commenced a program that gives potential SDB suppliers the opportunity to meet with program managers and subcontract administrators. SAIC *Small/Disadvantaged Business Opportunity Days* provide SDBs a forum to present their capabilities and qualifications, while the SAIC groups provide information on opportunities that would be mutually

beneficial to all parties. The desired result is to establish a comprehensive network for SDBs learning SAIC's operational structure.

C. SAIC has been involved in outreach efforts to identify and qualify SB and related subset concerns. An "open door" policy is maintained for all suppliers, and organizational elements provide special managerial and technical support in assisting these businesses to "set up" tasks. This includes providing assistance to HBCU/MI in performance of research type subcontracts, in addition to assisting these concerns with advanced payments or any financial problems.

D. When SB and related subset concerns encounter technical difficulties while working on our contracts or potential suppliers require additional assistance in responding to a solicitation, subcontract administrators in conjunction with the Program Management Team provide direct assistance to overcome short-term difficulties. In addition, follow-up efforts to determine why SB and related subset concerns did not respond to solicitations or were not successful in receiving an award are pursued.

E. Additional efforts that have been initiated include SDB seminars to encourage new suppliers to become qualified and able to respond to solicitation requirements. SAIC supports local trade fairs and small business conferences in areas where company procurement offices are located.

F. SAIC is committed to achieving the SDB goals established on our individual subcontracting plans, and where the procurement action reasonably permits, solicitations will be restricted to SDBs.

XII REPORT SUBMITTAL

SAIC has and will continue to submit Subcontracting Reports for Individual Contracts (i.e., SF294 or the electronic equivalent) and Summary Subcontract Report (i.e., SF294 or the electronic equivalent) in accordance with instructions provided on the forms or as provided in agency regulations. SAIC will ensure that its subcontractors agree to submit SF294s and SF295s (or the electronic equivalent) when applicable.

SF294 or ISR: This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to the contract. This report is not required for commercial plans.

Contracts that were evaluated with SDB participation targets must report SDB award achievements of SDB participation by North American Industrial Classification System (NAICS) Industry Subsector at completion of the contract on Optional Form-312 or in SAIC's format providing the same information. If contract contains an individual Small, Small Disadvantaged, and Woman-Owned Business plan, reports may be submitted with the final Subcontracting Report of Individual Contracts (SF294) at the completion of the contract.

SF295 or SSR: This report encompasses all the contracts with the awarding agency. It will be submitted semiannually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity will report annually all subcontract awards under that plan.

All reports submitted at the close of each fiscal year (both individual and commercial plans) will include a breakout, using Optional Form-312 or in SAIC's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industrial Classification System (NAICS) Industry Subsector. For a commercial plan, SAIC will obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant. NAICS Industry Subsector.

XIII UNDERSTANDING

SAIC understands that:

A. An acceptable plan must, in the determination of the Contracting Officer, provide the maximum practicable opportunity for Small, Small Disadvantaged, Woman-owned, HUBZone, Historically Black Colleges and Universities and Minority Institutions, Veteran owned, Service Disabled Veteran Owned, and Javits-Wagner-O'Day concerns to participate in the performance of the contract.

B. The Contracting Officer shall notify the contractor in writing of his/her reasons for determining a subcontracting plan to be unacceptable. Such notice shall be given early enough in the negotiation process to allow the contractor sufficient time to modify the plan within the time limits prescribed.

C. Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

D. The failure of any contractor or subcontractor to comply in good faith with

1. The clause entitled "Utilization of Small, Small Disadvantaged and Woman-Owned Small Business Concerns" or

2. An approved plan required by this Small Business and Small Disadvantaged Business Subcontracting Plan (negotiated) provision, will be a material breach of such contract or subcontract.

E. A Master Subcontract Plan on a plant or division-wide basis which contains all the elements required by FAR 52.219-9 above, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause, provided:

