

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 3
2. AMENDMENT/MODIFICATION NO. 000059	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. N/A	5. PROJECT NO. (If applicable)
6. ISSUED BY NASA/Marshall Space Flight Center Procurement Office Marshall Space Flight Center AL 35812	CODE MSFC	7. ADMINISTERED BY (If other than Item 6) NASA/Marshall Space Flight Center Marshall Space Flight Center AL 35812	CODE MSFC
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) COLSA CORPORATION Attn: NONE SPECIFIED 6726 ODYSSEY DR NW HUNTSVILLE AL 35806-3302		(x) 9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
CODE		x 10A. MODIFICATION OF CONTRACT/ORDER NO. NNM04AA07C	10B. DATED (SEE ITEM 11) 12/04/2003
FACILITY CODE		11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS	
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.			
12. ACCOUNTING AND APPROPRIATION DATA (If required)			
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.			
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.		
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).		
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52.243-2 Changes Cost Reimbursement (AUG1987) Alt I (APR1984)		
	D. OTHER (Specify type of modification and authority)		
E. IMPORTANT: Contractor <input type="checkbox"/> is not. <input checked="" type="checkbox"/> is required to sign this document and return <u>3</u> copies to the issuing office.			
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)			

The purpose of this modification is to officially incorporate FAR 52.204-9, Personal Identity Verification (PIV) of Contractor Personnel (Nov 2006), and to replace NASA FAR 1852.204-76 Security Requirements for Unclassified Information Technology Resources (Nov 2004) with the Deviation, at no cost to the Government as referenced in our letter dated October 19, 2006.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) PATRICIA HODGES Dir, Contracts, ColSA	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Kim E Whitson
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED 12/20/06
16B. UNITED STATES OF AMERICA _____ (Signature of Contracting Officer)	16C. DATE SIGNED 12/21/06

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Continued from page 1)

	Negotiated Est. Cost	Maximum Award Fee	Unearned Award Fee	Maximum Incentive Fee	Unearned Incentive Fee	Contract Value	Total Sum Allotted
Previous	\$ 88,518,178	\$ 3,490,389	(\$ 75,180)	\$ 1,879,443	(\$ 69,120)	\$ 93,743,710	\$ 69,115,204
This Mod	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>
New Total	\$ 88,518,178	\$ 3,490,389	(\$ 75,180)	\$ 1,879,443	(\$ 69,120)	\$ 93,743,710	\$ 69,115,204

1. The purpose of this modification is to officially incorporate FAR 52.204-9, Personal Identity Verification (PIV) of Contractor Personnel (Nov 2006), and to replace NASA FAR 1852.204-76 Security Requirements for Unclassified Information Technology Resources (Nov 2004) with the Deviation, at no cost to the Government as referenced in our letter dated October 19, 2006.
2. Section I.1 is revised to include FAR 52.204-9, Personal Identity Verification (PIV) of Contractor Personnel (Nov 2006) by reference, and Section I. 12 is added to incorporate NASA FAR 1852.204-76 (NOV 2004[DEVIATION] and 52.252-6 Authorized Deviations in Clauses (APR 1984) in full text.
3. In order to implement the foregoing, the Performance Work Statement is hereby revised to delete the requirement for 1016CD-002 and replace it with 1016 MA-010 Badged Employee and Remote IT User List. It also adds, 1016 MA-011 Contractor Employee Clearance Document and 1016 MA-012 Position Risk Designation for Non-NASA Employees Form.
4. Concurrently, Data Procurement Document 1016 Rev B is hereby deleted and replaced with Rev C which incorporates the foregoing changes and updates the titles to NFS 1852.204-76 from "Security Requirements for Unclassified Information Technology Resources (NOV 2004)" to "Security Requirements for Unclassified Information Technology Resources (NOV 2004 [DEVIATION])" in 1016CD-001 and 1016MA-005 Item 15.2
5. In order to reflect the changes resulting from this modification, the page(s) listed below are added or deleted from the contract as shown. In order to indicate the specific areas(s) of change, vertical lines are shown in the right margin of the enclosed replacement page(s) across from the revised area(s).

<u>Section</u>	<u>Pages Added</u>	<u>Pages Deleted</u>
I, Contract Clauses	I-3 , I-16 through I-18	I- 3, I-16
Attachment J-1 PWS	J-1-3	J-1-3
Attachment J-2 DPD	Rev C	Rev B

Contractor's Statement of Release

In consideration of the modification agreed to herein as complete equitable adjustment for all claims arising out of or attributable to the issuance of the contract changes and/or contractor

proposal listed below, the contractor hereby releases the Government from any and all liability under this contract for further equitable adjustment attributable to such facts or circumstances giving rise to said contract changes and/or contractor proposals, and for such additional obligations as may be required by this modification.

<u>Contract Change Identification</u>	<u>Contractor Proposal Number</u>
Modification No. 59 & MSFC's letter dated October 19, 2006	N/A

52.232-34	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER - OTHER THAN CENTRAL CONTRACTOR REGISTRATION
52.233-1	JUL 2002	DISPUTES
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION
52.237-3	JAN 1991	CONTINUITY OF SERVICES
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
52.242-10	APR 1984	F.O.B. ORIGIN--GOVERNMENT BILLS OF LADING OR PREPAID POSTAGE
52.242-13	JUL 1995	BANKRUPTCY
52.243-2	AUG 1987	CHANGES--COST-REIMBURSEMENT (ALTERNATE I) (APR 1984)
52.244-2	AUG 1998	SUBCONTRACTS (ALTERNATE I) (AUG 1998)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.245-5	JUN 2003	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS)
52.246-25	FEB 1997	LIMITATION OF LIABILITY-SERVICES
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.248-1	FEB 2000	VALUE ENGINEERING
52.249-6	SEP 1996	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS
52.251-2	Jan 1991	INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES
52.204-9	Nov 2006	PERSONAL IDENTITY VERIFICATION (PIV) OF CONTRACTOR PERSONNEL

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

CLAUSE NUMBER	DATE	TITLE
1852.204-76	Nov 2004	SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.223-76	JUL 2003	FEDERAL AUTOMOTIVE STATISTICAL TOOL REPORTING

I.2 Approval Of Contract (FAR 52.204-1) (DEC 1989)

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

adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.

(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

I.12.1852.204-76 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES(NOVEMBER 2004 [(DEVIATION)])

(a) The Contractor shall be responsible for information and information technology (IT) security when the Contractor or its subcontractors must obtain physical or electronic (i.e., authentication level 2 and above as defined in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-63, Electronic Authentication Guideline) access to NASA's computer systems, networks, or IT infrastructure, or where information categorized as low, moderate, or high by the Federal Information Processing Standards (FIPS) 199, Standards for Security Categorization of Federal Information and Information Systems, is stored, generated, or exchanged by NASA or on behalf of NASA by a contractor or subcontractor, regardless of whether the information resides on a NASA or a contractor/subcontractor's information system.

(b) IT Security Requirements.

(1) Within 30 days after contract award, a Contractor shall submit to the Contracting Officer for NASA approval an IT Security Plan, Risk Assessment, and FIPS 199, Standards for Security Categorization of Federal Information and Information Systems, Assessment. These plans and assessments, including annual updates shall be incorporated into the contract as compliance documents.

(i) The IT system security plan shall be prepared consistent, in form and content, with NIST SP 800-18, Guide for Developing Security Plans for Federal Information Systems, and any additions/augmentations described in NASA Procedural Requirements (NPR) 2810, Security of Information Technology. The security plan shall identify and document appropriate IT security controls consistent with the sensitivity of the information and the requirements of Federal Information Processing Standards (FIPS) 200, Recommended Security Controls for Federal Information Systems. The plan shall be reviewed and updated in accordance with NIST SP 800-26, Security Self-Assessment Guide for Information Technology Systems, and FIPS 200, on a yearly basis.

(ii) The risk assessment shall be prepared consistent, in form and content, with NIST SP 800-30, Risk Management Guide for Information Technology Systems, and any additions/augmentations described in NPR 2810. The risk assessment shall be updated on a yearly basis.

(iii) The FIPS 199 assessment shall identify all information types as well as the "high water mark," as defined in FIPS 199, of the processed, stored, or transmitted information necessary to fulfill the contractual requirements.

(2) The Contractor shall produce contingency plans consistent, in form and content, with NIST SP 800-34, Contingency Planning Guide for Information Technology Systems, and any additions/augmentations described in NPR 2810. The Contractor shall perform yearly

“Classroom Exercises.” “Functional Exercises,” shall be coordinated with the Center CIOs and be conducted once every three years, with the first conducted within the first two years of contract award. These exercises are defined and described in NIST SP 800-34.

(3) The Contractor shall ensure coordination of its incident response team with the NASA Incident Response Center and the NASA Security Operations Center.

(4) The Contractor shall ensure that its employees, in performance of the contract, receive annual IT security training in NASA IT Security policies, procedures, computer ethics, and best practices in accordance with NPR 2810 requirements. The Contractor may use web-based training available from NASA to meet this requirement.

(5) The Contractor shall provide NASA, including the NASA Office of Inspector General, access to the Contractor’s and subcontractors’ facilities, installations, operations, documentation, databases, and personnel used in performance of the contract. Access shall be provided to the extent required to carry out IT security inspection, investigation, and/or audits to safeguard against threats and hazards to the integrity, availability, and confidentiality of NASA information or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime. To facilitate mandatory reviews, the Contractor shall ensure appropriate compartmentalization of NASA information, stored and/or processed, either by information systems in direct support of the contract or that are incidental to the contract.

