

**CONSOLIDATED INFORMATION
TECHNOLOGY SERVICES (CONITS)
TASK ORDER L-70750D
(Raytheon Technical Services Company)**

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ORDER FOR SUPPLIES AND SERVICES

IMPORTANT: See Instructions
GSAR 553.370-300-1 for distribution.

PAGE 1 OF 61 PAGES
w/att

1. DATE OF ORDER: Jan 4 2001
2. ORDER NUMBER: T03-01-DS-L003
3. CONTRACT NUMBER: GS-00T-99-ALD-0209
4. ACT NUMBER: NASA Order No.: L-70750D

FOR GOVERNMENT USE ONLY	5. ACCOUNTING CLASSIFICATION				6. FINANCE DIVISION		
	FUND See Page	ORG CODE 1A	B/A CODE	O/C CODE	AC	SS	VENDOR NUMBER
	FUNC CODE	C/E CODE	PROJ./PROS. NO.	CC-A	MDL	FI	G/L DEBIT
	W/ITEM	CC-B	PRT./CRFT		AI	LC	DISCOUNT

7. TO: CONTRACTOR (Name, address and zip code)
Raytheon Technical Services Company
4400 Forbes Blvd.
Lanham, MD 20706-4392
Cage Code: 2Y992
DUNS: 112820840

8. TYPE OF ORDER REFERENCE YOUR
 A. PURCHASE
 B. DELIVERY
Please furnish the following on the terms specified on both sides of the order and the attached sheets, if any, including delivery as indicated.
This delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above numbered contract.

9A. EMPLOYER'S IDENTIFICATION NUMBER: 042305772
9B. CHECK, IF APPROP. WITHHOLD 20%

10A. CLASSIFICATION
 A. SMALL BUSINESS B. OTHER THAN SMALL BUSINESS C. SMALL DISADVANTAGED D. SMALL WOMEN-OWNED
10B. TYPE OF BUSINESS ORGANIZATION
 A. CORPORATION B. PARTNERSHIP C. SOLE PROPRIETOR

11. ISSUING OFFICE (Address, zip code and telephone no.)
GSA//FTS/Mid-Atlantic Region
100 Penn Square East, Suite 820
Philadelphia, PA 19107
215-656-6308
12. REMITTANCE ADDRESS (MANDATORY)
Raytheon Technical Srvcs. Company
4400 Forbes Blvd.
Lanham, MD 20706-4392
13. SHIP TO (Consignee address, zip code and telephone no.)
NASA Langley Research Center
Attn: L.M. Harvey, Mail Stop 126
Contract: NASA order Number L-70750D
Hampton, VA 23681-2199

14. PLACE OF INSPECTION AND ACCEPTANCE: Destination
15. REQUISITION OFFICE (Name, symbol and telephone no.)
16. F.O.B. POINT: Destination
17. GOVERNMENT B/L NO.
18. DELIVERY F.O.B. POINT ON OR BEFORE
19. PAYMENT/DISCOUNT TERMS

20. SCHEDULE					
ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QTY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Consolidated Information Technology Services				
	Estimated Cost	1	lot		
	Maximum Award Fee	1	lot		
	February 1, 2001 - January 31, 2002				
	Please see Page 1A for further details				

21. RECEIVING OFFICE (Name, symbol and telephone no.)
TOTAL FROM

22. SHIPPING POINT
23. GROSS SHIP WT.
GRAND TOTAL \$16,550,129.14

24. MAIL INVOICE TO: (Include zip code)
General Services Administration (FUND)
Financial Management Division
NASA Langley Research Center - MS175
Hampton, VA 23681-2199
25A. FOR INQUIRIES REGARDING PAYMENT CONTACT:
25B. TELEPHONE NO. (757)864-2136
26A. NAME OF CONTRACTING/ORDERING OFFICER (Type)
John G. Thomas, Contracting Officer
26B. TELEPHONE NO. (215)656-6324
26C. SIGNATURE *John G. Thomas*

(Solicitation No. 1-123-S1.10006) (R320000724)

Task Order #: T03-01-DS-L003

1A

A1. Award of this task order is made in accordance with the terms and conditions of Contract GS00T99ALD0209, the terms and conditions contained herein, and the contractor's proposal for this order dated October 30, 2000, as amended by their revised proposal dated December 12, 2000.

A2. In accordance with Paragraph 3 of this task order, funding in the amount of \$100,000.00 is available at this time. The applicable NASA funding citation(s) is as follows:

Purchase Request No. – SL.1018 dated 2000-12-13

<u>LINE</u>	<u>FY</u>	<u>FS</u>	<u>MA</u>	<u>OBJ</u>	<u>JOB ORDER</u>	<u>PROGRAM NO.</u>	<u>AMOUNT</u>
001	01	43	00	2529	A5160	28230020400	\$33,400.00
002	01	9	00	2529	M1791	99216040500	\$33,300.00
003	01	9	00	2529	M2086	99216030600	\$33,300.00

In accordance with the provisions of the "Limitation of Funds" clause contained in this order, additional funding must be provided by NASA prior to February 1, 2001 to fund performance under this order. Paragraph 3 of this task order will be modified to address available funding prior to February 1, 2001.

A3. In accordance with Paragraphs 2 and 19 of this task order, if all available options are exercised by the Government, the total estimated cost and maximum award fee for this task order will be [REDACTED].

A4. [REDACTED]

A5. Approval of the subcontract for [REDACTED] is limited to the following labor categories:

Senior IT Analyst
Journeyman IT Analyst
Apprentice IT Analyst
Junior IT Analyst
Emerging Technology Expert

Use of additional labor categories under this subcontract require prior approval by the Contracting Officer.

TASK ORDER (TO)

1. STATEMENT OF WORK

The Contractor shall provide all resources (except as may be expressly stated in this TO as furnished by the Government) necessary to perform the requirements delineated in Exhibit A, Statement of Work (SOW), entitled Consolidated Information Technology Services (CONITS).

1A.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2. ESTIMATED COST AND AWARD FEE [REDACTED]

(a) The estimated cost of this task order is [REDACTED] exclusive of the maximum available award fee is [REDACTED]. Total estimated cost and maximum award fee are \$120,279,275. The total estimated cost and maximum award fee for this task order, inclusive of all available options is \$275,652,344 (of which [REDACTED] represents maximum award fee).

(b) The estimated Cost-Plus-Award-Fee (CPAF) of this TO as stated above represents the Government's most accurate projection of the magnitude of support to be required under this TO during its performance period. To account for the possibility that the Government's requirements may increase at a faster rate than currently projected, the Government reserves the right to increase the estimated CPAF of this TO by as much as 50% over the life of the TO, if necessary. Such increases shall only apply to additional effort that clearly falls within the scope of the Statement of Work and within the performance period of the TO, including all available option periods.

(c) The award fee earned for each evaluation period is as follows:

<u>Period</u>	<u>Available Award Fee</u>	<u>Earned Award Fee</u>
February 1, 2001 – July 31, 2001		
August 1, 2001 – January 31, 2002		
February 1, 2002 – July 31, 2002		
August 1, 2002 – January 31, 2003		
February 1, 2003 – July 31, 2003		
August 1, 2003 – January 31, 2004		
February 1, 2004 – July 31, 2004		
TOTALS		

3. CONTRACT FUNDING (NASA 1852.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the "Limitation of Funds" clause, the total amount allotted by the Government to this Task Order is [REDACTED]. This allotment is for the performance of work under Task Assignments (TA) issued in accordance with Paragraph 3 of the SOW and covers the following estimated period of performance: August 30, 2004.

(b) An additional amount of [REDACTED] is obligated under this TO for payment of fee.

4. ADMINISTRATION OF CONTRACT FUNDING

(a) The Contractor agrees that all future incremental funding shall be accomplished by Administrative Change Modifications issued by NASA Langley Research Center and that the funding procedure shall in no way change the Contractor's notification obligations as set forth in the "Limitation of Funds" clause.

(b) In addition to the requirements of the "Limitation of Funds" clause, the Contractor shall notify the NASA Contracting Officer in writing if, at any time, the Contractor has reason to believe that the total cost to the Government for the complete performance of this TO will be greater or substantially less than the then total estimated cost of the TO. Such notification shall give a revised estimate of the total cost for the performance of this TO.

(c) The "Limitation of Funds" clause also applies individually to TA's issued under the Task Order.

5. LABOR, TRAVEL, TOOLS, ODC'S

(a) Exhibit B includes a list of labor categories and their associated fully loaded direct labor cost per hour. These labor categories and rates will be used to establish estimated cost for individual TA's issued under the TO, including options, if exercised.

(b) Exhibit B also lists the burden rates to be applied to travel, tools, and ODC's in developing the estimated costs for individual TA's.

(c) TA's will be written as performance-based completion tasks, not level-of-effort (LOE) tasks. Therefore, the negotiated number of hours and skill mix will be used for estimating purposes for a particular TA and will lead to the estimated cost and fee for that TA. The Government will not specify hours in the TA document and is not purchasing a LOE on TA's.

6. AWARD FEE PLAN AND AVAILABLE FEE

(a) The Award Fee Evaluation Plan is contained as Exhibit C to this TO. The maximum award fee available to the Contractor on each TA will be established by applying fixed TBD% rates to the total estimated (not actual) cost of each TA agreed upon by both parties at the time of issuance. A fixed rate of TBD% will be applied to the fully burdened direct labor cost and a fixed rate of TBD% will be applied to fully burdened costs of tools and ODC's. No fee will be applied to travel costs.

(b) The award fee available for each evaluation period will be determined based on the TA's issued during that period. If a TA is projected to be started and completed during a particular 6-month evaluation period, then the award fee for that particular TA will be included in the award fee available for that period only. If a TA is started in a particular evaluation period and projected to extend beyond that period, then the award fee for that particular TA will be evenly distributed among the evaluation period. However, depending on the development nature of some tasks, award fee may be distributed consistent with projected completion milestones. This will be done on a case by case basis depending on the nature of the task. At the end of each evaluation period, the actual earned award fee will be added to the Paragraph 2(c) of the TO by unilateral modification. (Mod 5)

7. AWARD FEE FOR SERVICE CONTRACTS

(a) The contractor can earn award fee from a minimum of zero dollars to the maximum stated in Paragraph 2(a) above.

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

(c) The Government will advise the Contractor in writing of the evaluation results. The Langley Research Center Financial Management Division will make payment based on a properly submitted invoice/voucher submitted within one (1) day of the Award Fee Debriefing. (Mod 58)

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

(e) The amount of award fee which can be awarded in each evaluation period is limited to the amounts set forth through the issuance of TA's in accordance with the Task Assignment Procedure in Paragraph 3 of Exhibit A and the distribution of fee on those TA's in accordance with Paragraph 6 above. Award fee which is not earned in an evaluation period cannot be reallocated to future evaluation periods.

(f) (1) Provisional award fee payments will NOT be made under this TO pending the determination of the amount of fee earned for an evaluation period.

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

8. FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (OCT 1992)

Reference clause E.3.1 of the contract, Responsibility for the Inspection and Acceptance. Acceptance will take place at Langley Research Center, Hampton, VA, unless stated otherwise in TA's.

9. PERIOD OF PERFORMANCE (Mod 88)

(a) The base period of performance of this TO shall be from February 1, 2001 to **January 31, 2005**. If options are exercised in accordance with Paragraph 19, the Period of Performance shall be as follows:

First Option Period:	February 1, 2002 – January 31, 2003
Second Option Period:	February 1, 2003 – January 31, 2004
Third Option Period:	February 1, 2004 – January 31, 2005
Fourth Option Period:	February 1, 2005 – January 31, 2006
Fifth Option Period:	February 1, 2006 – January 31, 2007
Sixth Option Period:	February 1, 2007 – January 31, 2008
Seventh Option Period:	February 1, 2008 – April 27, 2009

(b) Any task assignment (TA) issued during the effective period of this TO and not completed within that period shall be completed by the Contractor within the time specified in the TA. The TO and contract shall govern the Contractor's and Government's rights and obligations with respect to that TA to the same extent as if the TA were completed during the contract's effective period, provided, that the Contractor shall not be required to make any deliveries under this TO beyond six (6) months after the end of the contract's effective period.

10. PLACE OF DELIVERY (LaRC 52.211-92) (OCT 1992)

Delivery shall be f.o.b. destination NASA Langley Research Center, Hampton, VA 23681-2199 or as specified in TA's.

11. PLACE(S) OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The place(s) of performance shall be the Contractor's facility; NASA Langley Research Center, Hampton, Virginia; and/or other sites as may be designated in the TA's.

12. DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 1852.227-72) (JUL 1997)

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

<u>Title</u>	<u>Office Code</u>	<u>Address (including zip code)</u>
New Technology Representative	212	NASA, Langley Research Center Hampton, VA 23681-2199
Patent Representative	212	NASA, Langley Research Center Hampton, VA 23681-2199

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

13. SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is identified below. Public vouchers for payment of costs shall include references to the numbers of this contract and the TO.

(b) (1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

Attn: Financial Management Division, MS 175
 NASA Langley Research Center
 Hampton, VA 23681-2199

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

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

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

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



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

- (i) Copy 1 NASA Contracting Officer;
- (ii) Copy 2 Auditor;
- (iii) Copy 3 Contractor;
- (iv) Copy 4 Contract administration office; and
- (v) Copy 5 GSA Contracting Office

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

(d) Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and submitted to the Contracting Officer within one (1) day of the Award Fee Debriefing. The addressee(s) listed in paragraphs (c) or (c), whichever is applicable, is the designated billing office for fee vouchers for purposes of the Prompt Payment Clause of this TO. (Mod 58)

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

14. LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NASA 18-52.245-77) (JUL 1997)

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

(a) Office space, furniture, work area space, and utilities for 103 contractor personnel (including those employees assigned to the GEOLAB, DVAL, and GIS as indicated in 14(b)(3) below). Government telephones are available for official purposes only.

(b) Equipment specified in task assignments.

(1) 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.

(2) The Contractor shall not bring to the installation for use under this TO 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.

(3) Equipment to support the Data Visualization and Animation Laboratory (DVAL), the Geometry Laboratory (GEOLAB), and the Geographical Information System (GIS) laboratory will be listed in the appropriate TA's and the Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property.

(c) Safety and fire protection for Contractor personnel located on-site.

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

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

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

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

(h) The Government will provide and install the high speed data link interface equipment at both ends of the data circuit (See Section 2 of the SOW).

15. PROVIDING FACILITIES TO CONTRACTORS

(a) In accordance with FAR 45.302-1, it is policy of the Government that Contractors shall furnish all facilities required for performing Government contracts. "Facilities" include general purpose, off-the-shelf equipment, machine tools, test equipment, and vehicles. "Facilities" do not include material, special test equipment, special tooling or agency-peculiar property. Regarding the Millennium contract terminology, this policy also encompasses "Tools" as defined in C.5 and H.4.2, unless otherwise specified in TA's.

(b) In keeping with the policy set forth in FAR 45.302-1, the Contractor shall supply and maintain automatic data processing (ADP) equipment and software (such as desktop office product tools, configuration management software, programming language compilers) for their use on this TO. Specialized software, hardware, and test equipment required on a TA basis will either be directly charged to the TA or may be provided as Government furnished.

16. ROLE OF NASA LANGLEY RESEARCH CENTER FOR GOVERNMENT/CONTRACTOR INTERFACE

The following describes the interface methods to be utilized by the Government in the assignment of work. Notwithstanding paragraph G.7 of the contract, the following clarifies GSA and NASA Langley Research Center responsibilities for TO administration:

(a) The GSA Contracting Officer will issue, modify, and administer the basic TO. The NASA Langley Contracting Officer will issue, modify, and administer TA's issued under the basic TO. The NASA Contracting Officer will also issue incremental funding modifications to the TO. The Government reserves the right to require tracking and reporting of funding to the TA level.

(b) The Contracting Officer’s Representative (COR) appointed under this TO will be a NASA Langley Research Center (LaRC) employee. At NASA Langley, this individual is referred to as a Contracting Officer’s Technical Representative (COTR). The acronyms “COR” and “COTR” can be used interchangeably.

(c) The NASA LaRC Contracting Officer will also assign day-to-day Contract Administration functions at the TA level to a NASA LaRC Contract Specialist. The NASA Contract Specialist will provide any necessary contractual interpretation or guidance related to the TA’s. Langley’s management team will therefore consist primarily of three persons: the LaRC Contracting Officer, Contract Specialist, and COR.

(d) All modifications to the basic TO (except incremental funding) will be issued by GSA.

(e) Notwithstanding H.6.2, H.6.3, H.6.4, and H.6.5 of the contract, Langley Research Center will coordinate meeting and travel schedules, coordinate correspondence, and will provide any necessary technical direction related to Task Assignments. As needed, NASA LaRC will also participate in discussions with the contractor related to contract problems and their resolutions.

17. RESERVED

18. KEY PERSONNEL

Pursuant to H.9.2 of the contract, the following individuals are designated as Key Personnel for this TO:

<u>NAME</u>	<u>RTSC Title</u>

19. OPTIONS ██████████

The Contractor hereby grants to the Government options to extend the term of the TO for six additional periods of 12 months each and a final seventh period of 15 months. Such options are to be exercisable by issuance of a unilateral modification issued no later than 30 days before TO expiration date. Upon exercise of such option(s) by the Government, the following items will be increased by the amount specified below for each option period.