1. The master plan has been approved by the Contractor's cognizant Contract Administration Office;

J.10 CONTRACTOR MANAGED DATABASES

Name	Type of Database	Language	Use
ADP	MS Access/Web application	VBA/ASP	Tracking status of GFE Acceptance Data Packages.
ALERTS	MS Access	VBA	Hardware alerts
CaseATS	MS Access	VBA	Action Tracking System
CI&TATS	MS Access	VBA	Action Tracking System
ContractATS	MS Access	VBA	Action Tracking System
CSWGATS	MS Access	VBA	Action Tracking System
CTATS	MS Access	VBA	Action Tracking System
EVAATS	MS Access	VBA	Action Tracking System
FED	MS Access	VBA	Action Tracking System
FEDATS	MS Access	VBA	Action Tracking System
GAPATS	MS Access	VBA	Action Tracking System
GCHAPATS	MS Access	VBA	Action Tracking System
GFEATS	MS Access	VBA	Action Tracking System
IAATS	MS Access	VBA	Action Tracking System
IRMATS	MS Access	VBA	Action Tracking System
ISSATS	MS Access	VBA	Action Tracking System
JSAPATS	MS Access	VBA	Action Tracking System
LPAATS	MS Access	VBA	Action Tracking System
MAATS	MS Access	VBA	Action Tracking System
NAATS	MS Access	VBA	Action Tracking System
NAATS	MS Access	VBA	Action Tracking System
NTATS	MS Access	VBA	Action Tracking System
RMPANEL	MS Access	VBA	Action Tracking System
SAICATS	MS Access	VBA	Action Tracking System
SAICIRM	MS Access	VBA	Action Tracking System
SHUTATS	MS Access	VBA	Action Tracking System
SMARTATS	MS Access	VBA	Action Tracking System
STATIONATS	MS Access	VBA	Action Tracking System
TAATS	MS Access	VBA	Action Tracking System
TRAINATS	MS Access	VBA	Action Tracking System
TSOATS	MS Access	VBA	Action Tracking System
Awards	MS Access	VBA	Awards database
Budget	MS Access	VBA	Budget tracking?
Calendar	MS Access	VBA	NA calendar
Casper	MS Access	VBA	Former Director's Q&A system
Combats	MS Access	VBA	Action Tracking System
Comments	MS Access/Web Application	VBA/ASP	Collects Feedback about All-Hands meetings
Compus	MS Access	VBA	Code M Payload Utilization

			system
CTS	MS Access	VBA	Correspondence Tracking system
CustSer	MS Access	VBA	Customer Service Database?
DistList	MS Access	VBA	Distribution List database for S&MA ISS Division
EEEParts	MS Access	VBA	EEE Parts Assurance database
EVA	MS Access/Web Application	VBA/ASP	Dynamic Website Management tool for EVA
EvalSCAT	MS Access	VBA	Logging Significant Accomplishments
EVASCAT	MS Access	VBA	Logging Significant Accomplishments
Generic	MS Access	VBA	Maintains records of Change Papers for NC division.
SSP CP Add-On	MS Access ADE / SQL Server	VBA	Additional interface to the Generic database for the NC division.
GFE Cert	MS Access ADE /SQL Server	VBA	Contains Certification data for GFE hardware.
GFESCAT	MS Access	VBA	Logging Significant Accomplishments for GFE
GPTD	MS Access	VBA	GFE Project Tracking Database
IAASSESS	MS Access	VBA	Station Assessment Information from Independent Assessment
ICTS	MS Access	VBA	Incoming Correspondence Tracking System
Infobases	MS Access/Web Application	VBA/ASP	Dynamic Website Management tool for Folio Infobases
Innovations	MS Access	VBA	Database for Tracking NA Innovations
Inventory	MS Access	VBA	Inventory database for awards that have flown on shuttle missions.
ISS CP	MS Access ADE/SQL Server	VBA	Maintains records of Space Station Change Papers
ISSRM	MS Access/Web Application	VBA/ASP	Dynamic population of the ISS Reliability and Maintainability web site.
JAPC	MS Access/Web Application	VBA/ASP	Supports Joint Audit Planning Committee

Learner	MS Access/Web Application?	VBA/ASP?	S&MA Training Database
MechParts	MS Access	VBA	Mechanical Parts database
MerLog	MS Access	VBA	Database support for MER. Now used by S&MA personnel at KSC.
Payloads	MS Access	VBA	Payloads tracking database
PEI	MS Access/Web Application	VBA/ASP	Personnel Emergency Information database
Pressure Systems Database	MS Access ADE/SQL Server/Web Application	VBA/ASP	Database that maintains information on pressurized systems at JSC.
PM Database	MS Access	VBA	Preventive Maintenance database
GFE PRACA	MS Access ADE/SQL Server	VBA	Stores Problem Reporting and Corrective Action data for GFE hardware
PRDB	MS Access	VBA	Problem Reports database used by NE to track, assess and close software issues on station applications?
QARC	SQL Server Web application	VB/ASP	Maintains records of documents submitted to the Quality Assurance Record Centers
QRex	SQL Server Web application	ASP	Quality Records/Assessments
Risk	MS Access	VBA	Risk Management database
RITF	MS Access	VBA	Supports Receiving, Inspecting, Testing Facility
RMQAWAR	MS Access	VBA	RMQA Weekly Activity Reporting system
SAICTeam	MS Access	VBA	Dynamic population of Contract team web site
SAS	SQL Server/Web Application	ASP	Supplier Assessment System
SATS	MS Access	VBA	Safety Action Tracking System
SMARTSCH	MS Access	VBA	Panels Schedule Database
SFA	MS Access	VBA	Space Flight Awareness Awards database
ShutSCAT	MS Access	VBA	Shuttle Significant Accomplishments database