(6) The Contractor shall ensure that all individuals who perform tasks as a system administrator, or have authority to perform tasks normally performed by a system administrator, demonstrate knowledge appropriate to those tasks. Knowledge is demonstrated through the NASA System Administrator Security Certification Program. A system administrator is one who provides IT services, network services, files storage, and/or web services, to someone else other than themselves and takes or assumes the responsibility for the security and administrative controls of that service. Within 30 days after contract award, the Contractor shall provide to the Contracting Officer a list of all system administrator positions and personnel filling those positions, along with a schedule that ensures certification of all personnel within 90 days after contract award. Additionally, the Contractor should report all personnel changes which impact system administrator positions within 5 days of the personnel change and ensure these individuals obtain System Administrator certification within 90 days after the change.

(7) When the Contractor is located at a NASA Center or installation or is using NASA IP address space, the Contractor shall --

(i) Submit requests for non-NASA provided external Internet connections to the Contracting Officer for approval by the Network Security Configuration Control Board (NSCCB);

(ii) Comply with the NASA CIO metrics including patch management, operating systems and application configuration guidelines, vulnerability scanning, incident reporting, system administrator certification, and security training; and

(iii) Utilize the NASA Public Key Infrastructure (PKI) for all encrypted communication or non-repudiation requirements within NASA when secure email capability is required.

(c) Physical and Logical Access Requirements.

(1) Contractor personnel requiring access to IT systems operated by the Contractor for NASA or interconnected to a NASA network shall be screened at an appropriate level in accordance with NPR 2810 and Chapter 4, NPR 1600.1, NASA Security Program Procedural Requirements. NASA shall provide screening, appropriate to the highest risk level, of the IT

systems and information accessed, using, as a minimum, National Agency Check with Inquiries (NACI). The Contractor shall submit the required forms to the NASA Center Chief of Security (CCS) within fourteen (14) days after contract award or assignment of an individual to a position requiring screening. The forms may be obtained from the CCS. At the option of NASA, interim access may be granted pending completion of the required investigation and final access determination. For Contractors who will reside on a NASA Center or installation, the security screening required for all required access (e.g., installation, facility, IT, information, etc.) is consolidated to ensure only one investigation is conducted based on the highest risk level.

Contractors not residing on a NASA installation will be screened based on their IT access risk level determination only. See NPR 1600.1, Chapter 4.

(2) Guidance for selecting the appropriate level of screening is based on the risk of adverse impact to NASA missions. NASA defines three levels of risk for which screening is required (IT-1 has the highest level of risk).

(i) IT-1 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause very serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of spacecraft, satellites or aircraft.

(ii) IT-2 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; and those that contain the primary copy of "level 1" information whose cost to replace exceeds one million dollars.

(iii) IT-3 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause significant adverse impact to NASA missions. These systems include, for example, those that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; and systems operated by the Contractor for NASA whose function or information has substantial cost to replace, even if these systems are not interconnected with a NASA network.

(3) Screening for individuals shall employ forms appropriate for the level of risk as established in Chapter 4, NPR 1600.1.

(4) The Contractor may conduct its own screening of individuals requiring privileged access or limited privileged access provided the Contractor can demonstrate to the Contracting Officer that the procedures used by the Contractor are equivalent to NASA's personnel screening procedures for the risk level assigned for the IT position.

(5) Subject to approval of the Contracting Officer, the Contractor may forgo screening of Contractor personnel for those individuals who have proof of a --

(i) Current or recent national security clearances (within last three years);

(ii) Screening conducted by NASA within the last three years that meets or exceeds the screening requirements of the IT position; or

(iii) Screening conducted by the Contractor, within the last three years, that is equivalent to the NASA personnel screening procedures as approved by the Contracting Officer and concurred on by the CCS.

(d) The Contracting Officer may waive the requirements of paragraphs (b) and (c)(1) through (c)(3) upon request of the Contractor. The Contractor shall provide all relevant information requested by the Contracting Officer to support the waiver request.

(e) The Contractor shall contact the Contracting Officer for any documents, information, or forms necessary to comply with the requirements of this clause.

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

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

(2) Use information systems to generate, store, or exchange data with NASA or on behalf of NASA, regardless of whether the data resides on a NASA or a contractor's information system.

(End of clause)

I.13. 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any NASA FAR Supplement (48 CFR Chapter 18) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of Clause)

[END OF SECTION]

2.1 Contract Management

The contractor shall provide, implement and maintain the requisite organization, disciplines and systems necessary to manage the personnel and resources required for the performance of these functions. These functions shall be applied to the HOSC programs and projects commensurate to the level and complexity of activity. These management services shall be applied to the programmatic requirements of MSFC-PLAN-904, HOSC Functional Requirements and Implementation Plan.

The contractor shall ensure that HOSC and related facilities capabilities and configurations fully support mission operations and development objectives in accordance with the HOSC-PLAN-623, HOSC Project Plan. The contractor shall develop, implement, maintain and operate systems for planning, scheduling, controlling and reporting all HOSC services and functions and for analyzing and reporting contract performance. In performance of program management, the contractor shall:

- a. Prepare and maintain a Management Plan for the contracted effort in accordance with DRD 1016MA-001, Management Plan.
- b. Prepare and deliver Badged Employee and Remote IT User Listings in accordance with DRD 1016MA-010.
- c. Develop and maintain project, system, and facility schedules and staffing plans.
- d. Prepare and submit for approval, as required, status reports, metrics data, documentation, etc. as required by DRD 1016MA-003, Progress Reports.
- e. Provide necessary software and system development tools including hardware necessary to provide cost efficient development and operations.
- f. Provide training of personnel supporting HOSC mission operations in accordance with HOSC-PLAN-209, Integrated Support Team (IST) Training Plan. These activities shall ensure the technical competence of personnel assigned to mission support positions and their ability to perform in a mission support environment. The contractor shall provide training in support of engineering and software design and development activities.
- g. Provide, implement, and maintain adequate controls including contractor policies and procedures governing standards of conduct, procurement processes and practices, and prevention of waste, fraud, and mismanagement.
- h. Provide for travel to complete assigned tasks. The contractor shall provide for travel to attend training classes, to provide off-site system support, to participate in analysis at other facilities and in support of other engineering, design and development activities at remote sites.
- i. Prepare and submit for approval an Organizational Conflict of Interest Avoidance Plan for Sensitive Information as defined DRD No. 1016MA-009.
- j. Prepare and deliver Contractor Employee Clearance Documents in accordance with DRD 1016MA-011.
- k. Prepare and deliver Position Risk Designation for Non-NASA Employee Forms in accordance with DRD 1016MA-012.

The overall MSFC program management responsibilities for the services and functions addressed in this PWS are exercised through the established responsibility and authority of the Contracting Officer and the Contracting Officer's Technical Representative (COTR).

DATA PROCUREMENT DOC.
NO. ISSUE
1016 **Revision C**

NNM04AA07C

CONTRACT/RFP

EXHIBIT NUMBER

J-2

ATTACHMENT NUMBER

Huntsville Operations Support Center (HOSC)

PROJECT/SYSTEM

DATA PROCUREMENT DOCUMENT

COLSA CORPORATION

CONTRACTOR

December 1, 2006

DATE

National Aeronautics and
Space Administration

National Aeronautics and Space Administration					DATA PROCUREMENT DOC.	
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INCORPORATED REVISIONS OUTSTANDING REVISIONS				AS OF: Effective Date	SUPERSEDING:	PAGE:
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AUTHORITY	PORTION AFFECTED - PAGE NO./NO.				REMARKS	
	INTRO	SGR	DRL	DRD		
Contract Mod.07				1016MA-003	Item 6: Changed title to: "Monthly Progress Report" Item 15.1 Inserted "Monthly" prior to "Progress Report" Item 15.3(a): Inserted "to WBS Level III" to end of sentence Item 15.4: Inserted "Monthly" prior to "Progress Reports"	
				1016MA-006	DELETED	
				1016MA-007	Item 6: Changed title to: "HOSC Software Release Quarterly Report" Item 7: Changed DESCRIPTION/USE to read: "To provide identification and tracking measures or metrics for HOSC Software releases. The release information, as established by NPD 2210.1, will be reported quarterly to the Software Release Authority at MSFC to enable compliance with reporting to the Director, Commercial Technology Division at NASA Headquarters." Item 12: Changed "Monthly" to "Quarterly" Item 15.3: Changed Contents to read: "For each software product (e.g. EHS, EPC, IVoDS), provide a list of approved users, including user organization/location/etc., applicable payload/experiment, and software version" Additional changes incorporated in Mod. 07: Changed Title of MA-003 to "Monthly Progress Report", lined through MA-006 to indicate deletion, and changed Title of MA-007 to "HOSC Software Release Quarterly Report" The following change noted in the DCL for Mod. 07 was not incorporated but is for Rev. A:	
Contract Mod.11			X	1016MA-007	Item 7: Changed DESCRIPTION/USE to read: "To provide identification and tracking measures or metrics for HOSC Software releases. The release information, as established by NPD 2210.1, will be reported quarterly to the Software Release Authority at MSFC to enable compliance with reporting to the Director, Commercial Technology Division at NASA Headquarters."	
			X		DRL and Item 9: Changed QS to QD throughout entire DPD	
				1016MA-004	Item 3: Changed Data Type from 3 to 2	
				1016CM-001	Item 3: Changed Data Type from 2 to 1	
				1016SA-001	Item 3: Changed Data Type from 2 to 1	