<u>Item</u>	<u>First Option Period</u>	<u>Second Option Period</u>	<u>Third Option Period</u>	<u>Fourth Option Period</u>
Period of Performance (Paragraph 9.)	12 months	12 months	12 months	12 months
Estimated Cost (Paragraph 2.)				
Max. Award Fee (Para. 2.)				

<u>Item</u>	<u>Fifth Option Period</u>	<u>Sixth Option Period</u>	<u>Seventh Option Period</u>
Period of Performance (Paragraph 9.)	12 months	12 months	15 months
Estimated Cost (Para. 2.)			
Max. Award Fee (Para. 2.)			

20. SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN -- TASK ORDER REPORTING

The approved Contractor Small Business Subcontracting Plan for this Task Order is attached hereto as Exhibit D and is hereby made a part of this TO.

21. SECURITY PROGRAM/FOREIGN NATIONAL EMPLOYEE INVESTIGATIVE REQUIREMENTS (LaRC 52.204-91) (FEB 2000)

Foreign nationals must meet the eligibility requirements outlined in NPG 1371.2 prior to performing any work under a contract. Eligibility determinations will be based solely on the scientific and technical contributions of the contractor, as outlined in the statement of work. Foreign nationals who meet the eligibility requirements will undergo a rigorous approval and investigative process prior to physical access to the Center and/or to NASA information. Foreign nationals must be sponsored by a NASA Civil Service employee. The sponsor must submit a formal request to the Security Office for access to the Center and/or NASA information, to include electronic information. The request will be processed through the Center's Export Administrator and subject to approval by the International Visits Coordinator. Normal processing time for a request is between 60 and 90 days depending on the nationality of the foreign national. All approvals will be for a maximum of one year, and must be resubmitted annually. Following approval, the foreign national will undergo a National Agency Check Investigation (NACI). As part of the NACI, the foreign national will submit a "Name Check Request" (NASA Form 531) and a completed "applicant" fingerprint card, to the LaRC Security Office, Mail Stop 450. Normal processing time for a NACI is between 90 to 120 days. Until the NACI is completed and favorably adjudicated, the foreign national will require complete escort from entry onto and exit off of the Center, and will not be allowed access to electronic information unless approved by the Center Information Technology Security Manager. Upon completion of the NACI, the foreign national will only be granted unescorted access to an approved workplace and to designated open areas during normal weekday work hours between 6:00 a.m. and 6:00 p.m. The foreign national will not be granted access during non-work hours, weekends, and holidays. Derogatory information developed concerning the foreign national may be grounds for visit termination.

22. SECURITY CLASSIFICATION REQUIREMENTS (1852.204-75) (SEP 1989)

Performance under this TO will involve access to and/or generation of classified information, work in a security area, or both, up to the level of SECRET. See FAR Clause 52.204-2 of the contract and Exhibit F, DD Form 254, TO Security Classification Specification.

23. SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (1852.204-76) (JUL 2000)

(a) The Contractor shall comply with the security requirements outlined in NASA Policy Directive (NPD) 2810.1, Security of Information Technology, and NASA Procedures and Guidelines (NPG) 2810.1, Security of Information Technology. These policies apply to all IT systems and networks under NASA's purview operated by or on behalf of the Federal Government, regardless of location.

(b) (1) The Contractor shall ensure compliance by its employees with Federal directives and guidelines that deal with IT Security including, but not limited to, OMB Circular A-130, Management of Federal Information Resources, OMB Circular A-130 Appendix III, Security of Federal Automated Information Resources, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.), and all applicable Federal Information Processing Standards (FIPS).

(2) All Federally owned information is considered sensitive to some degree and must be appropriately protected by the Contractor as specified in applicable IT Security Plans. Types of sensitive information that may be found on NASA systems that the Contractor may have access to include, but are not limited to --

- (i) Privacy Act information (5 U.S.C. 552a et seq.);
- (ii) Export Controlled Data, (e.g. Resources protected by the International Traffic in Arms Regulations (22 CFR Parts 120-130)).

(3) The Contractor shall ensure that all systems connected to a NASA network or operated by the Contractor for NASA conform with NASA and Center security policies and procedures.

(c) (1) The Contractor's screening of Contractor personnel will be conducted in accordance with NPG 2810.1, Section 4.5 for personnel requiring unescorted or unsupervised physical or electronic access to NASA systems, programs, and data.

(2) The Contractor shall ensure that all such employees have at least a National Agency Check investigation. The Contractor shall submit a personnel security questionnaire (NASA Form 531), Name Check Request for National Agency Check (NAC) investigation, and Standard Form 85P, Questionnaire for Public Trust Positions (for specified sensitive positions), and a Fingerprint Card (FD-258 with NASA overprint in Origin Block) to the Center Chief of Security for each Contractor employee requiring screening. The required forms may be obtained from the Center Chief of Security. In the event that the NAC is not satisfactory, access shall not be granted. At the option of the Government, background screenings may not be required for employees with recent or current Federal Government investigative clearances.

(3) The Contractor shall have an employee checkout process that ensures --

(i) Return of badges, keys, electronic access devices and NASA equipment;

(ii) Notification to NASA of planned employee terminations at least three days in advance of the employee's departure. In the case of termination for cause, NASA shall be notified immediately. All NASA accounts and/or network access granted terminated employees shall be disabled immediately upon the employee's separation from the Contractor; and

(iii) That the terminated employee has no continuing access to systems under the operation of the Contractor for NASA. Any access must be disabled the day the employee separates from the Contractor.

(4) Granting a non-permanent resident alien (foreign national) access to NASA IT resources requires special authorization. The Contractor shall obtain authorization from the Center Chief of Security prior to granting a non-permanent resident alien access to NASA IT systems and networks.

(d) (1) The Contractor shall ensure that its employees with access to NASA information resources receive annual IT security awareness and training in NASA IT Security policies, procedures, computer ethics, and best practices.

(2) The Contractor shall employ an effective method for communicating to all its employees and assessing that they understand any Information Technology Security policies and guidance provided by the Center Information Technology Security Manager (CITSM) and/or Center CIO Representative as part of the new employee briefing process. The Contractor shall ensure that all employees represent that they have read and understand any new Information Technology Security policy and guidance provided by the CITSM and Center CIO Representative over the duration of the Task Order.

(3) The Contractor shall ensure that its employees performing duties as system and network administrators in addition to performing routine maintenance possess specific IT security skills. These skills include the following:

- (i) Utilizing software security tools.
- (ii) Analyzing logging and audit data.
- (iii) Responding and reporting to computer or network incidents as per NPG 2810.1.
- (iv) Preserving electronic evidence as per NPG 2810.1.
- (v) Recovering to a safe state of operation.

(4) The Contractor shall provide training to employees to whom they plan to assign system administrator roles. That training shall provide the employees with a full level of proficiency to meet all NASA

system administrators' functional requirements. The Contractor shall have methods or processes to document that employees have mastered the training material, or have the required knowledge and skills. This applies to all system administrator requirements.

(e) The Contractor shall promptly report to the Center IT Security Manager any suspected computer or network security incidents occurring on any system operated by the Contractor for NASA or connected to a NASA network. If it is validated that there is an incident, the Contractor shall provide access to the affected system(s) and system records to NASA and any NASA designated third party so that a detailed investigation can be conducted.

(f) The Contractor shall develop procedures and implementation plans that ensure that IT resources leaving the control of an assigned user (such as being reassigned, repaired, replaced, or excessed) have all NASA data and sensitive application software permanently removed by a NASA-approved technique. NASA-owned applications acquired via a "site license" or "server license" shall be removed prior to the resources leaving NASA's use. Damaged IT storage media for which data recovery is not possible shall be degaussed or destroyed. If the assigned task is to be assumed by another duly authorized person, at the Government's option, the IT resources may remain intact for assignment and use of the new user.

(g) The Contractor shall afford NASA, including the Office of Inspector General, access to the Contractor's and subcontractor's facilities, installations, operations, documentation, databases and personnel. Access shall be provided to the extent required to carry out a program of IT inspection, investigation and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data, and to preserve evidence of computer crime.

(h) (1) The Contractor shall document all vulnerability testing and risk assessments conducted in accordance with NPG 2810.1 and any other IT security requirements specified in the contract or as directed by the Contracting Officer.

(2) The results of these tests shall be provided to the Center IT Security Manager. Any Contractor system(s) connected to a NASA network or operated by the Contractor for NASA may be subject to vulnerability assessment or penetration testing as part of the Center's IT security compliance assessment and the Contractor shall be required to assist in the completion of these activities.

(3) A decision to accept any residual risk shall be the responsibility of NASA. The Contractor shall notify the NASA system owner and the NASA data owner within 5 working days if new or unanticipated threats or hazards are discovered by the Contractor, made known to the Contractor, or if existing safeguards fail to function effectively. The Contractor shall make appropriate risk reduction recommendations to the NASA system owner and/or the NASA data owner and document the risk or modifications in the IT Security Plan.

(i) The Contractor shall develop a procedure to accomplish the recording and tracking of IT System Security Plans, including updates, and IT system penetration and vulnerability tests for all NASA systems under its control or for systems outsourced to them to be managed on behalf of NASA. The Contractor must report the results of these actions directly to the Center IT Security Manager.

(j) When directed by the Contracting Officer, the Contractor shall submit for NASA approval a post-award security implementation plan outlining how the Contractor intends to meet the requirements of NPG 2810.1. The plan shall subsequently be incorporated into the contract as a compliance document after receiving Government approval. The plan shall demonstrate thorough understanding of NPG 2810.1 and shall include as a minimum, the security measures and program safeguards to ensure that IT resources acquired and used by Contractor and subcontractor personnel --

(1) Are protected from unauthorized access, alteration, disclosure, or misuse of information processed, stored, or transmitted;

(2) Can maintain the continuity of automated information support for NASA missions, programs, and functions;

- (3) Incorporate management, general, and application controls sufficient to provide cost-effective assurance of the systems' integrity and accuracy;
- (4) Have appropriate technical, personnel, administrative, environmental, and access safeguards;
- (5) Document and follow a virus protection program for all IT resources under its control;
- (6) Document and follow a network intrusion prevention program for all IT resources under its control.

(k) Prior to selecting any IT security solution, the Contractor shall consult with their Center IT Security Manager to ensure interoperability and compatibility with other systems with which there is a data or system interface requirement.

(l) The Contractor shall comply with all Federal and NASA encryption requirements for NASA flight programs (e.g., secure flight termination systems, encryption for satellite uplinks, encryption for flight and satellite command and control for both up and down link) and involve the Center Communications Security (COMSEC) Manager when selecting encryption solutions.

(m) The Contractor shall incorporate this clause in all subcontracts where the requirements identified in this clause are applicable to the performance of the subcontract.

24. OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES (LaRC 52.211-104) (MAY 1999)

(a) Observation of Regulations--In performance of that part of the contract work which may be performed at Langley Research Center or other Government installation, the Contractor shall require its employees to observe the rules and regulations as prescribed by the authorities at Langley Research Center or other installation including all applicable Federal, NASA and Langley or other local installation safety, health, environmental and security regulations.

(b) Identification Badges--At all times while on LaRC property, the Contractor shall require its employees, subcontractors and agents to wear badges which will be issued by the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228). Badges shall be issued only between the hours of 6:30 a.m. and 3:30 p.m., Monday through Friday. Contractors will be held accountable for these badges and may be required to validate outstanding badges on an annual basis with the NASA LaRC Security Office. Immediately after employee termination or contract completion, badges shall be returned to the NASA Contract Badge and Pass Office.

25. QUALITY SYSTEM REQUIREMENTS (ISO 9001) (LaRC 52.246-95) (FEB 2000)

(a) The Contractor's quality system shall be compliant with the requirements of ANSI/ISO/ASQC Q9001-1994, Quality Systems-Model for Quality Assurance in Design, Development, Production, Installation, and Servicing. If the Contractor's quality system is not already compliant with the requirements of ANSI/ISO/ASQC Q9001-1994, the Contractor shall develop quality system procedures and associated documentation to become compliant within **nine months** after the TO effective date. The Contractor's quality system shall remain in compliance with ANSI/ISO/ASQC Q9001-1994 during the term of the contract. The Government reserves the right to audit the Contractor's quality system at any time. The requirements of this clause are not required to flow down to subcontractors.

(b) "Compliant" as used in this clause means that the contractor has defined, documented, and will continually implement during the term of the contract management-approved methods of operation that conform to the requirements given in the above-cited International Standard.

26. LIMITATION OF FUTURE CONTRACTING (1852.209-71) (DEC 1988)

(a) The Contracting Officer has determined that this acquisition may give rise to a potential organizational conflict of interest. Accordingly, the attention of prospective offerors is invited to FAR Subpart 9.5--Organizational Conflicts of Interest.

(b) The nature of this conflict is the handling of various types of information including, but not limited to, Privacy Act information, Source Selection information, Patent information, and Export Control information. In addition, the Contractor may participate in design reviews with the Government and other contractor representatives to define operational improvement and plan implementation, and have access to other company's proprietary data. Additionally, a conflict may involve the preparation of technical specifications for hardware, software and/or IT services.

(c) The restrictions upon future contracting are as follows:

(1) If the Contractor, under the terms of this TO, or through the performance of TA's pursuant to this TO, is required to develop specifications or statements of work that are to be incorporated into a solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias (this time shall in no case be less than the duration of the initial production contract). NASA shall not unilaterally require the Contractor to prepare such specifications or statements of work under this TO.

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

27. TASK ORDER CLOSEOUT (LaRC 52.242-90) (MAY 1999)

(a) Reassignment--After receipt, inspection, and acceptance by the Government of all required articles and/or services, and resolution of any pending issues raised during the Period of Performance, this Task Order will then be processed by the NASA Langley Research Center Contracting Officer for Closeout. All transactions subsequent to the physical completion of the Task Order should, therefore, be addressed to the NASA Contracting Officer for Closeout. GSA will execute a final modification to the TO at final TO closeout.

(b) "Quick Closeout"--Paragraph (f) of the Allowable Cost and Payment clause of the contract addresses the "Quick Closeout Procedure" delineated by Subpart 42.7 of the Federal Acquisition Regulation (FAR). It should be understood that the said procedure applies to the settlement of indirect costs for a specific contract in advance of the determination of final indirect cost rates when the amount of unsettled indirect cost to be allocated to the contract is relatively insignificant. Therefore, the "Quick Closeout" procedure does not preclude the provisions of Paragraph (d) of the Allowable Cost and Payment clause nor does it constitute a waiver of final audit of the Contractor's Completion Voucher.

(c) Completion Voucher Submittal--Notwithstanding the provisions of the Allowable Cost and Payment clause, as soon as practicable after settlement of the Contractor's indirect cost rates applicable to performance of the task order, the Contractor shall submit a Completion Voucher as required by the aforesaid clause. The Completion Voucher shall be supported by a cumulative claim and reconciliation statement and executed NASA Forms 778, Contractor's Release, and 780, Contractor's Assignment of Refunds, Rebates, Credits, and Other Amounts. Unless directed otherwise by the GSA Contracting Officer for Contract Closeout, the Contractor shall forward the said Completion Voucher directly to the cognizant Government Agency to which audit functions under the task order have been delegated.

28. SAFETY AND HEALTH AND SECURITY IMPLEMENTATION PLANS

The Government-approved Safety and Health Plan and Security Implementation Plan are hereby incorporated by reference and are in full effect as if they were listed in their entirety.

29. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES BY REFERENCE and FULL TEXT:

A. The following FAR and NASA FAR Supplement clauses are applicable to this TO by reference:

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.222-2	Payment for Overtime Premiums (Jul 1990)(fill-in: "None") (Mod 5)
52.222-43	Fair Labor Standards Act and Service Contract Act – Price Adjustment (Multiple Year and Option Contracts)(May 1989) (Mod 5)
52.227-14	Rights in Data General (Oct 1995) as modified by NASA FAR Supplement 1852.227-14
52.227-19	Commercial Computer Software—Restricted Rights as modified by NASA FAR Supplement 1852.227-19

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
1852.208-81	Restrictions on Printing and Duplicating (AUG 1993)
1852.215-84	Ombudsman (OCT 1996) Insert "Belinda Adams, direct inquires to Sandra S. Ray, (757) 864-2428"
1852.216-89	Assignment and Release Forms (JUL 1997)
1852.219-74	Use of Rural Area Small Businesses (SEP 1990)
1852.219-75	Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Reporting (JUL 1997)
1852.219-76	NASA 8 Percent Goal (JUL 1997)
1852.223-70	Safety and Health (JUL 2000)
1852.223-74	Drug and Alcohol-Free Workforce (MAR 1996)
1852.223-75	Major Breach of Safety or Security (JUL 2000)
1852.225-70	Export Licenses (FEB 2000)
1852.227-70	New Technology (NOV 1998)
1852.228-75	Minimum Insurance Coverage (OCT 1988) supercedes GSA contract clause
1852.235-70	Center for AeroSpace Information (JUN 1998)
1852.237-70	Emergency Evacuation Procedures (DEC 1988)
1852.242-72	Observance of Legal Holidays (AUG 1992) ALT I (SEP 1989) and ALT II (SEP 1989)
1852.242-73	NASA Contractor Financial Management Reporting (JUL 1997)
1852.243-71	Shared Savings (March 1997)
1852.245-70	Contractor Requests for Government-Owned Equipment (JUL 1997)
1852.245-71	Installation-Accountable Government Property (JUN 1998)
1852.245-73	Financial Reporting of NASA Property in the Custody of Contractors (AUG 2001)(DEVIATION) (Mod 85)

B. The following FAR clause is applicable to this TO.

30. 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>

31. LIST OF EXHIBITS

Exhibit A, Statement of Work

Exhibit B, Labor Loaded Rates and Travel, Tools, And Other Direct Costs (ODC) Indirect Handling Rates

- Exhibit C, Award Fee Evaluation Plan
- Exhibit D, Subcontracting Plan (to be submitted)
- Exhibit E, Contract Documentation Requirements
- Exhibit F, Contract Security Classification Specification, DD Form 254
- Exhibit G, Procedures for the Preparation and Approval of Contractor Reports for Langley Research Center, Form P-72

32. LIST OF ATTACHMENTS

- Attachment 1, Instructions And Evaluation Criteria
- Attachment 2, Government Estimated Staffing
- Attachment 3, Past Performance Questionnaire
- Attachment 4, Bid Schedules
- Attachment 5, Full Cost Accounting Report (Sample)
- Attachment 6, Questions and Answers

EXHIBIT A -- STATEMENT OF WORK

FOR

CONSOLIDATED INFORMATION TECHNOLOGY SERVICES

(CONITS)

1. INTRODUCTION	18
2. SCOPE.....	18
3. TASK ASSIGNMENT PROCEDURE.....	19
3.1. Task Assignment Initiation.....	19
3.2. Amendments to the Task Assignment	20
3.3. Electronic Task Assignment System	20
4. GENERAL IT SUPPORT SERVICES.....	20
4.1. System Administration	21
4.1.1. System Configuration Management	21
4.1.2. System Upgrade and Improvement.....	21
4.1.3. Operations.....	21
4.1.4. Documentation	22
4.2. Information Technology Security Administration.....	22
4.3. Hardware Maintenance	23
4.4. System Software Maintenance.....	24
4.5. Application Management.....	24
4.5.1. Application Maintenance, Upgrade, and Improvement.....	24
4.5.2. Documentation	25
4.6. Database Administration.....	25
4.6.1. Installation of Database Software and Tools	25
4.6.2. Monitoring and Configuring Database Engine and Tools	25
4.6.3. Archiving and Restoring.....	26
4.6.4. Security of databases and instances.....	26
4.6.5. Documentation	26
4.6.6. Resolution of Problems/issues.....	26
4.7. Customer Support	26
4.8. Consultation and Training	27
5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES.....	27
5.1. Work Requirements	27
5.2. Process Requirements.....	28
5.3. Information Systems Development.....	28
6. WORK AREA SPECIFIC SERVICES.....	28
6.1. Central Business and Administrative Computing.....	29
6.2. LaRC Technical Library	29
6.3. World-Wide Web Servers.....	30
6.4. Database Servers.....	30
6.5. Large Scale Data Storage and Retrieval System.....	31
6.6. Distributed Computing Environment (DCE).....	31
6.7. LaRC IT Security Manager Support.....	31
6.8. Network Design and Development.....	32
6.9. Software Engineering Process Group	32
6.10. High Performance Computing	32
6.11. Surface Modeling and Grid Generation.....	33
6.12. Data Visualization and Image Processing.....	33
6.13. World Wide Web Application Support.....	33
6.14. Data Management Support	34
6.15. Distributed Systems.....	34
6.16. Data Reduction	34
6.17. Geographic Information Systems	35
6.18. Computational Analysis and Programming Services for Research and Flight Projects.....	35
6.19. Card Key System	35
6.20. Central Computer Facility Environmental Monitoring.....	36

1. INTRODUCTION

The NASA Langley Research Center (LaRC) in Hampton, VA, has been instrumental in shaping aerospace history for more than eight decades. Established in 1917 as the first national civil aeronautics laboratory, LaRC has become a comprehensive, world-class center for aeronautics, earth science, space technology, and structures and materials research. Further information on the LaRC mission and its contribution to the NASA vision can be obtained from the web site <http://www.larc.nasa.gov>.

To accomplish its mission, the Center depends heavily on state-of-the-art information technology (IT), embracing computer systems ranging from laptop and desktop personal computers to supercomputers; network systems ranging from building-dedicated through Center-wide; data storage facilities ranging from diskettes to massive, centrally accessed tape storage systems; and all of the associated operating, input/output, data transfer, data management, and data analysis systems.

The Center has increasingly relied upon contractors to provide IT services. At the present time, several IT related contracts are in place, including Scientific Computer Operations, Maintenance, and Communications (SCOMAC) Services; Computer Analysis and Programming Services (CAPS); and Business and Administrative Management Information Services (BAMIS).

It is the intent of the Center to consolidate IT activities. As a first step in this direction, the Center has subscribed to the Outsourcing Desktop Initiative for NASA (ODIN) for the provision of desktop computing, networking, and telecommunications capability at the Center. The intent of this Consolidated Information Technology Services (CONITS) Task Order is to consolidate most of the functions of SCOMAC, CAPS, and BAMIS that are not covered by ODIN.

In general, the ODIN contract provides a broad range of general-purpose desktop computing support services including system administration, hardware and software maintenance, and help desk assistance. The ODIN approach is designed to offer a comprehensive, end-to-end desktop service for those systems that are considered to be fully functional and mature and in providing an operational system that is stable. The CONITS Task Order, on the other hand, provides computing support services (including system administration and hardware and software maintenance) for systems that are either uniquely configured or highly specialized in function. The CONITS services typically involve a wide range of support functions including those for non-standard operating systems, system interfaces, or for use within a dynamic environment such as a research laboratory or test facility. The CONITS Task Order provides system administration as a component of integrated support. Integrated support encompasses all activities necessary to develop, deploy, upgrade, operate, and maintain a production system which delivers an IT capability.

2. SCOPE

CONITS will include a broad scope of IT services including new and emerging technologies that will evolve over the life of the contract. The scope of support to be provided under this Task Order is intended to cover all requirements for "Information Technology" including computers, ancillary equipment, software, firmware, services, and related resources.

CONITS services are divided into the following categories:

- General IT Support Services
- Systems and Applications Development Services
- Work Area Specific Services

General IT Support Services include, but are not limited to, systems administration, systems maintenance, database administration, and customer support. Section 4 more fully describes the requirements of this category of work.

Systems and Application Development Services embraces new software and modifications to existing software (other than those required for maintenance). Section 5 more fully describes the requirements for this category of work.

Work-Area Specific Services are similar in scope to General IT Support Services, but are specialized to particular work areas that are included in the CONITS effort. Section 6 more fully describes the requirements of this category of work.

Specific work requirements for CONITS will be furnished by the Government through the issuance of Task Assignments (TA). Work under the CONITS Task Order is not limited to the work areas given in Section 6. Technical performance standards and metrics will be provided in the TA. All other standards and metrics will be provided in the Award Fee Evaluation Plan.

Software development, operations, and maintenance under CONITS apply to software at several levels of risk and control from minimal to critical (as it relates to impact to the Government) that will be specified by the Government in TAs.

The Contractor shall, except as otherwise specified in TAs, furnish all personnel, training, facilities, equipment, materials, and transportation, necessary to perform these services. In addition, any contractor-provided equipment connected to the LaRC network shall comply with NASA Procedures and Guidelines (NPG) 2810.1. While the majority of work is directly in support of LaRC at the Center, other industry and government partners of LaRC are at times supported. This support may be provided at remote sites. Remote support is required for, but is not limited to, Section 6.17, Geographic Information Systems of this SOW.

The Contractor shall provide a high-speed data link (minimum T-1 capability) to connect the Contractor's offsite facility to the Government's LaRCNET Local Area Network (LAN). This high-speed data line must be ethernet compatible.

3. TASK ASSIGNMENT PROCEDURE

The Contractor shall provide IT services on an "as needed" basis in response to TAs issued by the Government. TAs will be initiated by a NASA civil servant (requestor), with the concurrence of the Task Area Monitor (TAM) and Contracting Officer's Representative (COR), and will provide the specific details of the technical requirements, any Government furnished equipment or Government furnished information, and a schedule of milestones and deliverables. Within 2 weeks (or as specified in the TA), the contractor shall deliver an electronic or written task plan. Following a review by the Government and negotiation with the contractor, the LaRC Contracting Officer (CO) or designee will authorize the contractor to begin the work.

3.1. Task Assignment Initiation

All TAs will be generated in writing by a NASA civil servant (requestor) and initiated with the concurrence of the TAM and/or COR, and may include the following information:

- Date of Initiation
- Task Assignment Number
- Title, Objective, and Background Information
- Description of work to be performed (including all tasks, deliverables, and performance metrics)
- Inventory of equipment and software with cross-reference to Section 4 requirements.
- Required milestones, deliverables, delivery dates, and period of performance
- Required delivery date for the Task Plan
- Acceptance criteria
- Software class/control level for Section 5 requirements
- Development approach (i.e., waterfall, spiral, evolutionary) for Section 5 requirements
- Required software life cycle phases for Section 5 requirements
- Requirements for installation, operations, or maintenance
- Documentation requirements
- Training requirements
- Joint review requirements (including the requirement for the contractor to document and distribute all joint review meetings and discussions and associated action item list)
- Government estimated cost and fee

Government furnished items

Name and contact information for the Requester, Software Manager (if applicable), and TAM

Signatures blocks for the LaRC COR, TAM, Requester, and CO.

3.2. Amendments to the Task Assignment

In the case where the TA requires changes, the Government and contractor shall arrive at a general agreement to the changes.

Changes that do not affect scope or cost shall be documented by the contractor in the form of amendments to the Task Plan and must be reviewed and authorized by the requester, TAM, and COR. Changes that affect scope or cost shall follow the same approval process as the original TA.

In the case of work out of scope of the CONITS, the contractor shall notify the COR in writing and shall not proceed with any work.

3.3. Electronic Task Assignment System

The contractor shall establish, implement, and maintain a management control system required for planning, organizing, and controlling Task Order activities. The Contractor shall automate the task flow process as defined above in a manner that is compatible with the Center Information Architecture (see Section 5.3); i.e., a COTS task assignment system or one developed within the Center Information Architecture. The automated system shall allow for the electronic initiation, routing, review, approval, issuance, and modification of Task Assignments with the use of password security for the Government officials identified above in this section with initiation, editing, and re-routing by each approver as needed, and with automatic notification to the approvers of the need for approval. The contractor shall track individual TA estimated cost, award fee, funded cost and fee, cumulative Task Order Estimated cost and fee, and funding limitations. In addition, the contractor's automated management system shall track the status of Task Assignments from planning to completion and record projected and actual resources data for each Task Assignment with graphic, tabular, and narrative descriptions. The contractor's tracking system shall also provide input data to the Task Order award fee evaluation process by tracking each task assignment's performance metrics for proposal response, timeliness, costs, and other metrics required by the Government to track and score performance. These Task Assignment data shall be the same information that is in the monthly progress and financial reports required in Exhibit E, Task Order Documentation Requirements. At the discretion of the Contracting Officer and the COR, these electronic versions may be used in lieu of their respective paper copies.

4. GENERAL IT SUPPORT SERVICES

General support services are defined at a basic level as applicable to many TAs. The contractor shall perform any or all of the functions stated in this section for systems that will be specified in TAs. A cross-reference will be provided in the TA indicating what functions of Section 4 will be required for each system in the inventory of equipment and software.

Services will be provided for a prime shift of 8 hours per day beginning no earlier than 7:00 a.m., Monday through Friday, except for Federal holidays and other days when the Center is closed. Where more rigorous requirements exist, they will be defined in TA's.

Software is classified as system software, database software, or application software. System software consists of operating systems; the native file system; distributed file systems such as the Network File System (NFS) and the Distributed File System (DFS) under the Distributed Computing Environment (DCE); system and user command suites that usually accompany the release of an operating system; and general-purpose software such as browsers, e-mail clients, and office programs. Database software includes engines as well as associated database tools. Application software is that software which provides specific capabilities in pursuit of the Center's mission. Hardware generally consists of the central processing units, memory, peripheral devices (such as output devices, disks, and tapes), adapters, and network equipment.

4.1. System Administration

The system administration function pertains to providing a variety of services involving hardware and systems software. Systems administration functions must be integrated with functions associated with database software (database administration) and applications support specific to the task assignment. System administration requirements include:

4.1.1. System Configuration Management

- a) Maintain a configuration management system (CMS) to track the inventory of equipment and software for all systems supported under task assignments. The CMS shall show hardware configurations, versions of installed software and associated documentation, maintenance status, software license status, and status of planned upgrades.
- b) Provide and use a centralized asset management tool for this service that is compatible in data format and reporting to the one used by the ODIN contract.
- c) Develop and maintain a historical configuration tracking log that identifies by date and time all changes, modifications, and upgrades that occur on systems supported on task assignments.

4.1.2. System Upgrade and Improvement

- a) Monitor user requirements and system performance. Monitor the availability of updates and upgrades to installed equipment and system software and the availability of new equipment and system software that would apply to the supported system. Participate in system reviews and recommend the installation of updates, upgrades, and new equipment and system software as appropriate.
- b) Plan for the installation of new or upgraded equipment and system software. This includes the consideration of cost, schedule, performance, power, space limitations, networking, workflow, and the impact on other elements and users of the system.
- c) Following Government approval, install and verify the operability of new or upgraded equipment and system software. Minimize unavailability of system services.
- d) Recommend operational improvements and implement them upon Government approval.
- e) Inform users of impacts from system upgrades and improvements.

4.1.3. Operations

- a) Perform routine operations such as power up and shut down.
- b) Interface with equipment vendors or service providers for the maintenance of equipment and software. Monitor the currency of maintenance contracts and software licenses.
- c) Interface with network service providers for access to networks and to resolve problems associated with network access.
- d) Diagnose anomalies in the operation of equipment or system software. Provide timely fixes or work-arounds where possible. Report and document problems requiring correction. When necessary, interface with other IT service providers to resolve problems. Initiate corrective action. Maintain trouble report tracking system to give the current status of problems and their resolution. Follow up to ensure problem resolution. Response to problems during prime shift will be within 2 hours of notification or as specified in task assignments.
- e) Develop a disaster/recovery plan in accordance with NPG 2810.1. Work with other cognizant IT personnel (e.g., database administrators and other application or data managers) in developing the plan.
- f) Backup and restore files in accordance with disaster/recovery plan.
- g) Monitor the operation of the system and adjust the configuration and system parameters as necessary to maximize operational efficiency.
- h) Create and modify scripts that increase functionality or enhance system operation or performance.

4.1.4. Documentation

a) Develop, deliver, and maintain the following documentation as a minimum:

- Configuration management plan
- Disaster/recovery plan
- Operational procedures

Additional documentation may be defined in task assignments.

4.2. **Information Technology Security Administration**

NPG 2810.1 dictates that "... a properly trained System Administrator [System Security Administrator] is assigned as the focal point for the security of each system or application."

Baseline IT security requirements are given in Appendix A of NPG 2810.1. These requirements vary, depending on the information category of the system. The baseline information categories are:

MSN	Mission
BRT	Business and Restricted Technology
SER	Scientific, Engineering, and Research
ADM	Administrative
PUB	Public Access

One of these categories is assigned to each system identified in a TA and determines the security requirements for that system as stated in Appendix A of NPG 2810.1. The IT security metrics for each of the services given in this section are accordingly dependent upon the assigned category.

The contractor shall identify a System Security Administrator as the focal point for the security of each identified system. This person shall be trained in IT security to the degree required for the information category of the system.

The System Security Administrator shall assist the Government Line Manager (see NPG 2810.1) in the development and implementation of Security Plans for the assigned system or application.

The System Security Administrator shall have the following duties, as given in paragraph 2.2.8 of NPG 2810.1:

- a) Making sure that all users complete an Account Request Document approved by a Government management official responsible for the individual (e.g., manager, sponsor, task manager) for all user accounts and that the information gathered is handled in accordance with the Privacy Act.
- b) Promptly disabling access to a user's account if the user is identified as having left the Center, changed assignments, changed contracts, or completed work on a grant or other agreement, or is no longer requiring system access. Written authorization will be required from the Government management official, who originally authorized the account, to reactivate the user's account. (Digitally signed e-mail is acceptable).
- c) Granting accounts only to individuals who have had the appropriate personnel screening. The Center IT Security Manager will provide a process for verifying that appropriate screening has been completed and that the individual is eligible to be issued an account.
- d) Granting accounts to foreign nationals without permanent resident alien status only with prior approval by the CCS [Center Chief of Security].
- e) Performing annual self-inspections of their systems and reporting the findings to their line managers and the cognizant organizational CSO [Computer Security Official] or designee. The Center IT Security Manager will provide guidance for conducting self-inspections.
- f) Reporting IT security incidents.
- g) In response to an IT security incident, taking necessary actions to prevent further damage to their systems and documenting their actions.