SIRMA	SQL Server		Risk Management database
SMART	MS Access	VBA	Subsystem Measurement Automated Retrieving Tool
SoftInv	MS Access	VBA	Software Inventory Database
SpaceUtil	MS Access	VBA	Space/Resource Utilization Database
SRP	MS Access	VBA	Safety Review Panel
SRRAD	MS Access ADE / SQL Server	VBA	Shuttle Reliability database
StationG	MS Access	VBA	Station Generic database
Vaults	MS Access	VBA	Payload Vaults databas
VersionDB	MS Access	VBA	Maintains versions of databases, performs automatic upgrades of clients
VSEWAR	MS Access	VBA	Vehicle Safety Engineers Weekly Activity Report database
WARTS	MS Access	VBA	Weekly Activity Reporting database
ESC_Safety	MS Access	VBA	Dynamic population of Executive Safety Committee web site
HT	MS Access	VBA	Dynamic population of a safety web site
ISSRM2	MS Access	VBA	Dynamic population of ISSRM web site
LPA	MS Access	VBA	Dynamic population of Mission Logistics Planning web site
NSTC	MS Access	VBA	Dynamic population of NS TC web site
Sites	MS Access	VBA	Dynamic population of SSRP web site
SRQA	MS Access	VBA	Dynamic population of SRQA web site
ST	MS Access	VBA	Dynamic population of ST calendar
STH	MS Access	VBA	Dynamic population of Safety and Total Health calendar
GNATS	SQL Server Web Application	ASP	A generic weekly activity reporting system for SR&QA
IPS	SQL Server Web Application	ASP	Information Technology planning and budgeting tool
IRS/ResourceUtil	SQL Server Web Application	ASP	Tracking tool for SR&QA resources

NA	SQL Server Web Application	ASP	Dynamic population of the NA web site
NAATS	SQL Server Web Application	ASP	Action tracking system for NA
PayloadsSQL	SQL Server Web Application	ASP	Shuttle payloads tracking database
RITF	SQL Server Web Application	ASP	Dynamic population of the RITF web site
RTFATS	SQL Server Web Application	ASP	Return to Flight Action Tracking System
SIRMA_Web	SQL Server Web Application	ASP	Risk management database
Survey Wizard	SQL Server Web Application	ASP	Tool used to building custom surveys
PSRP	SQL Server Web Application	ASP	Payload Safety Review Panel Document Management System
Aspen	MS Access / SQL Server	VBA	Commercially available Laboratory Information Management System
IRMA	SQL Server Web Application	ASP	Risk management database
IRMA-Arch	SQL Server Web Application	ASP	Risk management database
ISSCP	MS Access MDE / SQL Server database	VBA	Change Paper database for the International Space Station.

J.11 CONTRACTOR MANAGED WEBSITES

ADP Status Tracker
S&MA Recognition Program
SR&QA MER Console Reports
NA SR&QA Executive Calendar
SAIC S&MA's E-Learning
SAIC Team Page
All Hands Comments
Ops Customer Survey
S&MA Extra Vehicular Activity
Flight Equipment S&MA Branch (GFE)
Government Furnished Equipment (GFE) Problem Reporting and Corrective Action (PRACA) Database
Generic Activity Tracking System (GNATS)
Shuttle and Station Infobases
I.T.M. Action Tracking System
SR&QA Infrastructure Resource System
S&MA QMS/ISO 9000 Road Map
NASA Space Station Reliability and Maintainability
SR&QA Information Technology Planning
Life Cycle Risk Management
Mission and Logistics Planning
S&MA Action Tracking System
Safety & Mission Assurance Website
Safety and Test Operations Division (NS)
Prelaunch Assessment Review (PAR)
Payloads Web
Payload Safety
Desk Instructions
Personnel Emergency Information
QARC Reports
QREX
JSC Nonconformance Trend Data (Quality)
Resource Util
Learner S&MA On-Line Training System
Risk Management at JSC
Receiving Inspection & Test Facility (RITF)
SR&QA Skills Assessment Survey
ISS SRP Planning Calendar
International Space Station Division (NE)
Independent Assessment (NQ)
Flight Equipment Division (NT)
S&MA Space Shuttle Division Website (SSD)
The SR&QA Flight Operations Training Web
System Safety Review Panel
Station Generic User Guide
S&MA Web-Based Survey Wizard
SR&QA Software Assurance Technology Team
SR&QA Shuttle & Reliability Analysis
S&MA Academy
Test Safety Officer Planning Calendar
Cycle Tracking and Reporting Tool

JSC Integrated Risk Management Application (IRMA)
Space Shuttle Program Integrated Risk Management Application (SIRMA)
NESC Assessment Risk Management Application
SAS
Integrated Supplier Assurance Management Program (ISAMP)