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INCORPORATED REVISIONS			AS OF: Effective Date		SUPERSEDING:	PAGE:
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AUTHORITY	PORTION AFFECTED - PAGE NO./NO.				REMARKS	
	INTRO	SGR	DRL	DRD		
Contract Mod 42			X	X	Updated Organizational codes as required throughout document	
			X	X	Added DRD 1016MA-009 – Organizational Conflict of Interest (OCI) Avoidance Plan	
Contract Mod. 59				1016CD-001 & 1016MA-005	Item 15.2 - Changed title of NFS 1852.204-76 to "Security Requirements for Unclassified Information Technology Resources (November 2004 [Deviation])	
			X	1016CD-002	Deleted – replaced by 1016MA-010	
			X	X	Added the following DRDs: 1016MA-010, Badged Employee and Remote IT User Listing; 1016MA-011, Contractor Employee Clearance Document; 1016MA-012, Position Risk Designation for Non-NASA Employees Form	
				X	Updated Organizational codes as required throughout document	

MSFC - Form 3461-1 (Rev August 1970)

National Aeronautics and Space Administration			DATA PROCUREMENT DOC.		
PAGE REVISION LOG			NO.	ISSUE	
			1016	Revision C	
NOTE: The current revision is denoted by a vertical line in the outer margin adjacent to the affected text.		AS OF: 12-01-06	SUPERSEDING: 11-09-05	PAGE: 1 of 1	
INSERT LATEST REVISED PAGES.			DISCARD SUPERSEDED PAGES.		
ITEM	PAGE	STATUS	ITEM	PAGE	STATUS
DPD	All	Revision C			

MSFC - Form 3461-2 (Rev August 1970)

1.0 INTRODUCTION

1.1 Scope: Subject to the Rights in Data clause, this Data Procurement Document (DPD) sets forth the data requirements in each Data Requirements Description (DRD) and shall govern that data required by the DPD for the contract. The contractor shall furnish data defined by the DRD's listed on the Data Requirements List (DRL) by category of data, attached hereto, and made a part of this DPD. Such data shall be prepared, maintained, and delivered to MSFC in accordance with the requirements set forth within this DPD. In cases where data requirements are covered by a Federal Acquisition Regulation (FAR) or NASA FAR Supplement (NFS) regulation or clause, the regulation will take precedence over the DPD, per FAR 52.215-8.

1.2 DPD Description: This DPD consists of a Document Change Log, a Page Revision Log, a Table of Contents, an Introduction, a Statement of General Requirements, DPD maintenance procedures, a DRL, and the DRD's.

1.2.1 General Requirements: The general requirements, as specified in paragraph 2.0 of this DPD, prescribe those requirements applicable to the preparation, maintenance, and delivery of data that are better defined in aggregate than in the individual DRD's.

1.2.2 Data Requirements List (DRL): Throughout the performance of the contract, the DRL provides a listing by data category of the data requirements of the DPD.

1.2.3 Data Requirements Descriptions (DRD's)

1.2.3.1 Each data requirement listed on the DRL is given complete definition by a DRD. The DRD prescribes content, format, maintenance instructions, and submittal requirements.

1.2.3.2 For the purpose of classification and control, DRD's of this DPD are grouped into the following broad functional data categories:

<u>CATEGORY SYMBOL</u>	<u>DESCRIPTION</u>
CD	Contractual Data
CM	Configuration Management
LS	Logistics/Support
MA	Management
OP	Operations
QE	Quality Engineering
SA	Safety
SE	Systems Engineering
VR	Verification

1.2.3.3 The symbols representing these data categories form part of the prefix of the DRD identification number. The first numerical characters reflect the DPD number.

1.2.3.4 To facilitate the usage and maintenance of the DPD, the DRD's have been sectionalized in accordance with the above data categories.

- 1.2.3.5 The DRD's are filed by data category and are in alpha-numeric sequence as listed on the DRL page (or pages) that precedes the DRD's.
- 1.2.4 Document Change Log (DCL) and Page Revision Log (PRL): The Document Change Log chronologically records all revision actions that pertain to the DPD. The Page Revision Log describes the current revision status of each page of the DPD and thus, at all times, provides its exact configuration.
- 1.2.5 DPD Maintenance Procedures: Maintenance procedures define the detailed methods to be employed in maintaining the DPD. Detailed maintenance procedures are specified in paragraph 3.0 of this DPD.
- 1.3 Data Types for Contractual Efforts: The types of data and their contractually applicable requirements for approval and delivery are:

<u>TYPE</u>	<u>DESCRIPTION</u>
1	All issues and interim changes to those issues require written approval from the requiring organization before formal release for use or implementation.
2	MSFC reserves a time-limited right to disapprove in writing any issues and interim changes to those issues. Data shall be submitted to the procuring activity for review not less than 45 calendar days prior to its release for use or implementation. The contractor shall clearly identify the release target date in the "submitted for review" transmittal. If the contractor has not been notified of any disapproval prior to the release target date, the data shall be considered approved. To be an acceptable delivery, disapproved data shall be revised to remove causes for the disapproval before its release.
3	These data shall be delivered by the contractor as required by the contract and do not require MSFC approval. However, to be a satisfactory delivery, the data must satisfy all applicable contractual requirements.
4	These data are produced or used during performance of the contract and are retained by the contractor. They shall be delivered when MSFC requests it according to instructions in the request. The contractor shall maintain a list of these data and shall furnish copies of the list to MSFC when requested to do so.
5	These data are incidental to contract performance and are retained by the contractor in those cases where contracting parties have agreed that delivery is not required. However, the Contracting Officer or the Contracting Officer's Representative shall have access to and can inspect this data at its location in the contractor's or subcontractor's facilities.

2.0 STATEMENT OF GENERAL REQUIREMENTS

- 2.1 Applicable Documents: Documents included as applicable documents in this DPD are the issue specified in the Performance Work Statement, and form a part of the DPD to the extent specified herein. References to documents other than applicable documents in the data requirements of this DPD may sometimes be utilized. These do not constitute a contractual obligation on the contractor. They are to be used only as a possible example or to provide related information to assist the contractor in developing a response to that particular data requirement.

2.2 Subcontractor Data Requirements

2.2.1 The contractor shall specify to subcontractors and vendors, if any, the availability source of all data required for the satisfactory accomplishment of their contracts. The contractor shall validate these requirements for documents when appropriate; where the requirement concerns other contractor data, the contractor shall provide his subcontractor or vendor with the necessary documents. All such requests shall be accomplished under the auspices of the contractor.

2.2.2 Reference to subcontractor data in the contractor's responses is permissible, providing the references are adequate and include such identification elements as title, number, revision, etc., and a copy of the referenced data is supplied with the response document at time of delivery to MSFC.

2.3 Distribution

2.3.1 Distribution of required documentation shall be in quantities determined by the Contracting Officer. Recipient names and email (if applicable) addresses shall be noted on a separate distribution list to be furnished by the Contracting Officer.

2.3.2 Electronic submission of data deliverables is preferred. The preferred formats include Microsoft Word, Excel, PowerPoint, or Adobe Acrobat PDF as appropriate. The software versions shall be confirmed prior to submittals. Marshall Policy Directive (MPD) 2210.1 specifies the requirements for utilizing the Documentation Repository. Electronic data submittals to the Repository shall be coordinated with the Repository. MSFC has the capability of receiving electronic data files for importing into the MSFC Documentation Repository system. Computer-Aided Design (CAD) drawings shall be submitted in the original native vector, Hewlett-Packard Graphic Language (HPGL) and raster image formats.

2.4 Printing: All printing, duplicating, or binding shall be in accordance with NFS 1852.208-81, Restrictions on Printing and Duplicating. Printing of formal reports and Type 1 and 2 data in book format shall be in accordance with the following general specifications:

- a. Method of reproduction – offset/xerography.
- b. Finished size – 8 1/2" X 11".
- c. Paper – 20-pound opaque bond.
- d. Cover – Litho cover stock.
- e. Pages will be printed on both sides; blank pages will be avoided when possible.
- f. Oversize pages will be avoided when possible, but if necessary will be folded to 8 1/2" X 11".
- g. Binding shall be the most economical method commensurate with the size of the report and its intended use.

2.5 Microfilm: When microfilm of drawings, specifications, and associated lists is required, it shall be 35mm silver halide negative, first generation (Type 1, Class 1) in accordance with ANSI/AIIM MS32-1987 (Microrecording of Engineering Source Documents on 35mm Microfilm). Input Form DD Form 1562, Dual Purpose Engineering Document Card, shall be used for microfilm purposes. The microfilm shall be submitted in the form of roll microfilm or master microfilm aperture cards. If microfilm rolls are used, they shall not exceed 100 feet in length. Deviations from these requirements shall be approved by the Contracting Officer. All deviations shall be coordinated with the MSFC Micrographics Manager, located in the Documentation Repository.

2.6 Contractor's Internal Documents: The contractor's internal documents shall be used to meet the data requirements of this DPD unless a specific format is required by the applicable DRD.

