

2. AMENDMENT/MODIFICATION NO. 000026
 3. EFFECTIVE DATE See Block 16C
 4. REQUISITION/PURCHASE REQ. NO.
 5. PROJECT NO. (if applicable)
 6. ISSUED BY CODE MSFC
 NASA/Marshall Space Flight Center
 Procurement Office
 Marshall Space Flight Center AL 35812
 7. ADMINISTERED BY (if other than item 6) CODE MSFC
 NASA/Marshall Space Flight Center
 Marshall Space Flight Center AL 35812

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)
 INFOPRO CORPORATION
 6705 ODYSSEY DR
 HUNTSVILLE AL 35806-2300
 9A. AMENDMENT OF SOLICITATION NO. (x)
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. X
 NNM08AA20C
 10B. DATED (SEE ITEM 13) 02/12/2008
 CODE 0AFL2 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended. 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)
 See Schedule

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).
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
 D. OTHER (Specify type of modification and authority)
 X Bilateral Mod: FAR 42.103(a) Mutual Agreement; & FAR 52.245-2 Changes - Cost Reimbursement (Alt. II)

E. IMPORTANT: Contractor is not. is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
 The Negotiated Estimated Cost increases by (b)(4) The Provisional Estimated Cost remains unchanged at (b)(4). The Award Fee Earned for Fee Period 1 remains unchanged at (b)(4). The Potential Award Fee increases by (b)(4) from (b)(4). The Total Fee increases by (b)(4). The Contract Value increases by \$2,045,241 from \$27,528,313 to \$29,573,554. Total Funding Allotted remains unchanged at \$21,159,771.

See Page 2 for further description of modification.
 Delivery Location Code: MSFC
 NASA/Marshall Space Flight Center
 Marshall Space Flight Center AL 35812
 Continued ...

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) Carl V. Ehler Sr. of Contract
 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Roxanne C Melton
 15B. CONTRACTOR/OFFEROR [Signature]
 15C. DATE SIGNED 3-6-09
 16B. UNITED STATES OF AMERICA
 16C. DATE SIGNED 3/6/09 [Signature]

A. The purpose of Modification No. 26 is to:

1. Update Table B-1, "Estimated Cost and Award Fee," to incorporate Option 1 Task Orders Plans 3.4-2009-002, 3.3-2009-004, 3.1-209-005, 3.3-2009-006, 3.12-2009-007, 3.17-2009-010, and 3.5-2009-011 issued for IDIQ services
 - ❖ Table B-1, Estimated Cost and Award Fee, shown in Mod 25 is hereby deleted in its entirety and the revised Table B-1, shown on the enclosed replacement page B-2 (Mod 26), is substituted in lieu thereof.
2. Revise MSFC Clause 52.222-90, "Premiums for Scheduled Overtime," to reflect the overtime premium approved by the COTR and CO for the incorporation of the IDIQs
 - ❖ Clause B.6, PREMIUMS FOR SCHEDULED OVERTIME, the authorized amount of overtime for Option 1 is hereby increased in the amount of (b)(4). Clause B.6 shown in Mod 21 is hereby deleted in its entirety and the revised Clause B.6, shown on the enclosed replacement page B-5 (Mod 26), is substituted in lieu thereof.
3. Revise Section J, Attachment J-1, "Performance Work Statement," for clarity
 - ❖ Attachment J-1, PERFORMANCE WORK STATEMENT, pages J-1-24, shown in the Basic contract is hereby deleted in its entirety and the revised Attachment J-1, shown on the enclosed replacement pages J-1-24 (Mod 26), is substituted in lieu thereof.
4. Revise Section J, Attachment J-2, "Data Procurement Document," remove conflicting contract language in DRD 1163LS-001 and revise the required report contents for DRD 1163MA-010
 - ❖ Attachment J-1, DATA PROCUREMENT DOCUMENT, shown in Mod 17 is hereby deleted in its entirety and the revised Attachment J-1 Revision B, shown on the enclosed replacement pages J-2-1 through J-2-49 (Mod 26) is substituted in lieu thereof.
5. Update Section J, Attachment J-7, "Task Order by Reference," to include all approved Task Order Plans
 - ❖ Attachment J-7, TASK ORDER BY REFERENCE, shown in Mod 24 is hereby deleted in its entirety and the revised Attachment J-7, shown on the enclosed replacement pages J-7-1 through J-7-2 (Mod 26), is substituted in lieu thereof.

B. A recapitulation of the contract value is as follows:

	Negotiated Estimated Cost (a)	Provisional Estimated Cost	Award Fee Earned (b)	Potential Award Fee (c)	Total Fee (b+c)	Contract Value (a+b+c)	Total Funding Allotted
Previous	(b)(4)						
This Mod	(b)(4)						
Revised Total	(b)(4)						

C. Purchase Request No./Accounting & Appropriation Data: None

D. The following pages/sections are deleted in their entirety and the attached revised pages/sections are substituted in lieu thereof:

	Pages Deleted	Sections Added/Revised
Section B	B-2 (Mod 22)	B-2 (Mod 24)
	B-5 (Mod 21)	B-5 (Mod 26)
Attachment J-1	J-1-24 (Basic)	J-1-24 (Mod 26)
Attachment J-2	J-2-1 through J-2-49 (Mod 17)	J-2-1 through J-2-49 (Mod 26)
Attachment J-7	J-7-1 (Mod 22)	J-7-1 (Mod 24)

E. Revisions described above are indicated by a vertical line in the right margin of the enclosed replacement pages.

F. Contractor's Statement of Release

In consideration of the modification agreed to herein as complete equitable adjustment for the contractor's proposal for adjustment 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.

Contract
Change Identification

Contractor
Proposal Number

Modification 26

Not Applicable

G. All other terms and conditions remain unchanged and in full force and effect.

TABLE B-1, ESTIMATED COST AND AWARD FEE (AF)

CLIN	PERIOD COVERED	MISSION SERVICES (BY)			IDIQ SUMMATION OF TASK ORDERS (BY)			TOTAL					
		ESTIMATED COST	PROVISIONAL ESTIMATED COST	MAXIMUM POTENTIAL AWARD FEE	ESTIMATED COST	PROVISIONAL ESTIMATED COST	MAXIMUM POTENTIAL AWARD FEE	TOTAL ESTIMATED COST	TOTAL PROVISIONAL ESTIMATED COST	TOTAL MAXIMUM POTENTIAL AWARD FEE	TOTAL EARNED AWARD FEE	TOTAL VALUE	
1	BASE YEAR	(b)(4)											
	Fee Period 1*												
	Fee Period 2*												
	Total Base												
2	OPTION YEAR 1												
	Fee Period 3*												
	Fee Period 4*												
	Total Option 1												
Overall Contract													

* 6-month evaluation periods

(a) If the Government exercises any of its Options pursuant to the terms of the contract, the estimated costs and fees for each Mission Services CLIN shall be as set forth in Table B-2 below.

TABLE B-2, MISSION SERVICES – OPTION VALUES

CLIN	PERIOD COVERED	MISSION SERVICES (BY)		IDIQ SUMMATION OF TASK ORDERS (BY)		TOTAL				
		ESTIMATED COST	MAXIMUM POTENTIAL AWARD FEE	ESTIMATED COST	MAXIMUM POTENTIAL AWARD FEE	TOTAL ESTIMATED COST	TOTAL MAXIMUM POTENTIAL AWARD FEE	TOTAL EARNED AWARD FEE	TOTAL VALUE	
3	OPTION YEAR 2	(b)(4)								
	Fee Period 5*									
	Fee Period 6*									
4	OPTION YEAR 3									
	Fee Period 7*									
	Fee Period 8*									
5	OPTION YEAR 4									
	Fee Period 9*									
	Fee Period 10*									

* 6-month evaluation periods

B.6 MSFC 52.222-90 PREMIUMS FOR SCHEDULED OVERTIME (FEB 2001)

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

Amount	Period
(b)(4)	Base Period
	Option 1
	Option 2
	Option 3
	Option 4

Note 1 - Overtime premium is defined herein as any payment (for both exempt and non-exempt employees) for time worked exceeding forty hours per week (alternate work schedules will be considered by NASA on a WBS basis). A work week of forty-one hours includes one hour of overtime premium, whether the employee was paid at time-and-a-half, straight time, compensatory time, or as an offset of an earlier thirty-nine hour work week (unless an alternate work schedule has been approved by NASA).

Note 2 - All overtime shall be coordinated with, and concurred in, by the COTR prior to work commencing.

(End of Clause)

B.7 ALLOWABLE ITEMS OF COST (MSFC 52.242-90) (FEB 2001)

(a) In accordance with the advance agreement between the Government and the Contractor for this contract, allowable costs for the items listed below are subject to the ceilings shown:

General and Administrative (G&A) Rate Ceiling (applicable to Mission and IDIQ portions):

InfoPro Corporation	ERC Incorporated	Period
(b)(4)		Base Period
		Option 1
		Option 2
		Option 3
		Option 4

(b) It is mutually agreed that when indirect cost rate ceilings are specified, the following conditions shall apply: (1) the Government shall not be obligated to pay any additional amount should the final indirect cost rates exceed the negotiated ceiling rates, and (2) in the event the final indirect cost rates are less than the negotiated ceiling rates, the negotiated rates shall be reduced to conform with the lower rates.

(End of Clause)

the results of testing, and provide written reports at the completion of each test. The Contractor shall attend meetings, present results and interact at the Program/Project level.

2.7.4 Development of Internal, Scientific and Data Documentation and Publications - The Contractor shall create scientific, technical and data documents, and internal documentation and publications as needed and as directed by the COTR. The documents required include research papers to be published by scientific organizations, periodical sections, newspaper articles, failure analyses, problem assessments, problem resolutions, anomaly investigations, preferred materials applications documents, data explanation documents, technical evaluation documentation, and other similar scientific and engineering documentation. The Contractor shall also create needed internal documentation, which include Organizational Instructions, safety documents and communications documentation. The Contractor shall work with the MSFC printing office to ensure that all documents are in the proper format, printed properly and delivered when required. The Contractor shall also be responsible for supporting the distribution effort of all documents created under this task.

2.8 Reserved.

2.9 Environmental Gas Laboratory Support. MSFC has the requirement to verify the cleanliness of a variety of hardware and facilities that prevents the contamination of space flight hardware. These facilities and equipment include clean rooms at all cleanliness levels, flow benches, small hardware and equipment, and large hardware and cross-country cytogenic liquid and gas lines.

The cleanliness verifications are requested in two ways; (1) MSFC customer organizations request regularly scheduled verification checks, or (2) MSFC customers who do not need regular verifications request special one-time verifications performed within a specified time period. All data analyses and findings for the week are compiled into one Excel spreadsheet and sent to all customers for whom evaluations were performed.

