

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE 07	PAGE OF PAGES 1 / 4
2. AMENDMENT/MODIFICATION NO. 07	3. EFFECTIVE DATE APR 06 2004	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY Procurement Office George C. Marshall Space Flight Center National Aeronautics and Space Administration Marshall Space Flight Center, AL 35812	CODE PS41-F	7. ADMINISTERED BY (If other than Item 6) PS41-F/Lizette Kummer/ 256-544-3457 Lizette.M. Kummer@nasa.gov	CODE PS41-F
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) COLSA Corporation 6726 Odyssey Drive Huntsville, AL 35802 Attn: Pat Hodges		(v)	9A. AMENDMENT OF SOLICITATION NO.
Code 4U285 FACILITY CODE		X	9B. DATED (SEE ITEM 11)
			10A. MODIFICATION OF CONTRACT/ORDER NO. NNM04AA07C
			10B. DATED (SEE ITEM 13) December 4, 2003

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)

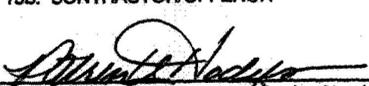
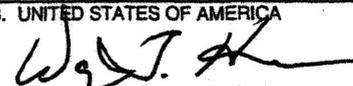
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

	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). NFS 1852.216-85
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.103(a)(3)
	D. OTHER (Specify type of modification and authority)

**EXECUTED COPY
OFFICIAL FMO
KOR**

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.)
See Page 2 for description of this modification.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.			
15A. NAME AND TITLE OF SIGNER (Type or print) Patricia U. Hodges Director, Contracts		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Wayne T. Harmon Contracting Officer	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 3/29/04	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 7/06/2004

Standard Form 30 Continued

1. TABULATION OF CONTRACT CHANGES:

	<u>Negotiated Est. Cost</u>	<u>Award Fee Earned</u>	<u>Potential Award Fee</u>	<u>Incentive Fee Earned</u>	<u>Potential Incentive Fee</u>	<u>Total Contract Value</u>	<u>Total Sum Allotted</u>
Previous Total	\$104,341,126	0	\$ 4,185,495	\$ 0	\$2,253,727	\$110,780,347	\$17,596,441
This Mod	\$	0	\$ 0	0	\$ 0	0	0
Revised Total	\$104,341,126	0	\$ 4,185,495	\$ 0	\$2,253,727	\$110,780,347	\$17,596,441

2. This modification is issued to make the following changes:

- a. Section B.2. (d) is modified to add the division and allocation of award fee and incentive fee into individual 6 month periods.
- b. Section E.1 I. Clause 52.246-3 "Inspection of Supplies Cost Reimbursement" (APR 1984) is updated to May 2001.
- c. Section E.2 Material Inspection and Receiving Report (NFS 1852.246-72 (Jun 1995) is updated to August 2003.
- d. Clause F.5. "Bills of Lading" NFS.1852.247-73(Jun 2002) section (b) (2) replace "TBD" with Carolyn Greenwood, Transportation Officer, AD42T, 256-544-2718.
- e. Section F.6 Delivery Schedule "Attn: CN72/Transportation Officer" is updated to: "Attn: AD42/Transportation Officer"
- f. Clause H.1 I. 52.223-5 APR 1998 "Pollution Prevention and Right- to- Know Information" is updated to August 2003 and includes both ALT I and ALT II.
- g. Section I.1 I Clauses 52.203-12, 52.219-6, 52.222-3, 52.225-1, 52.225-13, and 52.245-5 are updated to Jun 2003. Clause 52.216-7 is updated to Dec 2002.
- h. Clause I.3, I.4, and I.5. replace "TBD" with "None".
- i. Clause I.6. "Taxes-Foreign Cost-Reimbursement Contracts" (FAR 52.229-8) (Mar1990) - Delete in its entirety.
- j. Attachment J-1 Performance Work Statement Section 2.5 is amended (see replacement page J-1-6) IAW NFS 1852.204-76 "Security Requirements for Unclassified Information Technology Resources" (July 2002)

k. Attachment J-2 Data Procurement Document No. 1016- Basic- DRD No. 1016MA-003 and DRD No. 1016 MA-007 are revised. DRD No. 1016MA-006 - is deleted in its entirety.

3. In order to conform the contract document with previous modifications, the following Sections have been revised:

Section B.2 page B-1 and page B-2 (Mod 05 and Mod 03)
Attachment J-1-page J-1-19(Mod 03)

4. The changes are indicated by a vertical line in the outer margin of each replacement page next to the affected text. Please substitute the replacement pages for the current pages in the contract.

5. Summary of Page Revisions:

<u>Current Page</u>	<u>Replacement Page</u>
B-1	B-1
B-2	B-2
B-3	B-3
E-1	E-1
F-3	F-3
G-6	G-6
G-7	G-7
G-8	G-8
G-9	G-9
H-1	H-1
H-2	H-2
I-1	I-1
I-2	I-2
I-3	I-3
I-4	I-4
I-6	I-6
I-10	I-10
I-11	I-11
I-12	I-12
J-1-6	J-1-6

	J-1-6A
J-1-19	J-1-19
J-1-20	J-1-20
J-2-2	J-2-2
J-2-3	J-2-3
J-2-9	J-2-9
J-2-21	J-2-21
J-2-22	J-2-22
J-2-26	J-2-26
J-2-27	J-2-27

6.. The total value of the contract remains unchanged at \$110,780,347. All other terms, and conditions pursuant to this contract remain unchanged and in full force and effect.