- 2.7 Document Identification: Type 1 and 2 documents published by the contractor and submitted in response to the data requirements of this DPD shall be identified within an organized identification numbering system prescribed to MSFC by the contractor and, if applicable, as approved by MSFC. This number, change legend, date, and title constitute the minimum identification of the specific document and shall appear on the cover and title page. The contract number shall also appear on the cover and title page as separate markings. The originator and organization shall be included on the title page. The document number, change legend, and date shall appear on each page of the document. In the front matter of each document, identify the DPD number and applicable DRD number(s) required for document preparation. Successive issues or revisions of documents shall be identified in the same manner as the basic issue and shall have appropriate change identification. Drawings and ECP's are excluded from the marking provisions of this paragraph. All Type 1 documentation, excluding configuration management requirements, will be marked "PRELIMINARY PENDING MSFC APPROVAL," and once approved shall be reissued with "APPROVED BY MSFC" and the date and approval authority annotated on the cover.
- 2.8 Reference to Other Documents in Data Submittals: All referenced documents shall be made readily available to the cognizant MSFC organization upon request. The contractor should make sure that the references are available to MSFC in a manner which does not incur delays in the use of the response document.
- 2.9 Maintenance of Type 1 Document Submittals
- 2.9.1 Revisions of Type 1 documentation may be accomplished either by individual page revision or by a complete reissue of the document identified in accordance with requirements of 2.7 above, with the exception of drawings (which shall be revised in accordance with contract configuration management requirements).
- 2.9.2 Individual page revisions shall be made as deemed necessary by the contractor or as directed by the Contracting Officer.
- 2.9.3 A Type 1 document shall be completely reissued when, in the opinion of the contractor and/or MSFC, the document has been revised to the extent that it is unusable in its present state, or when directed by the Contracting Officer. When complete reissues are made, the entire contents of the document shall be brought up to date and shall incorporate revised pages. All revisions shall be recorded. A revision log shall identify complete reissues except for periodic reports and documents which are complete within themselves as final.
- 2.9.4 Changes of a minor nature to correct obvious typing errors, misspelled words, etc., shall only be made when a technical change is made, unless the accuracy of the document is affected.
- 2.9.5 All revised pages shall be identified by a revision symbol and a new date. Each document shall contain a log of revised pages that will identify the revision status of each page with the revision symbol. This list shall follow the table of contents in each document. The line or lines revised on a given page shall be designated by the use of vertical line in the margin of the page, and the change authority shall be indicated adjacent to the change.
- 2.9.6 Contractor Type 1 documents shall not be submitted containing pen and ink markups which correct, add to, or change the text, unless schedule problems exist and approval is obtained in writing from the Contracting Officer. Such markups, however, shall not exceed 20 percent of the page content and shall be acceptable provided that the reproduced copies are legible. In addition, hand-drawn schematics, block diagrams, data curves, and similar charts may be used in original reports in lieu of formally prepared art work, as long as legibility of copies is not impaired. The Contracting Officer will determine acceptability.

3.0 DPD MAINTENANCE PROCEDURES

3.1 MSFC-Initiated Change: New and/or revised data requirements will be incorporated by contract modification to which the new or revised portion of the DPD will be appended. The contractor shall notify the Contracting Officer in the event a deliverable data requirement is imposed and is not covered by a DRD, or when a DRD is changed by a contract modification and for which no revision to DPD is appended. In such cases, the contractor shall submit the requested changes to MSFC for approval. See paragraph 3.3.1 for change procedures.

3.2 Contractor-Initiated Change: Contractor-proposed data requirements, or proposed changes to existing requirements shall be submitted to MSFC for approval.

3.3 DPD Change Procedures

3.3.1 Changes to a contractual issue of this DPD will be identified by MSFC on the Document Change Log and Page Revision Log. The actual revised material on the DPD page will be identified by placing a heavy vertical line in the right-hand margin extending the entire length of the change. In addition, the numerical control number of the contractual direction authorizing the change shall be placed adjacent to the vertical revision line. These revision identifiers shall be used to reflect the current revision only; any previous symbols on a page will be deleted by the current revision.

3.3.2 The date of the contractual direction paper, e.g., Change Order, Supplemental Agreement, or Contracting Officer's letter shall be entered under the "Status " column of the Page Revision Log adjacent to the affected page or DRD number, and in the "as of" block. The date that was in the "as of" block will be entered in the "Superseding" block.

3.3.3 The Document Change Log entitled "Incorporated Revisions" will be changed to indicate the number, portions affected, and associated Supplemental Agreement number, if applicable.

3.3.4 The Document Change Log entitled "Outstanding Revisions" is changed periodically to indicate outstanding Change Orders and Contracting Officer notification letters.

3.4 DPD Reissues

3.4.1 When conditions warrant, the DPD will be reissued by MSFC and will supersede the existing DPD in its entirety. Reissues will be issued by contractual direction.

3.4.2 All revision symbols (vertical lines and contractual direction control numbers) will be removed from all pages; revision dates shall remain in the Date Revised block on DRD's that have been revised. The issue symbol, which will commence with "A" and progress through "Z," will be entered in the DPD identification block of each DRD page of the DPD.

HUNTSVILLE OPERATIONS SUPPORT CENTER (HOSC)
Data Requirements List

<u>DRD</u>	<u>DATA TYPE</u>	<u>TITLE</u>	<u>OPR</u>
CD - Contractual Data			
1016CD-001	2	Information Technology Security Plan(s)	IS10
1016CD-002	3	On-site Employee Location List	PS10
1016CD-003	3	Technology Reports	ED03
CM - Configuration Management			
1016CM-001	1	Configuration Management Plan	ED03/EO02
LS - Logistics Support			
1016LS-001	2	Government Property Management Plan	AS41
MA - Management			
1016MA-001	1	Management Plan	EO02
1016MA-002	3	Financial Management Report (533M)	CS40
1016MA-003	3	Monthly Progress Report	EO02
1016MA-004	2	Work Breakdown Structure (WBS) and WBS Dictionary	CS40/QD02
1016MA-005	3	IT Security Status Report	EO02
1016MA-006	3	Systems Status Monthly Report	EO02
1016MA-007	3	HOSC Software Release Quarterly Report	EO02
1016MA-008	3	Performance Requirements Summary	EO02
1016MA-009	2	Organizational Conflict of Interest (OCI) Avoidance Plan	PS22
1016MA-010	3	Badged Employee and Remote IT User Listing	AS50
1016MA-011	3	Contractor Employee Clearance Document	AS50
1016MA-012	3	Position Risk Designation Form for Non-NASA Employee Form	AS50
OP - Operations			
1016OP-001	2	Operations/Maintenance Plan	EO02
QE - Quality Engineering			
1016QE-001	1	Software Quality Assurance Plan	QD40
SA - Safety			
1016SA-001	1	On-site Safety and Health Plan	AS10/QD50
1016SA-002	3	Mishap and Safety Statistics Reports	QD50
SE - System Engineering			
1016SE-001	2	System Development Plan	EO02
VR - Verification			
1016VR-001	2	Verification Plan	EO02

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|-------------------|--------------------------------------|
| 1. DPD NO.: 1016 | ISSUE: Revision C | 2. DRD NO.: 1016CD-001 |
| 3. DATA TYPE: 2 | | 4. DATE REVISED: 12-01-06 |
| | | 5. PAGE: 1/2 |
6. **TITLE:** Information Technology Security Plan(s)
7. **DESCRIPTION/USE:** To document information technology security risk management and safeguards for protection of unclassified NASA electronic information and data processed by Federal general support computer systems and major software applications.
8. **OPR:** IS10 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 45 days after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Revise as required
13. **REMARKS:** The information technology security plan(s) 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 NFS 1852.204-76.
14. **INTERRELATIONSHIP:** PWS paragraph 2.5
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** Information Technology Security Plan(s) shall document the safeguards necessary to ensure sufficient availability, integrity, and confidentiality of that information accessed or managed within the systems and/or applications, based on the contractor's assessment of risks.
- 15.2 **APPLICABLE DOCUMENTS:**
- | | |
|-----------------|--|
| MPD 2810.1 | <i>IT Security</i> |
| NPG 2810.1 | <i>Security of Information Technology</i> |
| NFS 1804.470-3 | <i>Security Plan for Unclassified Federal Information Technology systems</i> |
| NFS 1852.204-76 | <i>Security Requirements for Unclassified Information Technology Resources (November 2004 [Deviation])</i> |
- 15.3 **CONTENTS:** The Information Technology Security Plan shall meet the requirements of the applicable documents in 15.2 and document how the contractor and subcontractor personnel will utilize, in a secure manner commensurate with the sensitivity of the information involved, those Federal computer systems and software applications managed by others. The plan shall describe the contractor's processes for implementing information security including personnel background screening, personnel awareness and training, information protection, and security incident response.

Additionally, a separate system-level Information Technology System Security Plan shall be prepared for each Federal general support computer system or major software application managed by the contractor and/or subcontractor personnel in the performance of this contract. The Information Technology System Security Plan(s) shall meet the requirements of the applicable documents in 15.2. NPG 2810.1 defines "general support computer systems" and "major applications" and provides plan requirements for both.

DRD Continuation Sheet

TITLE: Information Technology Security Plan (s)

DRD NO.: 1016CD-001

DATA TYPE: 2

PAGE: 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED):**

15.4 **FORMAT:** Contractor format is acceptable.

15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DRD Continuation Sheet

TITLE: Technology Reports

DRD NO.: 1016CD-003

DATA TYPE: 3

PAGE: 2/3

15. DATA PREPARATION INFORMATION (CONTINUED):

publication at the time of disclosure. In addition, after disclosure to the agency, the Contractor will promptly notify the agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor. This reporting requirement may be met by completing NASA Form 1679 (February 1998). Use of this form is preferred; however, if the form is not used the following information should be provided in order to meet the reporting requirement:

1. Descriptive title.
2. Innovator(s) name(s), title(s), phone number(s), and home address(es).
3. Employer when innovation made (name and division).
4. Address (place of performance).
5. Employer status (e.g., Government, college or university, non-profit organization, small business firm, large entity).
6. Origin (e.g., NASA grant number, NASA prime contract number, subcontractor, joint effort, multiple contractor contribution, other).
7. NASA Contracting Officer's Technical Representative (COTR).
8. Contractor/grantee New Technology Representative.
9. Brief abstract providing a general description of the innovation:
 - (a) Description of the problem or objective that motivated the innovation's development.
 - (b) Technically complete and easily understandable description of innovation developed to solve or meet the objective.
 - (c) Unique or novel features of the innovation and the results or benefits of its application.
 - (d) Speculation regarding potential commercial applications and points of contact (including names of companies producing or using similar products).
10. Additional documentation.
11. Degree of technological significance (e.g., modification of existing technology, substantial advancement in the art, major breakthrough).
12. State of development (e.g., concept only, design, prototype, modification, production model, used in current work).
13. Patent status.
14. Dates or approximate time period during which this innovation was developed.
15. Previous or contemplated publication or public disclosure including dates.
16. Answers to the following questions (for software only):
 - (a) Using outsiders to beta-test code? If yes, done under beta-test agreement?
 - (b) Modifications to this software continue by civil servant and/or contractual agreement?
 - (c) Previously copyrighted (if so, by whom)?
 - (d) Were prior versions distributed (if yes, supply NASA or Contractor contract)?
 - (e) Contains or is based on code owned by a non-federal entity (if yes, has a license for use been obtained)?
 - (f) Has the latest version been distributed without restrictions as to use or disclosure for more than one year (if yes, supply date of disclosure)?
17. Name(s) and signature(s) of innovator(s).