- h) Identifying personnel who will be responsible for systems if an IT security incident requiring immediate attention occurs when the System Administrator is absent. The names and contact information for these personnel will be provided to their management and their organizational CSO.
- i) Periodically using tools to verify and/or monitor compliance to password guidelines.
- j) Using IT security tools to assist in detecting modifications to the system and monitoring audit logs.
- k) Ensuring that security controls are in place and functioning.

1) 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 skill assessment have 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 arbitrative 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. (Mod 90)

4.3. Hardware Maintenance

Hardware maintenance as defined in this section includes the repair and replacement of hardware components necessary to ensure operability of the covered equipment or to return the covered equipment to a fully operational status. The covered equipment includes those items that are specifically identified in a TA. Services that shall be provided in satisfying the hardware maintenance requirements include:

- a) Diagnose problem or failure.
- b) Repair or replace failing components. Replacement parts shall meet or exceed Original Equipment manufacturer's standards.
- c) Verify that repair or replacement performs to manufacturer's standards.
- d) Verify that the performance of the system following the repair or replacement of failing components, meets or exceeds the performance of the system prior to system failure.
- e) Reload any files and/or data (if accessible) that are contained on a replaced or failing component before returning the system to operational status.
- f) Return any replaced components that contain classified data to the user.
- g) Cleanse (to ensure that data is fully erased and not retrievable or accessible by any means) any replaced data storage equipment that contains unclassified data prior to disposal or returning to the supplier, and maintain a documented log to indicate that this action was completed.

4.4. System Software Maintenance

System software maintenance as defined in this section includes the services required to ensure continuing operation of system software. All supported systems software will be licensed to the Government and will be specifically identified in a TA. Services that shall be provided in satisfying the software maintenance requirements include:

- a) Analyze software failure or performance degradation.
- b) Obtain software updates and upgrades from the vendor or public domain sources (if required in individual task assignments).
- c) Install software updates as requested by the user.
- d) Verify system operation following software upgrades.
- e) Perform full system, file, and data backup prior to software upgrade.
- f) Preserve and/or restore all files and data during software upgrade.

4.5. Application Management

The application software used in support of NASA LaRC missions, business processes, and specific IT functions can be categorized as follows:

- 1) COTS software, e.g.
 - a. Hierarchical Storage Management (HSM) software for a mass storage system.
 - b. ICEM Computer Aided Design package.
 - c. Data Explorer (DX) general-purpose package for data visualization and analysis
- 2) Non-COTS software not developed locally, e.g.
 - a. Automated Information Management (AIM) Program software for core business management and administration functions.
 - b. DARWIN tools for analysis of wind tunnel data.
- 3) Software developed by or for LaRC and used in production mode, e.g.
 - a. Approach to Data Management, Archive, Protection, and Transmission (ADAPT) System.
 - b. Wind Tunnel Test Data Management System (WTTDMAS).
 - c. Data reduction software for processing wind tunnel test data and flight data.
 - d. Explicit Archive and Retrieval System (EARS) command suite for accessing the Distributed Mass Storage System (DMSS).
 - e. GridTool for unstructured grid generation.

Application services may be required as part of integrated support as described in Section 1, Introduction, or it can be an independent requirement. In the case of an independent requirement, the Contractor shall interface with other cognizant IT personnel to plan upgrades and resolve problems. Application management requirements include:

4.5.1. Application Maintenance, Upgrade, and Improvement

- a) Develop and maintain a configuration management system to include the following:
 - Current software versions
 - Status of planned upgrades
 - License information
 - Software maintenance status
 - Locations of source code and documentation

- b) Optimize the execution of the application. Monitor the application for anomalies and respond to customer trouble reports. Analyze problems, interface with cognizant IT personnel if necessary to resolve problems. Implement corrective action.
- c) Plan for and recommend evolution of the application. For example, advise the Government on applicability of upgrades and recommend possible software solutions to identified user requirements.
- d) For COTS and non-locally developed applications, actively monitor availability of patches and upgrades. Evaluate upgrades, recommend schedule for upgrade, and inform customers of impact of upgrade.
- e) Interface with software vendors to obtain patches and upgrades. Procure software updates and upgrades from the vendor (if required in individual task assignments). Install patches as required to ensure that application remains current, secure, and reliable. Install upgrades according to schedule approved by the Government. Interface with cognizant IT personnel as necessary to ensure smooth upgrade. Perform upgrades with minimal impact to users and notify users of interruptions in application.
- f) Maintain software developed by or for LaRC. In general, the contractor shall follow the maintenance process defined in Section 5.5 of IEEE/EIA Standard 12207- Software Life Cycle Processes; however, the processes shall be tailored to the particular software package and applied with a rigor consistent with the software control class. Maintenance process requirements for the various classes of software will be further defined in a TA to be issued at TO start.
- g) Advise customers on effective use of the software.

4.5.2. Documentation

- a) For COTS and non-locally developed software, maintain and make available a library of application documentation.
- b) For software developed by or for LaRC as identified under Subsection 4.5.1 (f), deliver a Maintenance Plan within two weeks of receiving the TA. The Maintenance Plan shall document the level of maintenance to be performed; how problems and/or modifications are identified, classified, prioritized, tracked, and analyzed; and the approval, implementation, and test process to be used.

4.6. Database Administration

Database administration (DBA) as defined in this section shall be provided for those task assignments identifying a database management system (DBMS) environment, including DBMS software and associated database tools.

Database administration requirements include:

4.6.1. Installation of Database Software and Tools

- a) Install and maintain new and upgraded DBMS software and associated tools on both production and development systems. Identify impacts of new and upgraded software by testing, documenting, and communicating impacts to customers before implementation.
- b) Ensure operability of the DBMS environment. Achieve a common or standard configuration for the DBMS environment to enable application developers to efficiently produce predictable results.
- c) Ensure compatibility between the DBMS and the operating system and interact with cognizant IT personnel to ensure that the system adequately supports database applications.

4.6.2. Monitoring and Configuring Database Engine and Tools

- a) Monitor activity of the database engine to determine efficiency of the database engine and applications. Manage disk space allocations, perform consistency checking, and monitor logical/recovery log.
- b) Based on the configuration of the file server and the existing and projected database workload, configure the database engine to optimize performance of database applications while minimizing effects on the rest of the file-server workload.
- c) Analyze the database workload and storage needs and plan for growth for databases and applications. Make determinations of DBMS software to support these needs, and communicate hardware/system software requirements to system administrator. Implement recommendations upon Government approval.

- d) Monitor use of the licenses for the database engines and related tools. Interface with vendors to develop software maintenance strategies and maintain current licenses.
- e) Provide solutions for allowing connections to the database engines from other platforms. These solutions will include the use of ODBC (open database connectivity) and database client tools. Provide user training in the installation and configuration of these connections as needed.

4.6.3. Archiving and Restoring

- a) Archive and restore the database instance and logical logs, and provide input into system disaster/recovery plan to ensure restoration of database. Restore data as required.
- b) Perform periodic tests (at least every 6 months) to ensure that hardware, software, and processes will function as required to support archiving and restoring of data and to verify the disaster/recovery plan.

4.6.4. Security of databases and instances

- a) Maintain security of databases by managing access and passwords in compliance with NPG 2810.1 and DBMS application-specific requirements.
- b) Assist developers with managing access privileges to tables, stored procedures and other areas of the database.
- c) Periodically (at least weekly) audit logs to identify potential security breaches.

4.6.5. Documentation

Fully document, deliver, and maintain documentation for the following:

- Current configuration of the database environment including site specific parameters and tools installed and their availability.
- Historical tracking of changes made to the DBMS environment over time.
- Operational procedures in the administration of the database environment
- Procedures to be used by end users using the database environment
- Database archive/restore strategy to be included in system disaster recovery plan

4.6.6. Resolution of Problems/issues

- a) Provide troubleshooting skills to identify and solve problems/issues related to the database instance or related tools. Document these problems/issues and lessons.
- b) Interface with system administrator and application developers to develop solutions to problems and implement corrective action. Maintain trouble report tracking system to give status of problems and their resolution.

4.7. Customer Support

ODIN will provide help desk support for the Center. The CONITS contractor shall establish a signed formal agreement with the ODIN contractor by TO start to coordinate assignment, tracking, and resolution of ODIN help desk calls pertaining to systems and applications supported by CONITS.

A basic level of customer support is required for all General IT Support Services to include:

- a) Consultation and assistance on basic use of equipment and applications.
- b) Efficient mechanism for communication between customer and IT support staff.
- c) Prompt response (within 2 hours) to user problems. Two hours commences when the call is received by the CONITS contractor.
- d) Provide and use an electronic customer request tracking system to give the current status of requests or problems and their resolution.
- e) Interface with system administrators, system security administrators, database administrators, and other application administrators as necessary to resolve the problem for the customer.

Other customer support activities such as help desk, training, and end-user documentation will be specified in task assignments.

4.8. Consultation and Training

The contractor shall provide technical support, consulting, and coordination to ensure orderly system implementation, integration, and operation of all systems, systems software, and application software identified in task assignments. Additional consulting requirements may be identified in task assignments and include, but are not limited to:

- a) Assist the Government in defining data and information requirements, data sources, and intended end-user applications, and recommend appropriate information technology, products, and capabilities for satisfying information requirements.
- b) Design, develop, and revise training materials for systems and applications relevant to CONITS Task Order. Schedule classes, arrange logistics for classes, conduct training, validate training effectiveness, and provide information for input to student records.
- c) Perform studies analyzing new technologies, analyzing feasibility of technical approaches, defining user requirements, analyzing existing environments, identifying constraints, deriving and analyzing alternative solutions, recommending approaches and solutions, and estimating costs and benefits.

5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES

Services in this category involve the development of new software or the modification of existing software to change or add to its functionality. Modifications to correct faults, improve performance or other attributes, or to adapt to a changed environment, are considered maintenance and are covered in Section 4 of this SOW. Requirements for system and application development services will be specified in TAs. They will include but will not be limited to the following:

- a) Design and development of new software packages to meet specified requirements.
- b) Design and development of new systems integrated from hardware, commercial software, and newly developed applications.
- c) Development of software applications within existing system environments; for example, a database application developed on central database servers.
- d) Modifications to existing software to change or add to its functionality.
- e) Software support to research and/or development projects that involve the continuing evolution of algorithms and techniques.

5.1. Work Requirements

In the planning and execution of the work as specified in the TA, the Contractor shall undertake any or all of the following activities:

- a) Requirements Analysis and Planning: Analyze requirements to determine the feasibility of providing the desired software, target computer system, computer programs, results, documentation or other deliverables.
- b) System Integration: Integrate equipment, software, communications, and processes to develop and deploy a new system or IT capability, including procurement of hardware and software if required.
- c) Software Design and Development: Design, develop, and test software to meet specified technical and quality requirements.
- d) Software Modification: Modify existing software in order to change or add to its functionality.
- e) Quality Assurance and Software Testing: Perform software quality assurance, prepare test plans, perform software acceptance testing, and document test results.

- f) Planning for Installation, Operations, or Maintenance Services: Prepare plans for these activities to follow systems or applications delivery.
- g) Documentation: Develop or update documentation such as user manuals, reference manuals, design documents, and test plans using either online or hard copy format.
- h) Problem Analysis: Perform independent analysis of mathematical, logical, system approaches and perform comparison studies of competing techniques to solve problems.
- i) Process Improvement: Collect and analyze process and product metrics. Identify, evaluate, and implement promising new technologies to improve productivity and quality.

5.2. Process Requirements

System and Application Development Services will be initiated through the issuance of a TA that will define the specifics of the software project. Project title, name of the LaRC software manager, software control class (defined by the Government as minimal, low, high or critical), description of requirements, constraints, and joint review schedules will be included in the TA. Life-cycle requirements, development approach, risk assessment, role of contractor and Government personnel in a cooperative effort, acceptance criteria, documentation, deliverables, and delivery schedules will also be specified as appropriate.

In general, the contractor shall comply with the processes of IEEE/EIA Standard 12207 Standard for Information Technology - Software Life Cycle Processes; however, processes shall be tailored to the specific project and applied with a rigor consistent with the software control class. Life-cycle process requirements for the various classes of software will be further defined in a TA to be issued at TO start.

For each project, the contractor shall prepare and maintain a Software Project Management Plan (SPMP), as tailored to the specific project and applied with a rigor consistent with the software control class. SPMP requirements for the various classes of software will be further defined in a TA to be issued at TO start.

5.3. Information Systems Development

The Center is continuing to develop the LaRC Information Architecture, that is, a framework within which information management systems shall be designed. Only at the insistence of the customer shall databases be developed in legacy application environments, such as Sapphire and Acius 4th Dimension, FoxPro, Microsoft SQL Server and Microsoft Access, and major modifications to legacy databases shall include consideration of conversion to the LaRC information architecture. The architecture relies on standards and configuration control to provide interoperability between databases, reduce the development of unique or duplicative systems, permit focus and skill-building among the technical and consumer work force, and reduce application specific training required by end users.

The Information Architecture technical environment consists of a suite of tools and database management systems which support the standards selected for use. Current tools include Oracle and Informix DBMS, Cold Fusion and WebObjects application development and production environments, and Brio query tools.

6. WORK-AREA SPECIFIC SERVICES

The effort to be provided under this Task Order shall be in support of, but not limited to, the work areas of the LaRC IT environment described in this section.

As stated in Section 3, task assignments will be issued to specify required services. These services may include any or all of the general support requirements given in Section 4 and software development requirements given in Section 5, but also may include requirements that are specific to a work area. In addition to a brief description of each work area, specific requirements are listed that are representative but not all-inclusive of that work area.

Reference to “integrated support” of a system or systems encompasses all activities necessary to develop, deploy, upgrade, operate, and maintain a production IT capability.

Many of these work areas require services involving the operation of hardware and software systems to produce data; reports; or business, scientific, or engineering solutions. If this is the case a TA will require that the contractor develop an "Operations Plan," defining the procedures for receiving requests; prioritizing, approving, scheduling, and executing work, and delivering products.

In general, in the event that software developed by or for the Government is to be operated, such a plan shall comply with the operations process of Section 5.4 of IEEE/EIA Standard 12207- Software Life Cycle Processes; however, it shall be tailored to the particular software package and applied with a rigor consistent with the software control class. Operations process requirements for the various classes of software will be further defined in a TA to be issued at TO start.

6.1. Central Business and Administrative Computing

Business and administrative computing includes financial, human resources, asset, procurement, security, and logistics management. The operational environment consists of a Central Business and Administrative Computing Complex (CBACC). Users connect from their individual workstations via network connections. Applications software runs on central mainframes (host based applications) located at the NASA Automated Data Processing (ADP) Consolidation Center (NACC) at Marshall Space Flight Center (MSFC) in Huntsville, Alabama, and on distributed computers located either in the CBACC or remotely (distributed applications). The NACC at Marshall centrally integrates and operates Agency-wide Multiple Virtual System (MVS) computing resources for NASA Centers and Headquarters. The NACC works in coordination with the CBACC to provide business and administrative IT services to LaRC. Consolidated mainframe MVS systems support is provided by the NACC. The LaRC business and administrative applications software portfolio consists of both Agency standard systems (host based), developed under the NASA Automated Information Management (AIM) Program and unique LaRC applications (both host based and distributed) developed and maintained by LaRC. Requirements specific to this work area include:

- Provide local MVS support in the CBACC, which is responsible for local applications and functions internal to the LaRC logical partition (LPAR) at the NACC.
- Provide integrated support for the CBACC systems and coordinate work with NACC.
- Perform business production input/output including operating high-speed printers, developing production schedules, monitoring execution of applications jobs, and preparing all output for distribution.
- Operate, maintain, and enhance applications and integrated hardware-software systems that have been developed to meet requirements unique to LaRC.
- Develop and maintain systems and applications to address requirements for new or substantially enhanced LaRC-unique applications.
- Maintain documentation library for each system and application in the CBACC.
- Provide customer training and support for business and administrative applications.

The AIM Program will be phased out as functional applications are replaced according to the NASA Integrated Financial Management (IFM) plan for combining core financial applications, human resource applications, and several specific business applications at the Marshall Space Flight Center. The components of the IFM are to be Commercial-Off-The-Shelf (COTS) products. They will be implemented in a phased approach, starting with the core financial module, continuing with the human resources module, and ending with approximately 11 specific packages. As each of these modules comes on line, the contractor shall support the transition from LaRC-unique applications to the IFM system. Furthermore, it is possible that LaRC will assist in the integration of one or more packages into the IFM system; the Government may issue task assignments to support these system development efforts.