The Contractor shall evaluate, as directed by the COTR, MSFC clean rooms, MSFC propellant lines and their components, and propellant storage vessels and their components to determine contamination or cleanliness levels. The Contractor shall follow a scheduled sampling routine to check the clean rooms and propellant systems at MSFC to determine contamination levels. The Contractor shall also perform any analysis not included on the routine checklist, if requested by the COTR. The Contractor shall develop and implement an effective electronic Special Test Order (STO) system, formerly called an Avoid Verbal Orders (AVO) system. This system will serve to request special or one-time only evaluations of clean rooms or lines. The Contractor shall track all data and evaluations from a central location, and provide a written report of all findings weekly. The Contractor shall inform the COTR immediately if any test result is out of the tolerance levels established by MSFC or by the COTR.

2.10 Computer-Aided Design (CAD) Drawing. The Contractor shall provide drafting, design support, and library support services in order to prepare, maintain, reproduce and store detailed CAD drawings. The Contractor shall provide functional design drawings utilizing state of the art Computer-Aided Design (CAD) software as specified and provided by the Government (which includes, but not limited to, ProEngineering (Pro-E) as a primary package and MicroStation® as a secondary package) to numerous customers, both internal

ATTACHMENT J-7

TASK ORDERS BY REFERENCE – Base Year

Task Order No.	Revision	Initiating Org	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
3.1-2008-007	0	EM10	MCRF Support	3/1/2008 - 2/28/2009	(b)(4)		
3.3-2008-006	1	ET30	Structural Test Support	3/1/2008 - 2/28/2009			
3.3-2008-008	0	ET40	Structural Dynamics Test Facility	6/1/2008 - 2/28/2009			
3.4-2008-001	1	ES23	Mechanical Fabrication Support	3/1/2008 - 2/28/2009			
3.4-2008-002	0	ES23	CLV-US Support	3/1/2008 - 2/28/2009			
3.4-2008-003	1	ES23	Test Equipment & FSW Support	3/1/2008 - 2/28/2009			
3.4-2008-004	1	ES23	ECLSS Support	3/1/2008 - 2/28/2009			
3.4-2008-005	1	ES23	CBMDA Support	11/1/2008 - 2/28/2009			
3.14-2008-009	1	VP63	XRCF Support	4/1/2008 - 2/28/2009			
3.4-2008-010	0	ES23	Fabrication Machining Support	6/23/2008 - 2/28/2009			
3.4-2008-011	0	ES23	4705 Bldg Prep	7/7/2008 - 2/28/2009			
3.4-2008-012	0	ES23	Machine-Weld-Apprentice Support	8/25/2008 - 2/28/2009			
3.6-2008-013	0	ES01	Instrumentation Calibration	11/1/2008 - 2/28/2009			
3.16-2008-014	0	ET02	Valve & Component Refurbishment	11/1/2008 - 2/28/2009			
3.4-2008-016	0	ES23	ECLSS Precision Clean, Inspection, & MTO Support	11/24/2008 - 2/28/2009			
3.4-2008-017	0	ES23	ECLSS Production Control & Material Expediting	12/1/2008 - 2/28/2009			
3.17-2008-015	1	ES61	Mechanical Leak Test Technician	1/5/2009 - 2/28/2009			
3.2-2008-018	0	ET40	Structural Dynamics Test Support	1/5/2009 - 2/28/2009			
Total Base Year							

TASK ORDERS BY REFERENCE – Option Year 1

Task Order No.	Revision	Initiating Org	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
3.4-2009-002	0	ES23	CLV Planner/Scheduler/Coordinator & Trades Service Support	3/1/2009 - 2/28/2010	(b)(4)		
3.2-2009-004	0	ET30	Structural Strength Test Support	3/1/2009 - 2/28/2010			
3.1-2009-005	0	EM10	MCRF Engineering Technician Test Support	3/1/2009 - 2/28/2010			
3.3-2009-006	0	ET40	Structural Dynamics Test Facility Technician Support	3/1/2009 - 2/28/2010			
3.12-2009-007	0	VP63	XRCF Support	3/1/2009 - 2/28/2010			
3.17-2009-010	0	ES61	Mechanical Leak Test Technician	3/1/2009 - 2/28/2010			
3.5-2009-011	0	ES43	Electrical Test, Fabrication and Assembly Technician	3/1/2009 - 2/28/2010			

DATA PROCUREMENT DOC.
NO. ISSUE
1163 Revision B

NNM08AA20C

CONTRACT/RFP

EXHIBIT NUMBER

J-2

ATTACHMENT NUMBER

**Marshall Engineering Technician and Trade
Services (METTS)**

PROJECT/SYSTEM

DATA PROCUREMENT DOCUMENT

InfoPro Corporation

CONTRACTOR

February 25, 2009

DATE

National Aeronautics and
Space Administration

National Aeronautics and Space Administration					DATA PROCUREMENT DOC.		
DOCUMENT CHANGE LOG					NO.	ISSUE	
INCORPORATED REVISIONS OUTSTANDING REVISIONS					AS OF:	SUPERSEDING:	PAGE:
					02-25-09	11-01-08	
AUTHORITY (DPD Revision)	PORTION AFFECTED - PAGE NO./NO.				REMARKS		
	INTRO	SGR	DRL	DRD			
Contract Mod. 0017				X	<p>Added the following DRDs: 1163MA-010, Monthly Calibration Services Reports 1163MA-011, Monthly Valve and Component Shop (V&CS) Services Report 1163QE-002, Deficiency Corrective and Preventive Action Report 1163RM-001, Reliability Centered Maintenance (RCM) Plan</p>		
				1163LS-001	<p>Item 15.3: Added the following paragraph "In addition to the requirements above, the plan shall address identification and control of Government materials less than \$5,000 in WBS 3.6".</p>		
				1163QE-001	<p>Item 15.3: Added the following paragraph "2. In addition to the requirements in 15.3, paragraph 1, each quality element of the Government approved release of ANS/NCSL Z540 as defined in NPD 8730.1, the roles and responsibilities of MPR 8730.5 shall be addressed to describe the philosophy and approach for implementation. A copy of the Calibration Quality Manual shall be submitted.</p>		
Contract Mod. 0026				1163LS-001	<p>Item 15.3: Deleted the following last paragraph "In addition to the requirements above, the plan shall address identification and control of Government materials less than \$5,000 in WBS 3.6".</p>		
				1163MA-010	<p>Item 15.3a: Deleted the following sentence "Quality Deficiencies and status for the reporting period". Added the following 15.3e through 15.3k: e. Calibration Content. f. Work Order Number. g. Equipment Control Number (ECN). h. Date Arrived at Calibration Laboratory. i. Estimated Completion Date. j. Actual Completion Date. k. Days Early/Days Late.</p>		

02/25/09

National Aeronautics and Space Administration PAGE REVISION LOG			DATA PROCUREMENT DOC. NO. ISSUE 1163 Revision B		
NOTE: The current revision is denoted by a vertical line in the outer margin adjacent to the affected text.		AS OF: 02-25-09	SUPERSEDING: 11-01-08	PAGE:	
INSERT LATEST REVISED PAGES. DISCARD SUPERSEDED PAGES.					
ITEM	PAGE	STATUS	ITEM	PAGE	STATUS
DPD	ALL	Revision B			

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 NASA 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) clause, that clause shall take precedence over the DPD, consistent with clause 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
QE	Quality
RM	Reliability Maintainability
SA	Safety

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*	NASA reserves a time-limited right to disapprove in writing any issues and interim changes to those issues. The contractor shall submit the required data to NASA for review not less than 45 calendar days** prior to its release for use. The contractor shall clearly identify the release target date in the "submitted for review" transmittal***. If the data is unacceptable, NASA will notify the contractor within 45 calendar days** from the date of submission, regardless of the intended release date***. The contractor shall resubmit the information for reevaluation if disapproved. The submittal is considered approved if the contractor does not receive disapproval or an extension request from NASA within 45 calendar days**.
3	These data shall be delivered by the contractor as required by the contract and do not require NASA approval. However, to be a satisfactory delivery, the data shall satisfy all applicable contractual requirements and be submitted on time.
4	These data are produced or used during performance of the contract and are retained by the contractor. They shall be delivered only when NASA requests in writing and shall be delivered in accordance with the instructions in the request. The contractor shall maintain a list of these data and shall furnish copies of the list to NASA 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 formal 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, or in an electronic database accessible to the Government.
*	Note: Type 1 and Type 2 data may be placed under NASA configuration management control when designated by NASA. CM control requires the contractor to submit Type 1 and Type 2 data updates through Engineering Change Proposals (ECPs).
**	Note: This time limit may be tailored for individual DRD's to meet the requirements of the procuring activity.
***	Note: If the contractor does not identify a release target date or if the intended release date is shorter than 45 calendar days from the date of submission, the 45 calendar days review cycle stands (or the tailored Type 2 time limitation for the specific procurement).

2.0 STATEMENT OF GENERAL REQUIREMENTS

- 2.1 Applicable/Reference Documents: Documents included as applicable documents in this DPD are the issue specified in the Performance Work Statement (PWS), and form a part of the DPD to the extent specified herein. Applicable documents listed in Item 15.2 of a DRD are applicable only to the preparation of the deliverable documentation described by that DRD.

References to documents other than applicable documents in the data requirements of this DPD may sometimes be utilized, and shall be indicated in 13. Remarks of the DRD. 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 NASA.

2.3 Data Distribution, Format, Data Restriction Marking, and Transmittal

- 2.3.1 Distribution: 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. The Contracting Officer's letter may include other information pertinent to delivery of data, as required.

2.3.2 Format

- 2.3.2.1 Electronic Format: Electronic submission of data deliverables is required. Electronic deliverables shall be printable. Data deliverables shall be delivered to NASA in the format specified below unless a specific format is required by a DRD. Data submittals shall consist of a single Adobe Acrobat PDF file and the native format electronic file(s). The preferred native formats include Microsoft Word, Excel, PowerPoint or CAD drawing plot file, as appropriate. Where a single native format file is not possible, multiple files may be integrated into a single ZIP file for submission. The organization of the contents of the integrated ZIP file shall be made readily apparent to the reader, and each file within the integrated product shall be clearly identifiable and traceable within the organization of the integrated product. If files are fragmented, file names shall be labeled logically and contiguously, and the files shall be easily reassembled or merged (e.g. 1 filename, 2 filename, 2a filename, etc.). The software versions shall be confirmed prior to submittals.

- 2.3.2.2 Hardcopy Format: In addition to the electronic submittal, one hardcopy package of specific data deliverables shall be delivered to the NASA Contracting Officer for the Government contract file. This requirement is indicated in Item 15.4, Format of each DRD. The hardcopy package shall consist of the contractor's Transmittal Memo and one copy of the data deliverable.

2.3.3 Data Restriction Marking

- 2.3.3.1 Data Restriction Determination and Marking Requirements: The contractor shall determine the data restriction that applies to each data deliverable and mark the data restriction on the data coversheet, or indicate the data restriction in the data transmittal package if the data format precludes identification of data restriction directly in the data. The contractor shall make a determination for each individual data deliverable item, and shall not apply a default or blanket data restriction marking to all data deliverables (e.g., "data may be export restricted"). If NASA does not agree with the contractor applied data restriction, the NASA Contracting Officer shall return the data to the contractor, cancel the markings, or ignore the markings consistent with the procedures set forth in the "data rights" clause(s) contained in the contract.