DRD Continuation Sheet

TITLE: Technology Reports

DRD NO.: 1016CD-003

DATA TYPE: 3

PAGE: 3/3

15. DATA PREPARATION INFORMATION (CONTINUED):

- b. Interim NASA-MSFC Technology Report: This report shall consist of a complete listing of subject inventions for the previous 12-month period or certify that there are none. Completion of MSFC Form 4204 will satisfy this reporting requirement. Use of the form is preferred; however an alternate format is acceptable provided all required information is provided.
- c. Final NASA-MSFC Technology Report: This report shall consist of a comprehensive list of all subject inventions for the duration of the contract or certification that there are none. Completion of MSFC Form 4204 will satisfy this reporting requirement. Use of the form is preferred; however an alternate format is acceptable provided all required information is provided.
- d. Report on utilization of subject inventions: This report provides information on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the contractor or its licensees or assignees. Per FAR 52.227-11, this report shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the contractor, and other data requested by the Contracting Officer.

15.4 FORMAT:

The Disclosure of Invention and New Technology (Including Software) report may use NASA Form 1679 (February 1998) or provide sufficient information to meet the reporting requirement.

The interim and final NASA-MSFC Technology Reports may use MSFC Form 4204 (February 1993) or provide sufficient information to meet the reporting requirement.

Referenced forms may be obtained from the Contracting Officer or New Technology Representative.

15.5 MAINTENANCE: None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016CM-001**
3. **DATA TYPE:** 1
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/1
6. **TITLE:** Configuration Management Plan
7. **DESCRIPTION/USE:** To describe the contractor's method for accomplishing the configuration management requirements of the contract using the existing configuration management system as a baseline.
8. **OPR:** ED03/EO02 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 60 days after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:** One time, revise as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.9
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Configuration Management Plan (CMP) provides the contractor's proposed management approach for implementation of configuration management.
- 15.2 **APPLICABLE DOCUMENTS:**
 MSFC-PLAN-2929 Configuration Management Plan for the Huntsville Operations Support Center (HOSC)
- 15.3 **CONTENTS:** The plan shall describe the contractors approach to the Configuration Management of the hardware, software, firmware and documentation to be utilized on this contract. The plan shall be compatible with MSFC-PLAN-2929, Configuration Management Plan for the Huntsville Operations Support (HOSC). The plan shall include configuration identification, interface control, change control, documentation, status accounting, and configuration verification. The plan shall include a schedule referenced to phase-in of all the major milestones needed to track implementation.
- 15.4 **FORMAT:** Contractor format is acceptable with MSFC approval.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue. Update as required to maintain current with program changes.

DATA REQUIREMENTS DESCRIPTION (DRD)

- 1. **DPD NO.:** 1016 **ISSUE:** Revision C
- 2. **DRD NO.:** **1016LS-001**
- 3. **DATA TYPE:** 2
- 4. **DATE REVISED:** 12-01-06
- 5. **PAGE:** 1/1
- 6. **TITLE:** Government Property Management Plan
- 7. **DESCRIPTION/USE:** To describe the method of controlling and managing Government property.
- 8. **OPR:** AS41 9. **DM:** EO02
- 10. **DISTRIBUTION:** Cognizant property administrator
- 11. **INITIAL SUBMISSION:** Preliminary three months after Authority To Proceed (ATP)
- 12. **SUBMISSION FREQUENCY:** Final one year after ATP, revise as required
- 13. **REMARKS:** This document shall be the official contract requirements document for the control and identification of all Government property.
- 14. **INTERRELATIONSHIP:** PWS paragraph 2.4
- 15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Government Property Management Plan defines the contractor's methods of care, accounting, and control of Government property.
- 15.2 **APPLICABLE DOCUMENTS**
 - FAR *Federal Acquisition Regulation, Part 45*
 - NPG 5100.4B *Federal Acquisition Regulation Supplement, (NASA/FAR Supplement) Part 18-45 and latest revisions thereto*
 - NPG 4200.1E *NASA Equipment Management Manual*
 - MWI 4200.1A *Equipment Control*
- 15.3 **CONTENTS:** This plan shall satisfy the requirements of the documents listed in 15.2, and the contract. This plan shall consist of those procedures which constitute the contractor's property management system and shall include the following categories:
 - a. Property management.
 - b. Acquisition.
 - c. Receiving.
 - d. Identification.
 - e. Records.
 - f. Movement.
 - g. Storage.
 - h. Physical inventories.
 - i. Reports.
 - j. Consumption.
 - k. Utilization.
 - l. Maintenance.
 - m. Subcontractor control.
 - n. Disposition.
 - o. Contract close-out.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | |
|---|---|
| <p>1. DPD NO.: 1016 ISSUE: Revision C</p> <p>3. DATA TYPE: 1</p> <p>6. TITLE: Management Plan</p> <p>7. DESCRIPTION/USE: To provide an overall description of the process and methods planned for accomplishing the Performance Work Statement.</p> <p>8. OPR: EO02 9. DM: EO02</p> <p>10. DISTRIBUTION: Per Contracting Officer's letter</p> <p>11. INITIAL SUBMISSION: 30 days after Authority To Proceed (ATP)</p> <p>12. SUBMISSION FREQUENCY: Update as required</p> <p>13. REMARKS:</p> <p>14. INTERRELATIONSHIP: PWS paragraph 2.1.a</p> <p>15. DATA PREPARATION INFORMATION:</p> <p>15.1 SCOPE: The Management Plan provides the basic planning document which describes the contractor's overall plan for performing the contracted scope of work.</p> <p>15.2 APPLICABLE DOCUMENTS: None</p> <p>15.3 CONTENTS: The Management Plan shall provide a description of the contractor's management concepts, practices, approaches, plans, and schedules necessary for accomplishing (managing and controlling) the tasks described in the Performance Work Statement. In addition, the plan shall present those management systems to be utilized to define and delegate task assignments and shall define the organizational relationships of the contractor, subcontractors, and the Government.
 Management Overview - A brief description of the project objectives, the system to be furnished, and the equipment (systems), and software that is to be provided. Include a concise summary of the contractor's management organization responsible for performance of the contract, including interrelationships with the Work Breakdown Structure (WBS), within the company and with other contractors, and proposed relationships with the NASA project management.
 Management Systems - This plan shall briefly describe how the various management systems are to be integrated and used for the overall project management and reporting of:</p> <ol style="list-style-type: none"> a. Project management. b. Contract management. c. Financial management. d. Data requirements management. e. Schedules (planning and control). f. Performance management (cost/schedule/technical). g. Configuration management. h. Engineering management. i. Logistics management. j. Test/verification management. k. Subcontractor/vendor management. | <p>2. DRD NO.: 1016MA-001</p> <p>4. DATE REVISED: 12-01-06</p> <p>5. PAGE: 1/2</p> |
|---|---|

DRD Continuation Sheet

TITLE: Management Plan

DRD NO.: 1016MA-001

DATA TYPE: 1

PAGE: 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED):**

- l. Procurement management.
- m. Government furnished property (GFP) management.
- n. Systems engineering management.
- o. Safety, reliability, maintainability, quality assurance.
- p. Automated information management systems.
- q. Communications.
- r. Support equipment management.
- s. Spares philosophy and planning.
- t. Facilities utilization and management.
- u. Project reviews.
- v. Environmental impact management.
- w. Risk Management.

NOTE: It is not intended that this plan duplicate other plans called for in the Data Requirements List. This plan should summarize the overall project and reference or summarize other plans where appropriate and shall reference contractor internal procedures where applicable.

15.4 **FORMAT:** Contractor format is acceptable.

15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016MA-002**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/1
6. **TITLE:** Financial Management Report (533M)
7. **DESCRIPTION/USE:** To provide monthly financial reports for monitoring program costs. The 533 reports are the official cost documents used at NASA for cost type, price re-determination, and fixed price incentive contracts.
8. **OPR:** CS40 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** No later than 10 working days following the end of the contractor's accounting month and not more than 44 calendar days after Authority To Proceed (ATP).
12. **SUBMISSION FREQUENCY:** No later than 10 working days following the end of the contractor's accounting month
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.2
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Financial Management Report provides data on accumulated costs and funding projections for management of the contract.
- 15.2 **APPLICABLE DOCUMENTS**

NFS 1852.242-73	<i>NASA Contractor Financial Management Reporting, (July 1997)</i>
NPG 9501.2	<i>NASA Contractor Financial Management Reporting</i>
- 15.3 **CONTENTS:** The elements of cost for financial reporting shall be mutually agreed by the contractor and NASA project office and cover labor hours by function, direct labor cost, materials, subcontracts, interdivisional work, other direct rates, overhead by pool, fringe, G&A, and fee. Changes or additions to elements of cost shall be by mutual agreement between the contractor and the NASA project manager. The data contained in the reports must be auditable using Generally Accepted Accounting Principles. The 533M Report shall include actuals and projections at the total contract level. A summary page at the contract level shall be included reflecting the cumulative since inception cost for the contract.
- 15.4 **FORMAT:** The NASA Form 533M shall be prepared per NPG 9501.2 and NFS 1852.242-73. Contractor format is acceptable provided all necessary requirements are met. Electronic submission of contractor data is required.
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016MA-003**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/2
6. **TITLE:** Monthly Progress Report
7. **DESCRIPTION/USE:** To provide data for the assessment of contract progress and HOSC system performance/quality. To provide visibility to contractor and MSFC Management of actual and potential problems, and progress toward meeting the requirements of the contract.
8. **OPR:** EO02 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Ten calendar days following the end of the first two months after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:**
 - a. Progress Report: Monthly, no later than the 20th day of the calendar month following the end of the accounting month
 - b. Metrics: Monthly, no later than the 10th day of the calendar month following the end of the accounting month
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.1.d, 3.2, 3.3, 4.5, 4.6
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Monthly Progress Report shall provide a comprehensive status on all active tasks and include the necessary information to assess status and identify problems that need resolution for accomplishment of the contract tasks. The Metrics shall provide information regarding the quality and timeliness of overall HOSC systems performance and product deliveries.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:**
 - a. Progress Report:
 1. For each WBS Level II task, provide the following by facility/project:
 - (a) Narrative report of status to WBS Level III
 - (b) Narrative report of planned effort for next reporting period.
 - (c) Schedule, showing progress of Level III elements.
 - (d) Labor expended by category.
 2. Status of significant Problem Reports, Change Requests, and other issues as appropriate, including anticipated schedule and resource impacts.