6.2. LaRC Technical Library

The LaRC Technical Library operates a number of integrated hardware-software systems consisting of commercial-off-the-shelf (COTS) applications and information products as well as LaRC-developed applications that are used by the LaRC library staff in providing library services and by the LaRC research community in searching for and accessing information. These systems include NASA GALAXIE, a NASA-wide library management system

containing bibliographic information on the holdings for all of the NASA libraries and providing modules for managing and automating circulation, acquisitions, cataloging, serials check ins, materials requests, and other library tasks. Other systems include technical report servers which disseminate documents over the internet, a database application used to track and report on LaRC technical publications, interlibrary loan systems, and CD-ROM and database servers. New electronic information products are emerging rapidly and the Library is continuously evaluating, installing, and planning for these new products. Requirements specific to this work area include:

- Provide integrated support for NASA GALAXIE system and provide customer support to staff in all NASA libraries in the form of telephone support, staff training, documentation, and meetings with users.
- Provide integrated support for all other library systems. Install, update, and maintain electronic databases received on CD-ROM, diskette, or computer tape on servers networked within the library and LaRC.
- Operate, maintain, and enhance digital library applications running on technical report servers.
- Perform database administration and maintain and enhance database applications.
- Provide library with input as to maintenance needs of the various systems, needed system upgrades, changes in system technology.
- Consult with library staff on provided new digital information services.

6.3. World-Wide Web Servers

Central web servers and products on those servers are available to all LaRC personnel for web site hosting and web development activities, which promote and support LaRC teams, organizations, and programs. Several web technology products are available on the centralized web servers including web server software, web application development software, a search engine, site usage analysis tools, and Secure Socket Layer (SSL) capability.

Requirements specific to this work area include:

- Provide integrated support for central web servers including system administration, performance and security monitoring, daily backup, log monitoring and archival, and monthly access reports.
- Provide for all hosted web sites a unique virtual server name, a dedicated IP address, disk space for site development, limited consultation on site development, and monthly report of site activity.
- Develop site search capability.
- Respond to problems and questions directly related to web software residing on the WWW central servers and monitor sites and servers for any problems that interrupt services or compromise security.
- Administer a site license for the Netscape Enterprise server, Directory server, and Proxy server.
- Operate a web site allowing download of the software and provide customer installation and documentation support.
- Serve as web site curator.
- Participate in Center and Agency-level web activities (i.e, workshops, VITS, presentations)

6.4. Database Servers

A central database architecture is available for the development of applications by LaRC teams, organizations, and programs. The central environment can be used to develop applications to be hosted on central database servers or on customers' own systems. The central database architecture includes database servers running Oracle and Informix database management systems, along with web server software, web interface and other database development tools, and query tools. Requirements specific to this work area include:

- Provide integrated support for central database servers including database administration, system administration, performance and security monitoring, and daily backup.
- Administer Oracle and Informix licenses and licenses for associated database development tools.
- Provide database application development and consultation.

6.5. Large Scale Data Storage and Retrieval System

The contractor shall support the general-purpose production mass storage system. The current system is the Distributed Mass Storage System (DMSS) that employs the hierarchical storage management (HSM) software product named High Performance Storage System (HPSS). This system is used by users at LaRC and other NASA centers to:

- (1) archive data;
- (2) temporarily store large data files for near-term computation needs;
- (3) store data for scientific and business information systems
- (4) archive shared data for projects; and
- (5) backup systems

Requirements specific to this work area include:

- Provide integrated support for the general purpose mass storage system to deliver production mass storage services 24 hours per day, 7 days per week (24x7).
- Interface with other IT services that use the mass storage system.
- Stay abreast of rapidly changing mass storage technologies and investigate potential upgrades and new approaches.
- Test and verify new hardware and software systems prior to installation.
- Develop user applications or system tools that enhance user access, system performance and the operation of the system.
- Maintain a test system for testing system upgrades and running prototypes of new features.
- Provide a disaster recovery plan and necessary services for LaRC to use off-site storage for the execution of the disaster recovery plan.
- Plan, develop and execute the integration of a new system for production use, and the transition of all user data into the new system with a new HSM and/or new tape technology as required by the Government.

6.6. Distributed Computing Environment (DCE)

The contractor shall support the LaRC campus DCE core servers to deliver 24x7 secure campus DCE services on which many distributed applications are built and executed. Currently, this service is required by the HPSS application software on DMSS, for the security control, transaction management and metadata management. It is also used by the LaRC Distributed File System (DFS) and for secure access of computation servers. Requirements specific to this work area include:

- Provide integrated support for 24x7 production operation of DCE core servers
- Prototype DCE applications such as DFS.
- Provide assistance for DCE application development.
- Stay abreast of leading edge distributed system technologies for requirement studies.

6.7. LaRC IT Security Manager Support

The contractor shall support the LaRC Center IT Security Manager (CITSM) in implementing the NASA Security of Information Technology Program as described in NPG 2810.1. The CITSM's role is to develop Center-wide IT security policies and guidance, to provide computer awareness and training, to maintain an incident response capability, and to document, review, and report the status of the Center IT Security Program. The CITSM's responsibilities are further defined in paragraph 2.2.4 of NPG 2810.1. Requirements specific to this work area include:

- Provide a trained Incident Response Team.

- Operate and monitor the LaRC intrusion detection system.
- Operate and maintain the LaRC vulnerability scanning system (for penetration testing).
- Conduct risk analysis and assessment on request from system owners.
- Operate and maintain the LaRC and facility-specific firewalls.
- Maintain a LaRC specific web-site for IT security and conduct training in IT security.
- Acquire, implement and maintain computer systems and tools for automating IT security functions.
- Coordinate IT security activities with ITS personnel at other NASA Centers and Headquarters.

6.8. Network Design and Development (Mod 52)

LaRCNET is the centrally-operated network which serves the data communications needs of the LaRC Research Center user community. In order to provide the best possible communications capabilities at LaRC, the CONITS contractor shall provide network expertise to plan for the evolution of LaRCNET architecture. Requirements specific to this work area include:

- Stay abreast of rapidly changing network technologies.
- Investigate potential upgrades and new approaches that might apply to the LaRC environment.
- Test and verify new hardware and software systems prior to installation.
- Integration of new technology for advancement of LaRCNET.
- Operation and maintenance of the integrated network.

6.9. Software Engineering Process Group

Software Engineering Process Group support includes the definition, implementation, and continuous improvement of complete software development lifecycle processes and procedures for LaRC research programs. The primary focus of this area is to support LaRC organizations with implementing LaRC's Software Process Improvement Initiative, the software related LaRC Management System Center Procedures, and the key process areas of the Software Engineering Institute's Capability Maturity Model. Requirements specific to this work area include:

- Evaluate, implement, and aid others in the use of current and new software technologies, methods, processes, and procedures.
- Collect and analyze process, procedure, and product metrics to improve software reliability, productivity, quality, and system performance.
- Develop software requirements, design, code, and test products.
- Assist in the implementation and improvement of software related to LaRC Management System Center Procedures.
- Assist in the implementation of the Key Process Areas of the Software Engineering Institute's Capability Maturity Model.
- Assist LaRC Programs/Projects in managing the development of and production of glue-ware / middle-ware to implement their requirements.
- Assist LaRC Organizations/Programs/Projects in effectively implementing software reuse.
- Select and use Computer Aided Software Engineering (CASE) tools.

6.10. High Performance Computing

LaRC has been involved in the Federal High Performance Computing and Communications Program (HPCCP) with goals to accelerate the rapid development of future generations of high performance computers and networks and the use of these resources in the Federal government and throughout the American economy. LaRC currently participates in the research of Computational AeroSciences (CAS), an area of HPCCP "grand challenges", through the use of networks of high-performance computers for multi-discipline optimization in the design of airframes. The

LaRC major requirements for the support of high performance computing have been generated under HPCCP. Requirements specific to this work area include:

- Administer the HPCC testbed computer systems.
- Facilitate the development, debugging, performance analysis, and optimization of user applications.
- Benchmark, test, and evaluate new architectures and software.
- Develop, and implement state-of-the-art numerical algorithms.
- Administer LaRC parallel and clustered computational or application servers with state-of-the-art architecture
- Support specialized libraries for system or software development for high performance computing architecture

6.11. Surface Modeling and Grid Generation

Surface modeling and grid generation support includes the production of accurate surface definitions and numerical grids for Computational Fluid Dynamics (CFD), Computational Structural Mechanics (CSM), and other engineering analyses. This work is centered in the Geometry Laboratory (GEOLAB). Requirements specific to this work area include:

- Provide integrated support for the GEOLAB systems.
- Create and modify numerical surface models to be compatible with software tools using multi-block structured or unstructured grid generation techniques using computer aided design software systems.
- Generate numerical grids compatible with analysis software and geometry.
- Analyze grid quality and validate surface modeling and grid generation integrity.
- Incorporate surface model measurements acquired using digital scanners into surface models.
- Develop software and user interfaces to integrate use of geometry tools.
- Provide consultation services in the areas of structured and unstructured grid generation and geometry modeling.

6.12. Data Visualization and Image Processing

Data visualization support involves the development and application of data analysis and visualization tools and techniques for a wide variety of disciplines including Computational Fluid Dynamics, Computational Structures, atmospheric modeling, remote sensing, and experimental fluid dynamics. This work is primarily in support of the Data Visualization and Analysis Laboratory (DVAL). Requirements specific to this work area include:

- Provide integrated support for the DVAL systems.
- Generate static and dynamic visualizations from experimental and computational data sets.
- Process and analyze large sequences of video images.
- Apply collaborative virtual environments technology to specific research problems.
- Develop custom software applications with sophisticated graphical user interfaces.
- Apply feature extraction techniques to complex, multivariate data sets.
- Consult on methods for the comparative visualization of simulated and observed results.

6.13. World Wide Web Application Support

WWW support is focused on application development activities at LaRC. The term “WWW application” refers to software products that include a World Wide Web browser as their user interface. Typical WWW applications are comprised of static or dynamically generated code in Hypertext Markup Language (HTML), often include executable components and sometimes include connectivity to databases. Requirements specific to this work area include:

- Develop WWW applications including web page interface design.
- Develop code and data reuse repositories.

6.14. Data Management Support

Data management support includes information management applications, Database Management System (DBMS) support, data modeling, knowledge management system support, and program integration. Requirements specific to this work area include:

- Develop and maintain web-based information management systems for scientific and administrative data management including data model, graphical user interface, and database interface development.
- Evaluate, design, and/or implement information management technologies.
- Evaluate and apply database connectivity tools, database standards, and data format standards to data management applications.
- Provide administration of database management systems such as, but not limited to, Informix and Oracle and application server software.
- Incorporate knowledge management with software agents that provide specific data services and can in turn invoke other software agents.

6.15. Distributed Systems

Distributed systems consist of clusters of networked computers and associated equipment, located at various sites throughout the Center, which are used in specific experimental or analytical environments. These clusters are generally used by small groups of researchers or engineers with particular specialties such as computational fluid dynamics, engineering development, software development, and other IT intensive applications. Most work will be accomplished at LaRC; however, occasional travel will be required to support work in collaboration with other NASA centers, Government agencies, and industry.

The majority of the services required for distributed systems are systems administration, database administration, hardware and software maintenance, and applications management as described in Section 4. Services to be provided for applications programs include "Commercial-off-the Shelf" (COTS) as well as custom software developed by civil service personnel or other contractors. Support for this applications software may include only the distribution and installation of the applications package and upgrades (designated as software maintenance) or services all the way up to full technical support including software development, enhancements, and consultation. Examples of COTS applications support include Pro Engineer, Matlab, LabView, NASTRAN, and Mechanica, as well as custom software applications for database management and knowledge management.

6.16. Data Reduction

Data reduction programming and analysis support is required at LaRC by a wide variety of research facilities with research disciplines ranging from rotorcraft, low-speed aircraft to hypersonic spacecraft, dynamic flight testing, and structural analysis and materials research in static laboratory testing. A significant portion of this support includes the development of utility and application interfaces such as Graphical User Interfaces (GUI) code or control software, using COTS packages such as Sherill-Lubinski Graphics Modeling System (SL-GMS) or LabView. The development may also include data acquisition software and translators for information exchange between heterogeneous platforms and other IT intensive applications. The extent of the application management support for the existing and newly developed applications may range from installation only to full support involving additional software or script development, code enhancements, execution of the application, generation of required products, and consultation. Requirements specific to this work area include:

- Algorithm and code development in computer languages including but not limited, to FORTRAN, C, C++, Java and Visual Basic
- Application management of legacy codes
- Execution of data acquisition, analysis and presentation applications based on Government's test and data presentation requirements, and the delivery of products
- Performing data distribution and data archival

6.17. Geographic Information Systems

Geographic Information System (GIS) is an intuitive decision making tool used primarily by LaRC institutional managers. It is a Spatial Information Management (SIM) system built around a relational database consisting of data that includes or is derived from such records as: aerial photographs, topographic maps, descriptions and engineering drawings of buildings and facilities, utility plats, geological data, climatic records, financial data, and personnel locator records. The location of objects such as buildings - or even individual offices - is given with high accuracy in coordinates derived from the satellite-based Global Positioning System (GPS). Support is often provided at remote sites.

The database can be interactively queried through web pages to extract up-to-date maps or plans restricted to selected features or to produce reports relating selected data. Examples are: maps depicting the effects of flooding correlated to tidal stages; maps and reports in support of master planning (e.g. land use, security, emergency evacuation, traffic flow, parking, landscaping and environmental monitoring); and reports on space utilization (e.g., office occupancy densities for both contract and civil service personnel, and associated full cost accounting for facilities). The personnel/office locator can be used to locate the office of an individual employee and then to display a map showing its location.

Other information can be extracted from the available data on a case-by-case basis.

Requirements specific to this work area include:

- Provide integrated support of the GIS systems
- Update and enhance GIS databases
- Provide field observation, network solution, equipment readiness, and report generation in support of GPS data gathering and use.
- Develop and enhance software products for the display, maintenance, and publication of building spatial data and Master Plan related data.
- Develop new software tools and maintain existing tools to support the activities of the GIS.

6.18. Computational Analysis and Programming Services for Research and Flight Projects

This activity includes the mathematical modeling of physical systems; development of real-time embedded systems; 3D graphical scene generation; the determination of computational techniques and algorithms for the solution of the resulting mathematical problems on appropriate computer systems; and the development or adaptation of computer codes to implement the solution process. Mission software may be required for LaRC programs and projects, for example, the Aviation System Capacity Program, the Clouds and the Earth's Radiant Energy System (CERES) Project, and the Aviation Safety Program. Requirements specific to this work area include:

- Establish data management systems, graphical interfaces, and software for combining computer programs to provide for integrated analyses of multidisciplinary research projects.
- Develop embedded flight software systems to provide real-time instrument control and data acquisition.
- Develop ground computer software systems to support instrument development, test, calibration, commanding, and simulation.
- Develop software procedures for the integration and test of a flight experiment with its spacecraft or airframe platform. On-site diagnostic support for comprehensive performance tests that involve the operational behavior of the flight experiment and its attendant flight software and ground systems.
- Write and maintain project documentation for software systems. Programming languages required include, but are not limited to, FORTRAN, C, C++, Java, Javascript, and Perl.

6.19. Card Key System

Access to many of the buildings and interior secure areas on the LaRC campus is controlled by electronic door locks equipped with magnetic card key readers. Each door lock is connected to a node on an independent network under control of a master computer. The LaRC Security Officer issues card keys and permissions for individuals to access particular areas during selected time periods. Requirements specific to this area include:

- Support the administration of the card key system master computer
- Maintain the access database
- Plan for the addition of new secure areas
- Monitor network and card key installations.

6.20. Central Computer Facility Environmental Monitoring

Building 1268 complex (including 1268, 1268A, 1268B, 1268C, and 1268D) shares a common environmental monitoring system. The system monitors temperature and humidity and airflow in various equipment areas and displays this information in graphical form so that heating, cooling, and air handling systems can be adjusted for optimum conditions. Requirements specific to this area include:

- Monitor backup power systems for readiness.
- Support the administration of the computer that displays environmental data. Plan for the addition of new equipment areas and updating the monitoring system as necessary.

Advise Facility Coordinator or designee of problems or any situation requiring remedial or corrective action.

EXHIBIT B (AMENDED BY EXCEL FILE REV 4A.XLS MOD 64)

LABOR LOADED RATES AND TRAVEL, TOOLS, AND OTHER DIRECT COSTS (ODC) INDIRECT HANDLING RATES

The following is a list of labor categories and their associated fully loaded direct labor cost per hour. These labor categories and rates will be used by the Government and Contractor to establish the estimated cost for individual TA's.