- 2.3.3.2 Data Restriction Categories and Marking Statements: The contractor shall consider the following data restriction categories, as a minimum, and utilize specified marking statements.

If data delivered under this contract is subject to the International Traffic in Arms Regulations (ITAR), the data shall contain an "ITAR Notice" as follows:

International Traffic in Arms Regulations (ITAR) Notice

This document contains information which falls under the purview of the U.S. Munitions List (USML), as defined in the International Traffic in Arms Regulations (ITAR), 22 CFR 120-130, and is export controlled. It shall not be transferred to foreign nationals in the U.S. or abroad, without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exemption is obtained/available from the United States Department of State. Violations of these regulations are punishable by fine, imprisonment, or both.

If data delivered under this contract is subject to the Export Administration Regulations (EAR), the data shall contain the "EAR Notice" as follows:

Export Administration Regulations (EAR) Notice

This document contains information within the purview of the Export Administration Regulations (EAR), 15 CFR 730-774, and is export controlled. It may not be transferred to foreign nationals in the U.S. or abroad without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exception is obtained/available from the Bureau of Industry and Security, United States Department of Commerce. Violations of these regulations are punishable by fine, imprisonment, or both.

If the contract contains FAR 52.227-14 *Alternate II*, the "Limited Rights Notice" may be applicable to data (other than computer software) delivered under this contract.

If the contract contains FAR 52.227-14 *Alternate III*, the "Restricted Rights Notice" may be applicable to computer software delivered under this contract.

If the contract contains FAR 52.227-20, the "SBIR Rights Notice" may be applicable to SBIR data delivered under this contract.

If the contract contains NFS 1852.237-73, a sensitive information legend may be applicable to information delivered under this contract.

In accordance with the applicable data clause (e.g., FAR 52.227-14(c) or FAR 52.227-20(c)), the contractor may be able to assert a copyright claim in data delivered under this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government.

2.3.4 Transmittal

2.3.4.1 Data shall be transmitted to NASA by email, CD or DVD, hardcopy, or other mechanism agreed to by the Contracting Officer, COTR, and Project representatives who are responsible to receive, index, and store the data deliverables.

2.3.4.2 If email is used to transmit data deliverables, the email size shall be 10 Megabytes or less to ensure receipt by the NASA email servers. Encrypted email format shall be used to transmit data which has been judged sensitive by the contractor (e.g., export controlled, limited rights data, SBIR, restricted computer software, copyrighted, etc.).

2.3.4.3 Data Transmittal Package: Each data transmittal package shall include:

- a. Transmittal memorandum that specifies the meta-data below for each data transmittal:
 1. Contract number.
 2. Data Requirements Description (DRD) number.
 3. DRD data type (specified in Item 3 on the DRD).

4. Submission date or milestone being satisfied.
 5. Document number and revision.
 6. Document title.
 7. File names of all files being delivered; file naming convention shall clearly identify the document being delivered.
 8. Distribution (as defined by the Contracting Officer's letter).
 9. Requested response date.
 10. Contractor assigned data restriction (export controlled, limited rights data, SBIR, restricted computer software, copyrighted, etc.) if not marked on data.
 11. NASA Records Retention Schedule (NRRS) number, if applicable. (See NPR 1441.1, NASA Records Retention Schedules).
- b. Printable electronic files or hardcopy data.
- 2.3.5 Electronic data deliverables should be transmitted directly to the MSFC Repository through the Digital Asset Manager web interface. Instructions for electronic data submittals can be found at http://cio.msfc.nasa.gov/repository/repository_submittal.html. Document submitters must register for a Documentum user account through the NASA Account Management System (NAMS). 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 shall be printed on both sides; blank pages shall be avoided when possible.
 - f. Oversize pages shall be avoided when possible, but if necessary shall 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 **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.
- 2.6 **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 NASA by the contractor and, if applicable, as approved by NASA. For all data types, the document 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, shall be marked "PRELIMINARY PENDING NASA APPROVAL," and once approved shall be reissued with "APPROVED BY NASA" and the date and approval authority annotated on the cover.
- 2.7 **Reference to Other Documents and Data Deliverables in Data Submittals:** All referenced documents shall be made readily available to the cognizant NASA organization upon request. The contractor should make sure that the references are available to NASA in a manner which does not incur delays in the use of the response document. Reference may be made, within one data submittal, to other data submittals delivered in response to this DPD in those cases where the data required by one DRD may have been delivered by the contractor in response to another DRD. The reference to previously-submitted data shall include the applicable DRD number, data submittal version date, and location within the referenced document.

2.8 Maintenance of Type 1 Document Submittals

- 2.8.1 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).
- 2.8.2 Individual page revisions shall be made as deemed necessary by the contractor or as directed by the Contracting Officer.
- 2.8.3 A Type 1 document shall be completely reissued when, in the opinion of the contractor and/or NASA, 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.
- 2.8.4 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.
- 2.8.5 All revised pages shall be identified by a revision symbol and a new date. Each document shall contain a log of revised pages that 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.
- 2.8.6 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. Acceptability shall be determined by the Contracting Officer.

3.0 DPD MAINTENANCE PROCEDURES

- 3.1 NASA-Initiated Change: New and/or revised data requirements shall be incorporated by contract modification to which the new or revised portion of the DPD shall 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 NASA 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 NASA for approval.
- 3.3 DPD Change Procedures
- 3.3.1 Changes to a contractual issue of this DPD shall be identified by NASA on the Document Change Log and Page Revision Log. The actual revised material on the DPD page shall 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 shall 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 shall be entered in the "Superseding" block.

- 3.3.3 The Document Change Log entitled "Incorporated Revisions" shall 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 shall be reissued by NASA and shall supersede the existing DPD in its entirety. Reissues shall be issued by contractual direction.
 - 3.4.2 All revision symbols (vertical lines and contractual direction control numbers) shall 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 shall commence with "A" and progress through "Z," shall be entered in the DPD identification block of each DRD page of the DPD.

Marshall Engineering Technician and Trades Services (METTS)

Data Requirements Lists

<u>DRD</u>	<u>DATA TYPE</u>	<u>TITLE</u>	<u>OPR</u>
CD - Contractual Data			
1163CD-001	2	Contractor Information Technology Security Program Plan	IS10
1163CD-002	3	Technology Reports	ED03
CM - Configuration Management			
1163CM-001	1	Acceptance Data Package	ED03
1163CM-002	2/3	Functional Configuration/Physical Configuration Audit Documentation	ED03
LS -Logistics			
1163LS-001	2	Government Property Management Plan	AS41
MA - Management			
1163MA-001	1	Management Plan	ED03
1163MA-002	1	Task Order Plan (TOP)	ED03
1163MA-003	3	Financial Management Report (533M)	CS40
1163MA-004	3	Monthly Status Report	ED03
1163MA-005	3	Badged Employee and Remote IT User Listing	AS50
1163MA-006	3	Contractor Employee Clearance Document	AS50
1163MA-007	3	Position Risk Designation for Non-NASA Employee	AS50
1163MA-008	3	Monthly and Semi-Annually Performance Reports	ED03
1163MA-009	2	Organizational Conflict of Interest (OCI) Avoidance Plan	PS21
1163MA-010	3	Monthly Calibration Services Reports	ET02
1163MA-011	3	Monthly Valve and Component Shop (V&CS) Services Report	ET02
RM – Reliability and Maintainability			
1163RM-001	1	Reliability Centered Maintenance (RCM) Plan	ET02
QE - Quality			
1163QE-001	1	Quality Management System Plan	QD40
1163QE-002	3	Deficiency Corrective and Preventive Action Report	ET02
SA - Safety			
1163SA-001	2	Safety, Health and Environmental (SHE) Plan	QD12/AS10
1163SA-002	1	Personnel Certification Plan	QD40
1163SA-003	3	Mishap and Safety Statistics Report	QD12

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|--------------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163CD-001 |
| 3. DATA TYPE: 2 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/2 |
6. **TITLE:** Contractor Information Technology Security Program Plan
7. **DESCRIPTION/USE:** To ensure that the contractor fully understands their responsibility for information and information technology (IT) security as required in NFS 1852.204-76. This plan will describe the contractor's information technology security program that addresses the management, operational, and technical aspects of protecting the confidentiality, integrity and availability of information and information technology systems.
8. **OPR:** IS10 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 30 days after Contract Award
12. **SUBMISSION FREQUENCY:** Revise after any significant changes. Review and update every three years.
13. **REMARKS:** The Federal Information Processing Standards (FIPS) Publication Series of the National Institute of Standards and Technology (NIST) is the official series of publications relating to standards and guidelines adopted and promulgated under the provisions of the Federal Information Security Management Act (FISMA) of 2002. FIPS Pub 200, Minimum Security Requirements for Federal Information and Information Systems, specifies minimum security requirements for information and information systems supporting the executive agencies of the federal government and a risk-based process for selecting the security controls necessary to satisfy the minimum security requirements.
- The seventeen security-related areas to be addressed in the content of the Contractor IT Security Program Plan represent a broad-based, balanced information technology security program that addresses the management, operational, and technical aspects of protecting information and information technology systems. Additional information for these security-related areas can be found in FIPS Pub 200.
14. **INTERRELATIONSHIP:** PWS paragraph 1.2.4
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The extent of the Contractor IT Security Program Plan can vary and shall be appropriate to comply with the breadth of sensitivity level security requirements for protecting information and information technology (IT) when the Contractor or its subcontractors must obtain physical or electronic access to NASA's computer systems, networks, or IT infrastructure, or where information is stored, generated, processed or exchanged by/with 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.
- 15.2 **APPLICABLE DOCUMENTS:**
NFS 1852.204-76 *Security Requirements for Unclassified Information Technology Resources (May 2007)*
- 15.3 **CONTENTS:** The Contractor IT Security Program Plan shall contain:
- a. A brief description of the types of information that will be stored, generated, processed, or exchanged with NASA or on behalf of NASA during the performance of the contract. Provide the security categorization of the information (LOW, MODERATE, or HIGH). A description of the policy or procedure to ensure the return of all NASA information and IT resources provided to the contractor during the performance of the contract and certify that all NASA information has been purged from contractor-owned systems used in the performance of the contract.