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B.1 Supplies And/Or Services To Be Furnished

- (a) In a manner consistent with the Marshall Space Flight Center (MSFC) values, the Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary for performing the "Huntsville Operations Support Center (HOSC)" in accordance with the Performance Work Statement, Attachment J-1.
- (b) This is a cost-reimbursement contract with both award fee and performance incentive fee criteria (CPAF/IF). The award fee (subjective evaluation) and performance incentive fee (objective evaluation) will be assessed in accordance with the Fee Evaluation Plan (FEP), Attachment J-7.
- (c) A portion of this contract is under an Indefinite Delivery/Indefinite Quantity (IDIQ) arrangement, which will also be on a CPAF/IF basis. The purpose of this provision is to allow the Government to acquire indefinite services as addressed in the Performance Work Statement, Attachment J-1, Paragraphs 3.0 and 4.0. IDIQ requirements cannot be adequately defined for inclusion in the contract because the precise quantities that will be required during the contract period of performance cannot be predetermined. IDIQ will be ordered in accordance with Clause B.7- Task Ordering Procedure and Clause B.8- IDIQ Schedule of Rates. The guaranteed minimum quantity of work that will be ordered under the IDIQ portion of this contract shall be \$50,000 per year. The maximum not-to-exceed (NTE) amount of IDIQ work per contract year is \$3,000,000 per contract year.

(End of Clause)

B.2 Estimated Cost, Award Fee And Performance Incentive Fee

- (a) The estimated cost of this contract is ~~\$104,341,126~~. The maximum potential award fee is ~~\$4,185,495~~. The maximum potential performance incentive fee is ~~\$2,253,727~~. Total estimated cost, maximum potential award fee, and maximum potential performance incentive fee are ~~\$110,780,347~~. It is expected that this contract will contain no base fee.
- (b) Breakout of estimated cost, maximum potential award fee, and maximum performance incentive fee is as follows:

<u>Period Covered</u>	<u>Estimated Cost</u>	<u>Maximum Award Fee</u>	<u>Award Fee Earned</u>	<u>Maximum Potential Perf. Fee</u>	<u>Performance Fee Earned</u>	<u>Total Contract Value</u>
1/1/04 - 12/31/06	\$63,796,107	\$2,572,185		\$1,385,022		\$67,753,313

(c) Breakout of estimated cost, maximum award fee, and maximum performance incentive fee for each option period are set forth below:

<u>Period Covered</u>	<u>Estimated Cost</u>	<u>Maximum Award Fee</u>	<u>Award Fee Earned</u>	<u>Maximum Potential Perf. Fee</u>	<u>Performance Fee Earned</u>	<u>Total Contract Value</u>
Option 1 (1/1/07 - 12/31/07)	\$20,094,150	\$797,496		\$429,421		\$21,321,067
Option 2 (1/1/08 - 12/31/08)	\$20,450,869	\$815,814		\$439,284		\$21,705,967

(d) The maximum potential award fee and performance incentive fee for each of the contract periods specified above is hereby divided and allocated into individual six month evaluation periods in order to calculate award and performance incentive fee earned.

<u>Evaluation Period</u>	<u>Potential Award Fee</u>	<u>Potential Incentive Fee</u>
January 1 - June 30, 2004	1 \$485,012	1 \$261,160
July 1-December 31, 2004	2 \$466,661	2 \$251,279
January 1 - June 30, 2005	3 \$409,818	3 \$220,671
July 1-December 31 2005	4 \$409,818	4 \$220,671
January 1-June 30, 2006	5 \$400,439	5 \$215,621
July 1-December 31, 2006	6 \$400,439	6 \$215,621
January 1-June 30, 2007	7 \$398,748	7 \$214,710
July 1-December 31, 2007	9 \$398,748	8 \$214,710
January 1-June 30, 2008	9 \$407,906	9 \$219,642
July1-December 31, 2008	10 \$407,906	10 \$219,642
	<u>\$4,185,495</u>	<u>\$2,253,727</u>

B.3 Award Fee For Service Contracts (NFS 1852.216-76)(June 2000)

- (a) The Contractor can earn award fee from a minimum of zero dollars to the maximum stated in Clause B.2 "Estimated Cost, Award Fee, and Performance Incentive Fee" in this contract. The award fee pool will also consist of 65% of the fee negotiated for the effort of this contract and primarily covers all Performance Work Statement requirements in Attachment J-1, with the exception of Paragraph 4.4, "HOSC Mission Services".
- (b) Beginning six months after the effective date of this contract, the Government shall evaluate the Contractor's performance every six months to determine the amount of award fee earned by the Contractor during the period. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations will be considered by the Government in its evaluation. The Government's Fee Determination Official (FDO) will determine the award fee amounts based on the Contractor's performance in accordance with Attachment J-7. The Government may revise the plan unilaterally prior to the beginning of any rating period to redirect emphasis.
- (c) The Government will advise the Contractor in writing of the evaluation results. The MSFC Accounting Operations Office will make payment based on the modification to the contract which incorporates the earned award fee.
- (d) After 85% of the potential award fee has been paid, the Contracting Officer may direct the withholding of further payment of award fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15% of the total potential award fee.
- (e) The amount of award fee which can be awarded in each evaluation period is limited to the amounts set forth in Clause B.2 and as further allocated into the six month evaluation periods. Award fee which is not earned in an evaluation period cannot be reallocated for future evaluation periods.
- (f) (1) Provisional award fee payments will be made under this contract pending the determination of the amount of fee earned for an evaluation period. If applicable, provisional award fee payments will be made to the Contractor on a monthly basis. The total amount of award fee available in an evaluation period that will be provisionally paid is the lesser of 80% of the maximum potential award fee or the prior period's evaluation score.
- (2) Provisional award fee payments will be superseded by the final award fee evaluation for that period. If provisional payments exceed the final evaluation score, the Contractor will either credit the next payment voucher for the amount of such overpayment or refund the difference to the Government, as directed by the Contracting Officer.
- (3) If the Contracting Officer determines that the Contractor will not achieve a level of performance commensurate with the provisional rate, payment of provisional award fee will be discontinued or reduced in such amounts as the Contracting Officer deems appropriate. The Contracting Officer will notify the Contractor in writing if it is determined that such discontinuance or reduction is appropriate.
- (4) Provisional award fee payments will be made prior to the first award fee determination by the Government.
- (g) Award fee determinations are unilateral decisions made solely at the discretion of the Government.