**FULLY LOADED DIRECT LABOR COST PER HOUR FOR BASE YEAR
February 1, 2001 – May 31, 2001**

Labor Categories	Fully Loaded Direct Labor Cost per Hour
<u>Contractor Site</u>	
Master IT Analyst	
Senior IT Analyst	
Journeyman IT Analyst	
Apprentice IT Analyst	
Junior IT Analyst	
Entry Level IT Trainee	
Senior Subject Matter Expert	
Subject Matter Expert	
Senior Technician	
Journeyman Technician	
Technician	
Junior Technician	
Procurement Mgt. Expert	
Project Control Officer	
Emerging Technology Expert	
Clerical	
Technical Writer	
<u>Government Site</u>	
Master IT Analyst	
Senior IT Analyst	
Journeyman IT Analyst	
Apprentice IT Analyst	
Junior IT Analyst	
Entry Level IT Trainee	
Senior Subject Matter Expert	
Subject Matter Expert	
Senior Technician	
Journeyman Technician	
Technician	
Junior Technician	
Procurement Mgt. Expert	
Project Control Officer	
Emerging Technology Expert	
Clerical	
Technical Writer	

FULLY LOADED DIRECT LABOR COST PER HOUR FOR BASE YEAR
June 1, 2001 – January 31, 2001

Labor Categories	Fully Loaded Direct Labor Cost per Hour
<u>Contractor Site</u>	
Master IT Analyst	
Senior IT Analyst	
Journeyman IT Analyst	
Apprentice IT Analyst	
Junior IT Analyst	
Entry Level IT Trainee	
Senior Subject Matter Expert	
Subject Matter Expert	
Senior Technician	
Journeyman Technician	
Technician	
Junior Technician	
Procurement Mgt. Expert	
Project Control Officer	
Emerging Technology Expert	
Clerical	
Technical Writer	
<u>Government Site</u>	
Master IT Analyst	
Senior IT Analyst	
Journeyman IT Analyst	
Apprentice IT Analyst	
Junior IT Analyst	
Entry Level IT Trainee	
Senior Subject Matter Expert	
Subject Matter Expert	
Senior Technician	
Journeyman Technician	
Technician	
Junior Technician	
Procurement Mgt. Expert	
Project Control Officer	
Emerging Technology Expert	
Clerical	
Technical Writer	

FULLY LOADED DIRECT LABOR COST PER HOUR FOR OPTION PERIODS 1-3

Labor Category	First Option Period	Second Option Period	Third Option Period
<u>Contractor Site</u>			
Master IT Analyst			
Senior IT Analyst			
Journeyman IT Analyst			
Apprentice IT Analyst			
Junior IT Analyst			
Entry Level IT Trainee			
Senior Subject Matter Expert			
Subject Matter Expert			
Senior Technician			
Journeyman Technician			
Technician			
Junior Technician			
Procurement Mgt. Expert			
Project Control Officer			
Emerging Technology Expert			
Clerical			
Technical Writer			
<u>Government Site</u>			
Master IT Analyst			
Senior IT Analyst			
Journeyman IT Analyst			
Apprentice IT Analyst			
Junior IT Analyst			
Entry Level IT Trainee			
Senior Subject Matter Expert			
Subject Matter Expert			
Senior Technician			
Journeyman Technician			
Technician			
Junior Technician			
Procurement Mgt. Expert			
Project Control Officer			
Emerging Technology Expert			
Clerical			
Technical Writer			

FULLY LOADED DIRECT LABOR COST PER HOUR FOR OPTION PERIODS 4 - 7

Labor Category	Fourth Option Period	Fifth Option Period	Sixth Option Period	Seventh Option Period
<u>Contractor Site</u>				
Master IT Analyst				
Senior IT Analyst				
Journeyman IT Analyst				
Apprentice IT Analyst				
Junior IT Analyst				
Entry Level IT Trainee				
Senior Subject Matter Expert				
Subject Matter Expert				
Senior Technician				
Journeyman Technician				
Technician				
Junior Technician				
Procurement Mgt. Expert				
Project Control Officer				
Emerging Technology Expert				
Clerical				
Technical Writer				
<u>Government Site</u>				
Master IT Analyst				
Senior IT Analyst				
Journeyman IT Analyst				
Apprentice IT Analyst				
Junior IT Analyst				
Entry Level IT Trainee				
Senior Subject Matter Expert				
Subject Matter Expert				
Senior Technician				
Journeyman Technician				
Technician				
Junior Technician				
Procurement Mgt. Expert				
Project Control Officer				
Emerging Technology Expert				
Clerical				
Technical Writer				

TRAVEL, TOOLS, AND OTHER DIRECT COSTS (ODC) INDIRECT HANDLING RATES

The following is a list of the indirect handling rates to be applied to travel, tools, and ODC's (including specialized TA training, hardware and software maintenance, etc.). These rates will be used by the Government and Contractor to establish the estimated cost for individual task assignments.

	<u>Rate</u>
Base Period	
Travel	
Tools	
ODC's	
First Option Period	
Travel	
Tools	
ODC's	
Second Option Period	
Travel	
Tools	
ODC's	
Third Option Period	
Travel	
Tools	
ODC's	
Fourth Option Period	
Travel	
Tools	
ODC's	
Fifth Option Period	
Travel	
Tools	
ODC's	
Sixth Option Period	
Travel	
Tools	
ODC's	
Seventh Option Period	
Travel	
Tools	
ODC's	

EXHIBIT C (REVISED BY MOD 38)

AWARD FEE EVALUATION PLAN

FOR TASK ORDER

ON THE GSA MILLENNIA CONTRACT

FOR

CONSOLIDATED INFORMATION TECHNOLOGY

SERVICES

(CONITS)

(Revision 1)

APPROVED:

Award Fee Evaluation Board Chairman

Date

AWARD FEE BOARD MEMBERS

David H. Jones
SCCB, Office of Procurement

Kathy Stacy
DAIB, SEC

James H. Ogiba
OCFO

Robert E. Grandle
AAAC

John M. Kusterer
ISB, OCIO

Nancy Ballay
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TABLE OF CONTENTS

PART I AWARD FEE EVALUATION BOARD CHARTER AND MEMBERS

PART II DEFINITIONS AND PROCEDURES

PART III EVALUATION PROCESS

PART IV EVALUATION FACTORS AND CONSIDERATIONS

PART V CHANGES TO EVALUATION PLAN

EXHIBIT A SCORING GUIDELINES

EXHIBIT B EVALUATION PROCESS SCHEDULE

PART I - AWARD FEE EVALUATION BOARD CHARTER AND MEMBERS

A. General

The Award Fee Evaluation Board (AFEB) derives its authority from a Langley Research Center memorandum dated August 1, 2001, signed by the Center Director.

The Charter of the AFEB is to maintain an organization and establish a method of operation which will ensure acquisition of data necessary to permit a valid semi-annual assessment of the Contractor's performance in the following four areas: Technical Performance, Management, Cost, and Utilization of Small and Small Disadvantaged Business (SDB) Subcontractors. The AFEB is to develop an evaluation plan, evaluate the Contractor's overall performance concerning the contract work, discuss such evaluations with the Contractor, receive and consider any additional performance data provided, and submit to the Fee Determination Official a fee recommendation for each evaluation period with applicable results and findings.

B. Award Fee Organization

The Award Fee Evaluation Board (AFEB) membership consists of those individuals appointed in the memorandum dated August 1, 2001 signed by the Center Director. Changes in the AFEB Chairman, Other Voting Members, Secretary, and Coordinators will be approved by the Fee Determination Official. Changes to Task Area Monitors will be issued and approved by the COTR. The Contractor will be provided with copies of any such changes.

PART II – DEFINITIONS AND PROCEDURES

- A. AFEB Meeting - The meetings will be scheduled so that the evaluation process can be completed and the Determination and Findings presented to the Fee Determination Official for action within 45 days following completion of the evaluation period. (An Evaluation Schedule is included as Exhibit B to this Plan.) At least four AFEB Voting Members shall be present in order to conduct the meeting. One of the Voting Members present must be the Chairperson or a designated alternate.
- B. AFEB Chairperson - A NASA Langley employee designated to lead the Award Fee evaluation process. The Chair is responsible for leading the preparation of the Award Fee Plan and for all Meetings of the AFEB. The Chair shall schedule all meetings so that the evaluation process can be completed within the time allotted.
- C. AFEB Recording Secretary - A NASA Langley employee responsible for the documentation of the activities of the AFEB. The Recording Secretary is responsible for the minutes of meetings or other documentation that summarizes the information reviewed, including any additional information provided by the contractor, and the consideration given to all such information. Announcements, documentation and files are important to support the meetings and recommendations of the AFEB.
- D. Task Area Monitor (TAM) - A NASA Langley employee designated to observe, assess, and report on the performance of the Contractor to the Technical Coordinator.
- The TAM will compile semi-annual performance data in a report using the metrics specified in Part IV of this award fee plan as the basis for evaluation. In addition, areas in need of improvement, as well as any other information sufficient to provide the Technical Coordinator with a clear understanding of the Contractor's performance will be provided.
- E. Contractor - The Contractor shall submit a self-evaluation of performance within 10 business days from the end of each Award Fee evaluation period. This report will be used by the Technical and Business Coordinators in assessing the Contractor's performance for the period.
- F. Coordinators - NASA Langley employees designated to receive, validate, assess, and consolidate the Task Area Monitors' reports and present performance information to the AFEB.

- G. AFEB - A Board of NASA Langley and GSA employees who perform an in-depth review of all aspects of Contractor performance and recommend an appropriate performance rating and fee amount to the Fee Determination Official.

The AFEB is responsible for developing the Award Fee Evaluation Plan used to evaluate the Contractor's performance and will periodically review the plan to determine whether it is still current and whether any changes are necessary. The AFEB will convene after each semi-annual evaluation period to evaluate the Contractor's performance, on a schedule consistent with the completion of the total Award Fee Process through fee payment within 60 days of the end of the award fee evaluation period. As requested by the Chairperson, any other personnel involved in performance evaluation will attend the meeting and participate in discussions.

- H. Fee Determination Official - A member of Langley Research Center's management designated to review the semi-annual recommendation of the Award Fee Board in order to make a final determination of award fee. Any change of the Fee Determination Official will be made by the Center Director.

PART III – EVALUATION PROCESS

There are two Coordinators for this contract. The Technical Coordinator is responsible for documenting and presenting the evaluation of the Contractor's Technical Performance, technical management, and the Task Assignment (TA) cost performance. The Technical Coordinator is also responsible for documenting and presenting the evaluation of the Contractor's combined Technical and Business Management performance. The Business Coordinator is responsible for evaluating business management and documenting and presenting the evaluation of the Contractor's performance for the Cost Factor and the Utilization of Small and Small Disadvantaged Business (SDB) Subcontractors Factor.

The Technical Coordinator will provide a comprehensive report to the AFEB which documents strong and weak points and fully justifies each rating recommended as described in Part IV below. The Technical Coordinator will review and consolidate the TAMs' reports, will make an independent assessment of the performance rendered by the Contractor, and will assign a recommended adjective rating (see Exhibit A) for Technical Performance. In deriving these technical performance ratings, the Technical Coordinator will also take into account the amount of effort and technical complexity associated with each of the Task Area Monitors' work areas.

The Technical Coordinator will then present and document a comprehensive review of the Contractor's performance under the Management Factor, detailing strengths and weaknesses and assigning an adjective rating. In developing the rating, the Technical Coordinator will consider the performance standards and metrics outlined below (see Factor 3 - Management). The Business Coordinator will provide input to the Technical Coordinator regarding the Contractor's performance for business in the Management Factor.

The Business Coordinator will evaluate the Cost Factor and will evaluate the Utilization of Small and SDB Subcontractors Factor. The Business Coordinator will present and document a complete review of the effectiveness of the Contractor's management of costs in accordance with the cost metrics. The Business Coordinator will also assess and report the Contractor's overall task order cost performance, including control of labor rates, overhead, G&A and other burden rates, and other costs. The Business Coordinator will also evaluate the performance of the Contractor against the goals set forth in the Small and SDB Subcontracting Plan and assign a recommended adjective rating. The Business Coordinator will provide a comprehensive report to the AFEB that documents strong and weak points.

The Coordinators' reports will be forwarded to the other members of the AFEB at least 2 business days prior to the scheduled AFEB meeting. The Coordinators will present an informal oral briefing of their evaluation results to the AFEB at the evaluation meeting. TAMs or their representatives may be in attendance at the award fee meeting.

The available award fee is computed as specified in Paragraph 6 of the Task Order. The fee available for each Factor - Technical (Quality and Timeliness), Cost, Management, and Small and Small Disadvantaged Business - will be computed using the Factor weights set forth in Part IV below. The percentages computed using the formulas set forth in Part IV will be reviewed by the AFEB and accepted or revised to reflect actual performance. The AFEB

will assess the evaluation and formula results considering the conditions under which performance was achieved. For example, performance will be considered in light of the priorities and workload existing during the evaluation period, taking into consideration factors beyond the Contractor's control that either enhanced or detracted from performance.

The AFEB will develop a numerical rating for each Factor and a corresponding adjective rating for each Factor according to Exhibit A. These numerical factor ratings will be applied to the available fee for each Factor to determine earned fee for those Factors.

The AFEB will then sum the earned fee for each of the Factors. This earned fee will be computed as a percentage of the total available fee and that percentage will be converted to an adjective rating from Exhibit A.

The AFEB will provide the Contractor with a comprehensive briefing of the evaluation findings for all Factors. The AFEB will consider any further performance data offered by the Contractor, and if necessary, will revise evaluation findings, adjective ratings, and recommended fee rating to reflect this additional information. The AFEB will document its evaluation results and recommended fee amount for transmittal to the Fee Determination Official. If the Fee Determination Official's final determination of award fee is different from that recommended by the AFEB, the Fee Determination Official will document the rationale for the AFEB's file. The Business Coordinator will prepare a "Notice of Award Fee" for transmittal by the Contracting Officer to the Contractor.

The Office of Procurement will maintain the official Award Fee evaluation files containing: the AFEB Establishment Memorandum and revisions, Evaluation Plan and revisions, minutes of meetings, Coordinators' and Monitors' reports, Contractor submittals, general correspondence, memoranda to the Fee Determination Official, Determinations of Award Fee, Notices of Award Fee, and other documents of significance.

PART IV EVALUATION FACTORS AND CONSIDERATIONS

The contractor's information management system will provide input data to the evaluation process by tracking each task assignment's parameters for proposal response, timeliness, costs, and other input data as required by the TAM's to effectively track and score performance.

The factors to be evaluated in judging the contractor's performance and the relative weights are shown in the table below.

AWARD FEE EVALUATION FACTORS AND WEIGHTS

<u>Factor No.</u>	<u>Brief Factor Identification</u>	<u>Factor Weight</u>
1	Technical Performance (Quality and Timeliness)	40 percent
2	Cost Performance	25 percent
3	Management	25 percent
4	Small Disadvantaged Business	10 percent

Factor 1, Technical Performance

The effectiveness of the Contractor's overall technical performance will be evaluated. Consideration will be given to both quality and timeliness of the work performed under the task assignment. Task assignment monitors will provide feedback on the contractor's performance in both satisfaction of the work and in meeting the metrics as defined in each Task Assignment (TA).

Fee is earned on a per Task Assignment basis and will depend on the contractor's ability to meet metrics and in satisfying the overall task assignment requirements. Technical performance is weighted at 40% for each Task Assignment. The evaluation of the metric performance for the TA is considered of equal weight to the Technical Monitor's satisfaction ratings for the period.

Factor 2, Cost Performance

Cost will be assigned 25% of the available award fee. The Cost score for each Task Assignment will be derived by comparing the negotiated (planned) cost to actual cost using the scoring scheme outlined below. The recommended Cost fee will then be determined by multiplying the percentage Cost score by the available fee for Cost.

- When actual cost = negotiated cost for the Task Assignment,

Cost Score = 90%.

- When actual cost > negotiated cost for the Task Assignment,

Cost Score = 90% - (4 × n).

[n is the percentage of the negotiated cost by which actual cost exceeds negotiated cost; a cumulative Cost Score of 60% or less will result in a score of zero percent for the cost factor.]

- When actual cost < negotiated cost for the Task Assignment,

Cost Score = 90% + n.

[n is the percentage of the negotiated cost by which negotiated cost exceeds actual cost; the cost score cannot exceed 100% for an individual Task Assignment.]

The Government will also consider the contractor's overall Cost Management including control of labor rates, overhead, G&A, other burdened rates, and other costs. The Government will also consider the extent to which the Contractor makes sensible tradeoffs between technical performance and cost, e.g., productivity and expertise vs. labor rates. The Contractor is expected to be proactive in controlling and managing costs such as labor rates, overhead, G&A, and other burdened rates, and other costs.

Factor 3, Management

This factor is evaluated at the TO level, and carries a weight of 25% of the total available fee for each Award Fee Period. The effectiveness of the Contractor's overall technical and business management will be evaluated. Of particular importance is the Contractor's effectiveness in managing multiple objectives to ensure that all customers on this TO, large and small, are provided superior support. In addition, consideration will be given to:

- Management effectiveness
- Response to emergency and other urgent tasks
- Recognition, resolution, and prevention of problems
- Quality and timeliness of required documentation
- Safety record and company policies and procedures to maintain a safe environment
- Communications/cooperation/working relationships with Government and the ODIN contractor
- Effective staffing of the contract (including training)
- Soundness of management systems (e.g., purchasing and subcontracting, time and attendance, control of Government property, work scheduling and control)
- Adequacy of facility, equipment, and other tools to perform contract
- Trends or recurring problems

The Technical Coordinator will solicit input for consideration from the Business Coordinator to evaluate the contractor's management performance. The Technical Coordinator will consider any other actions that significantly contribute to or detract from effective management. The contractor shall take steps to prevent poor performance trends and recurring problems, resolving them expeditiously, and responding to emergency requests promptly. The

contractor is expected to meet requirements by implementing retention, recruitment and replacement policies that are highly effective in providing fully trained and qualified personnel. In addition, the Contractor shall maintain a safe working environment. The Contractor shall submit accurate technical and contract documentation on time. It is expected that the documentation will be error free, complete, and understandable and received on or before due dates

In general, these are areas that the award fee board will review in evaluating the contractor's performance for technical and business management. However, the award fee board has the prerogative of considering additional factors based on work priorities or other extenuating circumstances where poor performance may have affected a mission critical area of work under this task order.