DRD Continuation Sheet

TITLE: Contractor Information Technology (IT) Security Program Plan **DRD NO.:** 1163CD-001

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

15. DATA PREPARATION INFORMATION:

- b. A brief description regarding personnel (location, local or remote connections or access, privileged users, etc.) and the IT resources (NASA provided or contractor-owned) and environments utilized in the support of the work to be performed and their access to information identified.
- c. A brief description of policy or procedure that ensures the contractor inserts NFS 1852.204-76 in all subcontracts as required.
- d. Provide a description of each of the security-related areas (see Remarks) with regard to policies and procedures of the contractor's enterprise-wide information technology security program protecting the confidentiality, integrity, and availability of information and information technology systems.
 - 1. Management.
 - (a) Certification, Accreditation, and Security Assessments.
 - (b) Planning.
 - (c) Risk Assessment.
 - (d) Systems and Services Acquisition.
 - 2. Operational.
 - (a) Awareness and Training.
 - (b) Configuration Management.
 - (c) Contingency Planning.
 - (d) Incident Response.
 - (e) Maintenance.
 - (f) Media Protection.
 - (g) Physical and Environmental Protection.
 - (h) Personnel Security.
 - (i) System and Information Integrity.
 - 3. Technical.
 - (a) Access Control.
 - (b) Audit and Accountability.
 - (c) Identification and Authentication.
 - (d) System and Communications Protection.

NOTE: Any security-related area not currently implemented in the Contractor's IT security program shall be identified and the contractor's plan of action for implementation shall be explained.

15.4 **FORMAT:** Contractor format is acceptable and shall be consistent with contents of paragraph 15.3d of this DRD.

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

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163CD-002**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/3
6. **TITLE:** Technology Reports
7. **DESCRIPTION/USE:** Provides NASA with technical information concerning any invention, discovery, improvement, or innovation made by a contractor in the performance of work under this contract for the purpose of disseminating this information to obtain increased use. Also, to provide NASA with data to review for possible patentable items.
8. **OPR:** ED03 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Disclosure of Invention and New Technology (NASA Form 1679): Within 2 months of identification of subject invention. Interim NASA New Technology Summary Report (NTSR) Form: 12 months from the date of the contract. Utilization Report: Upon Contracting Officer's request.
12. **SUBMISSION FREQUENCY:** Disclosure of Invention and New Technology (NASA Form 1679): For each subject invention. Interim NASA New Technology Summary Report (NTSR): Every 12 months. Final NASA New Technology Summary Report (NTSR): Three months after completion of contracted work. Utilization Report: No more frequently than annually.
13. **REMARKS:** Copies of NASA Forms 1679, and the NASA New Technology Summary Report Form (Interim and Final) may be obtained and filled out electronically at: <http://www.webentre.nasa.gov/>. These forms may also be obtained from the New Technology Representative ([mailto: Carolyn E. McMillan@nasa.gov](mailto:Carolyn.E.McMillan@nasa.gov)).
14. **INTERRELATIONSHIP:** PWS paragraph 1.2.3
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Technology Reports include technical detail as is necessary to identify and fully describe a "Subject Invention". Per FAR 52.227-11, "Subject Invention" means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract.
- 15.2 **APPLICABLE DOCUMENTS:**
FAR 52.227-11 Patent Rights - Retention by Contractor (Short Form) (June 1997) - As modified by
NASA FAR Supplement 1852.227-11
- 15.3 **CONTENTS:** The Technology Reports consist of:
 - a. **Disclosure of Invention and New Technology (Including Software):** In accordance with FAR 52.227-11(c), the disclosure to the agency shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the agency, the Contractor shall 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 (latest revision) in hardcopy or online at: <http://www.webentre.nasa.gov/>. Use of this form or the online system 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).

DRD Continuation Sheet

TITLE: Technology Reports

DRD NO.: 1163CD-002

DATA TYPE: 3

PAGE: 2/3

15. DATA PREPARATION INFORMATION (CONTINUED):

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).
- b. Interim NASA New Technology Summary Report: This report shall consist of a complete listing of subject inventions for the previous 12-month period or certification that there are none. Completion of Interim NASA New Technology Summary Report (NTSR) Form shall satisfy this reporting requirement. Use of the form utilizing the online system at <http://www.webentre.nasa.gov/> is preferred; however an alternate format is acceptable provided all required information is provided.
 - c. Final NASA New Technology Summary 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 Final NASA New Technology Summary Report (NTSR) Form shall satisfy this reporting requirement. Use of the form utilizing the online system at <http://www.webentre.nasa.gov/> 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.

DRD Continuation Sheet

TITLE: Technology Reports

DRD NO.: **1163CD-002**

DATA TYPE: 3

PAGE: 3/3

15. DATA PREPARATION INFORMATION (CONTINUED):

- 15.4 **FORMAT:** The Disclosure of Invention and New Technology (Including Software) report may use NASA Form 1679 (latest revision) or the online system at: <http://www.webentre.nasa.gov/>, or provide sufficient information to meet the reporting requirement.

The interim and final NASA New Technology Reports may use NASA NTSR Form, Interim or Final (whichever is applicable) utilizing the online system at: <http://www.webentre.nasa.gov/>, or provide sufficient information to meet the reporting requirement.

- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|-------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163CM-001 |
| 3. DATA TYPE: 1 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/2 |
6. **TITLE:** Acceptance Data Package
7. **DESCRIPTION/USE:** To provide the documentation needed by MSFC to establish the acceptability of equipment/software for deliverable products.
8. **OPR:** ED03 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Preliminary two weeks prior to each Acceptance Review (AR)
12. **SUBMISSION FREQUENCY:** Final with delivery of each Configuration Item (CI)
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.4
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Acceptance Data Package (ADP) contains the elements of documentation required to establish the acceptability of DEI products as requested in each customer order.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:**
- a. The Acceptance Data Package shall include:
 1. Copy of Visual Manufacturing™ customer order and final work order.
 2. Copy of DD Form 250.
 3. Original work orders that specify Government mandatory inspection points (GMIPs).
 4. Final Deliverable End Item (DEI) configuration report/certification.
 5. DARs (waivers/deviations) and contractor MRB action discrepancy records.
 6. MSFC internal customer supplied product (ICPS) documentation submitted with articles and materials supplied by the customer, i.e. NASA MSFC parts tags (MSFC Form 312), log books (MSFC Form 3473), Temporary Installation Record (MSFC Form 4340), temporary red streamers (MSFC Tag 16) or other NASA Center or customer documentation.
 7. Generated log books when specified as an engineering requirement.
 8. Temporary Installation Record (MSFC Form 4340) as applicable for deliverable hardware products with attached Red Streamers (MSFC Tag 16).
 - b. Additional ADP to support specific customer requirements shall be specified on the customer order, which may include but are not limited to:
 1. Drawings, engineering orders, and engineering parts list.
 2. Results and draft of oven/furnace temperature survey.
 3. Results of processed representative sample specimens (hardness values and sketch) as required.
 4. Hardness values of each heat treated part, indicating the part number, serial number, and hardness.
 5. Material certification – chemical and/or physical test results.
 6. Nondestructive Evaluation (NDE) results and personnel certification.
 7. Welder's certification/weld procedures.
 8. Contractor miscellaneous inspection records.
 9. Copy of work orders.

DRD Continuation Sheet

TITLE: Acceptance Data Package

DRD NO.: 1163CM-001

DATA TYPE: 1

PAGE: 2/2

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

- 10. Alignment and Center of Gravity (CG) data.
- 11. Limited life data.
- 12. Cleanliness data.
- 13. Assembly integration data.

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

15.5 **MAINTENANCE:** The ADP shall be maintained current for five (5) years.

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|--------------------------|-------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163CM-002 |
| 3. DATA TYPE: 2/3 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/4 |
6. **TITLE:** Functional Configuration/Physical Configuration Audit Documentation
7. **DESCRIPTION/USE:** To support the Functional Configuration Audit (FCA) and Physical Configuration Audit (PCA). The FCA is an audit to verify performance of the CI against approved configuration documentation. The PCA is an audit of the configuration documentation and quality control records to ensure the as-built or as-coded configuration is defined in the documentation.
8. **OPR:** ED03 9. **DM:** ED03
10. **DISTRIBUTION:** See Attachment 2
11. **INITIAL SUBMISSION:** See Attachment 2
12. **SUBMISSION FREQUENCY:** Per configuration audit
13. **REMARKS:** MSFC will document audit planning and provide it to the contractor prior to the audit.
14. **INTERRELATIONSHIP:** PWS paragraph 2.4
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** Functional Configuration/Physical Configuration Audit Documentation contains the required documentation necessary to support the configuration audit for a configuration item (CI).
- 15.2 **APPLICABLE DOCUMENTS:**
MSFC-STD-3394 *Standard for Contractor Configuration Management MSFC Programs/Projects*
- 15.3 **CONTENTS:** Detailed content requirements shall be specified by MSFC to include Test and other required data for the FCA shall be that collected from the test of the configuration of the item that is to be formally accepted. The Physical Configuration Audit (PCA) is an audit to verify that the as-built configuration reflects the required physical characteristics documented in the as-designed configuration. Configuration and quality control records and other documents defining the as-built or as-coded configuration is defined in the documentation shall be provided.

MSFC-STD-3394 provides guidelines on documentation required for the FCA and PCA. See Attachment 1 for documentation required for the audits.

Additional documentation requirements to be provided are:

- a. **Agenda** - The agenda shall specify the date, time and place for the scheduled audit, specific review items, supporting documentation, and key participants. Submit approved copies at the review. See Attachment 2.
- b. **Presentation Charts** - Presentation charts shall be submitted at the start of the audit. They shall summarize the details contained in the data package and identify compliance with the contract requirements. See Attachment 2 for distribution and availability of data.
- c. **Plan** - A plan shall be submitted prior to initiating the audit, stating configuration items to be reviewed; data required to perform the review; how open actions are tracked; defining success criteria; and providing for formal certification of the audit. The plan shall also define extent of contractor and government participation in the review.

DRD Continuation Sheet**TITLE:** Functional Configuration/Physical Configuration Audit
Documentation**DRD NO.:** 1163CM-002**DATA TYPE:** 3**PAGE:** 2/4**15. DATA PREPARATION INFORMATION (CONTINUED):**

- d. Minutes - The minutes shall contain a description of the audit with sufficient detail to enable the audit to be made a matter of record. The minutes shall include the presentation charts, a listing of Findings, action items with actionee and suspense (closure) data, and identification of the documents which describe the approved baseline established at the conclusion of the PCA. See Attachment 2 for distribution and availability of data.
- e. Findings - showing action items, actionees, suspense dates and closure status shall be submitted. See Attachment 2 for distribution and availability of data.

15.4 FORMAT: Contractor format is acceptable.**15.5 MAINTENANCE:** As required to correct errors and to maintain findings closure status.

Configuration Audit Required Data**Documentation required for FCA**
(As applicable)

- Specifications.
- Drawings and parts list.
- ECPs and DARs incorporated and pending.
- Specification and drawing tree.
- Fracture control plan.
- Structural dynamics, analyses, loads, and models documentation (updated).
- Materials Usage Agreement (MUAs).
- Material Identification Usage List (MIUL).
- Certification of Qualification(s) (COQ's).
- Verification procedures and requirements.
- Complete list of successfully accomplished tests and test results.
- Complete list of successful tests if detailed test data are not recorded.
- Complete list of tests required but not performed.
- Software verification data.
- Software development documents.
- Software version description.
- Critical Design Review (CDR) RIDs and dispositions.
- Mission constraints.
- Nonconformance reports.
- Interface control drawings/documents.
- Hazard analysis/risk assessment.
- Test plans and procedures.
- Test reports.
- Verification closures.
- Verification tracking log.
- Analysis reports.
- ALERTS tracking log.