DRD Continuation Sheet

TITLE: Monthly Progress Report

DRD NO.: 1016MA-003

DATA TYPE: 3

PAGE: 2/2

15. DATA PREPARATION INFORMATION (CONTINUED):

- b. **Metrics:** The specific metrics data to be provided shall be determined by mutual agreement between the contractor and the NASA project manager. System performance/quality and product delivery metrics shall cover the following major topics:
1. Software development and test.
 2. Problem reports.
 3. Facility outages.
 4. Help desk information.
 5. Key accomplishments and plans.
- 15.4 **FORMAT:** The Monthly Progress Report shall be in report format. Submittal shall be standard hardcopy or other media as directed by the Contracting Officer. The Metrics data shall be in spreadsheet or other format, as mutually agreed to between the contractor and the NASA project manager. Electronic submittal of the Metrics data is required.
- 15.5 **MAINTENANCE:** None required

DRD Continuation Sheet

TITLE: Work Breakdown Structure (WBS) and WBS Dictionary **DRD NO.:** 1016MA-004

DATA TYPE: 2 **PAGE:** 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED):**

b. WBS Dictionary - The WBS dictionary shall describe the technical and cost content of every WBS element and efforts associated with each element (e.g., design, development, manufacturing). For WBS elements specified elsewhere for cost reporting, the WBS dictionary definitions shall also include the exact narrative of the directly associated PWS paragraphs. The WBS dictionary shall be arranged in the same order as the contract WBS index. Following the description of the WBS element shall be a listing of lower level WBS elements. The WBS dictionary shall include the following for each WBS element:

1. WBS element title, number, and element task description.
2. Performance measurement criteria (PMC).
3. PWS paragraph number.
4. Specification (number and title) associated with the WBS element.
5. Contract line item associated with the WBS element.
6. Date, revision number, revision authorization and approved changes.
7. Contract end item/data item number and quantity.
8. Cost content and description.
9. WBS code and work order/work authorization.
10. Technical content.
11. System contractor.
12. Associate or subcontractor.
13. Applicable PWS narrative.

15.4 **FORMAT:** The WBS shall be in a chart format showing element relationships, arranged in the same order as the WBS provided in the Request for Proposal. The WBS Dictionary shall be ordered in consonance with the WBS index and shall reference each WBS element by its identifier and name.

15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

- 1. **DPD NO.:** 1016 **ISSUE:** Revision C
- 2. **DRD NO.:** **1016MA-007**
- 3. **DATA TYPE:** 3
- 4. **DATE REVISED:** 12-01-06
- 5. **PAGE:** 1/1
- 6. **TITLE:** HOSC Software Release Quarterly Report
- 7. **DESCRIPTION/USE:** To provide identification and tracking measures or metrics for HOSC Software releases. The release information, as established by NPD 2210.1, will be reported quarterly to the Software Release Authority at MSFC to enable compliance with reporting to the Director, Commercial Technology Division at NASA Headquarters.
- 8. **OPR:** EO02 9. **DM:** EO02
- 10. **DISTRIBUTION:** Per Contracting Officer's letter
- 11. **INITIAL SUBMISSION:** Ten calendar days following the end of the first three months after Authority To Proceed (ATP)
- 12. **SUBMISSION FREQUENCY:** Quarterly, no later than the 20th day of the calendar month following the end of the accounting month.
- 13. **REMARKS:**
- 14. **INTERRELATIONSHIP:** PWS paragraph 4.4.5
- 15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The HOSC Software Release Quarterly Report shall provide a comprehensive status on the usage of all HOSC software releases.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** For each software product (Eg., EHS, EPC, IVoDS), provide a list of approved users, including user organization/location/etc., applicable payload/experiment, and software version.
- 15.4 **FORMAT:** The report shall be in spreadsheet format. Submittal shall be standard hard copy or other media as directed by the Contracting Officer.
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016MA-008**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/1
6. **TITLE:** Performance Requirements Summary
7. **DESCRIPTION/USE:** To provide necessary data for the assessment of the contractor performance incentive fee criteria.
8. **OPR:** EO02 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Ten calendar days following the end of the first three months after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Monthly, no later than the 10th day of the calendar month following the end of the accounting month.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 4.4
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Performance Requirements Summary will provide metrics regarding the availability of mission critical services, to be used in the determination of the performance incentive fee.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:**
The following metrics shall be provided:
 - a. Percentage (%) of service availability during the month, for each of the following mission services:
 1. Telemetry Processing & Distribution.
 2. Command Preparation & Execution.
 3. Provision of Operations Control Products.
 4. Voice Communication.
 - b. For each outage encountered during the month:
 1. Service affected.
 2. Duration of outage.
 3. Cause of outage.
- 15.4 **FORMAT:** The report shall be in spreadsheet format. Submittal shall be standard hard copy or other media as directed by the Contracting Officer.
- 15.5 **MAINTENANCE:** None required

DRD Continuation Sheet

TITLE: Organizational Conflict of Interest (OCI) Avoidance Plan

DRD NO.: 1016MA-009

DATA TYPE: 2

PAGE: 2/2

15. DATA PREPARATION INFORMATION (CONTINUED):

- (d) That each employee performing this contract signs an express, binding written agreement setting forth all responsibilities and duties to avoid organizational conflicts of interest and to protect sensitive data provided under this contract.
 - (e) That techniques are in place to ensure that the company shall not favor its conflicting business relationships and will avoid the appearance of conflicts of interest.
 - b. With regard to access to nonpublic information, the mitigation plan shall contain a plan to safeguard all proprietary/sensitive data the contractor receives. This plan shall include:
 - 1. The contractor shall not disclose the proprietary/sensitive data relating to this contract.
 - 2. The contractor only shall use the proprietary/sensitive data for purposes of this contract.
 - 3. Information, whether in hard copy or on electronic media, shall be marked, handled, stored and destroyed in order to preclude an unauthorized disclosure of information.
 - 4. Information Technology shall be protected to prevent unauthorized disclosure of information.
 - 5. Employees performing the effort must sign an express binding written agreement clearly agreeing to protect sensitive data.
 - 6. Requirement that subcontractors have appropriate OCI mitigation procedures in place.
 - 7. Requirement for periodic self-audits, the results of which shall be made available to the government.
 - 8. Initial and periodic refresher OCI training for contractor personnel working on the contract.
 - 9. Describe organizational and employee sanctions for violation of the OCI contract clause or OCI Avoidance Plan provisions.
 - 10. Provisions on recording keeping requirements regarding OCI (e.g., training, written agreements). The contractor shall make these records available to and cooperate with any neutral third party the Government assigns to review adherence to their OCI mitigation plan.
 - 11. A provision requiring the contractor to report any real, apparent, or potential conflict of interests that arise to the Contracting Officer.
 - 12. A provision requiring the contractor to update the OCI Mitigation Plan upon occurrence of any event that will cause a change to the plan.
 - c. The requirements of this DRD apply to each subcontractor performing work on this contract.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change pages or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016MA-010**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/1
6. **TITLE:** Badged Employee and Remote IT User Listing
7. **DESCRIPTION/USE:** To assist NASA in conducting contractor floor checks and to determine if the employees meet the minimum background investigation requirements.
8. **OPR:** AS50 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter. One copy shall go to MSFC Protective Services Office.
11. **INITIAL SUBMISSION:** No later than 10 working days after Authority to Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Formal update quarterly and email changes as personnel changes occur to distribution. If deemed necessary by the Contracting Officer, the contractor shall submit the list at times other than stated.
13. **REMARKS:** Reference is made to Federal Acquisition Regulation (FAR) Clause, FAR 52.215-2, *Audit and Records--Negotiations* (June 1999), NPR 1600.1, *NASA Security Program Procedural Requirements*.
14. **INTERRELATIONSHIP:** PWS paragraph 2.1.b
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Badged Employee and Remote IT User Listing provides NASA with a list of all MSFC badged contractor employees, as well as, any contractor remote IT users who will have access to the MSFC IT system.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Badged Employee and Remote IT User Listing shall include the following information for each employee: employee's full name (first and middle names must be birth names), last four digits of the Social Security Number (SSN), date of birth, place of birth, duty position, duty location (building/room number), shift assignment, and supervisor's name. Additionally, if applicable, the type of security background check already completed (NACLC or SSBI) and the date it was completed.
- 15.4 **FORMAT:** Contractor format using Excel Spreadsheet is acceptable.
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016MA-011**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/1
6. **TITLE:** Contractor Employee Clearance Document
7. **DESCRIPTION/USE:** To ensure that badged contractor employees who no longer require Center access properly clear all accounts when the access is no longer needed.
8. **OPR:** AS50 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Immediately when the access is no longer needed
12. **SUBMISSION FREQUENCY:** As required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.1.i
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Contractor Employee Clearance Document provides verification that all badged employees have properly cleared all accounts when the access is no longer needed.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Contractor Employee Clearance Document shall contain all the information required by MSFC Form 383-1.
- 15.4 **FORMAT:** MSFC Form 383-1, "Contractor Employee Clearance Document".
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016MA-012**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/1
6. **TITLE:** Position Risk Designation for Non-NASA Employee Form
7. **DESCRIPTION/USE:** To ensure that contractor employees are screened to an appropriate risk determination in accordance with NPR 1600.1, *NASA Security Program Procedural Requirements*, Chapter 4.
8. **OPR:** AS50 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter. One copy shall go to MSFC Protective Services Office.
11. **INITIAL SUBMISSION:** No later than 10 working days after Authority to Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Update as personnel or position changes occur.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.1.k
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Position Risk Designation for Non-NASA Employee Form provides information necessary to determine the type of investigation required and how closely an individual is screened for a position.
- 15.2 **APPLICABLE DOCUMENTS:**
NPR 1600.1 *NASA Security Program Procedural Requirements*
- 15.3 **CONTENTS:** The Position Risk Designation for Non-NASA Employee Form shall contain all the information required by MSFC Form 4482 in accordance with NPR 1600.1, *NASA Security Program Procedural Requirements*.
- 15.4 **FORMAT:** MSFC Form 4482, "Position Risk Designation for Non-NASA Employee".
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|--------------------------|--------------------------------------|
| 1. DPD NO.: 1016 | ISSUE: Revision C | 2. DRD NO.: 1016OP-001 |
| 3. DATA TYPE: 2 | | 4. DATE REVISED: 12-01-06 |
| | | 5. PAGE: 1/2 |
6. **TITLE:** Operations/Maintenance Plan
7. **DESCRIPTION/USE:** To provide the contractor and the Government a baseline document for operability/maintainability.
8. **OPR:** EO02 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 60 days after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Once, update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 4.0
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Operations/Maintenance Plan shall define all system operability and maintainability activities appropriate for providing the services and performing the functions set forth in the PWS.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** This plan shall define the ground operations and maintenance support of each facility. The plan describes organizational relationships, functional roles, responsibilities and methodologies, but does not provide specific operating procedures, capabilities or requirements. The plan shall address the overall operations and maintenance philosophy and capacities of integrated operations and peripheral support elements. The plan shall include:
- a. Operating philosophy
 1. Organizational relationships.
 - (a) Internal and external relationships.
 - (b) Functional roles.
 - (c) Responsibilities and methodologies.
 2. Operational services.
 - (a) Standard services.
 - (b) Optional services.
 - (c) Responsiveness parameters.
 - (1) Return to service.
 - (2) Operational response time.
 3. Operational tools.