(End of Clause)

B.4 Evaluation Of Performance Incentive Fee

SECTION E - INSPECTION AND ACCEPTANCE**E.1 Listing Of Clauses Incorporated By Reference**

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-1	APR 1984	CONTRACTOR INSPECTION REQUIREMENTS
52.246-3	May 2001	INSPECTION OF SUPPLIES--COST-REIMBURSEMENT
52.246-5	APR 1984	INSPECTION OF SERVICES-- COST-REIMBURSEMENT

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

CLAUSE
NUMBER DATE TITLE

None included by reference.

(End of Clause)

E.2 Material Inspection And Receiving Report (NFS 1852.246-72) (Aug 2003)

(a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in 3 copies, an original and 2 copies.

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.6. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of Clause)

used in this clause, "domestic overseas" means non-continental United States, i.e. Hawaii, Commonwealth of Puerto Rico, and possessions of the United States.

(2) At least 15 days before shipment, the Contractor shall request in writing GBLs from:

Carolyn Greenwood

Transportation Officer

AD42T

If time is limited, requests may be by telephone: 256-544-2718

Requests for GBLs shall include the following information.

- (i) Item identification/ description.
- (ii) Origin and destination.
- (iii) Individual and total weights.
- (iv) Dimensional Weight.
- (v) Dimensions and total cubic footage.
- (vi) Total number of pieces.
- (vii) Total dollar value.
- (viii) Other pertinent data.

(End of Clause)

F.6 Delivery Schedule

The Contractor shall deliver the items required to be furnished by this contract as follows:

<u>Item No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Delivery Date</u>	<u>Shipping Address</u>
	SEE ATTACHMENT J-1			*SEE BELOW

*SHIP TO: National Aeronautics and Space Administration
George C. Marshall Space Flight Center
Attn: AD42/Transportation Officer
Building 4471
Marshall Space Flight Center, AL 35812

(AND OTHER LOCATIONS AS APPROVED IN WRITING BY THE CONTRACTING OFFICER)

(End of Clause)

F.7 Free On Board (FOB) Point

installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer:

- (a) Office space, work area space, and utilities. Government telephones are available for official purposes only; pay telephones are available for contractor employees for unofficial calls.
- (b) General- and special-purpose equipment, including office furniture:
 - (1) Equipment to be made available is listed in Attachment J-8. The Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property, regardless of its authorized location.
 - (2) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.
 - (3) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.
- (c) General Office Supplies.
- (d) Publications and blank forms stocked by the installation.
- (e) Safety and fire protection for Contractor personnel and facilities.
- (f) Installation service facilities: See Attachment J-8.
- (g) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.
- (h) Cafeteria privileges for Contractor employees during normal operating hours.
- (i) Building maintenance for facilities occupied by Contractor personnel.
- (j) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.
- (k) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

(End of Clause)

G.7 Financial Reporting of NASA Property in the Custody of Contractors (NFS 1852.245-73) (OCT 2003)

- (a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on

the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.

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

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

(3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address: National Aeronautics and Space Administration, George C. Marshall Space Flight Center, Marshall Space Flight Center AL 35812, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c) (1) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 15. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 15. Some activity may be estimated for the month of September, if necessary, to ensure the NF 1018 is received when due. However, contractors procedures must document the process for developing these estimates based on planned activity such as planned purchases or NASA Form 533 (NF 533 Contractor Financial Management Report) cost estimates. It should be supported and documented by historical experience or other corroborating evidence, and be retained in accordance with FAR Subpart 4.7, Contractor Records Retention. Contractors shall validate the reasonableness of the estimates and associated methodology by comparing them to the actual activity once that data is available, and adjust them accordingly. In addition, differences between the estimated cost and actual cost must be adjusted during the next reporting period. Contractors shall have formal policies and procedures, which address the validation of NF 1018 data, including data from subcontractors, and the identification and timely reporting of errors. The objective of this validation is to ensure that information reported is accurate and in compliance with the NASA FAR Supplement. If errors are discovered on NF 1018 after submission, the contractor shall contact the cognizant NASA Center Industrial Property Officer (IPO) within 30 days after discovery of the error to discuss corrective action.

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

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

(End of clause)

G.8 List Of Government-Furnished Property (NFS 1852.245-76) (OCT 1988)

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

(End-Of-Clause)

G.9 Contractor Employee Badging And Employment Termination Clearance
(MSFC 52.204-90) (NOV 1999)

(a) It is anticipated that performance of the requirements of this contract will require employee access to and picture badging by the Marshall Space Flight Center. Contractor requests for badging of employees shall be by MSFC Form 1739, "Contractor Badge/Decal Application." Requests for badging shall be submitted to the appointed Contracting Officer Technical Representative for completion and approval prior to processing by the MSFC Protective Services Department.

(b) The Contractor shall establish procedures to ensure that each badged employee is properly cleared in accordance with MSFC Form 383-1, "Contractor Employee Clearance Document," prior to finalization of employment termination.