Documentation required for the PCA
(As applicable)

- Final version of all specifications.
- Product drawings and parts list.
- Configuration accounting and status reports.
- Final version of all software documents.
- Final version of software version description document.
- Copy of all FCA findings for each CI.
- List of approved and outstanding ECPs and DARs.
- Copies of ECPs and DARs as requested at the audit.
- Drawing and specification tree.
- Indentured parts list/as-designed configuration definition.
- As run test procedures (when applicable, include any test discrepancy records).
- Copy of parts tags or verification closure for verification items verified by inspection method.
- Manufacturing and inspection (build) records.
- Inspection records or inspection verification closures.
- As-built electronic data.
- Discrepancy Reports (DR's).
- Log Books.

ATTACHMENT 2

FCA/PCA Documentation
Distribution and Availability of Data

Document	Data Type	FCA Copies/Availability	PCA Copies/Availability
Agenda	2	One/15 days prior to audit, Approved copies at audit	One/15 days prior to audit, Approved copies at audit
Data Package	3	One/Two weeks prior to audit	One /Two weeks prior to audit
Presentation Charts	3	One for each attendee at audit	One for each attendee at audit
Minutes	2	One at audit/ copy to each attendee within two weeks	One at audit/one to each attendee within two weeks
Findings (generated at Reviews)	2	Provided as hard copy or electronically per the project specific Audit Plan.	Close out to be as specified in the project specific Audit Plan.

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|--------------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163LS-001 |
| 3. DATA TYPE: 2 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/1 |
6. **TITLE:** Government Property Management Plan
7. **DESCRIPTION/USE:** To describe the method of controlling and managing Government property and materials.
8. **OPR:** AS41 9. **DM:** ED03
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 1.2.2
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 and materials.
- 15.2 **APPLICABLE DOCUMENTS:**
- | | |
|-------------|---|
| FAR | <i>Federal Acquisition Regulation, Part 45</i> |
| NPR 5100.4B | <i>Federal Acquisition Regulation Supplement, (NASA/FAR Supplement) Part 18-45 and latest revisions thereto</i> |
- 15.3 **CONTENTS:** The Government Property Management 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:
- | | |
|---|--|
| <ul style="list-style-type: none"> a. Property management. b. Acquisition. c. Receiving. d. Identification. e. Records. f. Movement. g. Storage. h. Physical inventories. | <ul style="list-style-type: none"> 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.: 1163 ISSUE: Revision B</p> <p>3. DATA TYPE: 1</p> <p>6. TITLE: Management Plan</p> <p>7. DESCRIPTION/USE: To provide a description of the contractor's overall management system and organization for accomplishing the requirements set forth in the contract.</p> <p>8. OPR: ED03 9. DM: ED03</p> <p>10. DISTRIBUTION: Per Contracting Officer's letter</p> <p>11. INITIAL SUBMISSION: Thirty (30) days after Authority to Proceed (ATP), (including phase-in period)</p> <p>12. SUBMISSION FREQUENCY: Revise as required</p> <p>13. REMARKS:</p> <p>14. INTERRELATIONSHIP: PWS paragraph 1.1</p> <p>15. DATA PREPARATION INFORMATION:</p> <p>15.1 SCOPE: The Management Plan shall describe the contractor's concept plans, practice, and approach for accomplishing the requirements set forth in the contract, i.e., managing and controlling project tasks, experimental work, and management interfaces. The plan shall be in such detail as necessary to convey the contractor's internal procedures.</p> <p>15.2 APPLICABLE DOCUMENTS: None</p> <p>15.3 CONTENTS: The Management Plan shall include:</p> <ol style="list-style-type: none"> a. Description of the project tasks to be accomplished and an outline of methods by which the contractor proposes to accomplish each task down to the level III WBS task level. b. Description of management concepts, plans, project management and task/control systems, organizational approach, and communication channels between the contractor and the Government. This shall include descriptions, flow charts, schedules, and other documentation necessary to give a comprehensive plan of organization and accomplishment. c. Receiving, estimating and processing customer orders through the fabrication and assembly of Research and Development (R&D) Space Flight and Associated Hardware. d. Issuing, receiving, and controlling work done by subcontractor(s) to augment the fabrication and assembly capability. e. Fabrication process planning and production control (which includes scheduling and monitoring shop work loads, expediting hardware and status of work orders). f. Description of how outside/commercial work will be solicited, procured, managed, and scheduled. Description of how cost to customer is determined. <p>15.4 FORMAT: Contractor format is acceptable.</p> <p>15.5 MAINTENANCE: Changes shall be incorporated by change page or by complete reissue.</p> | <p>2. DRD NO.: 1163MA-001</p> <p>4. DATE REVISED: 02-25-09</p> <p>5. PAGE: 1/1</p> |
|--|--|

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | |
|--|--------------------------------------|
| 1. DPD NO.: 1163 | 2. DRD NO.: 1163MA-002 |
| 3. DATA TYPE: 1 | 4. DATE REVISED: 02-25-09 |
| 6. TITLE: Task Order Plan (TOP) | 5. PAGE: 1/1 |
7. **DESCRIPTION/USE:** To provide a plan that satisfies the requirements set forth in a Task Order Request.
8. **OPR:** ED03 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Draft submitted within Five (5) days of Task Order Request (TOR) or modification request of an existing Task Order Plan
12. **SUBMISSION FREQUENCY:** Five (5) days of Task Order Request (TOR) or modification request of an existing Task Order Plan
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 1.1.1
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Task Order Plan contains the elements of documentation necessary to determine the contractor's understanding of the requirements set forth in the Task Order Request.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Task Order Plan shall include:
- a. Contract Number.
 - b. Task Order Title.
 - c. Task Order Plan Number.
 - d. Period of Performance.
 - e. PR Number.
 - f. Task Manager.
 - g. Task Order Lead (contractor).
 - h. Task Order Description.
 - i. Technical Approach (including required input, guidelines and assumptions).
 - j. Discussion of skills required.
 - k. Special tools required.
 - l. Milestones and Deliverables.
 - m. Schedule.
 - n. Special considerations (recruiting, consulting, etc.).
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or by complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|-------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163MA-003 |
| 3. DATA TYPE: 3 | | 4. DATE REVISED: 02-25-09 |
| | | 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 redetermination, and fixed price incentive contracts.
8. **OPR:** CS40 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Within 30 days after the incurrence of cost
12. **SUBMISSION FREQUENCY:** No later than 10 working days following the end of the contractor's accounting month
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 1.4
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 *NASA Contractor Financial Management Reporting, (November 2004)*
NPR 9501.2D *NASA Contractor Financial Management Reporting*
- 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 shall 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. The 533 shall list all costs by Employee & PWS/WBS.
- 15.4 **FORMAT:** The NASA Form 533M shall be prepared per NPR 9501.2D and NFS 1852.242-73. Contractor format is acceptable provided all necessary requirements are met. Electronic submission of contractor data is strongly encouraged.
- 15.5 **MAINTENANCE:** None required

DRD Continuation Sheet

TITLE: Monthly Status Reports
DATA TYPE: 3

DRD NO.: 1163MA-004
PAGE: 2/2

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

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

15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|-------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163MA-005 |
| 3. DATA TYPE: 3 | | 4. DATE REVISED: 02-25-09 |
| | | 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:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter. One copy each shall go to MSFC's Protective Services Office and Facilities Planning and Business Management Office.
11. **INITIAL SUBMISSION:** No later than 10 working days after Authority to Proceed (ATP), (including phase-in period)
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 1.2.7
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.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163MA-006**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 02-25-09
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:** ASS0 9. **DM:** ED03
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 1.1.5
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.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163MA-007 |
| 3. DATA TYPE: 3 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/1 |
6. **TITLE:** Position Risk Designation for Non-NASA Employee
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:** ED03
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), (including phase-in period)
12. **SUBMISSION FREQUENCY:** Update as personnel or position changes occur
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 1.1.6
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Position Risk Designation for Non-NASA Employee 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 shall contain all the information required by NASA Form 1760 in accordance with NPR 1600.1, *NASA Security Program Procedural Requirements*.
- 15.4 **FORMAT:** NASA Form 1760, "Position Risk Designation for Non-NASA Employee", or as may otherwise be directed by the Contracting Officer.
- 15.5 **MAINTENANCE:** None required

DRD Continuation Sheet

TITLE: Monthly and Semi-Annually Performance Reports

DRD NO.: 1163MA-008

DATA TYPE: 3

PAGE: 2/2

15.3 **DATA PREPARATION INFORMATION (CONTINUED):**

15.4 **FORMAT:** Microsoft Excel shall be utilized.

15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163MA-009**
3. **DATA TYPE:** 2
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/2

6. **TITLE:** Organizational Conflict of Interest (OCI) Avoidance Plan

7. **DESCRIPTION/USE:** To demonstrate to the Government that the Contractor will mitigate organizational conflicts of interest and ensure that the contractor provides unbiased, impartial advice and adequately protects sensitive data.

8. **OPR:** PS21 9. **DM:** ED03

10. **DISTRIBUTION:** Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** 10 working days following Authority to Proceed (ATP) (including phase-in period)

12. **SUBMISSION FREQUENCY:** Update as required

13. **REMARKS:** Reference is made to Contract Clauses H.2, *Limitation of Future Contracting (NFS 1852.209-71*, H.3, *Organizational Conflicts of Interest*, I.7, *Access to Sensitive Information (NFS 1852.237-72)*, and I.8, *Release of Sensitive Information (NFS 1852.237-73)*.

14. **INTERRELATIONSHIP:** PWS paragraph 1.1

15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Organizational Conflicts of Interest Avoidance Plan demonstrates that no organizational conflict of interest exists or that any such potential conflicts have been adequately avoided or mitigated with any prime contractor or subcontractor performing or planning to propose on design, development, and/or delivery of space flight hardware, software, mission integration services or other critical systems related to MSFC. The Contractor should not assume that government performance of a contracted task is a form of mitigation.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Organizational Conflict of Interest Avoidance Plan shall include the following:
 - a. Organizational conflicts of interest pertaining to impaired objectivity shall be addressed as follows:
 1. Describe the nature of the conflict including any business relationships that might create a conflict with the performance of the work statement
 2. Describe the plan for avoiding, neutralizing, or mitigating the conflict, including the following with regard to subject matter experts/technical experts if applicable:
 - (a) That the management reporting chains between this contract and the work performed by the subject matter experts/technical experts for the conflicting business relationship are separated from each other.
 - (b) That the subject matter experts/technical experts when performing under this contract are physically separated from the portion of the company performing the work for the conflicting business relationships.
 - (c) That each subject matter expert/technical expert performing under 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 order.
 - (d) That techniques are in place to ensure that the contractor shall not favor the conflicting business relationships and will avoid the appearance of conflicts of interest.