DRD Continuation Sheet

TITLE: Operations/Maintenance Plan

DRD NO.: 1016OP-001

DATA TYPE: 2

PAGE: 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED):**

b. Maintenance philosophy.

1. Availability parameters.

(a) Overall percentage of system availability.

(b) Preventive maintenance.

(1) Schedule for performing.

(2) Downtime required.

(3) Remedial maintenance.

(a) Response time.

(b) Meantime to repair.

(4) Methodology used to establish parameters.

2. Identification and analysis of risks.

(a) Impact of non-availability.

(b) Trade-offs.

3. Detailed performance approach.

(a) Preventive maintenance.

(b) Remedial maintenance.

15.4 **FORMAT:** Contractor format is acceptable.15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

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|---|--------------------|--------------------------------------|
| 1. DPD NO.: 1016 | ISSUE: Revision C | 2. DRD NO.: 1016QE-001 |
| 3. DATA TYPE: 1 | | 4. DATE REVISED: 12-01-06 |
| | | 5. PAGE: 1/1 |
| 6. TITLE: Software Quality Assurance Plan | | |
| 7. DESCRIPTION/USE: To describe the contractor's method for accomplishing the Software Quality Assurance requirements for the contract. | | |
| 8. OPR: QD40 | 9. DM: EO02 | |
| 10. DISTRIBUTION: Per Contracting Officer's letter | | |
| 11. INITIAL SUBMISSION: 60 days after Authority To Proceed (ATP) | | |
| 12. SUBMISSION FREQUENCY: Update as required | | |
| 13. REMARKS: | | |
| 14. INTERRELATIONSHIP: PWS paragraph 3.1.2 | | |
| 15. DATA PREPARATION INFORMATION: | | |
| 15.1 SCOPE: The Software Quality Assurance Plan (SQAP) details the procedures, reviews, and audits required to accomplish Software Quality Assurance. | | |
| 15.2 <u>APPLICABLE DOCUMENTS</u> | | |
| IEEE Std 730-1998 <i>IEEE Standard for Software Quality Assurance Plans</i> | | |
| 15.3 <u>CONTENTS:</u> The Software Quality Assurance Plan shall provide the information defined in IEEE Std 730-1998. | | |
| 15.4 <u>FORMAT:</u> Contractor format is acceptable. | | |
| 15.5 <u>MAINTENANCE:</u> Changes shall be incorporated by change page or complete reissue. Update as required, to maintain current with program changes. | | |

DATA REQUIREMENTS DESCRIPTION (DRD)

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|--|---------------------------------|--|
| <p>1. DPD NO.: 1016</p> <p>3. DATA TYPE: 1</p> | <p>ISSUE: Revision C</p> | <p>2. DRD NO.: 1016SA-001</p> <p>4. DATE REVISED: 12-01-06</p> <p>5. PAGE: 1/3</p> |
|--|---------------------------------|--|
6. **TITLE:** On-site Safety and Health Plan
7. **DESCRIPTION/USE:** To provide the contractor and the Government a baseline document for planning, management, control, and implementation of the contractor's industrial/occupational safety, health, and environmental program.
- | | |
|--------------------------|--------------------|
| 8. OPR: AS10/QD50 | 9. DM: EO02 |
|--------------------------|--------------------|
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Preliminary with proposal
12. **SUBMISSION FREQUENCY:** 10 days after Authority To Proceed (ATP); update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.7; FAR 1852.223-70, *Safety and Health*; FAR 52.223-3, *Hazardous Material Identification and Material Safety Data*; FAR 52.23-5, *Pollution Prevention and Right-to-Know Information*, FAR 52.223-10, *Waste Reduction Program*.
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The On-site Safety and Health Plan describes the contractor's method of implementing occupational safety, health, and environmental standards over the duration of the contract.
- 15.2 **APPLICABLE DOCUMENTS:** Implementation of the following Occupational Safety and Health Standards and applicable requirements shall be specified in the plan.
- | | |
|---|--|
| 29 CFR 1910 | <i>Department of Labor; Occupational Safety and Health Administration Standards for General Industry</i> |
| 40 CFR | <i>Protection of the Environment</i> |
| ANSI Standards applicable to the scope of this contract | |
| MPG 8500.1 | <i>MSFC Environmental Management Program</i> |
| MPG 1040.3 | <i>MSFC Emergency Plan</i> |
| MPG 1840.3 | <i>MSFC Hazardous Chemicals in Laboratories Protection Program</i> |
| MPG 1810.1 | <i>MSFC Occupational Medicine</i> |
| MPD 1840.3 | <i>MSFC Respiratory Protection Program</i> |
| MPD 1840.2 | <i>MSFC Hearing Conservation Program</i> |
| MPD 1840.1 | <i>MSFC Environmental Health Program</i> |
| MPG 1840.2 | <i>MSFC Hazard Communication Program</i> |
| MWI 3410.1 | <i>Personnel Certification Program</i> |
| MPG 8715.1 | <i>Marshall Safety, Health and Environmental (SHE) Program</i> |
| MPD 8900.1 | <i>Medical Operations Responsibilities for Human Space Flight Programs (NOTE: This document only applies to Space Station contracts)</i> |
| NFPA Standards | <i>National Fire Codes</i> |
| NPG 8715.3 | <i>NASA Safety Manual</i> |
| NASA-STD-8719.11 | <i>Safety Standard for Fire Protection</i> |