(c) Requests for copies of MSFC Forms 383-1, and 1739 shall be directed to the MSFC Protective Services Department, Marshall Space Flight Center, Alabama 35812.

(End of Clause)

G.10 Statement Of Equivalent Rates For Federal Hires (FAR 52.222-42) (MAY 1989)

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

THIS STATEMENT IS FOR INFORMATION ONLY:
IT IS NOT A WAGE DETERMINATION

A. Classification, Grade, Rates

<u>Classification</u>	<u>Grade</u>	<u>Rate</u>
Computer Operator III	GS-06	15.02
Computer Operator V	GS-08	18.49
Computer Programmer I	GS-05	13.48
Computer Programmer III	GS-09	20.42
Computer Programmer IV	GS-11	24.71
Computer Systems Analyst II	GS-11	24.71
Computer Systems Analyst III	GS-12	29.61

Electronics Technician, Maintenance III	WG-10	17.21
Engineering Technician II	GS-04	12.05
Engineering Technician IV	GS-07	16.69
Engineering Technician VI	GS-11	24.71
Material Coordinator	WG-07	14.99
Secretary I	GS-04	12.05
Secretary III	GS-06	15.02
Secretary IV	GS-07	16.69
Technical Writer	GS-11	24.71

Fringe Benefits (applicable to all classifications)

1. Insurance and Health Programs
Life, accident, and health insurance and sick leave programs (22 percent of basic hourly rate).
2. Holidays
 - a. New Year's Day
 - b. Martin Luther King, Jr. Day
 - c. Presidents' Day
 - d. Memorial Day
 - e. Independence Day
 - f. Labor Day
 - g. Columbus Day
 - h. Veterans' Day
 - i. Thanksgiving Day
 - j. Christmas Day
3. Vacation or Paid Leave
 - a. 2 hours of annual leave each week for an employee with less than three years of service.
 - b. 3 hours of annual leave each week for an employee with less than fifteen years of service.
 - c. 4 hours of annual leave each week for an employee with fifteen or more years of service.
4. Retirement
1.5 percent of basic hourly rate plus Thrift Saving Plan plus Social Security.

(End of Clause)

[END OF SECTION]

SECTION H - SPECIAL CONTRACT REQUIREMENTS**H.1 Listing Of Clauses Incorporated By Reference**

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.223-5	AUG 2003	POLLUTION PREVENTION AND RIGHT- TO-KNOW INFORMATION (ALTERNATE I) (AUG 2003) AND (ALTERNATE II) (AUG 2003)

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

CLAUSE NUMBER	DATE	TITLE
1852.204-74	MAY 2002	CENTRAL CONTRACTOR REGISTRATION
1852.208-81	OCT 2001	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-74	MAR 1996	DRUG- AND ALCOHOL-FREE WORKFORCE
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.242-72	AUG 1992	OBSERVANCE OF LEGAL HOLIDAYS ALTERNATE II (OCT 2000)
1852.242-78	APR 2001	EMERGENCY MEDICAL SERVICES AND EVACUATION

(End of Clause)

H.2 Key Personnel And Facilities (NFS 1852.235-71) (MAR 1989)

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

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

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

No key personnel/facilities will be listed at this time

(End of Clause)

H.3 Asbestos Material (MSFC 52.223-90) (JUN 2002)

During performance of this contract, Contractor personnel performing work in MSFC buildings may come in contact with materials containing asbestos. MSFC Buildings 4200, 4201, 4202, 4663 and 4666 are of special concern since they are known to contain a sprayed on fire insulation on or above the ceiling, usually located on the metal or concrete structure of the buildings. These buildings and all other MSFC buildings may contain asbestos in floor tile, pipe and lagging insulation, exterior siding, roofing felt, and many other building materials. Prior to disturbing suspected asbestos material in any manner, the Contractor shall notify MSFC's Occupational Medicine and Environmental Health Services, for guidance. Contractor shall be responsible for ensuring that all Contractor personnel working onsite are made aware of and comply with this clause.

(End of Clause)

H.4 Hazardous Material Reporting (MSFC 52.223-91) (FEB 2001)

(a) If during the performance of this contract, the Contractor brings any hazardous materials (hazardous as defined under the latest version of Federal Standard No. 313, including revisions adopted during the term of the contract) on-site to the Marshall Space Flight Center, a completed MSFC Form 4099 (MSFC Chemical Inventory Addition) shall be immediately forwarded to the address on the form. The Contractor shall be responsible for ensuring that all Contractor/subcontractor personnel are made aware of and comply with this clause.

(b) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 Listing Of Clauses Incorporated By Reference

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

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	DEC 2001	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 2003	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-2	AUG 1996	SECURITY REQUIREMENTS
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.215-2	JUN 1999	AUDIT AND RECORDS--NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT
52.215-10	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA
52.215-11	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS
52.215-12	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA

52.215-13	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA-- MODIFICATIONS
52.215-14	OCT 1997	INTEGRITY OF UNIT PRICES
52.215-15	DEC 1998	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-18	OCT 1997	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA -- MODIFICATIONS
52.216-7	Dec 2002	ALLOWABLE COST AND PAYMENT
52.217-2	OCT 1997	CANCELLATION UNDER MULTIYEAR CONTRACTS
52.217-8	NOV 1999	OPTION TO EXTEND SERVICES
52.219-6	JUN 2003	NOTICE OF TOTAL SMALL BUSINESS SET- ASIDE
52.219-8	OCT 2000	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-14	DEC 1996	LIMITATION ON SUBCONTRACTING
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-2	JUL 1990	PAYMENT FOR OVERTIME PREMIUMS
		Insert "\$_See Section B_" in paragraph (a).
52.222-3	JUN 2003	CONVICT LABOR
52.222-19	SEP 2002	CHILD LABOR-COOPERATION WITH AUTHORITIES AND REMEDIES
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-37	DEC 2001	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-41	MAY 1989	SERVICE CONTRACT ACT OF 1965, AS AMENDED
52.223-6	MAY 2001	DRUG-FREE WORKPLACE
52.223-10	AUG 2000	WASTE REDUCTION PROGRAM
52.225-1	JUN 2003	BUY AMERICAN ACT-SUPPLIES
52.225-13	JUN 2003	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.227-1	JUL 1995	AUTHORIZATION AND CONSENT
52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL As modified by 1852.227-14 NASA FAR Supplement (OCT 1995)
52.227-16	JUN 1987	ADDITIONAL DATA REQUIREMENTS
52.228-7	MAR 1996	INSURANCE--LIABILITY TO THIRD PERSONS
52.232-9	APR 1984	LIMITATION ON WITHHOLDING OF PAYMENTS
52.232-17	JUN 1996	INTEREST
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	FEB 2002	PROMPT PAYMENT (ALTERNATE I) (FEB 2002)

52.232-34	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER - OTHER THAN CENTRAL CONTRACTOR REGISTRATION
52.233-1	JUL 2002	DISPUTES
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION
52.237-3	JAN 1991	CONTINUITY OF SERVICES
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-3	MAY 2001	PENALTIES FOR UNALLOWABLE COSTS
52.242-4	JAN 1997	CERTIFICATION OF FINAL INDIRECT COSTS
52.242-10	APR 1984	F.O.B. ORIGIN--GOVERNMENT BILLS OF LADING OR PREPAID POSTAGE
52.242-13	JUL 1995	BANKRUPTCY
52.243-2	AUG 1987	CHANGES--COST-REIMBURSEMENT (ALTERNATE I) (APR 1984)
52.244-2	AUG 1998	SUBCONTRACTS (ALTERNATE I) (AUG 1998)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.245-5	JUN 2003	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS)
52.246-25	FEB 1997	LIMITATION OF LIABILITY-SERVICES
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.248-1	FEB 2000	VALUE ENGINEERING
52.249-6	SEP 1996	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

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

CLAUSE NUMBER	DATE	TITLE
1852.204-76	JUL 2002	SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL

(End of Clause)

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

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

(End of Clause)

I.3 Equal Opportunity (FAR 52.222-26) (APR 2002) (Alternate I) (FEB 1999)

Notice: The following terms of this clause are waived for this contract: None

(a) Definition. "United States," as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with paragraphs (b)(1) through (b)(11) of this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to--

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion;
- (iv) Transfer;
- (v) Recruitment or recruitment advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's

I.4 Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (FAR 52.222-35) (DEC 2001) (Alternate I) (DEC 2001)

Notice: The following term(s) of this clause are waived for this contract:

None

(a) Definitions. As used in this clause-

"All employment openings" means all positions except executive and top management, those positions that will be filled from within the Contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days duration, and part-time employment.

"Executive and top management" means any employee-

- (1) Whose primary duty consists of the management of the enterprise in which the individual is employed or of a customarily recognized department or subdivision thereof;
- (2) Who customarily and regularly directs the work of two or more other employees;
- (3) Who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring or firing and as to the advancement and promotion or any other change of status of other employees will be given particular weight;
- (4) Who customarily and regularly exercises discretionary powers; and
- (5) Who does not devote more than 20 percent or, in the case of an employee of a retail or service establishment, who does not devote more than 40 percent of total hours of work in the work week to activities that are not directly and closely related to the performance of the work described in paragraphs (1) through (4) of this definition. This paragraph (5) does not apply in the case of an employee who is in sole charge of an establishment or a physically separated branch establishment, or who owns at least a 20 percent interest in the enterprise in which the individual is employed.

"Other eligible veteran" means any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

"Positions that will be filled from within the Contractor's organization" means employment openings for which the Contractor will give no consideration to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

I.5 Affirmative Action For Workers With Disabilities (FAR 52.222-36) (JUN 1998)
Alternate I (JUN 1998)

Notice: The following term(s) of this clause are waived for this contract: None

(a) General.

(1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

- (i) Recruitment, advertising, and job application procedures;
- (ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;
- (iii) Rates of pay or any other form of compensation and changes in compensation;
- (iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
- (v) Leaves of absence, sick leave, or any other leave;
- (vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;
- (vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
- (viii) Activities sponsored by the Contractor, including social or recreational programs; and
- (ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings.

- (1) The Contractor agrees to post employment notices stating--
- (i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and
 - (ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance.

If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts.

The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of Clause)

I.6 Taxes--Foreign Cost-Reimbursement Contracts (FAR 52.229-8) (MAR 1990)

DELETED IN ITS ENTIRETY

I.7 Clauses Incorporated By Reference (FAR 52.252-2) (FEB 1998)

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

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

(End of Clause)

I.8 Ombudsman (NFS 1852.215-84(OCT 2003) (Alternate 1)(Jun 2000)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman,

Axel Roth
National Aeronautics and Space Administration
George C. Marshall Space Flight Center/DE01
Marshall Space Flight Center, AL 35812

Telephone number: (256) 544-0451
Facsimile number: (256) 544-5590
E-Mail address: Axel.Roth@msfc.nasa.gov

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management Division, at 202-358-0445, facsimile 202-358-3083, e-mail james.a.balinskas@nasa.gov. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(c) If this is a task or delivery order contract, the ombudsman shall review complaints from contractors and ensure they are afforded a fair opportunity to be considered, consistent with the procedures of the contract.