DRD Continuation Sheet

TITLE: Organizational Conflict of Interest (OCI) Avoidance Plan

DRD NO.: 1163MA-009

DATA TYPE: 2

PAGE: 2/2

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

- b. With regard to access to nonpublic information, the avoidance plan shall contain a plan to safeguard all proprietary/sensitive data the contractor (including all employees and subject matter experts/technical experts) receives. This plan shall include:
1. A provision that the contractor shall not disclose or improperly use the proprietary/sensitive data received or accessed under this contract.
 2. A provision that 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.
 3. A provision that information technology shall be protected to prevent unauthorized disclosure of information.
 4. A provision that employees performing the effort must sign an express binding written agreement clearly agreeing to protect sensitive data.
 5. A requirement that subcontractors have appropriate OCI avoidance procedures in place for the use of subject matter experts.
 6. A requirement for periodic self-audits, the results of which shall be made available to the Government.
 7. Initial and periodic refresher OCI training for the contractor employees/experts working on this contract.
 8. A description of organizational and employee sanctions for violation of the OCI order clause or OCI Avoidance Plan provisions.
 9. Provisions on record 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.
 10. A provision requiring the contractor to report any real, apparent, or potential conflict of interest that may arise to the Contracting Officer.
 11. A provision requiring the contractor to update the OCI Avoidance Plan upon occurrence of any event that will cause a change to the plan.

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.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163MA-010 |
| 3. DATA TYPE: 3 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/1 |
6. **TITLE:** Monthly Calibration Services Reports
7. **DESCRIPTION/USE:** To provide the Government insight into contractor performance in all areas of the contract and identify existing or potential problems.
8. **OPR:** ET02 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** First calendar month following the end of the first full month after Authority to Proceed (ATP), unless otherwise specified by the Contracting Officer.
12. **SUBMISSION FREQUENCY:** 10 days following the end of each month
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 3.6
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Monthly Calibration Services Reports provides data for the assessment of Calibration Services.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Monthly Calibration Services Reports shall contain the following as a minimum:
- a. Government Authorized Priority: number of items performed over User Requested Due Date.
 - b. Outsourced Calibration Services: number of items performed over "total" of 10 business days Total = Cal lab receipt to vendor + receipt from vendor to customer.
 - c. Number of Outsourced Calibration Services items over 30, 60, and 90 calendar days.
 - d. Total number of items in the lab over 30 calendar days.
 - e. Calibration Content.
 - f. Work Order Number.
 - g. Equipment Control Number (ECN).
 - h. Date Arrived at Calibration Laboratory.
 - i. Estimated Completion Date.
 - j. Actual Completion Date.
 - k. Days Early/Days Late.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163MA-011**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/1

6. **TITLE:** Monthly Valve and Component Shop (V&CS) Services Report

7. **DESCRIPTION/USE:** To provide Government insight into contractor performance in all areas of the TOR and existing or potential problems at the V&CS.

8. **OPR:** ET02 9. **DM:** ED03

10. **DISTRIBUTION:** Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Thirty (30) days after Authority to Proceed (ATP)

12. **SUBMISSION FREQUENCY:** Revise as required

13. **REMARKS:**

14. **INTERRELATIONSHIP:** PWS paragraph 3.16

15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Monthly Valve and Component Shop (V&CS) Services Report provides data for the assessment of V&CS for quality and timeliness.

- 15.2 **APPLICABLE DOCUMENTS:** None

- 15.3 **CONTENTS:** The Monthly Valve and Component Shop (V&CS) Services Report shall contain:
 - a. Listing of any quality discrepancies and status.
 - b. Timeliness of components that was refurbished and/or repaired.
 - c. Man-hours expended for month and cumulative months, showing overtime hours separately.

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

- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

- | | | |
|-------------------------|--------------------------|--------------------------------------|
| 1. DPD NO.: 1163 | ISSUE: Revision B | 2. DRD NO.: 1163QE-001 |
| 3. DATA TYPE: 1 | | 4. DATE REVISED: 02-25-09 |
| | | 5. PAGE: 1/2 |
6. **TITLE:** Quality Management System Plan
7. **DESCRIPTION/USE:** To define the contractor's planned methods for accomplishing the applicable tasks required to satisfy the quality requirements of NPD 8730.5 for the specific products and engineering technical support being procured.
8. **OPR:** QD40 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Four (4) months after Authority to Proceed (ATP), (including phase-in period)
12. **SUBMISSION FREQUENCY:** Revise as required to address new or changed Task Orders with submission as agreed upon through the COTR.
13. **REMARKS:** A copy of the current Quality System Manual will be provided to the Contractor upon contract award
14. **INTERRELATIONSHIP:** PWS paragraph 1.1.7
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Quality Management System Plan shall identify, as applicable, the specific quality management system activities related to the procurement of materials/subcomponents, fabrication, assembly, and engineering technical support and services to assure the quality of the products delivered. The plan(s) will reference the contractor's quality manual and procedures as necessary to fully describe the contractor's quality system. Quality planning can be prepared as a single plan or a top level plan with separate task level planning, or any combination thereof. Updates to planning shall be addressed for any additional tasks added to the contract or for any changes if required.
- 15.2 **APPLICABLE DOCUMENTS:**
- | | |
|----------------|---|
| ANSI/NCSL Z540 | <i>Government Approved Release</i> |
| NPD 8730.1 | <i>Metrology and Calibration</i> |
| NPD 8730.5 | <i>NASA Quality Assurance Program Policy</i> |
| NPR 8735.2 | <i>Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contract</i> |
| MPR 8730.5 | <i>Control of Inspection, Measuring, and Test Equipment</i> |
| SAE AS9100 | <i>Quality Management Systems - Aerospace – Requirements</i> |
- 15.3 **CONTENTS:** The Quality Management System Plan shall include the following:
1. Each quality element of SAE AS9100 (excluding Section 7.3 "Design and Development") shall be addressed to describe the philosophy and approach for implementation of the quality management system. This can be satisfied by contractor's existing quality manual and procedures. The only exceptions allowed will be processes noted in Section 7 of SAE AS9100 and as specified in the contract Performance Work Statement (PWS) and/or in each task agreement. A copy of the Quality System Manual and 1st tier procedures shall be submitted with any required quality plan. As a minimum, the subparagraphs below shall be addressed by the quality plan to include details of responsibilities and controls to adequately describe the specific quality assurance and personnel resource activities related to hardware and technical support being procured by MSFC:
 - a. NASA MSFC Performance Work Statement (PWS) Activities – describe how hardware specific quality requirements imposed by contract or component/equipment specification will be assured (i.e., traceability requirements, specific inspection points, specific quality activities).

DRD Continuation Sheet

TITLE: Quality Management System Plan

DRD NO.: 1163QE-001

DATA TYPE: 1

PAGE: 2/2

15. DATA PREPARATION INFORMATION (CONTINUED):

- b. Responsibilities – describe which contractor organizations will be responsible to perform the applicable quality management system activities which need to include how the Contractor will support the MSFC requirements specified in the Contract Surveillance Plan (Reference NPR 8735.2).
 - c. Article, Material, and Service Controls - describe the level of article, material, and service control including traceability requirements invoked by the contractor for the articles, materials, and/or services used in or performed as part of the hardware design and maintenance criteria, including how quality is assured for each material, part, assembly, and/or service performed.
 - d. Procurement – include the procurement quality requirements for all materials/parts/ components the contractor purchases. Define the level of control exercised over the suppliers including how suppliers are monitored, and maintained with controls for supplier non-conformances processing in reference to the requirements in section 4.2 of the PWS.
 - e. Milestone Reviews – describe how the contractor’s quality system will support milestone reviews as requested by MSFC.
 - f. Configuration Assurance – describe how the configuration of the hardware build is compared and verified to the approved design baseline drawings and specifications as requested by NASA. Describe how the configuration of Government Furnished Property/Equipment is maintained.
 - g. Special Process Controls – describe special process controls implemented for in-house processes and, if applicable, for sub-tier supplier processes. Controls will include required training, certification, and maintenance of competency for technical personnel.
 - h. Inspection and Test (describe who will be responsible to perform inspections to include any limitations) – include: how the quality of purchased items is validated at receiving inspection or at sub-tier suppliers facilities, specific in-process (manufacturing) inspections performed, details of final inspection and pre-ship inspections.
 - i. Nonconformance Processing - describe how nonconformance will be documented and dispositioned as specified in the PWS, section 4.2.
 - j. Record retention – for those records not delivered to MSFC, specify which records are required to be kept, who keeps them, for how long, and how they are to be dispositioned at the end of the retention period, and/or as specified in the contract.
 - k. Personnel training and competency processes will need to be specified for all personnel who affect products and technical support delivered on this contract. Resources for training to the requirements of this contract, specified by special processes, will be provided by MSFC. Contractor training management communication with MSFC will need to be specified to assure adequate resources to maintain special process personnel competency.
2. In addition to the requirements in 15.3, paragraph 1, each quality element of the Government approved release of ANSI/NCSL Z540 as defined by NPD 8730.1, the roles and responsibilities of MPR 8730.5 shall be addressed to describe the philosophy and approach for implementation. A copy of the Calibration Quality Manual shall be submitted.

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.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163QE-002**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/1
6. **TITLE:** Deficiency Corrective and Preventive Action Report
7. **DESCRIPTION/USE:** To provide the Government with the corrective and preventive actions taken by the contractor to track the identification and resolution of an identified deficiency in the Calibration Facility or Valve & Component Shop. A deficiency is defined as any rework (to include data), customer complaints, or any issue that impacts quality, schedule, or cost.
8. **OPR:** ET02 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** First calendar month following the end of the first full month after Authority to Proceed (ATP), unless otherwise specified by the Contracting Officer.
12. **SUBMISSION FREQUENCY:** Monthly: 10 days following the end of each month. Semi-Annually: 10 days following the end of the reporting period.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 3.6
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Deficiency Corrective and Preventive Action Report applies to all identified deficient processes, products, and services provided by the Calibration Facility or Valve & Component Shop.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Deficiency Corrective and Preventative Action Report shall include as a minimum:
 - a. The deficiency.
 - b. Assignment of responsibility for correcting the problem.
 - c. Corrective Action.
 - d. Preventative Action.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** None required