Factor 4. Utilization of Small Business and SDB Subcontractors

This factor is evaluated at the TO level and carries a weight of 10% of the total available fee for each Award Fee Period. The Contractor's actual subcontracting performance as compared to the goals set forth in their Small and Small Disadvantaged Business Subcontracting Plan will be evaluated.

PART V - CHANGES TO EVALUATION PLAN

Throughout the period of performance, both parties to the TO are encouraged to submit suggestions for changing management emphasis, motivating higher performance levels, or improving the evaluation process. Both the Government and the contractor should work to eliminate any unnecessary contractual, organizational, or conceptual barriers that diminish information sharing and other communications needed for successful joint problem solving.

With the exception of changes to AFEB personnel, which are covered in Part I above, any changes to this Award Fee Evaluation Plan will be made by the AFEB. The Government may alter the plan unilaterally to reflect any changes in emphasis or concern. Changes will be made available to the Contractor, through the Contracting Officer, prior to the first evaluation period in which the change will be effective. Changes may be made during a period, and be retroactive to the beginning of the period, with the approval of the AFEB and the Contractor.

EXHIBIT A
SCORING GUIDELINES

Each evaluation factor is scored based on these guidelines. The determining percentage for each factor is weighted to derive a recommended award fee rating.

<u>Adjective</u>	<u>Description</u>	<u>Performance Points</u>
Excellent	Of exceptional merit; exemplary performance in a timely, efficient, and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance.	91-100
Very Good	Very effective performance, fully responsive to contract requirements accomplished in a timely, efficient, and economical manner for the most part. Only minor deficiencies.	81-90
Good	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.	71-80
Satisfactory	Meets or slightly exceeds minimum acceptable standards; adequate results. Reportable deficiencies with identifiable, but not substantial, effects on overall performance.	61-70
Poor/ Unsatisfactory	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely affect overall performance	0*

- Any factor/subfactor receiving a rating of Poor/Unsatisfactory will be assigned zero performance points for the purposes of calculating the award fee amount. An aggregate rating for all factors of Poor/Unsatisfactory will result in a fee of zero dollars for the period.

Cost Factor Score Limitation: The Contractor will normally be rewarded for an underrun within its control, up to the maximum score allocated for Cost, provided the weighted average numerical rating for all other evaluation factors is 81 or greater. An underrun shall be rewarded as if the Contractor has met the estimated cost of the Task Assignment when the weighted average numerical rating for all other factors is less than 81 but greater than 60. A score of zero for Cost shall be given if the weighted average numerical rating for all other evaluation factors under a Task Assignment, is less than 61.

EXHIBIT B

ACTIONS AND SCHEDULES FOR AWARD FEE DETERMINATIONS

The following is a summary of the principal actions involved in determining the award fee for each evaluation period and meeting NASA's metrics for Contractor Notification and Payment of Fee.

<u>Action</u>	<u>Schedule (Calendar Days)</u>
1. AFEB Chair and members appointed	Prior to contract award.
2. AFEB considers reports and other requested performance information.	On-going
3. Contractor submits self-evaluation report.	NLT 10 business days after end of each award fee period.
4. AFEB meets and summarizes preliminary findings.	NLT 37 calendar days after end of each award fee period.
5. AFEB meets with the Contractor to discuss preliminary findings.	NLT 38 calendar days after end of each award fee period.
6. AFEB establishes findings and recommendations for the AFER.	NLT 39 calendar days after end of each award fee period.
7. AFEB submits AFER to the FDO.	NLT 40 calendar days after end of each award fee period.
8. FDO considers the AFER and discusses it with AFEB, as appropriate.	NLT 43 calendar days after end of each award fee period.
9. FDO sends award fee determination memorandum to C.O.	NLT 44 calendar days after end of each award fee period.
10. C.O. sends award fee notification letter to Contractor	NLT *45 calendar days after end of each award fee period.
11. Payment made to Contractor	NLT *60 calendar days after end of each award fee period.

*NASA Award Fee Payment Metrics

EXHIBIT A

SCORING GUIDELINES

Each evaluation factor is scored based on these guidelines. The determining percentage for each factor is weighted to derive a recommended award fee rating.

<u>Adjective</u>	<u>Description</u>	<u>Performance Points</u>
Excellent	Of exceptional merit; exemplary performance in a timely, efficient, and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance.	91-100
Very Good	Very effective performance, fully responsive to contract requirements accomplished in a timely, efficient, and economical manner for the most part. Only minor deficiencies.	81-90
Good	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.	71-80
Satisfactory	Meets or slightly exceeds minimum acceptable standards; adequate results. Reportable deficiencies with identifiable, but not substantial, effects on overall performance.	61-70
Poor/ Unsatisfactory	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely affect overall performance	0*

- Any factor/subfactor receiving a rating of Poor/Unsatisfactory will be assigned zero performance points for the purposes of calculating the award fee amount. An aggregate rating for all factors of Poor/Unsatisfactory will result in a fee of zero dollars for the period.

Timeliness Factor Score Limitation: The computation for Timeliness will never go below zero.

Cost Factor Score Limitation: The Contractor will normally be rewarded for an underrun within its control, up to the maximum score allocated for Cost, provided the weighted average numerical rating for all other evaluation factors is 81 or greater. An underrun shall be rewarded as if the Contractor has met the estimated cost of the Task Assignment when the weighted average numerical rating for all other factors is less than 81 but greater than 60. A score of zero for Cost shall be given if the weighted average numerical rating for all other evaluation factors under Task Assignment, is less than 61.

EXHIBIT B

ACTIONS AND SCHEDULES FOR AWARD FEE DETERMINATIONS

The following is a summary of the principal actions involved in determining the award fee for each evaluation period and meeting NASA's metrics for Contractor Notification and Payment of Fee.

<u>Action</u>	<u>Schedule (Calendar Days)</u>
1. AFEB Chair and members appointed	Prior to contract award.
2. AFEB considers reports and other requested performance information.	On-going
3. Contractor submits self-evaluation report.	NLT 10 business days after end of each award fee period.
4. AFEB meets and summarizes preliminary findings.	NLT 37 calendar days after end of each award fee period.
5. AFEB meets with the Contractor to discuss preliminary findings.	NLT 38 calendar days after end of each award fee period.
6. AFEB establishes findings and recommendations for the AFER.	NLT 39 calendar days after end of each award fee period.
7. AFEB submits AFER to the FDO.	NLT 40 calendar days after end of each award fee period.
8. FDO considers the AFER and discusses it with AFEB, as appropriate.	NLT 43 calendar days after end of each award fee period.
9. FDO sends award fee determination memorandum to C.O.	NLT 44 calendar days after end of each award fee period.
10. C.O. sends award fee notification letter to Contractor	NLT * 45 calendar days after end of each award fee period.
11. Payment made to Contractor.	NLT * 60 calendar days after end of each award fee period.

- *NASA Award Fee Payment Metrics

EXHIBIT D

SUBCONTRACTING PLAN (Incorporated by Modification #1)

EXHIBIT E – TASK ORDER DOCUMENTATION REQUIREMENTS

I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

A. Financial Management Reports--The Contractor shall comply with the clause of the TO entitled "NASA Contractor Financial Management Reporting" by monthly submission of NASA Form 533M. The form shall be prepared and submitted in accordance with the instructions set forth on the reverse side of the form and NASA Policy and Guidelines (NPG) 9501.2C, "NASA Contractor Financial Management Reporting," as further definitized below.

1. For this TO, a Form 533M shall be provided as follows:
 - a. For each authorized Task Assignment
 - b. Summary Report for the total Task Order
2. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.
3. Columns 8.a. and b. shall be completed using current estimates (forecasts) for the succeeding two months.
4. As a minimum, the categories specified below shall be reported:
 - Direct Labor Hours
 - Direct Labor Dollars
 - Overhead
 - Other Direct Costs:
 - Travel
 - Training
 - Tools
 - Subcontracts (list major subcontractors separately)
 - Other ODC's
 - Total Other Direct Costs
 - G&A
 - Estimated Cost
 - Award Fee
 - Cost-Plus-Award Fee
5. Each Form 533M shall include a narrative explanation for variances exceeding 10 percent between planned hours and dollars and actual hours and dollars for each reporting category.
6. Form 533 is due 10 working days following the close of the calendar month. (Mod 11)

B. Safety and Health Plan--Within 30 calendar days after the effective date of the TO, the offeror shall submit a detailed Safety and Health Plan addressing how the company intends to protect the life, health, and well being of NASA Langley Research Center contractor employees and visitors, as well as protect on-site property and equipment. The offeror's Safety and Health Plan shall address how the company implements the Safety and Health Plan internally as well as how these requirements are effectively implemented in any subcontracts. This Plan, as approved by the Contracting Officer, will be included in any resulting TO by reference. As a minimum, the plan shall address the following areas. If any area is not applicable to the effort, the contractor shall so state in the Plan.

1. Contract Identification – Provide Task Order number, period of performance and identification of all option periods, and a brief summary of the scope of work.

2. Points of Contact and Responsibility – Provide organizational flowchart, including area responsible for safety. The safety organization shall include identification of the Program Manager and the Safety Representative and describe responsibilities of each employee in the safety organization.
3. Safety Regulations – Provide a statement of compliance to applicable OSHA, Federal, State, Local, and Langley Research Center Safety Regulations.
4. Accident & Injury Reporting and Recordkeeping – Address process for immediate reporting of all serious accidents/injuries to the NASA LaRC Safety Office at 864-7233. Identify process for initiating and maintaining appropriate records concerning accidents and injuries, in accordance with OSHA 29 CFR 1904, including submission of documented accident/injury report to the NASA LaRC Safety Office within 5 working days of the incident.
5. Quarterly Safety Report – Within 10 working days after the end of each quarter, the contractor shall provide a statement and schedule of compliance for submission of Quarterly Safety Reports to the LaRC Safety Officer. The Quarterly Safety Reports submitted by the contractor shall include the hours worked on the contract and the number of fatalities, lost time cases, OSHA recordable incidents and first aid cases which have occurred during the past quarter.
6. Notice of Violations – Describe process by which the prime contractor shall respond to any Notice of Violation (NOV) issued for safety violations to the prime itself or its' subcontractors. The response process should address: cause for violation; mitigation of impact, if applicable; planned prevention of recurrence; timing of response to ensure compliance within LaRC's three working day response time requirement; and proper delivery to the issuer of the NOV.
7. Safety Meetings – Identify plan for conduct of regular safety meetings in accordance with LaRC Policy as described in LAPG 1740.3, "Facility Safety Head and Facility Coordinator Guide" located at <http://ldms.larc.nasa.gov/procedures.html>.
8. Subcontractor Compliance – Address how the prime contractor ensures subcontractor compliance to the approved Safety Plan.
9. NASA LaRC Lockout/Tagout System – Describe plan for compliance with LAPG 1910.10, "Safety Clearance Procedures (Lockout/Tagout)" located at <http://ldms.larc.nasa.gov/procedures.html>.
10. Ionizing and Non-Ionizing Radiation – Describe employee awareness training of radiation symbols and when they are used. (Reference LAPG 1710.5 and LAPG 1710.8 located at <http://ldms.larc.nasa.gov/procedures.html>.)
11. Potentially Hazardous Materials (LAPG 1710.12) – Describe employee awareness training for LaRC's hazardous materials program. (Reference LAPG 1710.12 located at <http://ldms.larc.nasa.gov/procedures.html>.)
12. Hazardous Communications Program – Describe the hazardous communications program as defined in CFR 29 Part 1910.1200. Include process for compliance with and updating of Material Safety Data Sheets (MSDS) for each chemical, oil, lubricant, solvent, etc., used on the job-site.
13. Confined Space Entry – Describe plan for training personnel in confined space entry and obtaining a Confined Space Entry Permit. Describe process for initial and hourly readings in accordance with OSHA 29 CFR 1910.146.
14. Employee Safety Training, Certification and Programs – Provide detailed information on employee safety training, certification and programs. Describe types of safety training required per duties performed, parties responsible for certification, and provide an outline of applicable regulations. Describe safety programs and how the programs emphasize safety and motivate employees to be safety conscious.

15. Hazardous Operations – Identify hazardous operations involved in performance of the contract and provide a plan for apprising employees of all hazards to which they may be exposed.
16. Crane Certification – Describe process for ensuring that all mobile/truck-mounted cranes brought on site by the prime or subcontractors have a current "Annual Certification of Load Test." Include crane location identification for crane certifications to facilitate inspections upon request by NASA Inspector or Office of Safety and Facility Assurance employees. Address the process by which the contractor and subcontractors notify the Office of Safety and Facility Assurance (864-5594 or 864-7233) that a mobile/truck mounted crane is being or has been brought onto the Center.
17. Scaffolding – Describe plan to ensure scaffolding designed, constructed and assembled in accordance with OSHA 29 CFR 1926.450 through 454.
18. Excavations and Trenching – Define process for obtaining a "Digging Permit" and ensuring compliance to applicable OSHA standards 1926.650-652 when performing surface penetrations of 6 inches or more.
19. Fall Protection – Address requirements for fall protection systems and compliance with OSHA 29 CFR 1926.500 through 1926.503, which defines the types of fall protection devices and systems.
20. Personal Protective Equipment – Describe personal protective equipment program and usage requirements in accordance with OSHA 29 CFR 1926 Subpart E.
21. Bloodborne Pathogens – Describe blood-borne pathogen awareness training program.
22. Asbestos Awareness – Describe asbestos awareness training program.
23. Hot Work Permit – Describe process for obtaining Hot Work Permits from the Fire Department, and location of approved and posted Permit. Address process for written deviation or waiver requests to be submitted for approval by the LaRC Fire Chief.
24. (24) Other Safety Considerations – Identify any other safety considerations unique to the performance of this task order.

C. Property in the Custody of Contractors (NASA Form 1018)--The Contractor shall submit the NASA Form 1018 no later than October 31 of each year in accordance with the clause entitled "Financial Reporting of NASA Property in the Custody of Contractors."

D. Evidence of Insurance--The Contractor shall submit evidence of the insurance coverage, required by 1852.228-75, Minimum Insurance Coverage, (i.e., a Certificate of Insurance or other confirmation), to the NASA Contracting Officer prior to performing under this TO. In the event the Government exercises its options to extend the term of the TO, the Contractor shall also present such evidence to the Contracting Officer prior to commencement of performance under the extension.

E. Monthly Technical Letter Progress Report--The Contractor shall submit monthly technical letter reports for each TA describing progress of the task to date, noting all technical areas in which effort is being directed and indicating the status of work within these areas. Task Assignments may be summarized in one letter report unless otherwise stipulated in individual TA's and should also address any deviations in staffing, cost, hours, and schedule from that approved in the Task Plan/SPMP. Reports shall be in narrative form, brief and informal in content. These reports shall include:

1. A narrative statement of work accomplished during the report period
2. A statement of current and potential problem areas and proposed corrective action

3. A discussion of work to be performed during the next report period

The monthly progress report shall be submitted within 10 days after the end of each calendar monthly report period.

F. New Technology Report--The Contractor shall submit all disclosures of reportable items and subject inventions, interim reports, subcontract identification and other information as required by the clause at 1852.227-70. Further, upon completion of the work under the TO (or subcontract, if any) a final report shall be submitted.

G. Subcontracting Reports--The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, and Standard Form 295, Summary Subcontracting Report, in accordance with the instructions on the reverse of the form. (Mod 1)

H. Documentation for Transferring Property to the Government—In accordance with the Installation-Accountable Government Property clause of this Task Order, accountability for that property which is acquired for the Government under this TO shall be passed to the Government using the following procedure:

The transfer of accountability shall be initiated by the Contractor submitting a Requisition and Invoice/Shipping Document, DD Form 1149, accompanied by a copy of the Contractor's applicable purchasing and receipt document for the property. The Contractor shall insert both the Contractor's Subcontract/Purchase Order number and the Government Task Order/Contract number on the DD Form 1149 under the "Federal Stock Number, Description, and Coding of Material and/or Services" block. For purchases of supplies and materials, this document shall be submitted within 30 days after the end of each calendar-year quarter (that is, not later than January 30, April 30, July 30, and October 30). For equipment purchases, this document shall be submitted within five workdays after acceptance of each item of equipment by the Contractor. Receipt by the Contractor of a copy of the DD Form 1149 signed by the Government relieves the Contractor of accountability for the property specified on that form.