(End of clause)

The contractor shall maintain an Export Control Program in accordance with applicable government and NASA regulations, and with the policies set forth in MPD2190.1 and MPG 2190.1, MSFC Export Control Program. This Program shall include: identification of candidate exports; classification of candidate exports; identification of candidate license exceptions and exemptions; request of an export license, if required; and maintenance of records of export activities. The status of the contractor's export control activities shall be reported, as required, in routine written and oral reports.

In addition to any other requirements of this contract, all individuals who perform tasks as a system administrator or have authority to perform tasks normally performed by system administrator shall be required to demonstrate knowledge appropriate to those tasks.

This demonstration, referred to as the NASA System Administrator Security Certification, is a NASA funded two-tier assessment to verify that system administrators are able to –

1. Demonstrate knowledge in system administration for the operating systems for which they have responsibility.
2. Demonstrate knowledge in the understanding and application of Network and Internet Security.

Certification is granted upon achieving a score above the certification level on both an Operating System test and the Network and Internet Security Test. The Certification earned under this process will be valid for three years. The criteria for this skills assessment has been established by the NASA Chief Information Officer. The objectives and procedures for this certification can be obtained by contacting the IT Security Awareness and Training Center at (216) 433-2063.

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

2.6 Risk Management

The contractor shall implement a continuous risk management program for systems developments, operations and business following standard industry practices. Risks and t

2.7 Safety Program

The contractor shall establish and implement an industrial safety, health and environmental program and provide an On-Site Safety and Health Plan in accordance with DRD 1016SA-001. The contractor's industrial safety, health, and environmental program shall incorporate the following Safety and Health Program Core Process Requirement (CPR) elements documented in MPG 8715.1, Marshall Safety, Health, and Environmental (SHE) Program:

- a. Management commitment and employee involvement in the safety and health program.
- b. System and worksite hazard analysis.
- c. Hazard prevention and control.
- d. Safety and health training.
- e. Environmental compliance.

The contractor shall report mishaps and safety statistics to the MSFC Safety and Mission Assurance (S&MA) Office in accordance with DRD 1016SA-002.

2.8 Quality Management

The contractor shall establish, implement, and maintain quality assurance as a means of ensuring that products and services conform to specific requirements. The contractor shall provide quality management in accordance with HOSC-PLAN-661, HOSC Quality Plan.

Specifically, the contractor shall provide engineering support to the Shuttle project as specified in PWS paragraphs 3.3.1 through 3.3.4.

3.3.1 Shuttle Engineering Support Center (SESC)

The contractor shall perform sustaining engineering for the SESC facility per MSFC-PLAN-904, HOSC Functional Requirements and Implementation Plan. The contractor shall provide for operational requirements for PC Goal software to support pre-launch, launch and flight operations as defined in MSFC-PLAN-904, HOSC Functional Requirements and Implementation Plan, Volume 1, Chapter 2.

The contractor shall perform only System Engineering (PWS 3.1.1), Hardware Engineering (PWS 3.1.3), and Network Engineering (PWS 3.1.4) in support of the SESC.

3.3.2 Data Reduction Center (DRC)

The contractor shall perform sustaining engineering of data reduction services for Shuttle launches and related activities, including data acquisition, data reduction and archival of Space Shuttle launch and test data.

The contractor shall make all appropriate changes to MSFC-PLAN-904, HOSC Functional Requirements and Implementation Plan, and other HOSC documentation to integrate the Shuttle DRC into the current HOSC processes.

3.3.3 Meteorological Interactive Data Display System (MIDDS)

The contractor shall perform sustaining engineering of the MIDDS facility per MSFC-PLAN-904, HOSC Functional Requirements and Implementation Plan. The contractor shall ensure system wide compatibility with other MIDDS nodes, Johnson Space Center (JSC) and Cape Canaveral Air Force Station (CCAFS), and the MSFC MIDDS user community.

The contractor shall perform only System Engineering (PWS 3.1.1), Hardware Engineering (PWS 3.1.3), and Network Engineering (PWS 3.1.4) in support of the MIDDS.

3.4 Chandra X-Ray Observatory Project

The services described under this paragraph are specific to the Chandra X-Ray Observatory project.

The contractor shall perform sustaining engineering for the Chandra Engineering Support Center in the HOSC according to MSFC-PLAN-904, HOSC Functional Requirements and Implementation Plan – Program Requirements, Volume 1, Section 6.

The contractor shall perform the work necessary to complete the port of the CXO ONLS software system from Silicon Graphics IRIX to Intel-Base Hardware with

the Linux Operating System used in the operations of the Chandra X-ray Observatory (CXO) from the Chandra Operations Control Center (OCC) located at the Chandra X-ray Center (CXC) in Cambridge, MA.

The contractor shall perform System Engineering (PWS 3.1.1), Software Engineering (PWS 3.1.2), Hardware Engineering (PWS 3.1.3), Network Engineering (PWS 3.1.4), and IV&V (PWS 3.1.5), as required, in support of the Chandra Engineering Support Center.

3.5 Project-Independent Engineering Tasks

The contractor shall provide support for project-independent engineering tasks, within the scope of the HOSC contract, as required.

The contractor shall perform System Engineering (PWS 3.1.1), Software Engineering (PWS 3.1.2), Hardware Engineering (PWS 3.1.3), Network Engineering (PWS 3.1.4), and IV&V (PWS 3.1.5), as required, in support of these tasks.