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163RM-001**
3. **DATA TYPE:** 1
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/1
6. **TITLE:** Reliability Centered Maintenance (RCM) Plan
7. **DESCRIPTION/USE:** To provide a description of the contractor's Reliability Centered Maintenance (RCM) plan and implementation schedule for accomplishing these requirements for the Calibration Facility and Valve & Component Shop.
8. **OPR:** ET02 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Ninety (90) days after Authority to Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Revise as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 3.6
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Reliability Centered Maintenance (RCM) Plan (which incorporates approaches such as routine maintenance, preventive maintenance, predictive maintenance, run to fail, etc.) shall describe the contractor's plan and approach for accomplishing overall maintenance requirements for the Calibration Facility and the Valve and Component Shop. The plan shall be in such detail as necessary to convey the contractor's internal procedures.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Reliability Centered Maintenance (RCM) Plan shall include:
 - a. Description of each type of maintenance plan (routine, preventive, etc.) and a method of tracking each.
 - b. Description of a schedule for each type of maintenance plan.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or by complete reissue.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163SA-001**
3. **DATA TYPE:** 2
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/4
6. **TITLE:** Safety, Health, and Environmental (SHE) Plan
7. **DESCRIPTION/USE:** To provide the contractor and the Government a baseline document to (1) prevent employee fatalities, (2) reduce the number of incidents, (3) reduce the severity of employee injuries and illnesses, and (4) protect the environment through the ongoing planning, implementation, integration and management control of the contractor's industrial safety, occupational health, and environmental program by compliance with the Marshall Space Flight Center (MSFC) SHE core program requirements in accordance with NFS 1852.223-73.
8. **OPR:** AS10/QD12 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Detailed Draft with proposal
12. **SUBMISSION FREQUENCY:** Ten days after Authority to Proceed (ATP), (including phase-in period); update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** NFS 1852.223-70, *Safety and Health*; NFS 1852.223-73, *Safety and Health Plan*; FAR 52.223-3, *Hazardous Material Identification and Material Safety Data*; FAR 52.223-4, *Recovered Material Certification*; FAR 52.223-5, *Pollution Prevention and Right-to-Know Information*; FAR 52.223-7, *Notice of Radioactive Materials*; FAR 52.223-9, *Estimate of Percentage of Recovered Material Content for EPA-Designated Products*; FAR 52.223-10, *Waste Reduction Program*; FAR 52.223-11, *Ozone Depleting Substances*; FAR 52.223-12, *Refrigeration Equipment and Air Conditioners*; FAR 52.223-13, *Certification of Toxic Chemical Release Reporting*; and FAR 52.223-14, *Toxic Chemical Release Reporting*. DRD 1163SA-003, *Mishap and Safety Statistics Report*. PWS paragraph 1.3
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Safety, Health, and Environmental Plan shall describe the contractor's methods of planning, implementing and controlling their industrial safety, occupational health, and environmental requirements over the duration of the contract.
- 15.2 **APPLICABLE DOCUMENTS:** Compliance with the following Occupational Safety and Health Standards and applicable requirements shall be specified in the plan (if applicable to the scope of this contract).

29 CFR 1910	<i>Department of Labor; Occupational Safety and Health Administration Standards for General Industry</i>
29 CFR 1926	<i>Department of Labor; Occupational Safety and Health Administration Standards for Construction Industry</i>
40 CFR	<i>Protection of the Environment</i>
ANSI Standards applicable to the scope of this contract	
<i>ASME Boiler and Pressure Vessel Code</i> applicable to the scope of this contract	
NFPA Standards <i>National Fire Codes</i>	
NASA-STD-8719.11	<i>Safety Standard for Fire Protection</i>
NPR 8715.3	<i>NASA General Safety Program Requirements</i>
MPR 1040.3	<i>MSFC Emergency Plan</i>
MPD 1800.1	<i>MSFC Smoking Policy</i>
MPR 1800.1	<i>Bloodborne Pathogens</i>
MPR 1810.1	<i>MSFC Occupational Medicine</i>
MPD 1840.1	<i>MSFC Environmental Health Program</i>

DRD Continuation Sheet

TITLE: Safety, Health, and Environmental (SHE) Plan

DRD NO.: 1163SA-001

DATA TYPE: 2

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15. DATA PREPARATION INFORMATION (CONTINUED):

MPR 1840.1	<i>MSFC Confined Space Entries</i>
MPD 1840.2	<i>MSFC Hearing Conservation Program</i>
MPR 1840.2	<i>MSFC Hazard Communication Program</i>
MPD 1840.3	<i>MSFC Respiratory Protection Program</i>
MPR 1840.3	<i>MSFC Hazardous Chemicals in Laboratories Protection Program</i>
MPD 1860.1	<i>Laser Safety</i>
MPD 1860.2	<i>MSFC Radiation Safety Program</i>
MPR 3410.1	<i>Training</i>
MWI 3410.1	<i>Personnel Certification Program</i>
MPD 8500.1	<i>MSFC Environmental Management Policy</i>
MPR 8500.1	<i>MSFC Environmental Management Program</i>
MPR 8500.2	<i>MSFC Environmental Management System Manual</i>
MWI 8540.2	<i>Affirmative Procurement Program for Environmentally Preferable Products</i>
MWI 8550.1	<i>Waste Management</i>
MWI 8550.2	<i>Storm Water Management</i>
MWI 8550.3	<i>Wastewater Compliance</i>
MWI 8550.4	<i>Air Emissions Compliance</i>
MWI 8550.5	<i>Chemical Management</i>
MWI 8621.1	<i>Close Call and Mishap Reporting and Investigation Program</i>
MPR 8715.1	<i>Marshall Safety, Health and Environmental (SHE) Program</i>
MWI 8715.1	<i>Electrical Safety</i>
MWI 8715.2	<i>Lockout/Tagout Program</i>
MWI 8715.3	<i>Hazard Identification & Warning System</i>
MWI 8715.4	<i>Personal Protective Equipment (PPE)</i>
MWI 8715.5	<i>Building Manager Program</i>
MWI 8715.9	<i>Occupational Safety Guidelines for Contractors</i>
MWI 8715.10	<i>Explosives, Propellants, & Pyrotechnics Program</i>
MWI 8715.11	<i>Fire Safety Program</i>
MWI 8715.12	<i>Safety, Health, and Environmental Finding Tracking System (SHEtrak)</i>
MWI 8715.13	<i>Safety Concerns Reporting System (SCRS)</i>
MWI 8715.15	<i>Ground Operations Safety Assessment & Risk Mitigation Program</i>
MPD 8900.1	<i>Medical Operations Responsibilities for Human Space Flight Programs (NOTE: This document only applies to Space Station contracts)</i>

15.3 **CONTENTS:** The Safety, Health, and Environmental (SHE) Plan shall clearly describe how the contractor shall comply with the MSFC SHE core program requirements listed below to accomplish the following: (1) the methods to ensure compliance with the MSFC SHE core program requirements listed below, (2) the methods to ensure potentially hazardous conditions are identified and corrected, (3) the methods to ensure employees are trained to perform their tasks in a safe and healthful manner, and (4) the methods to ensure compliance with the applicable documents that pertain to the specific work tasks.

a. Management leadership and employee involvement:

1. A statement of the management policy and their commitment to (1) provide a safe and healthful workplace for personnel (i.e., employees, customers, and public), (2) protect the property and the environment, and (3) ensure compliance with EPA, OSHA and NASA requirements applicable to the contracted effort.
2. A description of how management and employees are held accountable for implementing their tasks in a safe and healthful manner while protecting the environment through the use of motivational or innovative techniques and when necessary through the use of a disciplinary program.
3. A description of safety, health, environmental awareness and motivation programs that, include documented safety meetings and safety awareness training for employees. (Onsite contractors shall document their safety meeting statistics in the MSFC Supervisors Safety Web page (SSWP).

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TITLE: Safety, Health, and Environmental (SHE) Plan

DRD NO.: 1163SA-001

DATA TYPE: 2

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15. DATA PREPARATION INFORMATION (CONTINUED):

4. A method of performing and documenting self evaluations of the contractor's safety, health and environmental program including the frequency of these evaluations.
 5. A method of ensuring the flowdown of MSFC safety, health, and environmental responsibilities and requirements applicable to the contracted effort are passed between all company levels and to all subcontractors, when applicable.
 6. The identification by title the individual who is assigned the responsibility for implementing the contractor's SHE program elements and serve as the SHE Point of Contact (POC) for the contracted effort.
 7. A method to ensure compliance with MPR 8715.1 and all other SHE documents that are applicable to the contracted effort.
 8. A method to ensure that each employee has read the SHE plan and fully understands their roles and responsibilities in supporting the MSFC SHE program.
 9. A method to ensure the SHE plan is reviewed annually and updated as necessary.
- b. System and worksite analysis:
1. The methods of identifying potentially hazardous conditions in the work area and operations, e.g., hazard analysis, safety assessment, change analysis, risk assessment and employee identified concerns.
 2. A description of the OSHA programs that require documented programs that are applicable to the contracted effort (e.g., Respiratory Protection, Hazard Communication, Confined Space, and Lockout/Tagout, etc. Address their interrelationships with the applicable MSFC SHE programs.)
 3. The methods of conducting and documenting supervisors' monthly safety visits. Onsite safety visits shall be performed once per month per supervisor and documented in the Supervisors Safety Web page.
- c. Hazard prevention and control:
1. The methods of controlling potentially hazardous conditions in the work area or in operations. This includes the generation of plans, procedures, and other working documents which clearly identify the hazardous situations in the work area or operation and the necessary cautions taken to mitigate the hazards. NOTE: MSFC requires an annual review of these plans and procedures. MSFC Safety Department concurrence is required for onsite hazardous procedures.
 2. The methods of ensuring controls over the procurement, storage, issuance, and use of hazardous chemical and materials are in accordance with MPR 8500.1 and the recycling and disposal of any hazardous waste is in accordance with MWI 8550.1.
 3. The methods of ensuring a documented emergency management program. Include a list of contractor emergency points that are located onsite. (Note: Onsite contractors may use MPR 1040.3.)
 4. The methods of ensuring the investigation of all mishaps and close calls to determine root cause and the reporting requirements are in accordance with MWI 8621.1. (Reference DRD 1163SA-003, *Mishap and Safety Statistics Report*).
 5. The method for providing safety, health, and environmental services applicable to the contracted effort such as hazardous waste disposal, industrial hygiene monitoring, emergency medical support, hearing conservation program, respiratory protection, and hazard communication. (Note in the SHE plan which, if any of these services are to be provided by MSFC for onsite work.)
 6. The methods employees have to suspend work where safety, health or environmental conditions warrant such action.
- d. Safety, health and environmental training:
1. The methods for ensuring each employee is trained to recognize hazards, avoid accidents, know the hazards specific to their job, and fully understands the contractor's disciplinary program.
 2. The methods for assessing employee training needs specific to their job. (Onsite employee assessments shall be performed using the SHE Training Assessment located on the MSFC Supervisor Safety Web Page.)
 3. The methods for training and documenting this training when designating employees to be competent, qualified, authorized or certified to perform operations that require specific training in accordance with 29 CFR 1910 or 29 CFR 1926.