I. Security Implementation Plan—In accordance with Paragraph 23, Security Requirements for Unclassified Information Technology Resources, within 30 days of TO award, the contractor shall submit a Security Implementation Plan, which will be approved by the Center IT Security Officer and be incorporated by reference in the TO.

J. Final Reports--Each task assignment may require the Contractor to submit a final report, either formal or informal, which documents and summarizes the results. When a formal final Contractor report is required, it shall be submitted in accordance with the instructions contained in Exhibit G, Procedures for the Preparation and Approval of Contractor Reports for Langley Research Center, Form PROC./P-72. The specified number of approval copies shall be submitted within the time specified in the task assignments.

For Center for AeroSpace Information (CASI), submit two paper copies (one of a quality that can be reproduced and a printed or reproduced copy) or one paper copy and the electronic format. Electronic formats include Adobe portable document format (PDF), Encapsulated Post Script, HTML, Standard Generalized Markup Language (SGML), ASCII full-text, WordPerfect, Microsoft Word, or CD-ROM. All graphics must be included. Standard Form 298, Report Documentation Page, shall comply with ANSI Standard Z39-18, OMB Approval 0704-0188. Ensure that the document has been approved by the responsible NASA Center for export control via NF Form 1676, NASA Scientific and Technical Document Availability (DAA), or the Center's equivalent form (Langley Form 99). Only Unclassified reports shall be submitted to the NASA Center for AeroSpace Information.

Note: Paragraph K. below ONLY applies to those offerors that are not ISO compliant at TO award:

K. Quality System Documents (ISO 9001)--The Contractor shall submit the following ISO-compliant documents in accordance with Paragraph 25 no later than nine months from the effective date of the TO:

1. Quality System Manual

2. Quality System Procedures - these procedures shall address: (1) contract and subcontract management, (2) customer requirement review and execution, (3) task management, including work order generation and processing, (4) document control, (5) handling of customer supplied product, (6) corrective and preventive action, (7) training of employees, and (8) design control for software development.

L. Full Cost Accounting Report—The Contractor shall provide a separate breakout of costs for each task assignment. LaRC will be using a full cost accounting approach in all program areas throughout the Center. An essential element of this approach will be accurate reporting of contract costs (including actuals and forecast) for the Government fiscal year. Under full cost, service activities must attribute all costs to applicable programs. Some task assignments under the CONITS task order will support the Information Technology Service Activity. Costs for work performed within these task assignments will be reported for each program/customer. Specific full cost reporting requirements will be provided in task assignments. See Attachment 5, Excel spreadsheet, for sample format. This report is due 12 working days following the close of the calendar month. (Mod 11)

II. DOCUMENT DISTRIBUTION REQUIREMENTS

A. Unless otherwise specified elsewhere in this contract, reports and other documentation shall be submitted F.O.B. destination as specified below, addressed as follows:

NASA Langley Research Center
Attn: Lisa M. Harvey, Mail Stop 126
Order L-
Hampton, VA 23681-2199

B. The following letter codes designate the recipients of reports and other documentation which are required to be delivered prepaid to Langley Research Center by the Contractor:

A--LaRC Contracting Officer, Mail Stop 126
B--LaRC Contracting Officer Representative, Mail Stop 125
C--LaRC Alternate Contracting Officer Representative, Mail Stop 125
D--New Technology Representative, Mail Stop 212
E--Cost Accounting, Mail Stop 135
F--Safety Manager, Mail Stop 429
G--Programs and Resources Division, Mail Stop 104
H--Patent Counsel, Mail Stop 212
I--Industrial Property Office, Mail Stop 377
J--Small Business Specialist, Mail Stop 144
K--Technical Monitor, Mail Stop as indicated in Task Assignment—for specific TA
L--Task Area Monitor Mail Stop as indicated in Task Assignment—for task areas TAs
M--LMS Project Office, Mail Stop 438
N--GSA Contracting Officer, Attn: Nancy Ballay, 100 Penn Square East, Rm. 820,
Philadelphia, PA 19107
O--NASA Center for Aerospace Information (CASI), Attn: Accessioning Department
Parkway Center, 7121 Standard Drive, Hanover, MD 21076*

C. The following are the distribution requirements for reports and other documentation required with the numeral following the letter code specifying the number of copies to be provided:

<u>DOCUMENT</u>	<u>LETTER CODE AND DISTRIBUTION</u>
Financial Management Report (NASA Forms 533M)	A-1, B-1, C-1, E-2, G-1, N-1
Safety and Health Plan	A-1, B-1, F-1
Monthly Technical Letter Progress Report	A-1, B-1, K-1, L-1, N-1
New Technology Report	A-1, B-1, D-1, H-1
Quarterly Safety Report	A-1, B-1, F-1
Notice of Violation Report	A-1, B-1, F-1
Final Report (Approval Copies)	A-2, B-1, K-2
Final Report (Final Copies)	A-2, B-1, K-5, O-2
NASA Property in the Custody of Contractors (NASA Form 1018)	A-1, B-1, I-4
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1, B-1, N-1, J-1
Summary Subcontracting Report (Standard Form 295)	A-1, B-1, N-1, J-1
Requisition and Invoice/Shipping Document (DD Form 1149)	I-1
Security Implementation Plan	A-1, B-2
Quality/ISO Documentation	A-1, B-1, M-1
Full Cost Accounting Report	A-1, B-1, E-1, K-1, L-1

D. When the Contract Administrator (A) is not designated above to receive a copy of a report or document, the Contractor shall furnish a copy of the report/document transmittal letter to the Contract Administrator (A and N designated above). The Contractor shall also furnish a copy of the transmittal letter and a copy of each Financial Management Report to the delegated Administrative Contracting Officer of the cognizant DoD (or other agency) contract administrative services component.

EXHIBIT F -- TO SECURITY CLASSIFICATION SPECIFICATION DD 254

<p align="center">DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i></p>				1. CLEARANCE AND SAFEGUARDING	
				A. Facility Clearance Required	
				SECRET	
				B. Level Of Safeguarding Required	
				NONE	
2. THIS SPECIFICATION IS FOR: <i>(X and complete as applicable)</i>			3. THIS SPECIFICATION IS: <i>(X and complete as applicable)</i>		
<input checked="" type="checkbox"/>	A. PRIME CONTRACT NUMBER	L70750D	<input checked="" type="checkbox"/>	A. ORIGINAL <i>(Complete Date In All Cases)</i>	Date (YYMMDD) 01/02/01
	B. SUBCONTRACT NUMBER			B. REVISED <i>(Supersedes all previous specs)</i>	Revision No.
	C. SOLICITATION OR OTHER NUMBER	Due Date (YYMMDD)		C. FINAL <i>(Complete Item 5 In All Cases)</i>	Date (YYMMDD)
4. IS THIS A FOLLOW-ON CONTRACT?			<input checked="" type="checkbox"/>	YES	
Classified material received or generated under _____			NO. If Yes, complete the following: NAS1-00075, NAS1-20048, NAS1-20650		
			<i>(Preceding Contract Number) is transferred to this follow-on contract.</i>		
5. IS THIS A FINAL DD FORM 254?				YES	<input checked="" type="checkbox"/>
In response to the contractor's request dated _____			retention of the classified material is authorized for the period _____		
6. CONTRACTOR <i>(Include Commercial and Government Entity (CAGE) Code)</i>					
A. Name, Address, And Zip Code		B. Cage Code	C. Cognizant Security Office <i>(Name, Address, And Zip Code)</i>		
RAYTHEON TESCHNICAL SERVICES CO. 4400 FORBES BOULEVARD LANHAM, MD 20706		8Z992	DEFENSE SECURITY SERVICES PEMBROKE 5, STE 525 VA BEACH, VA 23462-5460		
7. SUBCONTRACTOR					
A. Name, Address, And Zip Code		B. Cage Code	C. Cognizant Security Office <i>(Name, Address, And Zip Code)</i>		
N/A		N/A	N/A		
8. ACTUAL PERFORMANCE					
A. Location		B. Cage Code	C. Cognizant Security Office <i>(Name, Address, And Zip Code)</i>		
N/A		N/A	N/A		
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT					
GSA MILLENNIA CONTRACT, CONSOLIDATED INFORMATION TECHNOLOGY SERVICES					
10. CONTRACTOR WILL REQUIRE ACCESS TO:		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
A. Communications Security (Comsec) Information			<input checked="" type="checkbox"/>	A. Have Access To Classified Information Only At Another Contractor's Facility Or A Government Activity	<input checked="" type="checkbox"/>
B. Restricted Data			<input checked="" type="checkbox"/>	B. Receive Classified Documents Only	<input checked="" type="checkbox"/>
C. Critical Nuclear Weapon Design Information			<input checked="" type="checkbox"/>	C. Receive And Generate Classified Material	<input checked="" type="checkbox"/>
D. Formerly Restricted Data			<input checked="" type="checkbox"/>	D. Fabricate, Modify, Or Store Classified Hardware	<input checked="" type="checkbox"/>
E. Intelligence Information				E. Perform Services Only	<input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (Sci)			<input checked="" type="checkbox"/>	F. Have Access To U.S. Classified Information Outside The U.S., Puerto Rico, U.S. Possessions And Trust Territories	<input checked="" type="checkbox"/>
(2) Non-Sci			<input checked="" type="checkbox"/>	G. Be Authorized To Use The Services Of Defense Technical Information Center (Dtict) Or Other Secondary Distribution Center	<input checked="" type="checkbox"/>
F. Special Access Information	<input checked="" type="checkbox"/>			H. Require A Comsec Account	<input checked="" type="checkbox"/>
G. Nato Information			<input checked="" type="checkbox"/>	I. Have Temp Est Requirements	<input checked="" type="checkbox"/>
H. Foreign Government Information			<input checked="" type="checkbox"/>	J. Have Operations Security (Opsec) Requirements	<input checked="" type="checkbox"/>
I. Limited Dissemination Information			<input checked="" type="checkbox"/>	K. Be Authorized To Use The Defense Courier Service	<input checked="" type="checkbox"/>
J. For Official Use Only Information			<input checked="" type="checkbox"/>	L. Other <i>(Specify)</i>	
K. Other <i>(Specify)</i>					
	N/A				

12. PUBLIC RELEASE. Any information (*classified or unclassified*) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release

Direct Through (*Specify*)

**“NASA LANGLEY RESEARCH CENTER, M/S 126, HAMPTON, VA 23681-2199”
ATTN: Lisa Harvey “757-864-2444”**

to the Office of Public Affairs, National Aeronautics and Space Administration, Washington, DC 20546, for review.

13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (*Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.*)

ALL WORK ON THIS CONTRACT WILL BE PERFORMED AT GOVERNMENT FACILITIES WHERE CLASSIFICATION GUIDANCE WILL BE PROVIDED AS NEEDED.

THE CONTRACTOR HAS NO PERFORMANCE REQUIREMENTS INVOLVING ACTUAL GENERATION OF CLASSIFIED MATERIAL, HOWEVER THERE IS A NEED FOR ACCESS TO CLASSIFIED INFORMATION TO WORK ON ASSIGNED TASKS UNDER THIS CONTRACT.

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (*If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.*)

Yes No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (*If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.*)

Yes No

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL Michael Rammel	b. TITLE Security Specialist	c. TELEPHONE (<i>Include Area Code</i>) 757-864-3419
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d. ADDRESS (*Include Zip Code*)
**NASA LANGLEY RESEARCH CENTER
M/S 450, ATTN: MICHAEL RAMMEL
HAMPTON, VA 23681-2199**

e. SIGNATURE
(SIGNED BY MICHAEL RAMMEL)

17. REQUIRED DISTRIBUTION

<input checked="" type="checkbox"/>	A. Contractor
<input type="checkbox"/>	B. Subcontractor
<input checked="" type="checkbox"/>	C. Cognizant Security Office For Prime And Subcontractor
<input type="checkbox"/>	D. U.S. Activity Responsible For Overseas Security Administration
<input checked="" type="checkbox"/>	E. Administrative Contracting Officer
<input checked="" type="checkbox"/>	F. Others As Necessary

EXHIBIT G

PROCEDURES FOR THE PREPARATION AND APPROVAL OF CONTRACTOR REPORTS FOR LANGLEY RESEARCH CENTER

GUIDELINES: The following documents or subsequent editions in effect on date of contract shall serve as the basis for preparation of Contractor Reports:

NPG 2200.2A NASA Procedures and Guidelines (<http://www.sti.nasa.gov/neghome3.htm>) DoD 5220.22-M, National Industrial Security Program Operating Manual (NISPOM), January 1995

FORMAT AND ORGANIZATION: The format and organization of a Contractor Report should be consistent and follow the practices recommended in the NASA Procedures and Guidelines. For questions concerning format, contact Langley Research Information Management at (757) 864-2518. A Report Documentation Page (RDP) (Standard Form 298) shall be included as the last page in the report. The RDP is available electronically at (<http://www.sti.nasa.gov/neghome3.htm>). A sample of this form is attached.

TRADEMARKS: U.S. Government policy prohibits endorsing or criticizing commercial products in its publications. Use of trademarks is discouraged. If a trademark must be used, its owner must be credited and the trademark must be used as an adjective modifying the generic name.

REFERENCES: Material that is not obtainable or available must not be listed in the references. Documents of NASA contracts published as in-house documents must be referenced as NASA CR's, not as NASA Contract Numbers.

SECURITY: Security markings, when necessary, shall be consistent with DD Form 254, the directive issued by the Security Classification Officer, and shall conform to requirements established in the DoD NISPOM. For questions concerning security classification, contact LaRC Security Classification Officer at (757) 864-3420.

APPROVAL COPIES.

1. Upon completion of a report, the Contractor shall submit five (5) approval copies to the Contracting Officer's Technical Representative (COTR) for review and approval by NASA. These copies may be reproduced on both sides of sheet where feasible and assembled by an economical means by the Contractor. **Notify the Langley Contracting Officer when the approval copies are submitted.**
2. The Contractor will be notified of acceptance of the approval copy of the report by the COTR within thirty (30) days. Approval will be contingent upon changes required by NASA.

FINAL (REVISED) COPIES:

1. Upon receipt of acceptance from the Langley COTR, the Contractor shall prepare an original manuscript incorporating the changes required by NASA.
2. The Contractor shall submit the original manuscript and up to five (5) duplicate copies to the Langley COTR within thirty (30) days after receipt of acceptance. Electronic PostScript files for the cover and report (including figures and tables), and Report Documentation Page source file shall also be submitted to the Langley COTR, if available. **Notify the Langley Contracting Officer when the final revised report is submitted.**

Contact the Langley COTR for information on transmitting the electronic files by file transfer protocol (FTP). The electronic files may be saved on a 3.5-inch, high density, double-sided disk(s) and submitted with the final manuscript. The disk(s) and files should be labeled to properly identify the report.

ORIGINAL MANUSCRIPT: The original manuscript of a Contractor Report shall consist of a single-sided, unbound, laser printed copy of the text with all tables, figures, artwork, graphs, photos and captions included on the pages. Photographs shall be either scanned electronic images or unscreend glossy prints that have been cut and mounted on the pages. The manuscript shall be single spaced with consecutive page numbers on all pages, excluding the cover. The manuscript shall be printed on 8-1/2 by 11 paper with a maximum page image are of 7-1/8 by 9-3/16 inches

REPORT DOCUMENTATION PAGE			<i>Form Approved</i> <i>OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE May 1991		3. REPORT TYPE AND DATES COVERED Contractor Report
4. TITLE AND SUBTITLE Science Needs for Real-Time Adaptable Data Products From the Earth Observing System			5. FUNDING NUMBERS CC NAS1-18676 TA 6	
6. AUTHOR(S) Paul D. Try, Paul F. Twitchell and Christopher R. Redder				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Science and Technology Corporation 101 Research Drive Hampton, VA 23666-1340			8. PERFORMING ORGANIZATION REPORT NUMBER STC-42518	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-2199			10. SPONSORING/MONITORING AGENCY REPORT NUMBER NASA/CR	
11. SUPPLEMENTARY NOTES Langley Technical Monitor: David E. Bowker Final Report				
12a. DISTRIBUTION/AVAILABILITY STATEMENT (If contract specifies restricted distribution, state restriction instead of Unclassified-Unlimited.) Unclassified-Unlimited (If contract specifies restricted dist., state restriction instead of Unc.-Unl.) Subject Category 00 (See http://larcpubs.larc.nasa.gov/newhtml/subject.html) Distribution: Standard or Nonstandard (Tech. Monitor determines dist.) Avai			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Advancing the understanding of the Earth system requires improved knowledge of the time-variant governing processes, and the knowledge of these processes often comes only from real-time observations of the changing variables as seen from space. The unpredictability of what is to be measured and at what rate requires flexibility in the observational capability. The Earth Observing System (EOS) will be a major source of observational data during the next 10- to 25-year timeframe. Consequently, to ensure the needed advances in the understanding of the Earth system, real-time onboard processing is concluded to be a critical need for EOS. <i>(Provide an unclassified abstract not to exceed 200 words)</i>				
14. SUBJECT TERMS Real-time data needs; Onboard data processing; Real-time Processing EOS; EOS communication needs.			15. NUMBER OF PAGES 76	
			16. PRICE CODE	
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