4.0 Operations and Maintenance (O&M)

This paragraph defines all operations and maintenance (O&M) required to support the program requirements, systems and missions. Paragraphs 4.1 through 4.6 describe generic O&M functions to be performed for the HOSC, in support of all projects. Paragraphs 4.7 through 4.9 contain project-specific requirements.

The contractor shall develop the Operations and Maintenance approach to be used and report it in accordance with DRD 1016OP-001 Operations/Maintenance Plan. The systems operated and maintained are divided into two categories, infrastructure and project specific. Infrastructure (e.g., voice and video systems) includes those systems that provide services to multiple projects from a single system. Project specific systems are those systems that provide service to a single project.

The contractor shall provide operations and maintenance including upgrades support to the HOSC, in accordance with FPD-OI-FD43.1, Ground Systems Operations. The contractor shall plan, schedule and configure the facility for mission operations activities including individual mission, simulation, and training sessions. The contractor shall execute testing and simulation for real-time activities to ensure operational support readiness.

The contractor shall provide voice, video, command, and data processing services in support of real-time operations. The HOSC services shall be provided based on project mission specific requirements for the duration of the mission.

The contractor shall continuously review and assess the future direction of operations and take advantage of technical innovations and process improvements that would result in increased quality, reliability or customer satisfaction for the HOSC facilities and systems.

National Aeronautics and Space Administration					DATA PROCUREMENT DOC.	
DOCUMENT CHANGE LOG					NO.	ISSUE
					1016	BASIC
INCORPORATED REVISIONS			AS OF: Effective Date		SUPERSEDING:	PAGE:
OUTSTANDING REVISIONS			Mod 07		09-24-03	1 of 1
AUTHORITY	PORTION AFFECTED - PAGE NO./NO.				REMARKS	
Contract Mod.07	INTR	SGR	DRL	DRD		
	O					
				MA-003	Item 6: Changed title to: "Monthly Progress Report" Item 15.1 Inserted "Monthly" prior to "Progress Report" Item 15.3(a): Inserted "to WBS Level III" to end of sentence Item 15.4: Inserted "Monthly" prior to "Progress Reports"	
				MA-006	DELETED	
				MA-007	Item 6: Changed title to: "HOSC Software Release Quarterly Report" Item 7: Changed DESCRIPTION/USE to read: "To provide identification and tracking measures or metrics for HOSC Software releases. The release information, as established by NPD 2210.1, will be reported quarterly to the Software Release Authority at MSFC to enable compliance with reporting to the Director, Commercial Technology Division at NASA Headquarters." Item 12: Changed "Monthly" to "Quarterly" Item 15.3: Changed Contents to read: "For each software product (e.g. EHS, EPC, IVoDS), provide a list of approved users, including user organization/location/etc., applicable payload/experiment, and software version"	

MSFC - Form 3461-1 (Rev August 1970)

National Aeronautics and Space Administration			DATA PROCUREMENT DOC.		
PAGE REVISION LOG			NO.	ISSUE	
			1016	BASIC	
NOTE: The current revision is denoted by a vertical line in the outer margin adjacent to the affected text.		AS OF: Effective Date- Mod 07	SUPERSEDING: 09-24-03	PAGE:1 of 1	
INSERT LATEST REVISED PAGES.			DISCARD SUPERSEDED PAGES.		
ITEM	PAGE	STATUS	ITEM	PAGE	STATUS
MA-003	J-2-21 , J-2-22	Rev.			
MA-006	J-2-26	DRD Deleted			
MA-007	J-2-27	Rev.			

MSFC - Form 3461-2 (Rev August 1970)

HUNTSVILLE OPERATIONS SUPPORT CENTER (HOSC)
Data Requirements List

<u>DRD</u>	<u>DATA TYPE</u>	<u>TITLE</u>	<u>OPR</u>
CD - Contractual Data			
1016CD-001	2	Information Technology Security Plan(s)	AD33
1016CD-002	3	On-site Employee Location List	PS40
1016CD-003	3	Technology Reports	CD30
CM - Configuration Management			
1016CM-001	1	Configuration Management Plan	ED43
LS - Logistics Support			
1016LS-001	2	Government Property Management Plan	AD41
MA - Management			
1016MA-001	1	Management Plan	FD40
1016MA-002	3	Financial Management Report (533M)	RS40
1016MA-003	3	<i>Monthly Progress Report</i>	FD40
1016MA-004	3	Work Breakdown Structure (WBS) and WBS Dictionary	RS40/VS10
1016MA-005	3	IT Security Status Report	FD40
1016MA-006	3	Systems Status Monthly Report Deleted	FD40
1016MA-007	3	HOSC Software Release <i>Quarterly</i> Report	FD40
1016MA-008	3	Performance Requirements Summary	FD40
OP - Operations			
1016OP-001	2	Operations/Maintenance Plan	FD40
QE - Quality Engineering			
1016QE-001	1	Software Quality Assurance Plan	QS10
SA - Safety			
1016SA-001	1	On-site Safety and Health Plan	QS50/AD10/AD6
1016SA-002	3	Mishap and Safety Statistics Reports	QS50
SE - System Engineering			
1016SE-001	2	System Development Plan	FD40
VR - Verification			
1016VR-001	2	Verification Plan	FD40

DATA REQUIREMENTS DESCRIPTION (DRD)