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TITLE: Safety, Health, and Environmental (SHE) Plan

DRD NO.: **1163SA-001**

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

4. A list of identified job categories under the contracted effort that require MSFC safety certification in accordance with MWI 3410.1, "Personnel Certification Program". Example job categories that require MSFC safety certification include, but not limited to, operating MSFC lifting equipment (forklifts, cranes, etc.), working with chemicals, hazardous waste, pressure systems, etc. Personnel Certification for onsite job categories identified in MWI 3410.1 shall be tracked in the MSFC Certification Database (CERTRAK). (NOTE: offsite contracts shall list the job categories under the contracted effort that require OSHA documented training and certification.)
- e. Environmental compliance – The methods to ensure compliance with environmental laws and regulations 40 CFR, Alabama Department of Environmental Management (ADEM), and MPR 8500.1 by:
 1. Reporting hazardous and toxic substance use.
 2. Implementing and reporting green procurements in accordance with MWI 8540.2.
 3. Reducing, reusing, and recycling of hazardous and toxic substances prior to disposal in accordance with MWI 8550.1.
 4. Minimizing stormwater pollution in accordance with MWI 8550.2.
 5. Ensuring equipment and processes permitted by applicable laws.
 6. 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.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163SA-002**
3. **DATA TYPE:** 1
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/2
6. **TITLE:** Personnel Certification Plan
7. **DESCRIPTION/USE:** To provide the contractor and the Government a baseline document for the identification and definition of personnel certification criteria and the procedures to be implemented by the contractor to ensure a certification program is implemented.
8. **OPR:** QD12/QD40/ED01 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 30 days after Authority to Proceed (ATP), (including phase-in period)
12. **SUBMISSION FREQUENCY:** Revise as required
13. **REMARKS:** Where the contractor is operating under its own quality management system and processes, manufacturing special/critical process personnel qualification/certification controls are not included in this plan, they will be documented as specified in PWS paragraph 1.1.7, DRD 1163QE-001, and contract attachment J-20, NASA MSFC Safety & Mission Assurance Surveillance Plan.
14. **INTERRELATIONSHIP:** PWS paragraphs 1.1.2 and 1.1.3
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Personnel Certification Plan provides for training, certification, and re-certification of personnel engaged in the performance of MSFC critical processes. The purpose of a certification program is to assure that all personnel are capable of performing these MSFC critical processes and work assignments without endangering themselves, fellow employees, equipment and/or facilities. It is mandatory that these MSFC critical processes are performed by experienced and certified personnel and that test facility operations activities be performed by certified personnel.
- 15.2 **APPLICABLE DOCUMENTS:**

MWI 3410.1	<i>Personnel Certification Program</i>
NPR 8715.3	<i>NASA Safety Manual</i>
- 15.3 **CONTENTS:** The Personnel Certification Plan shall provide insight to the contractor's certification program. The plan shall include criteria which the contractor can relate directly to work classifications and the required skills, education, experience, training, and other qualifications necessary to perform work in these classifications. The contractor shall assure work performed by these classifications is performed with high quality workmanship to produce a high quality produce in a safe and efficient manner. The plan shall include the contractor methods to track these certifications. The contractor can elect to track their certifications for critical MSFC owned process in MSFC CERTRAK database in accordance with MWI 3410.1. The plan shall fulfill the requirements of the applicable documents listed in 15.2 and include the following:
 - a. Certification program:
 1. General:
 - (a) Program description.
 - (b) Program administration.
 - (c) Certification duration.
 - (d) Definitions.
 - (e) Job description summaries.
 - (f) Task assignments per job description.
 - (g) Skills required per job description.

DRD Continuation Sheet

TITLE: Personnel Certification Plan

DRD NO.: 1163SA-002

DATA TYPE: 1

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

2. Certification requirements/skills
 - (a) Education.
 - (b) Experience/work history.
 - (c) Specialized training.
 - (d) Physical condition/attitude.
3. Certification process:
 - (a) Supervision responsibilities.
 - (b) Certifying authority.
 - (c) Formal/informal examination.
 - (d) Proficiency demonstration.
- b. Certification documentation.

Specific critical MSFC owned process skills requiring certification and proficiency include the following:

- a. High pressure tubing fabrication and assembly.
- b. Welding:
 1. Carbon steel.
 2. Stainless steel.
 3. Aluminum.
- c. Control system operations.
- d. Schematic drawing comprehension
- e. Other processes identified by the Statement of Work (SOW)

The following certifications, if required, are obtained in accordance with MWI 3410.1

- a. Forklift, crane and hoist operators.
- b. Cryogenic and other hazardous pressure system operators.
- c. Propellant & Explosive Handlers
- c. Hazardous chemical/toxic material handling.
- d. Confined space entry.
- e. Electrical/instrumentation cable fabrication (including test articles):
 1. Crimping.
 2. Cabling, Harnessing, and Wiring.
 3. Soldering including Surface Mount Technology (SMT).
 4. Staking and Conformal Coating.
 5. ESD Control.
- f. Welding inspection and nondestructive evaluation (NDE).
 1. Penetrant Testing.
 2. Magnetic Particle Testing.
 3. Eddy Current Testing.
 4. Radiographic Testing.
 5. Thermal/Infrared Testing.
 6. Visual Testing.

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.:** 1163 **ISSUE:** Revision B
2. **DRD NO.:** **1163SA-003**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 02-25-09
5. **PAGE:** 1/2
6. **TITLE:** Mishap and Safety Statistics Reports
7. **DESCRIPTION/USE:** To provide reporting of metrics, mishaps, close calls, and serious non-occupational injuries or illnesses.
8. **OPR:** QD12 9. **DM:** ED03
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:**
 - a. Safety Statistics submitted by the 10th of each month after contract award using one of the following methods: MSFC Form 4371, or electronic notification system equivalent, or direct to NASA Incident Reporting Information System (IRIS) database. Statistics required to be submitted include: contract number, subcontractors, NAISC codes, number of employees, and number of supervisors, hours worked. Access to IRIS database can be obtained from the Industrial Safety Department after contract award. (Applicable to all onsite contracts)
 - b. Mishaps, Close Calls, and serious non-occupational injuries or illnesses as defined in Section 15.6 and in NPR 8621.1:
 1. Type A, B, mishaps, high visibility mishaps or close calls: Upon occurrence or awareness of mishap:
 - a. Immediate notification to the Contracting Officer and Industrial Safety (256-544-HELP, Safety Option) (Include location and time of incident, number of fatalities, number hospitalized, type of damage, estimated cost, brief description, and contact person's name and phone number), accompanied by IRIS Quick Incident submittal.
 - b. Update within 24 hours through IRIS entry, or electronic submittal (per NPR 8621.1, paragraph 1.5.5).
 2. Non-occupational fatality or serious injury occurring onsite or to an onsite contractor employee: Notification to Contracting Officer and Industrial Safety within 24 hour of occurrence or awareness. (Offsite non-occupational injury or illness notification is at the discretion of the family.)
 3. Type C mishaps: Upon occurrence or awareness of mishap:
 - a. Immediate notification to the Contracting Officer and Industrial Safety (256-544-HELP, Safety Option) (Include location and time of incident, type of lost-time injury or damage, estimated cost, brief description, and contact person's name and phone number), accompanied by IRIS Quick Incident submittal.
 - b. Update within 6 days through IRIS entry, or electronic submittal.
 4. Type D, and Close Call mishaps (Onsite): Notification by telephone (256-544-HELP, Safety Option) or electronic submittal within 4 hours of occurrence or awareness, and within 24 hours with IRIS Quick Incident. Update within 6 days may be through IRIS entry, or electronic submittal.
 5. Type A, B, and Close Calls with high Type A or B potential: Mishap Board Report submitted after completion of investigation. Corrective Action Plan submitted upon Endorsing Official approval.
 6. All Mishaps: Follow-up Corrective Action Plan/Status 30 days after first mishap.
 - c. Safety Concerns, Hazards, and non-reportable mishaps should be reported per MPR 8715.1 (**Onsite**) or the appropriate contractor method (**Offsite**).
12. **SUBMISSION FREQUENCY:** Safety Statistics (MSFC Form 4371, IRIS entry, or equivalent) - By the 10th of each month. All Mishaps: Monthly Follow-up Corrective Action Plan/Status until corrective actions implemented and closure received by updating record in IRIS data base (preferred) or electronic submittal.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** DRD 1163SA-001, *Safety, Health, and Environmental (SHE) Plan*. PWS paragraph 1.3

DRD Continuation Sheet

TITLE: Mishap and Safety Statistics Reports

DRD NO.: 1163SA-003

DATA TYPE: 3

PAGE: 2/2

15. DATA PREPARATION INFORMATION:

15.1 **SCOPE:** The Mishap and Safety Statistics Reports document all mishaps and close calls as required in NPR 8621.1.

15.2 **APPLICABLE DOCUMENTS:**

NPR 8621.1	<i>NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping</i>
MPR 8715.1	<i>MSFC Safety, Health, and Environmental (SHE) Program</i>
MWI 8621.1	<i>Close Call and Mishap Reporting and Investigation Program</i>

15.3 **CONTENTS:** The Mishap and Safety Statistics Reports shall contain the information required by NPR 8621.1 and MWI 8621.1.

15.4 **FORMAT:** The following formats or electronic equivalent shall be submitted:

- a. MSFC Form 4370, "MSFC Flash Mishap Report."
- b. Additional Information Submittal per NPR 8621.1.
- c. MSFC Form 4371, "MSFC Contractor Accident and Safety Statistics."
- d. Mishap Board Report using the format provided in NPR 8621.1.

15.5 **MAINTENANCE:** None required

15.6 **DEFINITIONS:**

Close Call. An event in which there is no injury or only minor injury requiring first aid and/or no equipment/property damage or minor equipment/property damage (less than \$1000), but which possesses a potential to cause a mishap.

High Visibility (Mishaps or Close Calls). Those particular mishaps or close calls, regardless of the amount of property damage or personnel injury, that the Administrator, Chief/OSMA, CD, AA/OIA, or the Center SMA director judges to possess a high degree of programmatic impact or public, media, or political interest including, but not limited to, mishaps and close calls that impact flight hardware, flight software, or completion of critical mission milestones.

Type A Mishap. A mishap resulting in one or more of the following: (1) an occupational injury or illness resulting in a fatality, a permanent total disability, or the hospitalization for inpatient care of 3 or more people within 30 workdays of the mishap; (2) a total direct cost of mission failure and property damage of \$1 million or more; (3) a crewed aircraft hull loss; (4) an occurrence of an unexpected aircraft departure from controlled flight (except high performance jet/test aircraft such as F-15, F-16, F/A-18, T-38, OV-10, and T-34, when engaged in flight test activities).

Type B Mishap. A mishap that caused an occupational injury or illness that resulted in a permanent partial disability, the hospitalization for inpatient care of 1-2 people within 30 workdays of the mishap, or a total direct cost of mission failure and property damage of at least \$250,000 but less than \$1,000,000.

Type C Mishap. A mishap resulting in a nonfatal occupational injury or illness that caused any days away from work, restricted duty, or transfer to another job beyond the day or shift on which it occurred, or a total direct cost of mission failure and property damage of at least \$25,000 but less than \$250,000.

Type D Mishap. A mishap that caused any nonfatal OSHA recordable occupational injury and/or illness that does not meet the definition of a Type C mishap, or a total direct cost of mission failure and property damage of at least \$1,000 but less than \$25,000.