DRD Continuation Sheet

TITLE: On-site Safety and Health Plan

DRD NO.: 1016SA-001

DATA TYPE: 2

PAGE: 2/3

15. DATA PREPARATION INFORMATION (CONTINUED):

- 15.3 CONTENTS:** The plan shall describe the manner in which the contractor shall implement the intent of the requirements of the applicable documents as they pertain to the specific performance work statement tasks to be performed. The plan shall define the safety, health, and environmental program, objectives and goals, management structure, and detailed description of the total safety program including responsibilities, procedures, reporting, training, compliance methodologies, and interface and coordination activities. The On-site Safety and Health Plan shall include:
- a. Management commitment and employee involvement in the safety and health program:
 1. Statement of management policy, commitment, and accountability to provide for the safety and health of personnel (i.e., employees, customers, and public) and property and compliance with EPA, OSHA and NASA requirements.
 2. Provision for top-level management monthly safety and health committee meetings.
 3. Descriptions of safety and health awareness and motivation programs, including documented safety meeting requirements, and documented safety awareness training for employees. (Safety meeting statistics documented in the Supervisors Safety Web page: http://msfcsma3.msfc.nasa.gov/dbwebs/apps/sswp/SSWP_login.taf)
 4. Means of program evaluation, identifying duties, methods and frequency for internal evaluation of the safety and health program, and identification of personnel who perform evaluations and to whom evaluations are reported and who approves corrective action.
 5. Flowdown of safety responsibilities between appropriate tiers (i.e., subcontractors).
 6. Identification of employees (by type, classification, and qualification) responsible for the implementation of the above elements.
 - b. System and worksite hazard analysis:
 1. Methods of hazard identification and control, e.g., hazard analysis and risk assessment.
 2. Descriptions of OSHA programs that require documented plans (e.g., Personnel Protective Equipment (PPE), Confined Space, and Lockout/Tagout, etc. Include the interrelationships with the MSFC plans.) (Note: only programs applicable to the contract need to be addressed.)
 3. Requirements for formal safety inspections and correction of deficiencies.
 4. Requirements for documented safety visits (e.g., one per month per supervisor) documented in the Supervisors Safety Web page.
 5. Schedules of the frequency and documentation requirements for inspections, plan and procedure reviews, and certifications.
 - c. Hazard prevention and control:
 1. Methods to include clear statements of hazardous situations and necessary cautions in appropriate detail plans, procedures, and other working documents.
 2. Controls over the procurement, storage, issuance, and use of hazardous substances and procedures for recycling and disposal of hazardous waste.
 3. Method of ensuring a documented emergency management program. Include a list of emergency points of contract. (Note: on-site contractors may use MPG 1040.3.)
 4. Method of reporting and investigating all mishaps and close calls, including an outline of reporting requirements and a description of how root cause analysis is to be accomplished.
 5. Provisions for safety, health, and environmental services such as hazardous waste disposal, industrial hygiene monitoring, emergency medical support, hearing conservation program, and hazard communication.
 6. Provision for suspending work where safety or environmental conditions warrant such action.

DRD Continuation Sheet

TITLE: On-site Safety and Health Plan

DRD NO.: 1016SA-001

DATA TYPE: 2

PAGE: 3/3

15. **DATA PREPARATION INFORMATION (CONTINUED):**

d. Safety and health training:

1. Means for training each employee to recognize hazards and avoid accidents, and assuring each employee has a clear understanding of the disciplinary program.
2. Provisions for training and certification of personnel performing potentially hazardous operations. Job categories under the contracted effort that require certification shall be identified. Personnel Certification for the identified job categories shall be tracked in the MSFC Certification Database (CERTRAK) in accordance with MWI 3410.1 "Personnel Certification Program."

e. Environmental compliance - Provisions for compliance with environmental laws and regulations by: reporting hazardous and toxic substance use; implementing green procurements; reducing, reusing, and recycling of hazardous and toxic substances prior to disposal; minimizing storm water pollution; ensuring equipment and processes permitted by applicable laws; and disposing of solid and liquid materials as permitted by applicable laws.

15.4 **FORMAT:** Contractor format is acceptable.15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016SA-002**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/2
6. **TITLE:** Mishap and Safety Statistics Reports
7. **DESCRIPTION/USE:** To provide reporting of mishaps and related information required to produce metrics for MSFC.
8. **OPR:** QD50 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:**
 - a. Mishaps and Close Calls:
 1. Type A or B mishaps only: Immediate telephone notification (256-544-0046)
 2. Type A, B and C mishaps (applicable to onsite contractors only): Flash Report within 4 hours of knowledge on MSFC Form 4370, submitted either electronically (at https://msfcsma3.msfc.nasa.gov/s&ma_01/mishap/index.htm) or by telephone [Call 256-544-4357 (4-HELP); ask operator to fill out MSFC Form 4370 or Flash Report].
 3. All Mishaps (Type A, B, C, Incidents and Close Calls): Mishap Report NASA Form 1627 within 6 calendar days of Mishap
 4. All Mishaps: Monthly Follow-up Corrective Action Plan/Status as required until closed.
 5. Type A, B, and Close Calls with high Type A or B potential: Mishap Board Report after completion of investigation.
 - b. Safety Statistics (e.g., contract number, subcontractors, SIC/NAIC codes, number of employees, number of supervisors, etc.): submitted on MSFC Form 4371 by the 10th of the month following Authority To Proceed (ATP) and document the safety meeting statistics in the MSFC Supervisor Safety Web Page (SSWP) by the end of the second month after Authority To Proceed (ATP).
12. **SUBMISSION FREQUENCY:**
 - a. MSFC Form 4370 - Each occurrence of a mishap except as identified in section 11.a.2.
 - b. NASA Form 1627 - Each occurrence of a mishap. Corrective action status reports are due every 30 days until the final report is submitted.
 - c. MSFC Form 4371 - By the 10th of each month.
 - d. Mishap Board Report - Each occurrence of a Type A or B mishap, or as directed by Center management.
 - e. MSFC Supervisor Safety Web Page Input - By the end of each month.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.7
15. **DATA PREPARATION INFORMATION:**
 - 15.1 **SCOPE:** The Mishap and Safety Statistics Reports document all mishaps and close calls as required in NPG 8621.1.
 - 15.2 **APPLICABLE DOCUMENTS**

NPG 8621.1	<i>NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Recordkeeping</i>
MWI 8621.1	<i>Close Call and Mishap Reporting and Investigation Program</i>

DRD Continuation Sheet

TITLE: Mishap and Safety Statistics Reports

DRD NO.: 1016SA-002

DATA TYPE: 3

PAGE: 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED):**
- 15.3 **CONTENTS:** The reports shall contain the information required by NPG 8621.1. The contractor shall use the forms listed in 15.4 to report mishaps and related information required to produce the safety metrics.
- 15.4 **FORMAT:** The following formats shall be submitted:
- a. MSFC Form 4370, "MSFC Flash Mishap Report."
 - b. NASA Form 1627, "NASA Mishap Report."
 - c. MSFC Form 4371, "MSFC Contractor Safety Statistics."
 - d. Mishap Board Report using the format provided in NPG 8621.1.
 - e. SSWP at: http://msfcsma3.msfc.nasa.gov/dbwebs/apps/sswp/SSWP_login.taf
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1016 **ISSUE:** Revision C
2. **DRD NO.:** **1016SE-001**
3. **DATA TYPE:** 2
4. **DATE REVISED:** 12-01-06
5. **PAGE:** 1/2
6. **TITLE:** System Development Plan
7. **DESCRIPTION/USE:** To describe systems engineering, integration, and development activities for the project.
8. **OPR:** EO02 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 60 days after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 3.1
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The System Development Plan describes the concepts and methodology for system engineering, hardware design and development, and software design and development.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:**
 - a. General requirements:
 1. The System Development Plan shall identify the concepts and methods to be employed for system engineering, hardware design and development, and software design and development.
 2. The plan shall serve as the implementation guide for HOSC facility development activities.
 - b. Systems engineering:
 1. The plan shall describe the contractor's system engineering activities for HOSC facilities and the methods to be utilized to accomplish these activities.
 2. The plan shall describe planning, requirements definition, requirements allocation, requirements/system analysis, market surveys, test support equipment definition, hardware/software integration (HSI), system integration, change evaluation, requirement/design review plans, GFP incorporation, design documentation, and design/development monitoring and coordination approaches.
 3. The plan shall describe the organization for managing system engineering activities including resource allocation, management methods, and activity coordination.
 - c. Hardware engineering:
 1. The plan shall describe the contractor's hardware engineering activities for HOSC facilities and the methods to be utilized to accomplish these activities.
 2. The plan shall describe hardware design/development methods, standards, and policies. The plan shall address development environment; drawing standards; prototyping policies; system sizing/capacity definition; product evaluations; GFP, COTS, existing component incorporation; design documentation; installation and delivery policies; hardware integration; developmental configuration management; and problem tracking.

DRD Continuation Sheet

TITLE: System Development Plan

DRD NO.: 1016SE-001

DATA TYPE: 2

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15. **DATA PREPARATION INFORMATION (CONTINUED):**

3. The plan shall describe the organization for managing hardware engineering activities including resource allocation, management methods, and activity coordination.

d. Software Engineering

1. The plan shall describe the contractor's software engineering activities for HOSC facilities and the methods to be utilized to accomplish these activities.

2. The plan shall describe software design/development methods, standards, and policies. The plan shall address software lifecycle; development environment; coding standards; test and evaluation practices; prototyping policies; installation and delivery policies; product evaluation; GFP, COTS, existing software incorporation; design documentation; developmental configuration management; and problem tracking.

3. The plan shall describe the organization for managing software engineering activities including resource allocation, management methods, and activity coordination.

15.4 **FORMAT:** Contractor format is acceptable.

15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|------------------------|-------------------|----------------------------------|
| 1. DPD NO: 1016 | ISSUE: Revision C | 2. DRD NO.: 1016VR-001 |
| 3. DATA TYPE: 2 | | 4. DATE REVISED: 12-01-06 |
| | | 5. PAGE: 1/1 |
6. **TITLE:** Verification Plan
7. **DESCRIPTION/USE:** To document the verification program to ensure HOSC facility systems and configurations are properly implemented and prepared.
8. **OPR:** EO02 9. **DM:** EO02
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 60 days after Authority To Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 3.1.5
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Verification Plan describes the verification program concepts, methods, and organization for the verification of HOSC facility systems and configurations in support of new systems, system upgrades, and mission activities to ensure operational readiness.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The plan shall contain the following:
- a. Description of the verification concept and methodology.
 - b. Overview of the verification program for each HOSC facility.
 - c. Description of the verification methods to be utilized and level of testing to be performed for new systems, system upgrades, and mission activities.
 - d. Management approach, organizational structure, and organizational responsibilities for the verification program.
 - e. Relationship of verification program to system engineering, development, and mission activities.
 - f. Position of verification activities within development and mission activity timelines.
 - g. Policies on use of verification equipment and environments and location of verification tests.
 - h. Policies on verification of developed items, COTS items, GFP items, and temporary items.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.