1. DPD NO.: 1016 ISSUE: BASIC 2. DRD NO.: 1016MA-003
3. DATA TYPE: 3 4. DATE REVISED:
5. PAGE: 1/2
6. TITLE: *Monthly Progress Report*
7. DESCRIPTION/USE: To provide data for the assessment of contract progress and HOSC system performance/quality. To provide visibility to contractor and MSFC Management of actual and potential problems, and progress toward meeting the requirements of the contract.
8. OPR: FD40 9. DM: FD40
10. DISTRIBUTION: Per Contracting Officer's letter
11. INITIAL SUBMISSION: Ten calendar days following the end of the first two months after Authority To Proceed (ATP)
12. SUBMISSION FREQUENCY:
 - a. Progress Report: Monthly, no later than the 20th day of the calendar month following the end of the accounting month
 - b. Metrics: Monthly, no later than the 10th day of the calendar month following the end of the accounting month
13. REMARKS:
14. INTERRELATIONSHIP: PWS paragraph 2.1.d, 3.2, 3.3, 4.5, 4.6
15. DATA PREPARATION INFORMATION:
 - 15.1 SCOPE: The *Monthly Progress Report* shall provide a comprehensive status on all active tasks and include the necessary information to assess status and identify problems that need resolution for accomplishment of the contract tasks. The Metrics shall provide information regarding the quality and timeliness of overall HOSC systems performance and product deliveries.
 - 15.2 APPLICABLE DOCUMENTS: None
 - 15.3 CONTENTS:
 - a. Progress Report:
 1. For each WBS Level II task, provide the following by facility/project:
 - (a) Narrative report of status to WBS Level III
 - (b) Narrative report of planned effort for next reporting period.
 - (c) Schedule, showing progress of Level III elements.
 - (d) Labor expended by category.
 2. Status of significant Problem Reports, Change Requests, and other issues as appropriate, including anticipated schedule and resource impacts.
 - b. Metrics: The specific metrics data to be provided shall be determined by mutual agreement between the contractor and the NASA project manager. System performance/quality and product delivery metrics shall cover the following major topics:
 1. Software development and test

DRD Continuation Sheet

TITLE: Work Breakdown Structure (WBS) and WBS Dictionary DRD NO.: 1016MA-003
DATA TYPE: 2 PAGE: 2/2

2. Problem Reports
3. facility outages
4. help desk information
5. key accomplishments and plans

15.4 **FORMAT:** The *Monthly* Progress Report shall be in report format. Submittal shall be standard hardcopy or other media as directed by the Contracting Officer. The Metrics data shall be in spreadsheet or other format, as mutually agreed to between the contractor and the NASA project manager. Electronic submittal of the Metrics data is required.

15.5 **MAINTENANCE:** None required.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. DPD NO.: 1016 ISSUE: BASIC 2. DRD NO.: 1016MA-006
3. DATA TYPE: 3 4. DATE REVISED:
5. PAGE: 1/1
6. TITLE: ~~Systems Status Monthly Report~~ - DELETED
7. DESCRIPTION/USE: To provide data for the assessment of systems status. To provide visibility to contractor and MSFC Management of actual and potential problems and progress toward meeting the requirements of the contract.
8. OPR: FD40 9. DM: FD40
10. DISTRIBUTION: ~~Per Contracting Officer's letter~~
11. INITIAL SUBMISSION: ~~Ten calendar days following the end of the first month after Authority To Proceed (ATP)~~
12. SUBMISSION FREQUENCY: ~~Monthly, no later than the 20th day of the calendar month following the end of the accounting month~~
13. REMARKS:
14. INTERRELATIONSHIP: ~~PWS paragraph 4.4.5~~
15. DATA PREPARATION INFORMATION:
 - 15.1 SCOPE: The Systems Status Monthly Report shall provide a report of the systems problems and the status of system maintenance activities.
 - 15.2 APPLICABLE DOCUMENTS: None
 - 15.3 CONTENTS:
 - a. For each system problem, provide the following by system:
 1. ~~Narrative report of system problem.~~
 2. ~~Narrative report of the effort to correct the problem.~~
 3. ~~Status of the problem and corrective efforts.~~
 4. ~~Narrative report of planned effort for next reporting period, if needed.~~
 - ~~b. Status of system maintenance activities including planned completion dates.~~
 - 15.4 FORMAT: ~~The Systems Status Monthly Report shall be in presentation chart format. Submittal shall be standard hard copy or other media as directed by the Contracting Officer.~~
 - 15.5 MAINTENANCE: None required.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. DPD NO.: 1016 ISSUE: BASIC
2. DRDNO.:1016MA-007
3. DATA TYPE: 3
4. DATE REVISED:
5. PAGE: 1/1
6. TITLE: HOSC Software Release *Quarterly* Report
7. DESCRIPTION/USE: To provide data for the assessment and management of HOSC Software releases. To provide visibility to contractor and MSFC Management of actual and potential problems in meeting software release dates and progress toward meeting the requirements of the contract.
8. OPR: FD40 9. DM: FD40
10. DISTRIBUTION: Per Contracting Officer's letter
11. INITIAL SUBMISSION: Ten calendar days following the end of the first three months after Authority To Proceed (ATP)
12. SUBMISSION FREQUENCY: *Quarterly*, no later than the 20th day of the calendar month following the end of the accounting month.
13. REMARKS:
14. INTERRELATIONSHIP: PWS paragraph 4.4.5
15. DATA PREPARATION INFORMATION:
 - 15.1 **SCOPE:** The HOSC Software Release *Quarterly* Report shall provide a comprehensive status on the usage of all HOSC software releases.
 - 15.2 **APPLICABLE DOCUMENTS:** None
 - 15.3 **CONTENTS:**
For each software product (Eg., EHS, EPC, IVoDS), provide a list of approved users, including user organization/location/etc., applicable payload/experiment, and software version.
 - 15.4 **FORMAT:** The report shall be in spreadsheet format. Submittal shall be standard hard copy or other media as directed by the Contracting Officer.
 - 15.5 **MAINTENANCE:** None required.